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Working Paper

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GLO Discussion Paper, No. 1222

Provided in Cooperation with:
Global Labor Organization (GLO)

Suggested Citation: Buscha, Franz; Gorman, Emma; Sturgis, Patrick; Zhang, Min (2023) : Ethnic differences in intergenerational housing mobility in England and Wales, GLO Discussion Paper, No. 1222, Global Labor Organization (GLO), Essen

This Version is available at:
https://hdl.handle.net/10419/267916

Ethnic differences in intergenerational housing mobility in England and Wales

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Abstract In this paper we use linked Census data to document rates of intergenerational housing mobility across ethnic groups in England and Wales. While home ownership has declined across all ethnic groups, we find substantial differences between them, with Black, Pakistani and Bangladeshi households experiencing the strongest intergenerational link between parent and child housing tenure, and Black individuals having the highest rates of downward housing mobility. In contrast, those of Indian origin have homeownership rates similar to White British families, and a weaker link between parent and child housing tenure. These patterns are likely, in turn, to exacerbate existing gradients in other dimensions of ethnicity-based inequality now and in the future.

JEL codes: J62; I24; R31; P46
Keywords: housing**,** social mobility, wealth transmission, ethnicity

Acknowledgements: We are grateful to funding from the ESRC via ES/R00627X/1. The permission of the Office for National Statistics to use the Longitudinal Study is gratefully acknowledged, as is the assistance provided by staff of the Centre for Longitudinal Study Information & User Support (CeLSIUS). CeLSIUS is supported by the ESRC Census of Population Programme under project ES/V003488/1. The authors alone are responsible for the interpretation of the data. This work contains statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

1. Introduction

The majority of the social mobility literature to date has focused on estimating correlations between income, earnings, social class or social status across generations, over time, and across countries at the level of *population averages* (Blanden, Goodman, Gregg, & Machin, 2004; Breen & Müller, 2020; Erikson & Goldthorpe, 2010). By contrast, relatively few studies have examined how intergenerational social mobility varies across ethnic groups, meaning the experiences of individuals from ethnic minority backgrounds are less well understood than is the case for ethnic majority groups, particularly whites. Furthermore, what research there is on this issue has focused almost entirely on social class, finding heterogeneity in intergenerational social class mobility across ethnic groups - differentiated by migration stage, sex, and social class origin in the pre-migration country. Mobility scholars have also shown that some minority ethnic groups have experienced greater social fluidity than the white majority (Li, 2018), especially Black African (Li and Heath 2016) and Black Caribbean groups (Platt 2005). While higher levels of fluidity are normatively desirable at the population level, in the context of inter-group differences it can also be taken to indicate a *reduced* ability to transmit familial advantage across generations relative to the ethnic majority group (Platt 2005). This means that relative advantage in socio-economic status is less likely to be transmitted across generations for ethnic minority groups and, indeed, Pakistani and Bangladeshi, Black Caribbean, and Black African groups in particular have been found to be more likely to experience downward mobility (Li 2021; Macmillan and McKnight 2022).

The causes of these variations in social mobility patterns between ethnic groups are complex and not currently well understood. While many factors likely play a role, such as the social position of immigrant groups pre-migration, cultural attitudes to the role of the family and educational attainment, weak social capital, and hostile institutional environments, one possibility that has not yet been explored is differential housing wealth. It is increasingly

recognised that family wealth is key to understanding the resistance of social (im)mobility to policy reform and, as the primary component of wealth for most families, housing assets may well play an important role in producing and reproducing inter-ethnic differences in other dimensions of social mobility, such as education, earnings, and income. Our objective in this paper is to shed light on this neglected component of social mobility by charting inter-ethnic patterns and trends in home ownership in England and Wales for the period 1971 to 2011. The paper proceeds as follows. First, we review the relevant literature, before describing the data and measures used in our analysis. This is followed by a description of the linked census data set that underpins our analysis, a presentation of our analyses and results and a consideration of the limitations, substantive and policy implications of our findings.

2. Literature

There can be little doubt that the uneven distribution of wealth and assets across individuals and families is a key driver of inequalities in important socio-economic outcomes such as earnings, qualification attainment, and home ownership (Davenport, Levell, & Sturrock, 2021). In addition to direct intergenerational wealth transfers through gifts and inheritance, family wealth can also perpetuate inequalities by facilitating access to privilege-generating locales, institutions, and networks. For example, even with comparatively low earnings, wealthy families can invest in private education for their children, tutoring to pass school entrance exams, or can move to areas with high-performing state schools. These strategies increase the chances of their offspring attaining high qualifications at school and, consequently, of graduating from a high-status university. In turn, this facilitates entry to well-paid professional occupations and the ability to purchase a home and invest in wealth-producing financial instruments, thus perpetuating the intergenerational cycle of wealth accrual and transmission. Similarly, wealthy families can support investment in housing for their adult children through

provision of deposits, which enables them to live in towns and cities with high-productivity labour markets that they would otherwise not be able to access due to high housing costs. And there are myriad other ways in which family wealth is deployed to perpetuate material and opportunity advantage from one generation to the next. Wealth is therefore key to understanding social and economic immobility across generations.

Yet wealth is also notoriously difficult to measure in the kinds of surveys that are generally used in studies of social mobility. Partly, this is a result of the complex and multi-faceted nature of wealth, but it is also because many people are unwilling to disclose their true wealth in surveys. For these reasons, the role of family wealth in shaping other dimensions of social mobility is currently not well understood. Recent exceptions to this are Gregg and Kanabar (2021) who find strong evidence of increasing intergenerational wealth persistence among recent cohorts in Britain using the Wealth and Assets Survey (WAS). These authors also demonstrate that the increase in the intergenerational persistence of wealth is driven mainly by large inequalities in home ownership. For example, they found that by age 35 years, the rate of homeownership was three-times higher among adults whose parents were high-educated homeowners compared to those from a low-educated renter background. The high-educated home-owner group also held approximately ten-times the level of housing wealth than the low-educated renters. The implications of these findings for other dimensions of social mobility is not encouraging; if family wealth is itself generative of disparities in educational, occupational, and income attainment then its increasing concentration amongst the already wealthy means that, *ceteris paribus*, social mobility in these domains will be inhibited.

There is a growing body of scholarship documenting heterogeneity in life outcomes between ethnic groups in the United Kingdom (Li & Heath, 2008, 2016, 2020; Lindley, 2005; Modood et al., 1997). This shows that some ethnic minority groups – Black African, Black Caribbean, Pakistani, and Bangladeshi – have higher rates of unemployment and lower

earnings over the lifecycle compared to the White majority (Li and Heath 2020). The same groups have also fared worse during recessions, experiencing higher unemployment and later re-entry into the labour market (Li & Heath, 2008). Indian and Chinese groups, however, have tended to have similar, or better socio-economic outcomes compared to White British (Li, 2018; Li & Heath, 2020). With regards to patterns of intergenerational mobility, higher rates of absolute downward social class mobility have been found among some first-generation immigrant groups. For example, Li and Heath (2016) showed that Black African immigrants to Britain were mostly drawn from higher social class groups in their country of origin but were frequently unable to pass these privileged positions across generations in Britain post-migration. Similarly, Platt (2005) found higher rates of downward mobility among first-generation Black Caribbeans - in contrast to Indian immigrants who were better able to transmit their privileged origin conditions to their offspring. While there is some evidence of "catch-up" in outcomes for the later generations (Li & Heath, 2016), scholars have also shown that minority ethnic groups have greater social fluidity (relative mobility) compared to the white majority (Li, 2018), especially the Black African (Li and Heath 2016) and Black Caribbean groups (Platt 2005).

Higher levels of relative mobility can be the result of success in accessing the salariat but, as noted previously, may also indicate a lower capacity to maintain socio-economic advantage from one generation to the next, compared to the majority group (Platt 2005). Indeed, Pakistani and Bangladeshi (Li, 2021), Black Caribbean, and Black African groups, in particular, have been more likely to experience downward mobility in Britain than other ethnic groups (Li, 2021; Macmillan & McKnight, 2022). A potentially important factor underpinning these ethnic differences in social class mobility is how patterns of home ownership vary between ethnic groups over time. Homeownership rates in Britain peaked at 69% in 2001, falling to 64% by 2011 - the first fall in homeownership since 1918 (Office for National

Statistics, 2015). In the 2011 Census, the majority of households of Indian, White British, Pakistani, White Irish and Chinese background were owner-occupiers. Those of Indian ethnicity had the highest rate of home ownership (69%), followed by White British (68%), Pakistani (63%) and White Irish (61%), while home ownership was lowest for the Black African (24%) and Arab (27%) ethnic groups. Between 1991 and 2011, rates of home ownership decreased for all ethnic groups (Finney & Harries, 2013). The picture, then, is not one of the white majority faring better than ethnic minority groups on these outcomes but of broad heterogeneity, with some groups performing better than the majority group and others significantly worse (Commission on Race and Ethnic Disparities, 2021; Li, 2021).

Differences in levels of home ownership between ethnic groups are likely shaped by a range of factors, including concentrations of earlier migrant flows, location preferences, local house prices, employment and earning conditions, and differential access to mortgage financing. Discrimination has also shaped experiences of ethnic minorities across all sectors of the housing market (Phillips, 2003; Rex & Moore, 1969), including residency requirements acting as a barrier to accessing social housing, and discrimination by landlords in private rental market (Lukes, de Noronha, & Finney, 2019). The implications of reduced access to home ownership for wealth accumulation are significant; as housing affordability declines, becoming a home-owner increasingly depends on intergenerational transfers, the so-called 'bank of mum and dad'. Sanderson and Udagawa (2017) found that 35% of first-time buyers in England in 2017 supported their house purchase with a parental gift or loan, up from 22% in 2000. Blanden, Eyles, and Machin (2021) use data from the National Child Development Study (NCDS), the British Cohort Study (BCS70), and the Wealth and Assets Survey (WAS), to estimate intergenerational trends in home ownership, as well as the relationship between home ownership and wealth. They too found that the probability of home ownership has increasingly come to depend on buyers' parents being home owners. Gregg and Kanabar (2022) also used

the WAS to show that parental wealth has become increasingly predictive of housing wealth in the next generation. Even among current homeowners, those from the wealthiest parental backgrounds reported ten-times more housing wealth than individuals from the most disadvantaged backgrounds.

If home ownership increasingly becomes the preserve of individuals from home-owning families (thereby strengthening the intergenerational housing correlation) then this may have the potential to exacerbate differences between ethnic groups. In 2011, the home ownership rate among Black households was 24%, compared to 68% among White British households (Finney & Harries, 2013), and the median housing wealth among Black African and Black Caribbean households in Britain in 2018 was £0, compared with £115,00 among White British households (Office for National Statistics, 2020b). That stark differences in homeownership and wealth exist across ethnic groups is now well known. Less is understood, however, about how ethnic groups differ in how this housing wealth is passed between generations. It is to this question that we now turn in our empirical analysis.

3. Data and measures

The Office for National Statistics Longitudinal Study (LS) is a 1% sample of the population of England and Wales, linking census and administrative data on births, deaths, and cancer registrations, since the 1971 Census (Shelton et al., 2019). The original LS sample was selected from the 1971 Census by identifying records for all individuals born on four (undisclosed) dates in the year. The LS is the largest nationally representative longitudinal studies in the UK with a sample size of over 500,000 in each Census year. The advantage of the LS for social mobility research is that the entire household is observed at each Census. Therefore, parental demographic characteristics, including occupation and housing tenure, are measured when the

study member was a child. Such parental characteristics can be used to measure 'origin' status on a range of measures and compared to study members' outcomes on these same variables in adulthood.

Here, we restrict the sample to study members who were aged 8 to 17 years in the 1971, 1981, and 1991 censuses, making this the age of origin for housing tenure for three consecutive cohorts. The analysis sample is comprised of study members born in England or Wales (97% of the sample), or who arrived as immigrants during their formative years (3% of the sample). Following Li (2018b), our ethnic minority sample members can be categorised as second or higher generation migrants on the basis that they would have received most (or all) of their education in Britain, and would acquire the same kind of human capital and have as fluent English as the British White group. We link study members' records to their data in the Census 20-years later, when they are aged 28 to 37 years, and identify their housing tenure at this point. This 28 to 37 years window includes the average age of first home purchase in England and Wales; between 2015 and 2017, the average age of first home buyer in the UK was 31 years and 11 months among White British, and 32 years and 5 months among all other ethnic groups (Office for National Statistics, 2021). We then estimate the association between origin and destination housing tenure status by ethnic group to assess the extent to which an individual's probability of home ownership depends on whether or not their parents owned their own home when sample members were children. Our novel contribution is to also examine whether this association differs between ethnic groups and how, if at all, it has changed over time.

Measures and definitions

Housing tenure is not consistently measured across the five censuses in the LS and therefore requires recoding to a comparable set of categories over time. For example, in 2011 a range of detailed tenure categories allowed for differentiation between owner-occupation with and

without a mortgage, shared ownership, and social- and private renting, but in 1971 only owner occupation vs renting was identified. While we would ideally differentiate between private and social renters, the lack of detail in the earlier census questions necessitates that we transform all housing tenure variables in each census to a simple binary indicator of owner occupation (with and without mortgage and shared ownership) and any form of renting (social and private). The census question regarding housing tenure asks about the housing tenure of the accommodation occupied by the head of household and their household members. We refer to 'origin' housing tenure as the tenure of the study members' parents, as co-habitation with at least one parent is the most common situation.

We also code ethnic group to a consistent set of categories in a way which is a compromise between maximising the number and distinctiveness of ethnic groups and having sufficient sample size to distinguish reliably between them. We use the following seven groups: *White British*, *White Other*, *Indian*, *Pakistani/Bangladeshi*, *Chinese/Other Asian*, *Black and Other Black* and *Mixed and Other*. The 'White Other' group is largely comprised of individuals of European origin (76% in the 2011 Census were from Europe, including Eastern and Western Europe, the Baltic States, the Commonwealth of Independent (Russian) States and Turkey) (Office for National Statistics, 2020a). The majority of the 'Mixed' category in the 2011 census comprised White and Black Caribbean, White and Asian, White and Black African (Office for National Statistics, 2020a). It would be much preferable to distinguish between Chinese and Other Asian but cell sizes are too small for these groups to be analysed separately (across all five Censuses, 38% of the combined group were Chinese). We also use a measure of median Local Authority house prices obtained from Office of National Statistics datasets to control for differential housing affordability across the areas in which different ethnic groups tend to be

concentrated.[1] To adjust for rising house prices over time, median local house prices were converted into deciles separately for each cohort and then linked to the destination census wave.

4. Analysis

Table 1 provides summary statistics for the LS analysis sample described above. The first column reports the sample size for each ethnic group by cohort, the average age of the cohort members, and the average age of sample members' parents. The second panel reports home ownership rates and the proportion who are in the National Statistics Socio-economic Classification (NS-SEC) groups 1 or 2 (managers and professional occupations). This shows the steady increase in this group for the population and across ethnic groups that has been well documented elsewhere (Buscha and Sturgis, 2018; Platt, 2005). Black, Pakistani, Bangladeshi, Indian and Asian groups have a relatively lower share of the parental generation in managerial or professional roles, compared with White British, White Other and Mixed and Other groups. The mean age of study members at first follow-up is 32 years (range = 28 to 37 years) and the mean parental age at origin was 41 years for most ethnic groups and cohorts. This is ten years later than the typical age of first home purchase (which was, on average, 31 years for White British and 32 years for other ethnic groups between 2015 and 2017) (Office for National Statistics, 2021).

[1] https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/medianhousepricefornationalandsubnationalgeographiesquarterlyrollingyearhpssadataset09

Table 1 Descriptive statistics and sample sizes

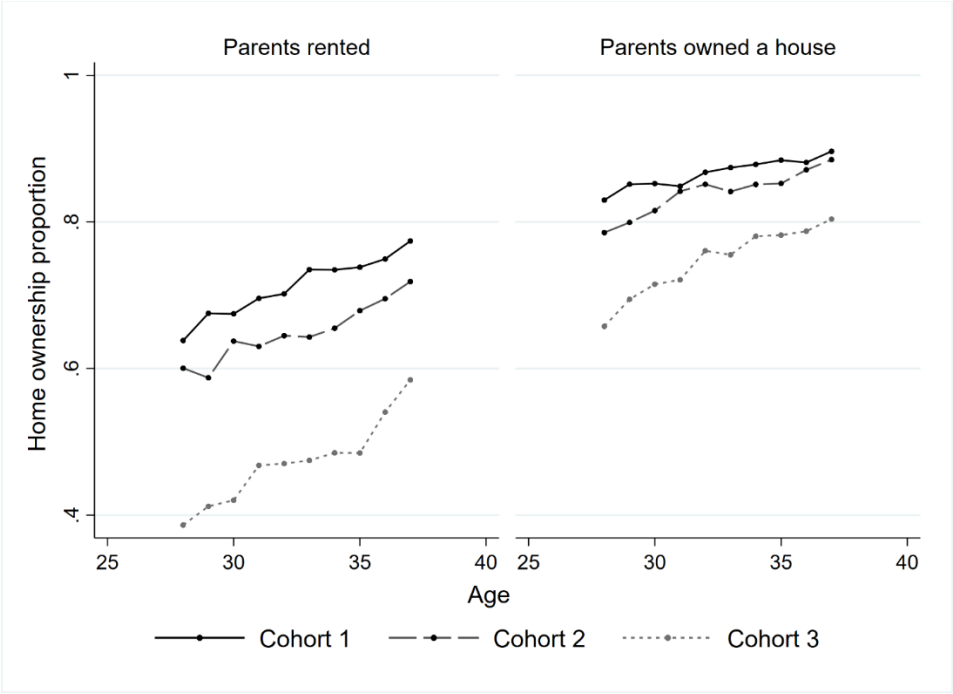
Ethnicity		Cohort 1	Cohort 2	Cohort 3		Cohort 1	Cohort 2	Cohort 3
						Proportions		
White British	N	52,398	53,756	40,909	NS-SEC 1/2	0.31	0.41	0.46
	Mean age	32.3	32.7	32.6	Origin owner	0.51	0.66	0.80
	Parental age	41.8	40.8	40.6	Destination owner	0.79	0.78	0.69
White Other	N	681	607	514	NS-SEC 1/2	0.40	0.51	0.63
	Age	32.4	33.0	32.6	Origin owner	0.57	0.68	0.81
	Parental age	42.7	43.0	41.9	Destination owner	0.77	0.76	0.67
Indian	N	379	780	1,106	NS-SEC 1/2	0.34	0.55	0.62
	Age	32.5	32.3	32.1	Origin owner	0.82	0.85	0.91
	Parental age	41.1	41.0	40.0	Destination owner	0.89	0.91	0.87
Pakistani/ Bangladeshi	N	138	395	841	NS-SEC 1/2	0.28	0.36	0.39
	Age	32.7	31.8	32.2	Origin owner	0.77	0.83	0.78
	Parental age	40.3	42.5	41.9	Destination owner	0.83	0.80	0.76
Chinese/ Other Asian	N	75	216	378	NS-SEC 1/2	0.28	0.48	0.64
	Age	32.5	31.9	32.3	Origin owner	0.63	0.76	0.79
	Parental age	40.6	41.9	41.6	Destination owner	0.76	0.84	0.79
Black & Other Black	N	483	724	450	NS-SEC 1/2	0.25	0.42	0.50
	Age	31.4	33.3	32.3	Origin owner	0.61	0.54	0.55
	Parental age	39.2	43.0	40.5	Destination owner	0.57	0.60	0.51
Mixed & Other	N	280	542	745	NS-SEC 1/2	0.35	0.46	0.52
	Age	31.8	32.4	32.0	Origin owner	0.50	0.63	0.71
	Parental age	41.1	41.4	40.4	Destination owner	0.73	0.68	0.62

Notes: Data source is the ONS-LS. N is the sample size; Age is age of the study member at follow-up ("destination"); Parental age is age of the parent at "origin" – when the main study member was a child; NS-SEC 1 / 2 is the proportion of main study members in a professional or managerial role at "destination"; Origin owner indicates whether the study members parents owned their own home; destination owner indicates whether the study member owned their own home in adulthood.

Figure 1 plots the association between age and homeownership for the three cohorts, separately by housing tenure origin status. As would be expected, for all three cohorts, the probability of homeownership increased with age. However, across successive cohorts, the

probability of homeownership declined, with a substantial decrease between cohorts 2 (born 1964 to 1973) and 3 (born 1974 to 1983), a trend which has also been reported by Blanden et al. (2021). The size of the decline in home ownership over the three cohorts is notably larger among those whose parents rented than it is amongst those whose parents owned their home. Among those born between 1954 to 1963 (cohort 1) who grew up in rented accommodation, 71% had become homeowners by age 28 to 37 years, while for those born between 1974 to 1983 (cohort 3) who grew up in rented accommodation, just 47% had become homeowners by the age of 28 to 37 years. In contrast, for those of owner origin, the decline in homeownership was much less pronounced. For cohort 1, 86% of those with home-owning parents themselves became homeowners, falling to 75% for the third cohort.

Figure 1 Ownership proportions by cohort, age and housing tenure



Notes: Data source is the ONS-LS.

Table 2 presents transitions between origin and destination housing tenure, by ethnicity and cohort. Conditional on being of renter origin, the probability of *upward housing mobility* (moving from renter origin to owner destination status) was 65% for the White British group,

pooled across cohorts. Conversely, conditional on growing up in an owner-occupier home, the probability of *downward housing mobility* (moving from owner origin to renter destination status) was just 19%. These estimates are quite different for minority ethnic groups. Individuals of Indian ethnicity experienced a significantly higher rate of upward housing mobility, at 81%. In other words, the relative risk of Indian individuals who grew up in rental accommodation transitioning to home ownership is 25% greater than for White British. For the Pakistani/Bangladeshi, Mixed & Other and Black & Other Black groups, the rates of upward mobility were lower compared to White British, with relative risks of .85, .82 and .68, respectively. Across all three ethnic groups, only around half of those from renter origins transitioned to home ownership as adults.

Table 2 Transitions between housing tenure of parents and housing tenure in adulthood

	Transition type between origin Census and destination Census			
Pooled	*Rent-own*	*Rent-rent*	*Own-own*	*Own-rent*
White British	0.65	0.35	0.81	0.19
White Other	0.66	0.34	0.78	0.22
Indian	0.81	0.19	0.90	0.10
Pakistani/Bangladeshi	0.55	0.45	0.84	0.16
Black & Other Black	0.44	0.56	0.66	0.34
Mixed & Other	0.53	0.47	0.73	0.27
Chinese and Other Asian	0.69	0.31	0.84	0.16
Cohort 1	*Rent-own*	*Rent-rent*	*Own-own*	*Own-rent*
White British	0.71	0.29	0.87	0.13
White Other	0.72	0.28	0.82	0.18
Indian	0.84	0.16	0.91	0.09
Pakistani/Bangladeshi	0.69	0.31	0.88	0.12
Black & Other Black	0.49	0.51	0.63	0.37
Mixed & Other	0.67	0.33	0.80	0.20
Cohort 2	*Rent-own*	*Rent-rent*	*Own-own*	*Own-rent*
White British	0.65	0.35	0.84	0.16
White Other	0.69	0.31	0.80	0.20
Indian	0.85	0.15	0.92	0.08
Pakistani/Bangladeshi	0.66	0.34	0.83	0.17
Black & Other Black	0.49	0.51	0.69	0.31
Mixed & Other	0.52	0.48	0.78	0.22
Chinese and Other Asian	0.73	0.27	0.88	0.12
Cohort 3	*Rent-own*	*Rent-rent*	*Own-own*	*Own-rent*
White British	0.47	0.53	0.74	0.26
White Other	0.43	0.57	0.73	0.27
Indian	0.75	0.25	0.88	0.12
Pakistani/Bangladeshi	0.49	0.51	0.84	0.16
Black & Other Black	0.32	0.68	0.66	0.34
Mixed & Other	0.45	0.55	0.68	0.32
Chinese and Other Asian	0.63	0.37	0.84	0.16

Notes: Data source is the ONS-LS. Figures for Chinese and Other Asian are excluded from cohort 1 due to lower cell sizes.

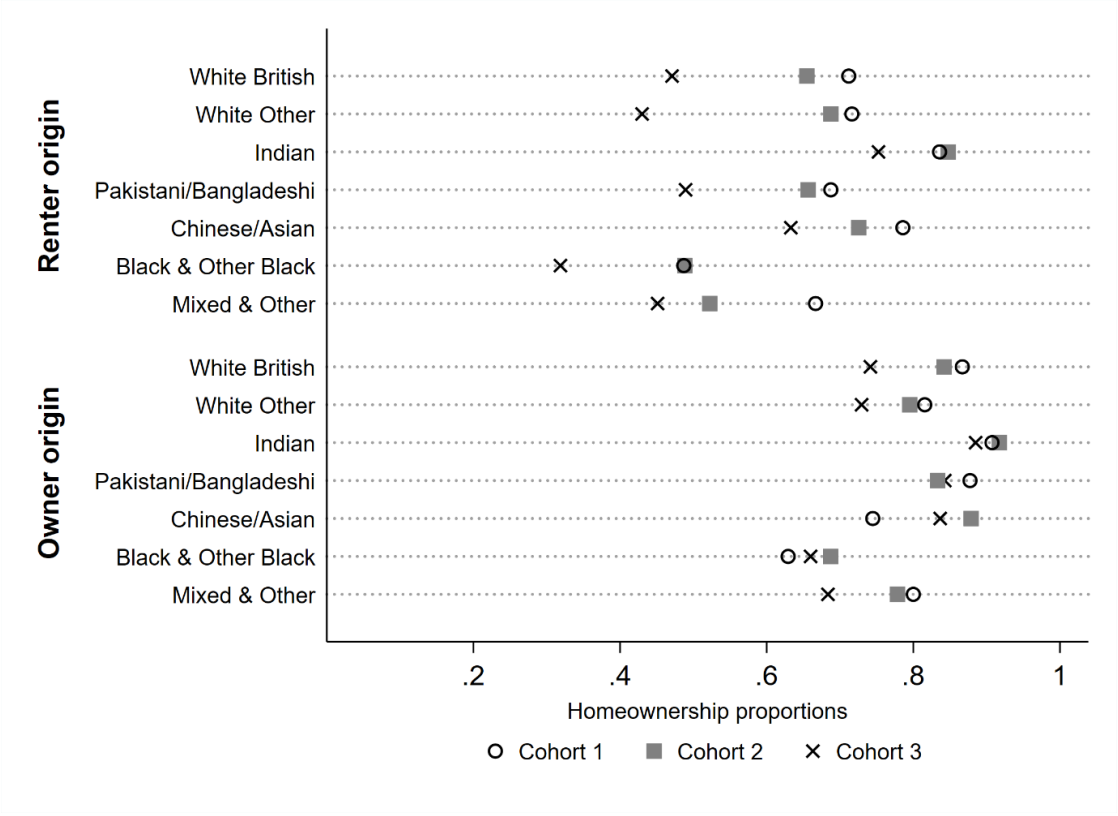
Also noteworthy in Table 2 is the large difference in the risk of downward housing mobility between the Indian and Black ethnic groups. Across all three cohorts, Indians experienced the lowest rate of downward mobility, at just 10%, while for Black study members this was over three times higher, at 34%. The difference between the Indian and Black groups is also reflected in the higher rates of ownership stability between generations, with the Black and Other Black and Mixed and Other groups considerably less likely to maintain home ownership status and more likely to remain renters from one generation to the next. The cohort-specific tables show that the chances of upward housing mobility have decreased, while downward housing mobility has increased for all ethnic groups. The increase in downward mobility was lowest for Black individuals but this was primarily due to the already high rates of this trajectory in cohort 1.

Figure 2[2] shows home ownership rates by ethnic group for individuals from renter (top part of Figure 2) and owner (bottom part of Figure 2) origins, which are again differentiated by ethnicity. Table 1 showed that, across all three cohorts, those of Indian ethnicity had the highest rate of home ownership in the parental generations, while those of Black ethnicity had the lowest. This is important because the combination of a low home ownership at origin paired with a higher intergenerational persistence works to perpetuate inequalities in homeownership and wealth. Across all ethnic groups and cohorts, those of ownership origin had a higher ownership probability compared to those whose parents rented. The general decline in home ownership over the period is predominantly concentrated amongst people whose parents rented, although this difference between origin renters and origin owners is smaller for the Indian and Chinese/Other Asian groups. 91% of cohort 1 Indians with home-owning parents became homeowners themselves, falling by just two percentage points to 89%

[2] A tabular version of Figure 2 is available in Appendix Table A1.

for the third cohort. For those or renter origin, the corresponding figures were 84% and 75%. In contrast, 88% of Pakistani/Bangladeshis with home-owning parents in cohort 1 went on to become homeowners themselves, with this figure declining to 84% for the third cohort. For Pakistani/Bangladeshis with renter parents, these estimates were 69% and 49%, respectively. This represents a substantial change from 1.28 to 1.71 in the relative risk of home ownership for owner over renter origin individuals in this ethnic group. For those in the Black group, homeownership rates were low across both tenure origin statuses, though particularly so among those with renting parents, where the homeownership rate was 49% for cohort 1, dropping to just 32% for cohort 3.

Figure 2 Ownership proportions by origin tenure, ethnicity and cohort



Notes: Data source is the ONS-LS.

It is likely that some of the differences between ethnic groups in housing tenure and its persistence across generations is a result of the different kinds of areas that ethnic groups tend

to live in, particularly the greater tendency of ethnic minorities to live in metropolitan areas, where the cost and availability of housing can differ substantially compared to more rural areas. As is documented in Figure A1 (Appendix), the geographic clustering of ethnic groups within England and Wales is highly concentrated. A substantial number of ethnic minority individuals are located in metropolitan areas such as London, Manchester and Birmingham. These areas are likely to have housing characteristics that are in turn reflected via local house prices. To control for such factors, and to facilitate summary of estimates in a more succinct and interpretable manner, we use a regression framework for the remaining analyses. We estimate the parameters of linear models, of the form described in Equation 1, using ordinary least squares (OLS):

$$D_i = \alpha + \boldsymbol{\beta} O_i + \boldsymbol{\gamma} E_i + \boldsymbol{\delta} O_i . E_i + X_i + \varepsilon_i \qquad (1)$$

D_i, is a binary variable denoting housing destination status (renter = 0, owner = 1), O_i measures housing tenure at origin for individual i, and E_i is a categorical variable indicating ethnic group. The $O_i . E_i$ term is an interaction between origin housing tenure and ethnic group. X_i is a vector of covariates which, in the full specification, includes sex, age and age-squared, dummy indicators for government office region, Local Authority, within-cohort deciles of Local Authority median house prices, and cohort. The cohort indicators are included to control for shocks that affect the entire cohort, such as macroeconomic shocks. $\boldsymbol{\beta}$, $\boldsymbol{\gamma}$ and $\boldsymbol{\delta}$ are regression coefficients to be estimated and ε_i is an idiosyncratic error term. Results from the simplest version of the model in Equation 1, including only sex, age and age-squared as controls, are presented in Table 3.

Table 3 Linear probability model of home ownership in adulthood

	Cohort 1	*Cohort 2*	*Cohort 3*	*Pooled*
Constant	0.100	0.126	-0.947***	-0.174
	(0.246)	(0.249)	(0.307)	(0.154)
Parent ownership (renter=base)	0.159***	0.188***	0.267***	0.161***
	(0.00350)	(0.00401)	(0.00601)	(0.00243)
Ethnicity (White British=base)				
White Other	0.00566	0.0300	-0.0407	0.00336
	(0.0262)	(0.0336)	(0.0503)	(0.0196)
Indian	0.121***	0.195***	0.292***	0.160***
	(0.0455)	(0.0334)	(0.0429)	(0.0232)
Pakistani/Bangladeshi	-0.0238	0.0172	0.0214	-0.0983***
	(0.0820)	(0.0582)	(0.0369)	(0.0295)
Chinese and other Asian	0.0746	0.0805	0.162***	0.0394
	(0.0783)	(0.0627)	(0.0537)	(0.0367)
Black & Other Black	-0.215***	-0.170***	-0.144***	-0.211***
	(0.0361)	(0.0275)	(0.0329)	(0.0184)
Mixed & Other	-0.0398	-0.134***	-0.0118	-0.119***
	(0.0396)	(0.0354)	(0.0346)	(0.0213)
*Parental ownership*ethnicity*				
Parent Ownership#White Other	-0.0601*	-0.0817**	0.0287	-0.0411*
	(0.0329)	(0.0390)	(0.0548)	(0.0230)
Parent Ownership#Indian	-0.0834*	-0.115***	-0.142***	-0.0719***
	(0.0484)	(0.0351)	(0.0442)	(0.0242)
Parent Ownership#Pakistani/Bangladeshi	0.0298	-0.0185	0.0851**	0.130***
	(0.0881)	(0.0616)	(0.0396)	(0.0315)
Parent Ownership#Chinese and other Asian	-0.202**	-0.0357	-0.0619	-0.00891
	(0.101)	(0.0677)	(0.0578)	(0.0401)
Parent Ownership#Black & Other Black	-0.0155	0.00951	0.0633	0.0588**
	(0.0458)	(0.0362)	(0.0447)	(0.0241)
Parent Ownership#Mixed & Other	-0.0248	0.0758*	-0.0372	0.0417
	(0.0521)	(0.0419)	(0.0402)	(0.0254)
N	54,522	57,184	45,022	156,728
R-squared	0.043	0.056	0.072	0.042

Notes: Data source is the ONS-LS. Control variables included are: sex, age and age-squared. Robust standard errors in parenthesis.

The main effects for parental homeownership status show the strengthening over cohorts in intergenerational persistence of homeownership for the baseline group, White British, that was also observed in Table 1. For this group, having homeowner parents increased the probability of homeownership—compared to having renting parents—by 16 percentage

points for cohort 1, 19 percentage points for cohort 2, and 27 percentage points for cohort 3. Turning the main effects for ethnicity, there are substantial differences in home ownership by ethnic group (among those of renter origin). Indians are notably more likely to be homeowners by age 37 years compared to all other ethnic groups. Compared to White British, Indians of renter origin were 12 (cohort 1) to 29 (cohort 3) percentage points more likely to be homeowners. In contrast, those of Black ethnicity with renter parents were less likely to own a home compared to White British, by 22 to 14 percentage points for cohorts 1 and 3, respectively. Other ethnic groups of renter origin did not experience significantly different levels of home ownership compared to White British.

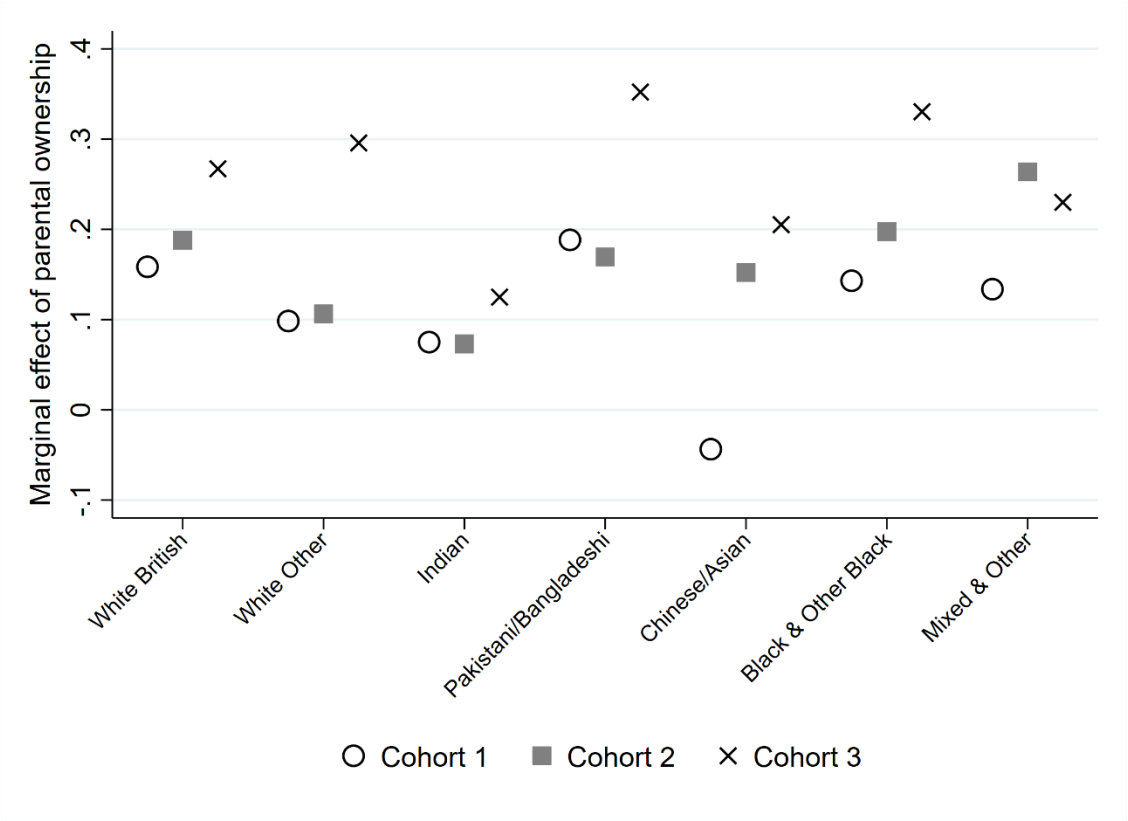
The coefficients of primary interest in Table 3 are the interactions between origin ownership status and ethnicity. These measure how the association between parent and child housing tenure varies by ethnic group (relative to the reference category, White British). The Indian group had a lower association between parent and child housing tenure across cohorts, with coefficients ranging from -0.08 to -0.14 from cohort 1 to cohort 3. This means that for Indian individuals, being of owner origin was less important for becoming a homeowner compared to the White British group. In cohort 3, the probability of being a homeowner if your parents were homeowners was 0.14 percentage points lower for Indians compared to the White majority. A coefficient of similar magnitude is estimated for the White Other group, who also had lower intergenerational persistence in housing tenure compared to White British, an effect which is mainly driven by cohorts 1 and 2.

The Pakistani and Bangladeshi group had a high intergenerational homeownership association in the third cohort, and for all cohorts pooled. A coefficient of 0.085 in cohort 3 represents an 8.5 percentage point higher intergenerational homeownership association compared to White British. Similarly, the Black group did not differ in their intergenerational homeownership association across the three cohorts compared to White British, but when

pooled across cohorts, had a significantly higher intergenerational homeownership association. This reflects the fact that, as we saw in Table 2, the Black group is more likely to be stable renters across generations. The Chinese and other Asian group had a low intergenerational housing association in the first cohort, but this became statistically indistinguishable from the White majority by cohorts 2 and 3, by which time the ownership rate for this group had increased substantially.

Figure 3 presents marginal effect estimates from the pooled model specification in Table 3 in graphical form; the difference in the predicted probability for individuals of homeowner origin compared to renter origin is plotted for each ethnicity by cohort. Recall also that homeownership rates are important for interpreting the intergenerational housing associations because whether a high association is normatively desirable depends on whether an ethnic group has high or low initial rates of home ownership. For instance, the Black group had low parental homeownership rates, as well as strong persistence of housing tenure across generations, whereas the Indian group had high parental homeownership, with low persistence of tenure across generations - parent ownership was less important for Indian individuals in gaining access to the housing ladder for Indians.

Figure 3 Marginal effect of parents owning a home on main study member owning a home *(intergenerational housing mobility)* for each ethnicity



Notes: Data source is the ONS-LS.

Finally, Table 4 reports estimates of intergenerational homeownership mobility adjusted for the remaining covariates. Model M0 in Table 3 reproduces the pooled estimates from Table 2 for ease of comparison. Model M1 adds indicators for Government Office Region (there are 9 regions), model M2 replaces region with Local Authority fixed effects, model (M3) adds median house price deciles (which vary by cohort and Local Authority), and model M4 adds cohort indicators to account for secular cohort-specific changes (to, e.g., the macroeconomic environment) over time. The purpose of taking these factors into account is not to 'explain away' ethnic group differences in homeownership mobility, but to identify possible underlying mechanisms leading to between group differences in home ownership and its persistence across generations.

After adjusting for government office region, in Model 1, the patterns seen in Table 3 persist; the Pakistani, Bangladeshi and Black groups have a stronger link between origin and destination housing tenure, whereas the White Other and Indian groups have a weaker link. Adjusting for Local Authority, a more granular geography, in Model 2, the coefficients for Pakistani and Bangladeshi and Black groups become smaller. Both interaction effects decrease by approximately a half, indicating that intergenerational differences between the Pakistani and Bangladeshi and Black groups compared to the White British group is in part explained by local characteristics. The findings also remain largely unaltered after adding time-varying controls for house prices. Finally, adding an indicator for cohort reduces the size of the interaction term for Pakistani, Bangladeshi and Mixed & Other groups to close to zero. One potential explanation of this is that nationwide economic conditions that affect all groups equally—such as the stagnation in real wages and increases in house prices—are an important contributor to differences in intergenerational housing mobility for these groups. In other words, the difference in intergenerational housing persistence may be explained by the disproportionate impact of macro-economic conditions on the Pakistani, Bangladeshi and Mixed & Other Black groups. However, we also cannot rule out alternative explanations, such as the effects of unobserved confounders which change over time, or differences in statistical power across cohorts.

Table 4 Pooled linear probability regressions with controls

	M0 Age and sex	M1 + region	M2 + LAD FE	M3 + house prices	M4 + wave
Parental homeowner	0.161***	0.162***	0.158***	0.159***	0.189***
	(0.00243)	(0.00243)	(0.00243)	(0.00243)	(0.00245)
White Other	0.00361	0.0220	0.0389**	0.0396**	0.0405**
	(0.0196)	(0.0196)	(0.0193)	(0.0192)	(0.0189)
Indian	0.162***	0.185***	0.183***	0.184***	0.220***
	(0.0231)	(0.0230)	(0.0227)	(0.0227)	(0.0226)
Pakistani/Bangladeshi	-0.0980***	-0.0678**	-0.0113	-0.0120	0.0626**
	(0.0295)	(0.0290)	(0.0271)	(0.0272)	(0.0270)
Chinese/Asian	0.0396	0.0680*	0.0841**	0.0841**	0.138***
	(0.0367)	(0.0368)	(0.0359)	(0.0360)	(0.0357)
Black	-0.211***	-0.175***	-0.133***	-0.133***	-0.108***
	(0.0185)	(0.0185)	(0.0179)	(0.0180)	(0.0178)
Mixed/Other	-0.119***	-0.103***	-0.0891***	-0.0884***	-0.0523**
	(0.0213)	(0.0212)	(0.0207)	(0.0208)	(0.0205)
Interaction					
Parent ownership X White Other	-0.0411*	-0.0402*	-0.0456**	-0.0465**	-0.0486**
	(0.0230)	(0.0229)	(0.0225)	(0.0225)	(0.0223)
Parent ownership X Indian	-0.0719***	-0.0794***	-0.0808***	-0.0819***	-0.0914***
	(0.0242)	(0.0240)	(0.0236)	(0.0236)	(0.0235)
Parent ownership X Pakistani/Bangladeshi	0.130***	0.101***	0.0504*	0.0511*	0.0155
	(0.0315)	(0.0310)	(0.0292)	(0.0292)	(0.0290)
Parent ownership X Chinese/Asian	-0.00891	-0.0190	-0.0242	-0.0249	-0.0412
	(0.0401)	(0.0402)	(0.0394)	(0.0395)	(0.0393)
Parent ownership X Black	0.0588**	0.0556**	0.0301	0.0300	-0.00388
	(0.0241)	(0.0240)	(0.0232)	(0.0233)	(0.0232)
Parent ownership X Mixed/Other	0.0417	0.0430*	0.0436*	0.0427*	0.0336
	(0.0254)	(0.0254)	(0.0249)	(0.0249)	(0.0246)
Constant	-0.174	-0.181	-0.127	-0.152	0.0123
	(0.154)	(0.154)	(0.153)	(0.153)	(0.151)
N	156,397	156,397	156,397	156,397	156,397
R-squared	0.042	0.046	0.067	0.067	0.087

Notes: Data source is the ONS-LS. Robust standard errors in parenthesis.

5. Discussion

Because the majority of the social mobility literature to date has focused on general populations (Blanden et al., 2004; Breen & Müller, 2020; Erikson & Goldthorpe, 2010), considerably less is known about how the intergenerational transmission of social and economic advantage is distributed across ethnic groups. In this paper we have sought to shed light on this lacuna by estimating intergenerational housing tenure correlations for different ethnic groups in England and Wales between 1971 and 2011, using high quality data from longitudinally linked census samples (Shelton et al., 2019). This is an important gap in understanding because home ownership is a key driver of wealth accumulation and its transmission across generations, which in turn perpetuates inequalities in other dimensions of socio-economic disadvantage (Davenport et al., 2021; Gregg & Kanabar, 2022).

Our findings revealed large differences in intergenerational housing mobility between ethnic groups. In particular, the Black ethnic group was shown to have experienced the highest rates of renting persistence, the highest rates of downward housing mobility, and the lowest rates of upward housing mobility across generations, a gradient that has become more pronounced in the most recent cohort (born between 1974 to 1983). Yet our findings are not consistent with a mechanism that simply advantages the ethnic majority, as the highest rates of home ownership and its transmission across generations was found amongst the Indian and Chinese/Other Asian groups. For instance, 91% of Indians born between 1954-1963 with home-owning parents became homeowners themselves, with this figure falling by just three percentage points to 88% for those born between 1974 to 1983. For those of renter origin, the corresponding figures were 84% and 75%. This corresponds to a change from 1.08 to 1.17 in the relative risk of home ownership for owner over renter origin individuals in this ethnic group. In contrast, for those in the Black group, homeownership rates were low across among those whose parents rented or owned, particularly so among those with renting parents where

the homeownership rate was 49% for those born between 1954-1963, compared to 63% for those with home owning parents. These figures fell to 32% and 66% respectively for those born between 1974 to 1983. This represents a striking change from 1.29 to 2.06 in the relative risk of home ownership for owner over renter origin individuals in this ethnic group. Among the White British majority, 87% born between 1954-1963 with home-owning parents became homeowners themselves, with this figure declining to 74% for those born between 1974 to 1983. For those or renter origin, the corresponding figures were 71% and 47%, implying relative risk figures of 1.22 and 1.57, respectively.

This pattern mirrors that found in England and Wales across other important domains and life outcomes, where the Chinese and Indian groups attain the highest employment, earnings, and educational attainment, with Black, Pakistani and Bangladeshis faring worse on these outcomes than White British (Commission on Race and Ethnic Disparities, 2021; Li, 2018). Lower levels of family wealth, and less transmission of wealth across generations, may represent an important mechanism underlying these patterns, although it is not possible to place a causal interpretation on this relationship, given the limitations of the LS design for this purpose.

Some of the differences in home ownership across ethnic groups can be explained by housing affordability and residential location choices, albeit noting that these "choices" are heavily constrained, shaped as they are by historical migration patterns and economic conditions. For example, the majority of Black families in England and Wales live in London (Office for National Statistics, 2020c), where buying a house has always been less affordable than in other parts of the country and is increasingly unattainable without large parental transfers, whereas the Indian group are more geographically dispersed, with more representation particularly in the Midlands (Office for National Statistics, 2019).

These inter-ethnic differences in home ownership and intergenerational transfer are important for wealth accumulation and transmission, because housing wealth is the most substantial component of wealth passed across generations (Davenport et al., 2021; Gregg & Kanabar, 2022). Housing wealth inequalities also have implications for access to institutions and resources which support upward mobility, such as university, private tutoring, high quality school quality, and social networks. In addition to direct wealth accumulation, there are other benefits of owning a home such as greater security, more personal choice, and higher housing and neighbourhood quality (Clair & Hughes, 2019; Singh, Daniel, Baker, & Bentley, 2019).

While our study uses high-quality linked census data, which avoids recall bias in origin status and yields sample sizes sufficient to study fine-grained ethnic groups, there are limitations to our findings that should be noted. First, the census question on housing tenure measures the tenure of the accommodation occupied by the head of the household and their household members, rather who owns the house. This raises the issue of ethnic variation in multigenerational households. For example, it may be that Black and Pakistani adults are more likely to remain living in the home owned or rented by their parents, generating a higher association between parent and child housing tenure. Or, by the same token, might Indian adults be less likely to do this, thus generating the lowest persistence in tenure? Examining analyses of rates of multigenerational housing from 2011 Census data (Nafilyan et al., 2021), ethnic minority groups do have higher rates of two and three generation households than White British. However, the rank ordering does not come out in such a way that would explain the ordering of the size of tenure associations in our data. For example, while Pakistani families have relatively high rates of multigenerational households, especially three-generation, Black African and Caribbean have relatively low rates, and Indian families are in between. While this may well explain some of our results, particularly regarding Pakistani groups, it is unlikely to explain the patterning in its entirety.

Second, we identify origin status by examining parental housing tenure in the Census of England and Wales. Therefore, people whose parents were not living in the UK whilst the main study member was aged 8 to 18 years are not included in our sample. In other words, we are studying the second and later generation immigrants. Therefore, our results may not be applicable to first-generation migrants.

Despite these limitations, our findings show that the combination of low rates of initial home ownership and high persistence across generations has resulted in substantial differences in home ownership between ethnic groups in England and Wales. Increasing house prices have likely exacerbated the relative advantage of individuals from owner origins over their renter counterparts, a trend which has been particularly marked for the Black and Other Black ethnic group. This is likely, in turn, to exacerbate existing gradients in other dimensions of ethnic and racial inequality and social mobility. To the extent that home ownership and wealth inequalities shape other important life outcomes – such as access to education, occupational attainment – these patterns have the potential to contribute to stalling social mobility and offset broader policy reforms aiming to improve life chances.

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Online Appendix

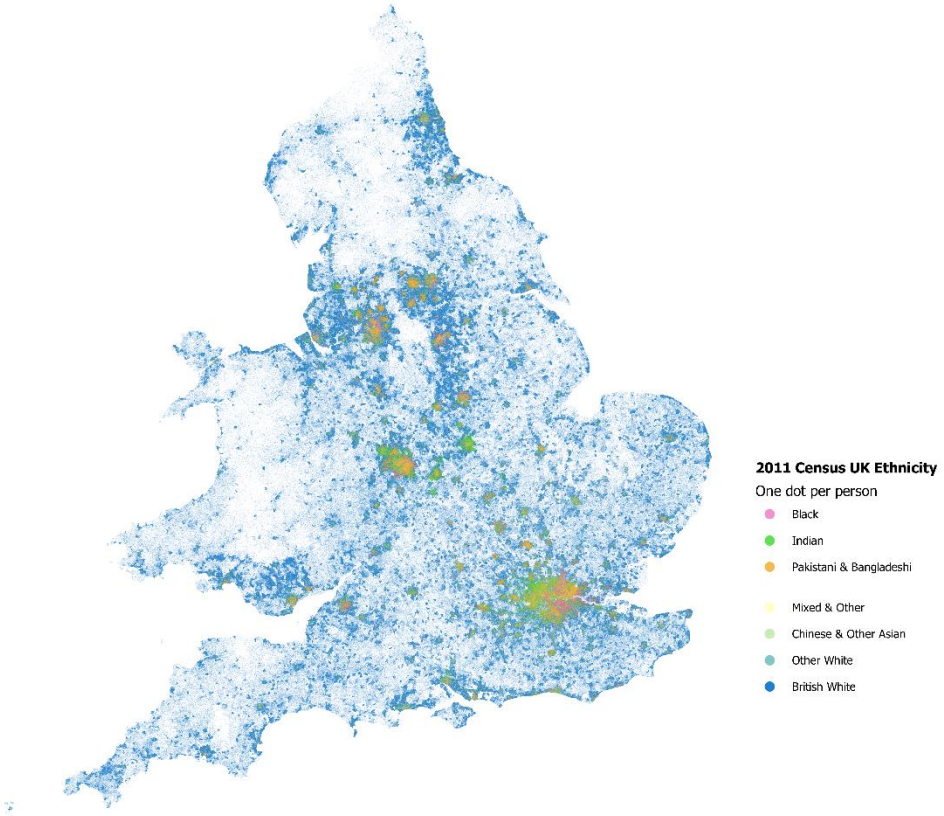
A Descriptive statistics

Table A1 Homeownership proportions by ethnicity, cohort and parental tenure status (statistics underlying Figure 2)

Parental tenure:	Renting			Owning		
Cohort:	1	2	3	1	2	3
	Home ownership proportions					
Ethnicity						
White British	0.71	0.65	0.47	0.87	0.84	0.74
White Other	0.72	0.69	0.43	0.82	0.80	0.73
Indian	0.84	0.85	0.75	0.91	0.92	0.88
Pakistani/Bangladeshi	0.69	0.66	0.49	0.88	0.83	0.84
Chinese and other Asian	0.79	0.73	0.63	0.74	0.88	0.84
Black & Other Black	0.49	0.49	0.32	0.63	0.69	0.66
Mixed & Other	0.67	0.52	0.45	0.80	0.78	0.68

Notes: Data source is the ONS-LS

Appendix Figure A1 2011 Census ethnicity dot map for England and Wales



Notes: Data source is the 2011 Census.