

Is residential mobility declining in the UK?

An overview of residential mobility in the last 15 years; identifying demographic, socioeconomic and geographic trends across the UK

Introduction

The impacts of **residential mobility** trends can be wide-ranging; from low rates leading to volatile house prices (Englund & Ioannides 1993) or higher unemployment associated with greater homeownership (Oswald 2009), to high rates devaluing social capital (David *et al.* 2011).

This brief investigates residential mobility trends across the UK over the last 15 years using **Annual Population Survey** data; firstly, looking at the national picture before delving into patterns among subgroups.



Background

Many academics have asserted that rates of residential mobility decline over time in countries of the Global North, and this notion is not particularly new. Zelinsky (1971) posed the fifth stage of the 'mobility transition' as that of a 'super-advanced' society in which technological progress makes mobility counterproductive. While more recent studies have found this to be true in the US (for example, Cooke 2011), trends in the UK are less apparent.

The national picture

Firstly, residential mobility can be considered at a national level, to examine the overall trend between 2005-6 and 2017-18.

The **weighted mobility rate** in 2005-6 was 10.03 per cent; compared to 9.83 per cent by 2017-18. At a national level, it appears that there is no substantial trend of declining

Key findings

- While residential mobility has been found to be declining in the US, the national mobility rate in the UK has remained stable over the last 15 years
- A spatial divide is identified across the UK, north-west regions experiencing mobility decline, while south-west regions have seen increased mobility
- Increasing mobility is found among individuals between the ages of 18 and 30 where multiple life events associated with housing moves occur, but gradual declines occurred from ages 30 to 90
- Lower transaction costs associated with renting has lead to greater mobility among renters, while homeowners are more likely to stay put
- In conclusion, while national mobility is stable, there are greater complexities amongst population subgroups

Definitions

residential mobility: though difficult to define, residential mobility is generally thought of as housing moves that involve shorter distances of changed address

Annual Population Survey (APS): a longitudinal survey using data from the UK Labour Force Survey at the household level covering several topics including housing

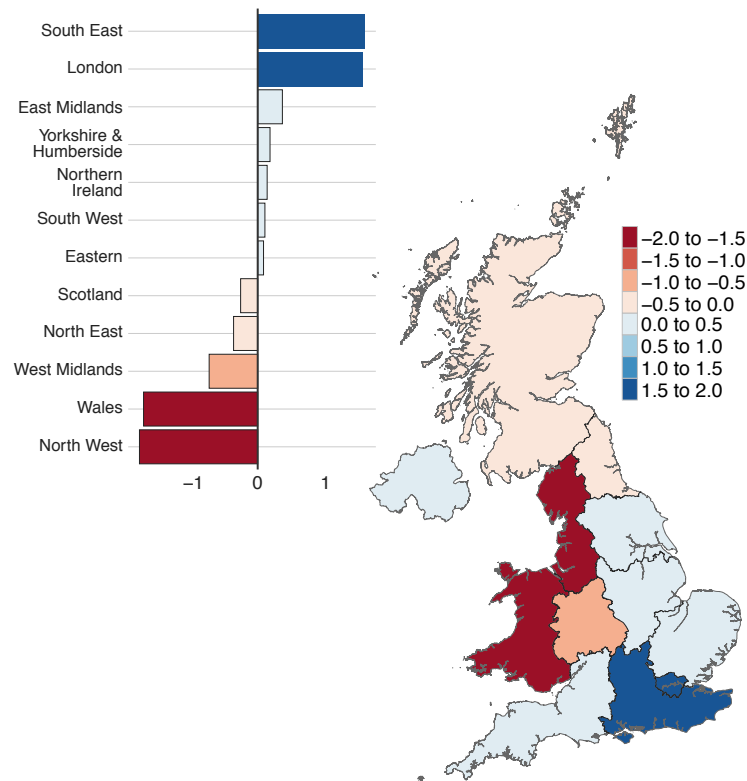
weighted mobility rate: proportion of the UK population, estimated using frequency weights, who have moved in the last year

mobility, however such aggregated measures can mask the complexities of mobility. While average UK mobility may have remained stable, when broken down geographically, demographically and by socioeconomic characteristics, very different patterns of residential mobility are identified.

Geography

Figure 1 below displays the change in mobility rates between 2005-06 and 2017-18 by region, in graphical and map form. Change in mobility varies geographically, some regions seeing declines, but just as many regions have seen increased mobility. A spatial pattern is also clear, with declines primarily seen in the north and west of the UK, and increased mobility in the south and east; with the exception of Northern Ireland that has also seen greater residential mobility.

Figure 1: Percentage point change in mobility between 2005-6 & 2017-18 by region

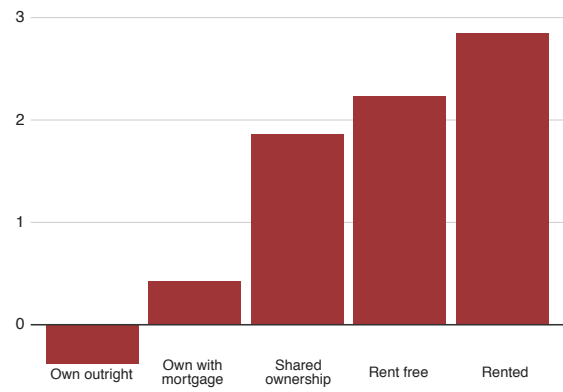


Tenure

The UK is generally considered to be a ‘homeownership society’ with an ownership rate of 63.4 per cent in 2016 (Eurostat 2019). However, reduced ‘affordability’ of housing is leading to a growing rental sector in which residential mobility is increasing over time (see Figure 2). Transaction costs associated with moving are generally higher for homeowners, involving taxes like Stamp Duty in the UK. While renters still have expenses in agency fees, the generally lower costs of moving mean that residential mobility is higher and increasing among renters.

The spatial distribution of changes in residential mobility may also in part be due to homeownership rates. Homeownership is higher in Wales and the North West compared to London, demonstrating the inverse relationship between homeownership and residential mobility. Higher renting in London is associated with increased mobility, compared to greater homeownership in areas like Wales in which mobility has fallen.

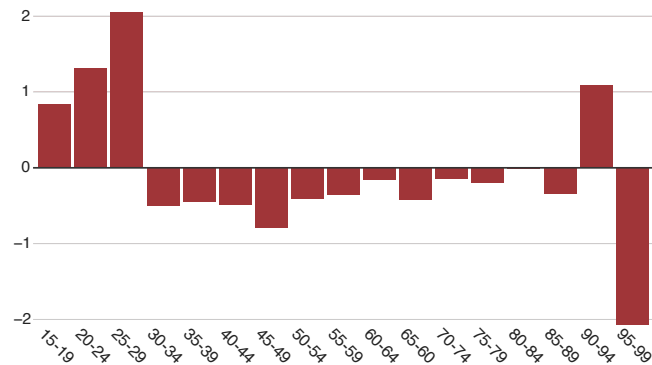
Figure 2: Percentage point change in mobility between 2005-6 & 2017-18 by tenure



Age

Residential mobility should also be considered from a demographic perspective. Figure 3 demonstrates a contradiction to the mobility trends in tenure. Homeownership rates rise quite rapidly among young adults, yet mobility is increasing the most between the ages of 20 and 30. This is likely down to this age bracket being the key point in the life course in which housing moves are plentiful. From leaving home to moving for higher education or for new jobs, young adults generally have greater mobility. The increase in mobility over time could also be associated with changes in accepted cultural norms of living arrangements. Yau (2019) uses animated US data about couples to demonstrate the much more dynamic relationship between living together today compared to the 1970s. Far more couples live together earlier in relationships, and moving in and out as partnerships break down might also contribute to the increases in mobility happening among young adults.

Figure 3: Percentage point change in mobility between 2005-6 & 2017-18 by age group



Conclusion

Overall, UK data does not appear to exhibit the evident picture of declining residential mobility in the US. In fact, at the national level, mobility has remained fairly stable over time. However, great variations are found by geography, tenure and age. Nevertheless, Zelinsky’s hypothesis of a ‘super-advanced’ doing away with mobility does not seem to have happened in the UK. Even in the capital, with its successful and extensive transport links and communications infrastructures, residential mobility is actually increasing over time.

The unequal transmission of homeownership

Investigating the impact of parental background on young people's transition into homeownership



Introduction

Social mobility has long been a key UK policy concern; with the aim of enabling individuals to improve their social status, reducing the limitations that family background and socioeconomic status might over the life course. The UK lies in the middle ground of OECD social mobility estimates, taking an average of five generations for a low-income family to reach mean income (OECD 2018).

This brief investigates the impact of parental background on young people's transition into homeownership, by examining point-in-time statistics, and the transition of individuals over time to track the inequalities produced through poor social mobility. It then models ownership rates while controlling for a selection of variables, to understand how different factors affect the transition into homeownership.

Background/context

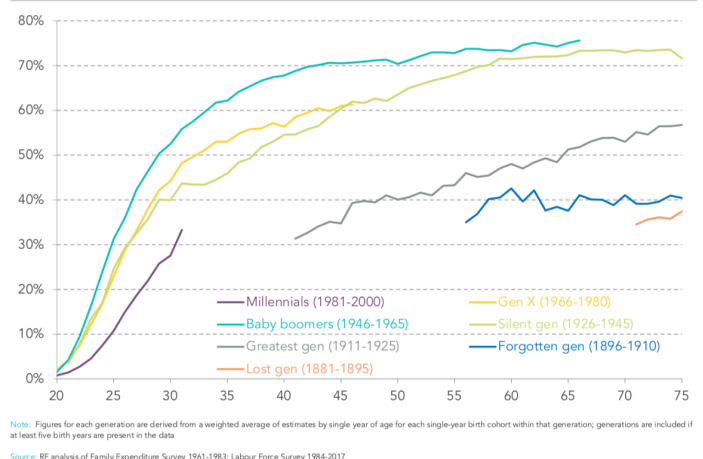
Fewer young people are entering homeownership, and the transition is occurring later in their lives than previous generations (see Figure 1). Andrew (2012) explains the many reasons for this trend; from demographics to income constraints, to greater borrowing restrictions and a failure to meet criteria as house prices rise.

Key findings

- Homeownership rates and the speed of transition into ownership over a lifetime varies greatly by generation
- Lower rates of homeownership among young people mean that inequalities are becoming apparent between those who become homeowners and those who do not, influenced by intergenerational transmission
- Those with higher education and income are more likely to be homeowners
- Parental background influences homeownership, with professional and managerial parental occupations leading to greater and more rapid transition into ownership
- Modelling the relationship reveals that education and income have a greater influence over homeownership than parental background

Figure 1: UK homeownership rates by generation

Source: Corlett & Judge (2017)



With poorer access, inequalities are being produced through the **intergenerational transmission** of homeownership, through means of financial support from family. Consequently, parental background influences the likelihood of, and rate of transition into, ownership.

Homeownership by individual characteristics

UK homeownership rates first increase rapidly with age from 9.8 per cent for 20-24 year olds to over 50 per cent for 30-34 year olds, before levelling out until the late 70s at which it declines (see Figure 2). Differences in ownership are also found by education, with almost 70 per cent of individuals with a degree are homeowners compared to just over half of those without a degree. Breaking owners down by income (see Figure 3), three-quarters of those in the top quartile are homeowners compared to less than half of those in the bottom quartile.

Figure 2: Homeownership by age group

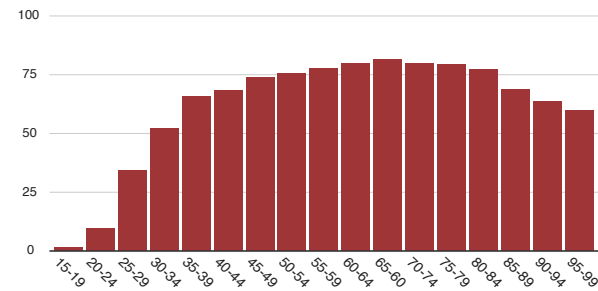
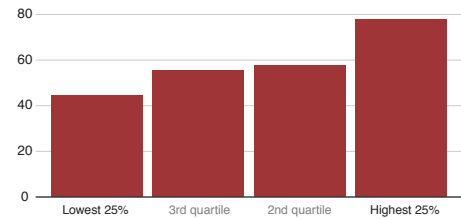


Figure 3: Homeownership by income quartile

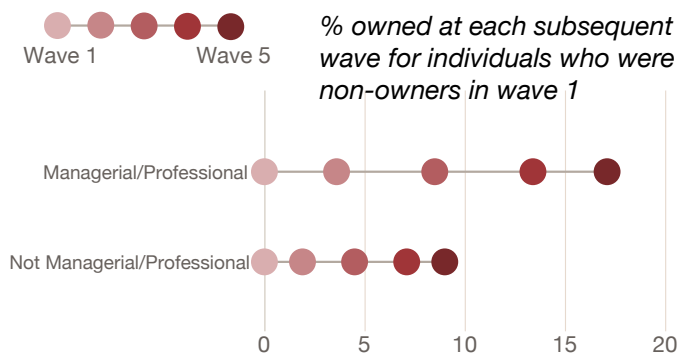


Ownership transition by parental occupation

Point-in-time statistics tell us only a static picture. More important - and potentially more revealing - findings are identified by tracking the same individuals through their transition into homeownership.

Figure 4 shows how transition into homeownership can vary greatly based on parents' occupation type. Less than 10 per cent of young adults whose parents do not work in managerial and professional occupations (and who are not homeowners in wave 1) have entered homeownership five years later, compared to over 17 per cent of those whose parents have managerial jobs.

Figure 4: Transition into homeownership by parental background



In fact, after three years, a similar proportion of children of professional parents are homeowners as the proportion of those without professional parents who are homeowners after the full five years.

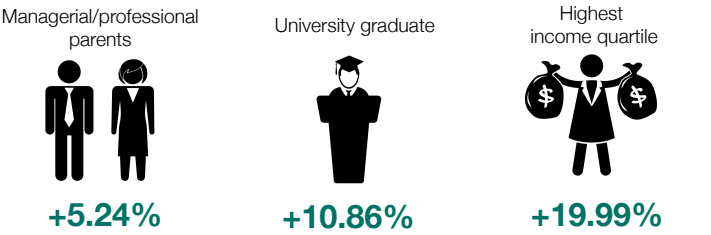
Modelling homeownership

A logistic regression model can be used to understand how different variables affect the transition into homeownership. Table 1 shows the average marginal effects from this regression, describing the predicted probabilities that a change in these variables will have on entry to homeownership.

Table 1: Average marginal effects of entering homeownership between waves 1 and 5

	Average Marginal Effect	p-value
Age	0.0015	0.1399
Parental occupation		
Non-managerial	ref.	ref.
Managerial	0.0524	<0.001
Education		
No degree	ref.	ref.
Degree	0.1086	<0.001
Income quartile		
Lowest 25%	ref.	ref.
2nd quartile	0.0640	<0.001
3rd quartile	0.0949	<0.001
Highest 25%	0.1999	<0.001

Managerial parents, university graduates and those with higher incomes are more likely to enter homeownership, though the effect of parental occupation is the smallest of these three.



Conclusion

In an age of lower and delayed homeownership, inequalities between those who become owners and those who do not are becoming more evident. Financial constraints mean that while homeownership increases with income and education, parental background also plays a part in the transition.

This analysis has shown the effect of parental occupation, however individuals may benefit from additional privileges from their parents. The passing on of owning preference for those who grew up in owned homes, and the way this socialisation of preference manifests in the form of gifts and mortgage guarantees from parent's assisting children into homeownership also perpetuate the transmission of advantage and disadvantage (Mulder *et al.* 2015).

Airbnb & Housing

Investigating the prevalence of likely commercialised Airbnb listings across London & their relation to the geography of rents

Introduction

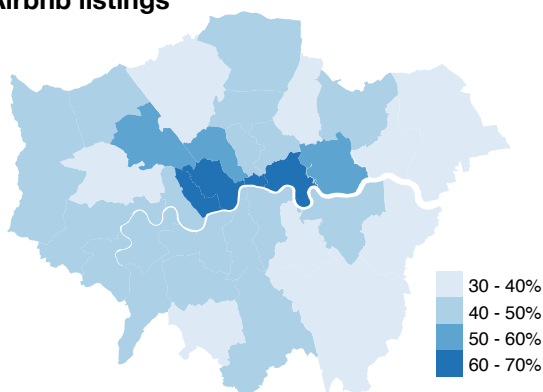
Housing across cities around the world is changing due to an increase in short-term lettings through firms like Airbnb. This brief investigates the prevalence of Airbnb listings across London, focussing on those believed to be commercialised by hosts who are running businesses out of these rentals. As well as exploring the distribution of such listings across the city, it examines their relationship with the geography of rents to understand how they are impacting London's housing system.

Background/context

The rise of short-term rentals, particularly through Airbnb is leading to implications in housing markets, especially in cities. While governments grapple with putting together legislation to regulate this new industry, hosts continue to elude and avoid new restrictions and taxation that enable prices to remain proportionally low, while neighbourhoods and their housing are being impacted as a result. Some of the main concerns currently raised about Airbnb are its detracting from the supply of private rentals, its potential to reduce social capital when a high concentration of short-term lets exist in an area, and the unequal distribution of any economic benefits that rentals bring.

This brief takes a focussed look at rentals expected to be 'commercial' because they are listed by hosts running two or more properties. Compared to other European cities, these 'commercial' hosts make up a higher proportion of the total (Coyle & Yeung 2016), sitting at 20.3 per cent from data scraped in October 2018. Furthermore, as Figure 1 demonstrates, these listings make up the highest proportions of all Airbnbs in central boroughs, like Tower Hamlets and Westminster, while still being the majority in West London.

Figure 1: 'Commercial' listings as a proportion of all Airbnb listings*



*controlling for the total number of dwellings across boroughs

Key findings

- The UK housing market, like many other countries, is facing a new challenge in the increase of short-term lettings through organisations like Airbnb
- Listings that are presumed to be commercialised make up the majority of Airbnbs in central London, and are more prevalent in the west than the east
- A strong correlation exists between the density of commercial Airbnbs and median rent, though the associations varies across London, with a greater impact of Airbnb density on rent in eastern boroughs
- When additional variables are added to the model, positive a relationship between commercial Airbnb density and the proportion of rented properties is identified, as well as an indication of a connection with mean availability of listings
- Such associations could exist because of landlords shifting to short-term lettings where profitability may be greater, leading to a more limited supply of rentals

Definitions

'commercial' listings: loosely-defined here as listings from hosts with 2 or more listings on Airbnb that are more likely to be commercial operators

While this subset of hosts with multiple listings does not definitively separate commercial operators, it has been established in several papers as a reasonable proxy (for example, Gurran & Phibbs 2017; Ke 2017).

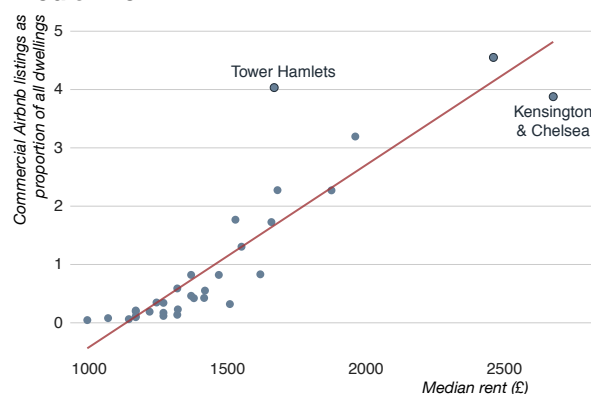
Why borough level analysis?

Attention must be paid to the administrative level of analysis, and how it might impact the results found. A borough-level investigation is used in this brief because of the range of available data that can be used at this level to assess the association between Airbnb density and a selection of different variables. However, the somewhat arbitrary units of boroughs may be vulnerable to MAUP with regard to scale, as aggregated units may mask within-borough differences. To avoid the zoning problem, data is generally expressed as proportions and controls like the total number of dwellings are used to prevent misleading results.

Airbnb & the geography of rents

Figure 2 below shows the highly positive correlation between the density of commercial Airbnb listings and median rent across London boroughs, with a Spearman's rank coefficient of 0.93. On average, for every £100 of median rent, Airbnb density increases by 0.3 percentage points (as a proportion of all dwellings in the borough).

Figure 2: Association between Airbnb density & median rent

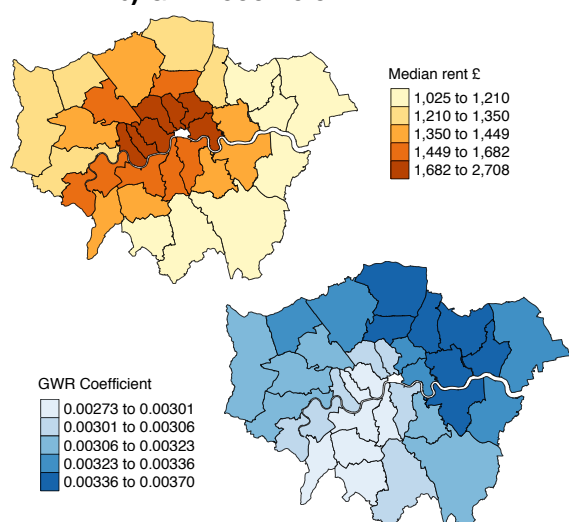


Local associations: GWR

Much like the density of commercial Airbnb listings, high median rent is concentrated in London's inner boroughs (see Figure 3a). As shown in Figure 2 above, several boroughs lie far away from the regression line indicating that there are differences in the association between Airbnb density and median rent across London. A Geographically-Weighted Regression (GWR) quantifies this variance.

In south-western boroughs, like Wandsworth, an additional £100 in median rent is associated with a 0.29 percentage point increase in commercial Airbnb density, but in north-eastern boroughs, like Waltham Forest, the same change is expected to increase commercial Airbnb density by 0.35 percentage points. The same east-west pattern is seen across London's inner city boroughs, with a coefficient of 0.27 for Westminster, compared to 0.37 in the eastern borough of Newham. Furthermore, local R^2 values vary, suggesting that the median rent explains up to 90 per cent of the variation in commercial Airbnb density in West London, but only around 68 per cent in eastern inner boroughs.

**Figure 3: a) Distribution of median rent
b) GWR coefficient**



Testing the association: more models

Additional variables can be added to this regression model to further assess how short-term lettings impact rents. Table 1 shows the output of a model that includes the proportion of rented properties and the mean availability of Airbnbs for each borough.

Table 1: Regression output of commercial Airbnb density on rent

	Coefficient	p-value
Intercept	-5.659	<0.01
Median rent (2018)	0.002	<0.01
% Rented properties (2016)	0.034	<0.01
Mean availability of Airbnbs (no. of days)	0.007	0.054

With these added variables, the model indicates that commercial Airbnbs make up an additional 0.24 percentage points of all dwellings in a borough for every additional £100 of median rent. More expensive neighbourhoods attract more commercial Airbnbs, in part due to the preferences of travellers. This idea confirms suspicions of the unequal benefits that Airbnb might produce, with Quattrone *et al.* (2016: 1390) finding that more 'attractive' areas draw in more listings as tourists look for good transport links and attractions in "well-to-do areas with young and tech-savvy residents".

While the coefficient for mean availability is just insignificant at the 5 per cent level, there is some indication of a positive correlation between the density of Airbnbs and their availability throughout the year. However, availability is becoming one of the areas in which regulation is coming into force due to fears of reducing the sense of community and breaking down social capital where Airbnb density is high. This novel type of restriction is becoming prevalent across Europe, in order to crack down on commercial operators (Guttentag 2018).

There is also a statistically significant relationship between commercial Airbnb density and the proportion of rented properties across boroughs. This finding could be associated with a transition of landlords shifting from seeking long lets to benefitting from greater profitability in the short-term rental sector (Wachsmuth & Weisler 2018: 1150). The result of this change is a lower supply of private long-term housing rentals in cities with increasing demand, causing reduced housing affordability (Ibid.).

Conclusion

In conclusion, the rapid growth of short-term lettings can have multiple and varied impacts - both economic and social - on neighbourhoods and housing markets. In London, the high proportion of commercialised listings is associated with rent prices; producing unequal outcomes - potentially negative in restricting private rent supply and positive in the form of economic externalities - across the city. As a new phenomenon, Airbnb is disrupting the housing market and regulation is struggling to keep up.

Residential segregation: ethnicity or social class?

Examining the extent of residential segregation in Blackburn with Darwen to investigate whether this Integration Area is divided more by ethnicity or social class.

Introduction

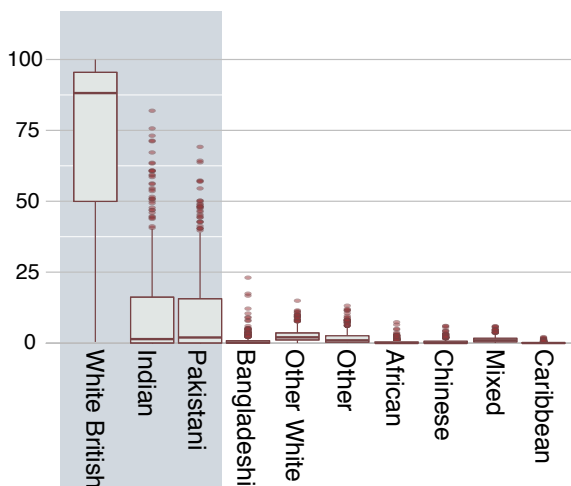
Segregation is notoriously difficult to define, with a multitude of indices used to investigate concepts like interaction, exposure and isolation, to name but a few (Massey & Denton 1988). This brief uses the 'evenness' definition of segregation, looking at the distribution of different population subgroups across administrative units. Segregation is also frequently associated with negative connotations, in part due to the dominant policy focus on ethnic segregation that - while more explicitly adverse in the US (Peach 1996) - still invokes ideas like mistrust, threat and isolation. However, while ethnicity is at the centre of policy attention, it is not necessarily the only type of residential segregation seen across the UK.

Background

This brief examines residential segregation by both ethnicity and social class in Blackburn with Darwen (BwD). A local authority district in the North West of England, BwD was identified as one of five **Integration Areas** under the UK government's Integrated Community Strategy (HM Government 2018).

Compared to the national averages, BwD has a lower White British population at 66.5 per cent and higher than average Indian and Pakistani populations at 13.4 per cent and 12.1 per cent, respectively (see Figure 1). This report will focus on segregation between these three ethnic groups that together make up over 90 per cent of the population. In terms of socioeconomic characteristics, BwD has a greater proportion of economically inactive individuals, higher unemployment and lower qualifications, compared to UK averages (BwD Borough Council 2018).

Figure 1: Ethnic composition of Blackburn with Darwen across OAs (%)



Key findings

- While policy generally focuses more on ethnic segregation, parts of the UK are also segregated by social class
- Blackburn with Darwen is highly segregated by both ethnicity and social class, and it identified as an Integration Area in which 'mixed communities' policy is being trialled
- More prevalent minorities of Indian and Pakistani populations clustered in Blackburn town centre, while the White British population dominates outer areas where managerial and professional occupations are more common
- The index of dissimilarity indicates that ethnic BwD is more divided by ethnicity than social class, but careful attention must be paid to issues with comparing across dimensions and over time.

Definitions

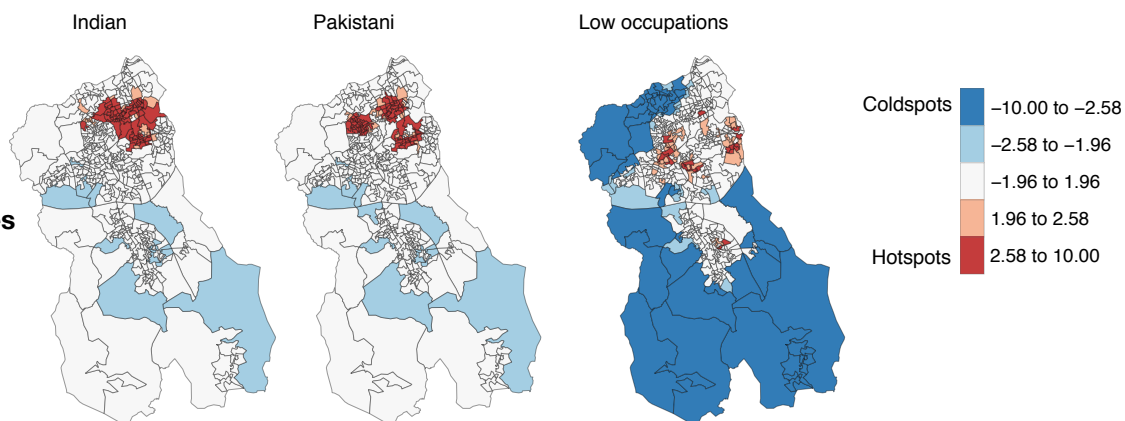
Integration Areas: 5 local authorities identified in the UK to trial a 'localised approach to integration' that tailored policy actions to the individual challenges of the area

OAs: Output Areas are the lowest geographical level at which census estimates are available

index of dissimilarity: a segregation index essentially measuring the proportion of one population that would have to move in order for the two subgroups to be completely evenly distributed across an area



Figure 2: Getis-Ord statistics showing clustering of ethnicities & occupation types



Distribution of ethnicities & occupation types

Blackburn is segregated by both ethnicity and class; with northern areas close to the town centre characterised by higher levels of Indian and Pakistani populations and generally lower occupations, compared to the outer **OAs** in which the White British population is consistently in excess of 95 per cent and occupations are generally more managerial and professional. The three maps above display Getis-Ord (G^*) statistics, as a method of clustering data. G^* provides insight into local spatial patterns, identifying 'hotspots' and 'coldspots' of variables across an area.

Ethnic segregation

The maps make the north-south division in ethnicity clear, highlighting the higher prevalence of Pakistani and Indian populations clustered amongst each other in the town centre. Much like the majority of 'mixed communities' policy interventions, the Integrated Communities Strategy is founded around the idea that integrated populations benefit from stronger and more trustful relationships between groups, as well as increased economic opportunities, such as improving unequal educational outcomes and the expansion of social networks (HM Government 2018). Nevertheless, a Panorama documentary interviewed Blackburn's residents to find that racial tensions ran high, with negative attitudes towards Muslim communities associated with terror attacks. Furthermore, a revisit ten years later has revealed that residents continue to feel let down by the poor impact of policy efforts and ethnic segregation is still harboured by perpetuated attitudes of fear (Wollaston 2018).

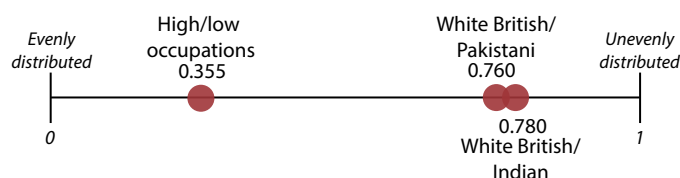
Social class (occupational) segregation

Occupation types are also segregated across BwD. High occupations (managerial, administrative and professional) are mainly found in the outer, more suburban OAs, whereas these areas are 'coldspots' for low occupations (lower supervisory and technical, semi-routine and routine) which are more prevalent around the edges of Blackburn's town centre (see right-hand map above). Additionally, in examining earnings data, BwD council found higher wages among those who work in the borough compared to those who live there, indicating that better paid jobs within BwD are taken up by commuters from elsewhere.

Indices of segregation

The **index of dissimilarity** is one of many measures of segregation, used to assess the distribution of different groups across an area. Figure 3 shows indices assessing dissimilarity between i) high and low occupations, ii) White British and Pakistani populations, and iii) White British and Indian populations. These figures indicate that BwD is more divided by ethnicity than social class, with Asian and White British populations more unevenly distributed across the local authority in comparison to high and low occupations.

Figure 3: Indices of dissimilarity



However, special care must be taken when making blanket comparison of indices across dimensions. The ethnic composition of areas routinely manifests in minority populations amongst a majority ethnicity - in the UK generally White British. Whereas, occupation type less regularly exhibits such distinct patterns of over 90 per cent of one type or another. Therefore, while technically ethnic segregation is more extensive, the statistically significant coldspots identified for lower occupations, and the practical significance associated with them should not be dismissed as inconsiderable socio-economic segregation.

Conclusion

Overall, it is clear that BwD is highly segregated by both ethnicity and social class, and has been suitably identified as an area which might benefit from successful integration policy. However, when used to determine whether segregation has reached 'dangerous' levels in order to inform policy, statistical issues can mislead. Like the problematical comparison across ethnicity and social class, the aggregation of units brings about further confusion. The Modifiable Areal Unit Problem (MAUP) describes issues of scale and zoning of somewhat arbitrary administrative boundaries, that produce varied results dependent on the way in which areas are divided (Openshaw & Taylor 1979). When analysing Indices of Dissimilarity of Blackburn in 1991 and 2001, Simpson (2007: 419) identified that what seemed to be an increase in segregation from 0.58 to 0.66 was actually "purely a result of boundary changes between the two censuses", with no change identified using consistent boundaries. Though segregation is an aspect of housing not to be avoided, the complexities involved in measuring it require carefully designed, appropriate policy.

The implications of 'homeownership societies'

To what extent is a higher homeownership rate associated with increased youth unemployment across Europe?

Introduction

In many societies across the 'developed' world, owner-occupation has become the dominant form of tenure (Ronald 2008). In these countries, homeownership is seen as the ideal and natural; with assumed financial benefits of security, avoiding potential volatility in rent price, together with more emotional feelings of autonomy, attachment and self-esteem that can be associated with owning (Elsinga & Hoekstra 2005). Homeownership preference is also driven by cultural and behavioural norms that are perpetuated in policy discourse. The narrative of 'getting on the housing ladder', with the endpoint of owning is a crucial goal for young adults in the UK (Ibid.).

Nevertheless, while homeownership has been encouraged by governments for years, some evidence suggests there may be negative consequences of high ownership.

Background

Oswald and Blanchflower (2013) introduced the hypothesis that high homeownership rates lead to high unemployment under three mechanisms: i) lower mobility, ii) longer commutes, and iii) lower rates of business formation.

Figures 1 and 2 compare Oswald and Blanchflower's findings with that of youth unemployment and homeownership across Europe in 2010. The original authors find that for every 1 per cent increase in unemployment, homeownership increases by 1.7 per cent. A similar - and statistically significant - association is identified in Europe, however the relationship differs greatly across countries. Eastern European countries are clustered toward the high end of the graph, with high homeownership and fairly high youth unemployment, while Western countries have much lower ownership and unemployment rates. Southern European cities vary greatly, all with similar homeownership but youth unemployment ranging from 9.9 per cent in Norway, up to 41.5 per cent in Spain.

Key findings

- The Oswald hypothesis poses an association between high homeownership and unemployment, based on US data
- A similar relationship is identified in Europe in 2010 for youth unemployment, but varies greatly between countries, particularly in the south of Europe
- The correlation does not seem to hold over time, and the diverse housing markets and cultural norms that have developed across European countries lead to very different outcomes of youth unemployment and homeownership
- When looking at change over time, several European countries see rising homeownership but falling youth unemployment, and vice versa
- Modelling unemployment by lagged homeownership indicates a delayed, but significant reaction between an increase in homeownership and a subsequent increase in youth unemployment

Definitions

homeownership society: a society in which homeownership is the default tenure, and the preference towards owning underpins policy and is driven by cultural and behavioural norms

youth unemployment: defined here as unemployment amongst under-25s

Figure 1: Oswald & Blanchflower (2013) unemployment & homeownership hypothesis

Figure 1: Unemployment and home-ownership rates across 28 EU and OECD countries

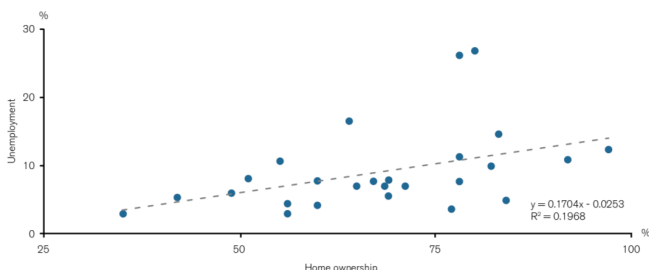
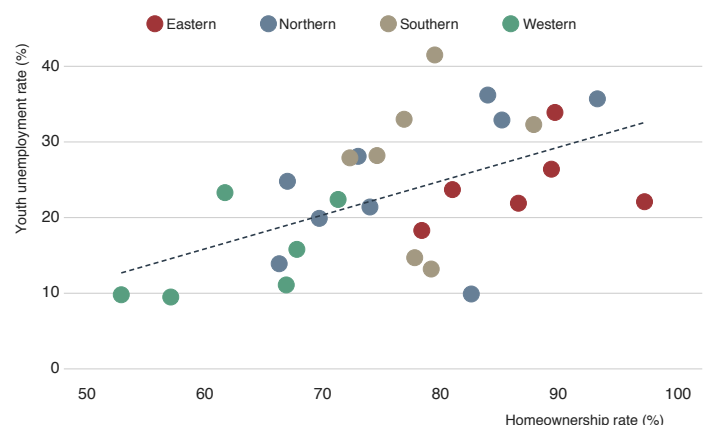


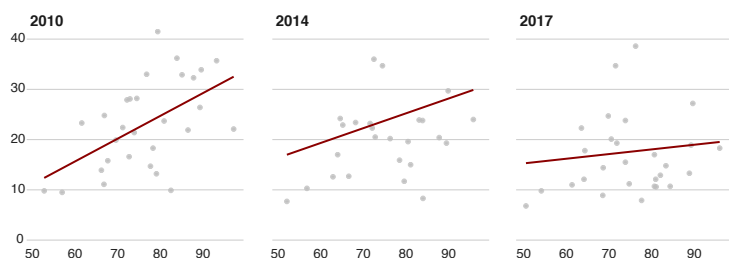
Figure 2: Youth unemployment & homeownership across Europe in 2010 (coloured by subregion)



Does it hold over time?

Despite finding a similar association in 2010, the relationship between youth unemployment and homeownership flattens over time (see Figure 2), from a Spearman's rho statistic of 0.535 in 2010 (indicating a moderate-strong correlation) to 0.121 in 2017 (a very weak correlation). This change over time seems to be produced by lower unemployment rates experienced more recently across Europe, rather than large changes in homeownership.

Figure 2: Youth unemployment & homeownership across Europe (2010)

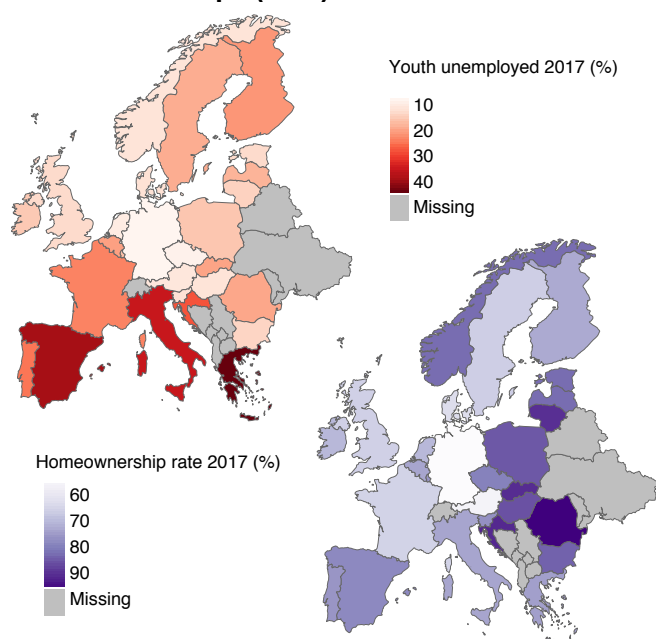


Geographic patterns

Several European countries have dualist housing markets in which social and private rental sectors operate separately and do not compete. However, development of these markets varies greatly, and homeownership and unemployment manifest differently as a result. Liberal markets with developed policy and mortgage systems, like the UK, are on the lower end of the unemployment spectrum and while the second mechanism (longer commutes) is likely to relate to the association, the UK does not have particularly low mobility. Mediterranean countries experience the highest unemployment but moderate homeownership. These countries generally do have lower mobility associated with higher home-leaving ages of young people (Aassve *et al.* 2013). Post-socialist societies who experienced a rapid and huge privatisation shift now have the highest homeownership rates (Simeleviciene 2018).

Furthermore, homeownership rates reflect cultural norms related to tenure; for example, in Germany and Austria renting is seen as a preferable, long-term decision, rather than a stepping stone to affording ownership as it tends to be in the UK.

Figure 4: Youth unemployment & homeownership rates across Europe (2017)



Change over time

Looking at change over time provides a more reliable idea of this association compared to a static, point-in-time assessment. Oswald and Blanchflower (2013) find the same positive correlation in an analysis of US states over time, however the same cannot truly be said for European countries. Figure 3 shows how several European countries have rising homeownership and falling unemployment, and vice versa.

Figure 3: Change in homeownership & youth unemployment rates over time (2010-17)



Modelling unemployment from previous homeownership rates

After transforming to log unemployment to improve the normality of the distribution (in order to better meet regression assumptions), it can be modelled based on lagged homeownership rates taken from the previous year, to assess whether changes to homeownership have a delayed impact on unemployment. Controlling for, age, education, year and country; a 1 per cent increase in homeownership rates in the previous year is associated with a 4.58 per cent increase in log unemployment. More intuitively, the exponent of this coefficient indicates that a 1 per cent increase in homeownership leads to an expected 4.68 per cent increase in youth unemployment in the following year. The p-value associated with the coefficient is statistically significant, meaning we can reject the null hypothesis that there is no association between youth unemployment and lagged homeownership. It is also possible that larger coefficients might be obtained if modelled on longer homeownership lags, as found by Oswald and Blanchflower (2013).

Conclusion

While there remains some indication of a relationship between youth unemployment and homeownership across Europe, contextual differences across the continent make it difficult to pin down a firm association and the mechanisms by which it works. Furthermore, over time it seems the relationship breaks down and even greater diversity is identified across countries. Nevertheless, there is evidence to suggest lagged influences of homeownership on youth unemployment.

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