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Are younger adults becoming less residentially mobile? A decomposition analysis of British trends, 1997–2019

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Abstract

Existing evidence suggests that rates of population mobility are falling in many Global North countries. However, the magnitude, selectivity and the drivers of U.K. relocation trends remain poorly understood. Using survey data and regression decompositions, this study examines how relocation propensity during the traditionally highly mobile phase of young adulthood changed in the United Kingdom from 1997 to 2019. The results show that rates of long-term address changing in young adulthood fell over this period due to changes in behaviour. Relocation has also become harder to predict as rates of address changing have fallen most sharply among those groups who were formerly the most mobile. The paper concludes by reflecting on the possible causes of these trends and the ways that more temporary forms of mobility may be substituting for long-term relocations as transitions to adulthood become more protracted and precarious.

KEYWORDS
migration, regression decomposition, residential mobility, United Kingdom, young adults

1 | INTRODUCTION

Population mobility has long been considered essential for economic development and individual well-being. In economic terms, a spatially flexible population is typically thought to boost productivity, reduce inequalities, and enable social mobility as people relocate to gain skills, find suitable jobs, increase their incomes and achieve occupational progression (Rodríguez-Pose & Storper, 2020). Although these economic benefits are usually obtained through longer distance migrations, the larger volume of shorter distance moves—often termed residential mobility—play a no-less-crucial social function by powering housing systems as people adjust their residential circumstances to meet the new demands created by changes in life course careers (Coulter et al., 2016). Globally, a large share of all moves are made by younger adults as many of the

transitions that often trigger relocation (e.g., enroling in postsecondary education, starting and changing jobs, forming partnerships or having children) tend to cluster in the biographical phase spanning the late teens to mid-thirties (Bernard et al., 2016). Younger adults tend also to have accumulated fewer of the ties and commitments like owner-occupied homes, school-aged children or locally employed partners that often dampen moving propensity later in life (Green, 2018).

Until recently, the conventional wisdom held that levels of population mobility within Global North countries would likely remain high or even increase through the early 21st century (Shuttleworth & Champion, 2021). This trend could be expected to be especially marked among younger adults for several reasons. First, recent cohorts have been postponing many of the traditional markers of the transition to adulthood (such as family formation and home purchase)

that are normally associated with residential stability, while leaving the parental home increasingly involves repeated exits and returns (Green, 2018). Second, the expansion of higher education coupled with high immigration have raised the share of mobile groups like students, the degree educated and recent immigrants within younger birth cohorts (Foster, 2017). Third, the individualization of social relations and acceptance that 'emerging adulthood' is a phase of experimentation might boost moving propensity by making early adult lives more fluid and dynamic (Arnett, 2000). Finally, heightened economic risk, deterioration of housing affordability and security, falling real incomes and cuts to social security entitlements may have combined to turn younger cohorts into what Bone (2014) termed 'neoliberal nomads' who lack the resources to establish stable homes.

This conventional wisdom is now being questioned as evidence accumulates that rates of long- and short-distance address changing are declining in some advanced economies, most notably the United States (Champion et al., 2018). Crucially, the U.S. mobility decline appears especially marked among the formerly highly mobile groups of younger adults and renters (Foster, 2017; Myers et al., 2023). However, recent reviews indicate that there is little consistency in mobility trends across countries (Shuttleworth & Champion, 2021) and in Britain the evidence appears rather more complex. Although Judge's (2019) survey analyses show that job-related moves and moves in the private rented sector have declined among younger Britons since the 1990s, analyses of other datasets suggest that the main trend is a modest fall in overall levels of residential mobility, with little evidence of a major mobility slowdown in early adulthood (Champion & Shuttleworth, 2017; Duke-Williams et al., 2021; McCollum et al., 2021). These seemingly contradictory results warrant further analysis.

This paper aims to enhance our understanding of how younger adults' relocation propensity changed in Britain from 1997 to 2019. This is achieved by applying the regression decomposition technique pioneered by Cooke (2011) to survey data to disentangle how shifts in the composition and behaviour of younger cohorts have altered their propensity to make long-term residential moves. This type of disaggregation is essential as trends in headline mobility rates—even for a particular demographic or socioeconomic subgroup—are the net product of an often-complex interacting and sometimes counteracting set of forces (Green, 2018).

The next section sketches a conceptual framework for understanding how and why relocation rates in young adulthood might be changing. Section 3 then describes the empirical approach before Section 4 interprets the results. Finally, Section 5 concludes by reviewing the findings and reconciling them with theory and the existing evidence base.

2 | BACKGROUND

2.1 | Conceptual framework

Many theoretical approaches have been used to understand how rates of population mobility are changing across the Global North.

However, there is little consensus about how best to conceptualize the array of macro-scale processes that interact to reshape individuals' relocation propensities over time. Figure 1 provides a diagram to help make sense of this complexity. The upper section of Figure 1 shows that restructuring processes across six domains produce the societal changes that drive new patterns of mobility over timescales that range from short-term business cyclicity through to 'deep' historical time (Fielding, 2012). The consequences of these processes for mobility rates are not universal but rather are filtered through national institutional settings, for example, countries' labour markets and occupational structures, housing systems, provision of social security, and so forth.

The middle of Figure 1 adapts the three canonical principles of criminal detection—establishing means, motive and opportunity—as a heuristic to summarize the mechanisms through which macro-scale processes actually drive micro-level shifts in moving behaviour. The basic idea is that societal restructuring processes can alter mobility rates by firstly changing the extent to which people want or need to move, as well as their reasons for doing so (motives). Mobility rates can also change due to shifts in the feasibility of moving and the ease of acting on moving preferences (means), as well as the availability of residential vacancies and the existence of suitable social, economic and related infrastructure at potential destinations (opportunities). Disentangling how changes in means, motives and opportunities affect mobility rates is exceedingly complex as direct measures are
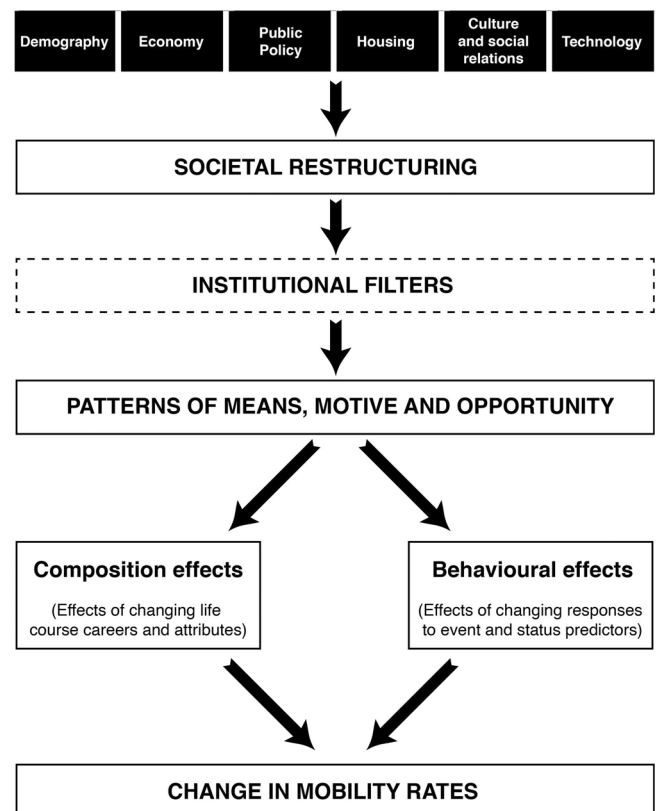

FIGURE 1 Conceptualizing the drivers of changing relocation rates.

often unavailable and because the three factors may interact and counterbalance each other (Green, 2018).

One way to draw inferences from observed data about shifting patterns of means, motives and opportunities is to separate out the effects that *compositional* and *behavioural* changes have on a population's mobility rate (Cooke, 2011; Foster, 2017; Green, 2018). Here, composition effects refer to the ways that changes in population structure (e.g., in age, occupation types and so forth) as well as the restructuring of life courses (in particular the types and biographical timing of events and transitions) alter aggregate mobility rates. A compositional shift in favour of highly mobile groups such as students or renters should thus push up aggregate levels of mobility within a population, whereas growth in the share who have attributes associated with immobility will have the opposite effect.

In contrast, behavioural effects indicate that the patterning of mobility means, motives and opportunities is changing over time. Strong behavioural effects thus signal that how strongly a particular attribute or a given event is associated with (im)mobility is itself evolving. For the United States, existing evidence indicates that both compositional and behavioural shifts have affected mobility rates over recent decades, but that much of the observed slowdown can be attributed to behavioural changes (Cooke, 2011; Foster, 2017). Hints of a similar British trend emerge from Judge's (2019) analysis as well as from McCollum and colleagues' (2021) report of a secular decline in moving propensities within Scotland since the 2000s.

2.2 | Understanding mobility trends in young adulthood

Given that young people make a large share of all moves and that migration may be a learned behaviour, the changing composition and relocation behaviours of younger adults should be focal issues in mobility trend analysis (Bernard et al., 2016). For the United States, Foster (2017) shows that mobility rates through the early adulthood of successive birth cohorts have declined since the 1960s. However, British evidence is more mixed with conclusions seemingly varying across different data resources. On the one hand, Judge's (2019) survey analysis points to falling rates of address and job changing among those aged 25–34. On the other hand, census and administrative data suggest younger adults remain relatively mobile, although there has been a modest reduction in aggregate levels of residential mobility and a diminishing socioeconomic gradient in migration propensity (Champion & Shuttleworth, 2017; Duke-Williams et al., 2021; McCollum et al., 2021). These rather complex findings imply that decomposing compositional from behavioural effects is vital for understanding how shifts in motives, means and opportunities may be driving changes in relocation propensity through early adulthood.

2.2.1 | Compositional factors

Both theory and empirical research indicate that the changing composition of younger cohorts should have pushed up young

adults' aggregate mobility rates in recent decades. In demographic terms, postponed partnership formation and delayed fertility mean that younger cohorts are spending longer as less encumbered singles and childless couples, while serial monogamy means that people experience more of the partnership transitions that often trigger relocation. Green (2018) also notes that the protraction and increased reversibility of parental home leaving generates a growing volume of residential relocations. Equally, an increase in the share of immigrants among younger populations should, ceteris paribus, bolster address changing, given that new arrivals to Global North countries have historically been highly mobile (Foster, 2017).

Changes in the socioeconomic composition of recent cohorts of young adults may have a more complex mix of impacts. On the one hand, students move frequently and so the expansion of higher education since the 1990s has boosted younger Britons' mobility (Champion & Shuttleworth, 2017). Long distance migration is a skills selective process and so growth in the proportion of younger adults with degrees coupled with increased female employment should have further driven up migration rates (although not necessarily shorter distance moves). On the other hand, Judge (2019) notes that reduced unemployment rates and limited growth in real wages since the 1990s have probably dampened the incentives for younger people to migrate for work.

Finally, shifts in how young people are housed probably exert a strong compositional effect on mobility rates. On the one hand, declining rates of young adult owner-occupation since the 1990s, reduced access to social housing and growth in more flexible but less secure forms of private renting and sharing are likely to have pushed up rates of address changing. However, younger adults are also spending longer in the parental home and this intergenerational co-residence trend could push down on relocation rates through early adulthood.

2.2.2 | Behavioural factors

Although movement is often positioned as a defining feature of contemporary societies, this does not necessarily mean that population mobility is predicted to increase over time (Champion et al., 2018). Indeed, there are good reasons to suspect that declining means, motives and opportunities to relocate in young adulthood may be exerting downward behavioural pressure on residential moves. In socioeconomic terms, the association of higher educational enrolment with mobility might be weakening as more students live at home both to reduce costs and because of greater participation by working class and ethnic minority students who more often commute to local institutions (Gamsu et al., 2019). Declines in regional occupational specialization along with reduced spatial disparities in unemployment rates and disposable incomes have also possibly lowered the economic incentives to move longer distances (Judge, 2019). These processes might be especially pronounced for highly skilled workers who can increasingly use ICT enabled home- or hybrid working plus long commutes to avoid having to migrate.

Finally, greater economic precarity and low incomes may not create neoliberal nomads as qualitative studies report that people respond to economic risk by staying put to avoid transaction costs and to draw on local support networks (Preece, 2018).

The association of housing circumstances with residential relocation may also be changing. Evidence from the United States and United Kingdom suggests that private tenants have become less mobile since the early 2000s and that this trend cannot be explained by changes in the composition of tenants (Judge, 2019; Myers et al., 2023). In Britain, landlords often raise rents when tenants turnover and so the inflation of private rents combined with economic insecurity, a desire to save up for homeownership and cuts to housing benefit entitlements are probably incentivising renters to stay put. Meanwhile, lower levels of turnover in owner-occupied housing since the 2008 crisis coupled with strong house price inflation and credit access difficulties may have lowered young homeowners' moving propensities as affordable vacancies become scarce.

Two competing perspectives suggest that there may be further cultural shifts in young adults' moving behaviours over time. On the one hand, Arnett's (2000) notion of emerging adulthood argues that young adulthood is increasingly viewed as a liminal period of experimentation in the domains of work, identity, relationships and more. This perspective hints that increasing levels of residential fluidity might be a cultural hallmark of contemporary young adulthood. In contrast, Cooke's (2011) notion of secular rootedness indicates that people may—for various reasons—more generally be becoming increasingly reluctant to move home. Adjudicating between these two perspectives requires unpacking how changes in moving propensities through early adulthood have ceteris paribus shifted across birth cohorts.

3 | DATA AND METHODS

3.1 | Survey data

Data were drawn from spring sweeps of the U.K. Labour Force Survey (LFS) collected by the country's statistical agencies from 1997 to 2019. The LFS is a nationally representative survey which in this period used a rotational sample design to sample from the population living in private households and National Health Service (NHS) accommodation (for full details see Office for National Statistics [ONS], 2017). The LFS sampling frame is derived from Royal Mail's Postcode Address File in Great Britain (supplemented in northern Scotland by the telephone directory), Northern Ireland's domestic property registers and a list of NHS residential premises (ONS, 2017). Residents of communal establishments—for example care homes, prisons, hostels and so forth—are not sampled, with the important exception of young adults aged 16 and over who live at an institutional address (e.g., university halls of residence) during term time. These young adults are recorded at their parental address regardless of the time of year (ONS, 2017, p. 9). Students living away

from the parental residence in private households during term-time are, in contrast, recorded as residents of their term-time address regardless of the time of year. Although the LFS is a large survey, the sample size declined across the period as response rates fell. Quality assessments suggest this trend has not introduced problematic selection bias and the supplied survey weights—which weight the sample to sum to published population estimates—were applied in all analyses (ONS, 2014).

The selection of study dates was determined by the availability of key variables and by a need to avoid years when relocation behaviour might have been distorted by strong period effects. The 1997 sweep was taken as the start as it took until the mid-1990s for the U.K. housing market to rebound from the early 1990s downturn. The study ends in 2019 before the COVID-19 pandemic began to affect residential behaviour and LFS data collection. In broad terms, the contextual backdrop to this period is one of an initially strong but then slowing economy accompanied by accelerating problems of housing affordability, with significant shocks to both labour and housing markets through the 2008–2009 Global Financial Crisis (GFC).

All LFS datasets were first restricted to adults aged 20 and over to avoid capturing dependent children. For much of the analysis the sample was further restricted to young adults aged 20–34. A small number of young people living away in halls of residence were dropped as the LFS assigns them the residential duration of the head of their household.[1] This sample restriction is likely to result in mobility rates being consistently underestimated as most students living in halls of residence do so for only a short time. The overall effect of discarding these students is nevertheless most likely quite minor given (i) that in the United Kingdom most students only live in halls during their first year at university (when typically aged under 20 and thus excluded from the sample on age grounds) and (ii) that moves into and within noninstitutional student housing (for instance privately rented dwellings) should be recorded. Levels of item nonresponse are very low in the LFS and so listwise deletion was applied to remove cases with missing data.

3.2 | Measures

A binary dependent variable measuring whether people had recently changed address was constructed from a question on duration of residence. Those living at their address for under 12 months were coded as movers. Using an annual frame of reference to identify moves fits with the approach used by the U.K. census and aligns with many international definitions of internal migration (Bell et al., 2015). However, in contrast to other U.K. data sources, the LFS excludes temporary residential moves from consideration as respondents are prompted to ignore 'absences which by their nature are temporary, that is, without permanent intent'. This means that we might expect LFS estimates of annual mobility rates to be lower than those derived from other datasets which do record more impermanent forms of address changing, such as moves from university back to the parental home during vacations or immediately after course completion.

This study examines trends in overall levels of address changing and so no attempt was made to disaggregate moves by distance or reason. In any case the LFS does not ask about reasons for moving and there are considerable technical difficulties associated with precisely and consistently estimating how far respondents have moved. Restricting the sample to exclude those immigrating to Britain during the last 12 months was not attempted as changes to survey design meant that some respondents in the early part of the period were not asked the requisite questions. However, sensitivity tests conducted by rerunning the final decomposition analyses on slightly smaller samples which did not contain recent immigrants yielded very similar results to those presented below (results not shown).

Several categorical predictors of relocation were defined for the modelling work. These were banded age, sex, whether the person was born abroad, family status (single, living as a couple, a lone parent, living as a couple with dependent children), degree level qualifications, employment status (in employment, full-time student, unemployed, economically inactive), broad region of residence (South, London, Midlands, North, Wales, Scotland, Northern Ireland) and housing status (owner-occupied, social rent, private rent, parental home). One limitation is that all variables are measured after mobility is recorded (i.e. at t) rather than before a possible move (i.e., at $t - 1$). This is a standard limitation of using cross-sectional data but as all variables are consistently defined over time it should not have a major bearing on the trend analysis (Foster, 2017). No variable for occupational status was defined as classifications of these have changed since the 1990s and because occupations are often fluid in early adulthood.

3.3 | Methods

The analysis begins by describing relocation trends among younger adults from 1997 to 2019. A counterfactual statistical technique—the Blinder-Oaxaca decomposition—is then used to disaggregate the compositional and behavioural components of the observed change in young adults' mobility rates from 1997 to 2019. In simple terms, the Blinder-Oaxaca decomposition splits into distinct parts the mean difference in an outcome between two groups (Jann, 2008). The method has two stages. Stage one consists of running group-specific regressions predicting the outcome before stage two uses the compositional characteristics of the two groups and the twin sets of stage one regression coefficients to conduct the decomposition (Foster, 2017).

The Blinder-Oaxaca decomposition can be run in different ways. In the twofold approach, the difference in the two groups' outcomes is decomposed into (1) an 'explained' part attributable to differences in group predictors and (2) an 'unexplained' part (Jann, 2008). This is the approach mentioned briefly by Judge (2019) in her analysis of declining job-related moves among younger Britons. In contrast, the threefold decomposition divides the mean outcome difference R into three parts:

$$R = C + B + I, \qquad (1)$$

where C represents the portion of the total differential attributed to group differences in the predictors (henceforth termed the composition effect), B represents the portion attributable to group differences in the coefficients (henceforth the behaviour effect, which also captures differences in group intercepts) and I is an interaction term accounting for the fact that C and B vary simultaneously (Jann, 2008, pp. 454–455). All three portions of the differential are formulated from the perspective of one of the groups in a counterfactual manner. C thus measures the expected change in the focal group's mean outcome *if the focal group had the composition of the other group* whereas B measures the expected change in the focal group's mean outcome *if the focal group instead had the coefficients of its comparator* (Foster, 2017). This threefold approach has been used in migration analysis by Cooke (2011) and Foster (2017) and is the method used in this study. Here, 1997 is taken as the focal cohort and so the decompositions estimate how the 1997 cohort's mobility rate would change if they instead had the observed composition and behaviours of the 2019 sample. The full equation for this study's decomposition thus looks as follows:

$$R = \underbrace{\{E(X_{2019}) - E(X_{1997})\}'\beta_{1997}}_{C} + \underbrace{E(X_{1997})'(\beta_{2019} - \beta_{1997})}_{B}$$
$$+ \underbrace{\{E(X_{2019}) - E(X_{1997})\}'(\beta_{2019} - \beta_{1997})}_{I}. \qquad (2)$$

Several additional aspects of the decomposition require further explanation. First, in the latter parts of the analysis model (2) is further decomposed to identify the detailed contributions each variable makes to each part of the equation (Jann, 2008 for details). Second, the stage one regressions of relocation (where 0 = stayed and 1 = moved) were estimated as Linear Probability Models (LPMs) with standard errors adjusted for the clustering of respondents within households. LPMs were used as their coefficients are simpler to interpret than logit or probit model output (Foster, 2017). In addition, the oft-cited statistical problems of LPMs are of less concern here as prediction is not attempted, standard errors are adjusted and the main interest lies in estimating the average effect associated with each categorical predictor (Cooke, 2011; Mood, 2010). Sensitivity analysis (not shown) comparing LPM decompositions with estimates derived from logit and probit models showed that the main findings are broadly similar.

A third issue with the decomposition is sometimes called the Blinder-Oaxaca identification problem (Jann, 2008). This arises with categorical predictors where in detailed decompositions 'the contribution of each individual variable or set of dummy variables *changes with the choice of the reference group* [emphasis added]' (Kim, 2013: 347), as well as depending on the way the categories themselves are defined. To address this, this study followed Yun (2005) by 'normalizing' the LPM coefficients for each group of predictors so that these sum to zero and thus express deviations from the grand mean (Jann, 2008). Yun (2005) shows that doing this yields the same results as running repeated decompositions using each level of a categorical variable as the reference in turn before averaging the results. While normalization thus provides an estimate of the

'average' effect associated with each category of a variable, the flip side is that it discards information and so in this study the multiple underlying decompositions were also run and inspected to assist in interpreting the final outputs. As Kim (2013) cautions that even this still cannot solve the identification problem, interpretation concentrates not on the precise point estimates, but rather on comparing their general directions and relative magnitudes.

4 | ANALYSIS

4.1 | Mobility trends 1997–2019

Figure 2 shows smoothed age-graded trends in annual relocation rates from 1997 to 2019. The figure shows that annual rates of relocation among everyone aged 20 and over fell slightly from around 10% in the late 1990s to just under 9% in the late 2010s. This evidence of a minor slowdown in British mobility over the last two decades fits with similar findings obtained from analyses of administrative and census datasets (Champion & Shuttleworth, 2017; Duke-Williams et al., 2021; McCollum et al., 2021).

The age disaggregation in Figure 2 shows that this modest slowdown has been heavily driven by young adults. While over 30% of young people aged 20–24 in the late 1990s had moved to their address in the last year, by 2019 this figure had fallen nearly 7 percentage points (PPs) to under 25%. Levels of mobility among young people aged 25–29 have also fallen although among this age bracket the decline is more modest in absolute terms (roughly 4 PPs) and only set in around the late 2000s. By contrast, Figure 2 shows that absolute relocation rates among those aged over 35 have changed little since 1997 with only small fluctuations correlated with the business cycle (e.g., a dip around 2009 during the GFC-induced slump).
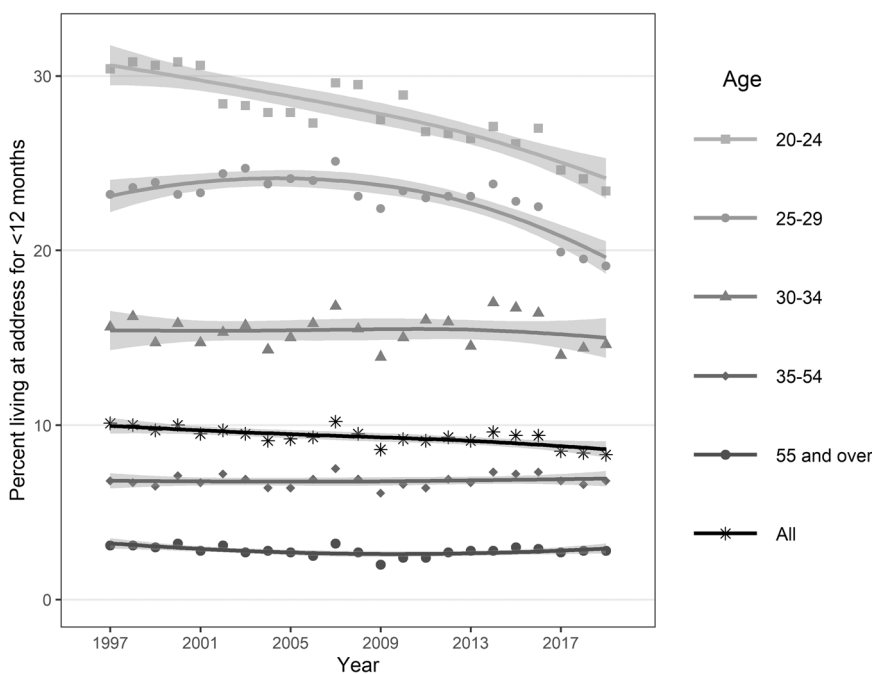
4.2 | Compositional and behavioural trends

Table 1 shows how the composition and mobility behaviours of younger adults changed between 1997 and 2019. The first columns show how the *composition* of the population aged 20-34 changed over this timeframe while the second block shows how the moving *behaviour* of young people with a given characteristic changed between the 2 years. The final column in Table 1 shows the combined effect that the compositional and behavioural changes associated with each variable had on the aggregate mobility rate of 20–34-year-olds. The figures in this column are calculated for each variable by multiplying its compositional value by the moving rate in both years (expressed as proportions) before calculating the difference between the 2 years' numbers. The resulting figure tells us the PP change in the mobility rate attributable to the interaction of composition and behaviour on each variable.[2] For example, the combined effect of −1.3 in the 20-24 row indicates that approximately 1.3 PP (37%) of the overall 3.5 PP decline in mobility among young people is attributable to changes in the share and moving behaviours of those aged 20–24.

The first columns of Table 1 indicate that compositional changes in young adults' attributes should, ceteris paribus, have driven up their mobility rate from 1997 to 2019. Over this period the share of young adults with the traditional hallmarks of mobility (younger age, living as singles or childless couples, immigrants, with tertiary degrees, students, private tenants) grew whilst the share with attributes that favour residential stability (for instance families with children and homeowners) contracted. This indicates that the postponement of traditional milestones in the transition to adulthood have transformed this phase into a period within which people increasingly have attributes favourable to address changing. However, one compositional countertrend is the major rise in rates of

FIGURE 2 Annual relocation rates by age band, 1997–2019. *Source*: Own analysis of Labour Force Survey data.

TABLE 1 Population composition and mobility behaviour in 1997 and 2019.

Variable	Composition (%)			Mobility rate (%)			Combined effect
	1997	2019	PP change	1997	2019	PP change	
Moved				22.3	18.9	−3.5	−3.5
Aged 20–24	27.7	30.5	2.8	30.3	23.4	−6.9	−1.3
Aged 25–29	34.9	34.8	−0.1	23.2	19.1	−4.1	−1.4
Aged 30–34	37.4	34.8	−2.7	15.6	14.6	−1.0	−0.8
Male	49.5	50.5	1.0	22.3	19.0	−3.3	−1.4
Female	50.5	49.5	−1.0	22.3	18.7	−3.6	−2.0
Born in United Kingdom	90.9	79.8	−11.1	21.1	17.1	−4.0	−5.5
Born abroad	9.1	20.2	11.1	34.3	25.6	−8.6	2.0
Single	38.3	45.1	6.8	22.9	17.5	−5.4	−0.9
Couple	21.4	24.3	2.8	31.3	26.1	−5.2	−0.4
Lone parent	6.9	5.6	−1.3	20.9	16.3	−4.6	−0.5
Couple with children	33.4	25.1	−8.3	16.2	14.9	−1.4	−1.7
No degree	85.2	68.3	−16.9	20.8	19.1	−1.8	−4.7
Degree	14.8	31.7	16.9	30.9	18.4	−12.5	1.3
In employment	73.3	75.7	2.4	20.2	16.9	−3.3	−2.0
Student	6.3	9.8	3.5	45.7	34.3	−11.3	0.5
Unemployed	6.4	3.9	−2.5	25.4	21.0	−4.4	−0.8
Inactive	14.0	10.6	−3.4	21.6	18.1	−3.5	−1.1
Owner-occupied	46.5	30.0	−16.5	17.5	15.8	−1.7	−3.4
Social rent	15.5	10.8	−4.6	22.5	16.8	−5.8	−1.7
Private rent	17.4	31.1	13.7	53.3	34.9	−18.4	1.6
Parental home	20.7	28.1	7.5	7.0	5.2	−1.8	0.0
South	29.1	28.2	−0.8	24.1	20.3	−3.9	−1.3
London	14.7	16.8	2.1	27.4	18.6	−8.8	−0.9
Midlands	15.8	15.9	0.1	20.3	18.5	−1.8	−0.3
North	24.1	23.3	−0.8	20.9	18.1	−2.7	−0.8
Wales	4.6	4.6	0.0	18.0	18.6	0.7	0.0
Scotland	8.8	8.4	−0.4	20.3	19.6	−0.7	−0.1
Northern Ireland	2.9	2.7	−0.2	14.2	11.9	−2.3	−0.1
Unweighted n	29,655	14,252		29,655	14,252		

Note: Combined effect, percentage point change in volume of relocations 1997–2019 within specified category. Rounding means PP changes may not precisely match differences in column values.

Abbreviation: PP, percentage point.

Source: Own analysis of LFS data.

parental co-residence from around one in five young adults in 1997 to more than one in four by 2019. Parental co-residence is associated with very low levels of mobility (at least as recorded by the LFS questionnaire) and so prolonged co-residence has tempered the overall upward pressure that compositional changes have had on aggregate rates of address changing in early adulthood.

The fact that the proportion of young adults with mobile attributes increased from 1997 to 2019 yet mobility rates fell implies that relocation behaviours changed substantially over this period. The second set of columns in Table 1 confirm this as young people with almost all types of characteristics were less likely to have recently changed address in 2019 than their peers in 1997. This slowdown has

involved some regression to the mean as falling absolute rates of mobility have been strongest for those groups which were the most mobile in 1997. For example, mobility rates among 20–24-year-olds fell by 6.9 PP over this period and large declines are also observed among immigrants (−8.6 PP), the degree educated (−12.5 PP), students (−11.3 PP), Londoners (−8.8 PP) and private tenants (−18.4 PP). This convergence around lower levels of address changing is statistically confirmed as the correlation between the variables' 1997 mobility rates and their 1997-2019 rate change is −0.89 with a falling coefficient of variation (0.38 in 1997 to 0.30 in 2019). Overall, it appears young people are less frequently making long-term moves and that attributes which were formerly strong predictors of relocation have become less predictive over time.

The final column in Table 1 shows the combined effects of compositional and behavioural changes associated with each variable. In terms of age, more of the decline is attributable to changes among those aged under 30 (−2.7 PP) than over 30 (−0.8 PP). Slightly more of the slowdown is attributable to women than men while increased moves among the growing immigrant population (+2 PP) has only partly countered a substantial fall in volumes of address changing among the shrinking share of British-born young adults (−5.5 PP). Levels of mobility among all family types have fallen while the doubling of the degree educated population has not uplifted overall volumes of mobility (+1.3 PP) by enough to offset a large decline among those without higher educational qualifications (−4.7 PP). Growth in student populations means students accounted for more moves in 2019 than 1997 (+0.5 PP) but all other employment statuses posted declines. Fewer moves occurred in owner-occupation in 2019 than 1997 (−3.4 PP) and the compositionally driven growth of private rental mobility (+1.6 PP) has only partly countered this trend. The largest share of the mobility decline came from younger adults in the South and London with smaller trends elsewhere. Overall, it appears from Table 1 that wide-ranging behavioural trends towards greater residential stability have out-weighed the compositional forces pushing in the opposite direction since 1997.

4.3 | Modelling mobility

Table 2 presents the results of two LPMs predicting recent relocation among the 1997 and 2019 cohorts. These LPMs form stage one of the decomposition and their estimates are worth examining as these provide information about how each variable is associated with relocation after controlling for confounders. At this point it is worth recalling that all predictors are categorical and their coefficients have been normalized so that these are expressed as deviations from the grand mean (Yun, 2005). The normalized coefficients across all levels of a predictor thus sum to zero and the two coefficients for the levels of the sex, nativity and educational dummies mirror one another and have the same p values (Kim, 2013).

The 1997 estimates in Table 2 are in line with decades of evidence on the predictors of address changing. In 1997, the probability of moving was highest among those aged 20–24 before dropping at older ages. Men were slightly more mobile than women while those born overseas and degree holders were substantially more mobile than the U.K. born and young adults without tertiary qualifications. Family status strongly predicted moving in 1997 with childless singles and couples having above-average mobility whilst lone parents and couples with children moved less frequently. In terms of employment status, being in work in 1997 was associated with reduced mobility whereas students were highly mobile. Living in the parental home in 1997 was associated with a strongly reduced moving propensity with a more modest negative effect of owner-occupation and strong positive coefficients for social and especially private renting. The coefficients suggest weak regional patterning in 1997 although those living in Southern England were somewhat more mobile than average.

Contrasting the 1997 with the 2019 estimates in Table 2 suggests two main changes over this period. First, the much-reduced intercept term (0.30 in 1997 to 0.21 in 2019) once again indicates a substantial general fall in levels of address changing that is neither explained by observed changes in population composition nor by the moving behaviours of subgroups. Second, decreased model fit together with attenuated 2019 coefficients on some variables suggests that mobility is becoming harder to predict as many traditional correlates have become weaker predictors over time. For instance, although the age, sex and family coefficients are quite similar in both years, differences between the moving propensities of (i) immigrants and the U.K. born and (ii) the degree and nondegree educated are much reduced in 2019.

The housing variables have quite different coefficients in 2019 as compared with 1997. While owner-occupation was negatively associated with moving in 1997, the 2019 coefficient is positive and suggests that young homeowners now have an above average likelihood of moving. This fits with the descriptive evidence in Table 1 and may be because a tendency to delay home purchase has left the much-diminished 2019 pool of homeowners containing a larger share of relatively affluent recent homebuyers. In contrast, the very strong association of private renting with mobility in 1997 is much attenuated in 2019 while living in the parental home remains strongly associated with immobility. Finally, and in contrast to the weakening effects of most variables, in 2019 there is more regional differentiation as Londoners and those living in Northern Ireland posted below average mobility rates while rates in the South remained above average.

4.4 | Decomposing mobility trends

Table 3 shows the overall results of the Blinder-Oaxaca decomposition which partitions the 3.5 PP decline in young adults' mobility between 1997 and 2019 into portions attributable to compositional change (C), behavioural change (B) and their interactions (I). The compositional estimate of +0.0461 indicates that the 1997 mobility rate would have been around 4.6 PP higher if the 1997 sample had

TABLE 2 Linear probability models of mobility.

Variable	1997		2019	
	Coefficient	95% CI	Coefficient	95% CI
Aged 20–24	0.0852***	0.0759, 0.0945	0.0718***	0.0579, 0.0857
Aged 25–29	−0.0115**	−0.0184, −0.0046	−0.0110*	−0.0213, −0.0007
Aged 30–34	−0.0737***	−0.0815, −0.0658	−0.0608***	−0.0730, −0.0486
Male	0.0077***	0.0039, 0.0116	0.0072*	0.0014, 0.0130
Female	−0.0077***	−0.0116, −0.0039	−0.0072*	−0.0130, −0.0014
Born in United Kingdom	−0.0251***	−0.0354, −0.0147	−0.0096	−0.0210, 0.0018
Born abroad	0.0251***	0.0147, 0.0354	0.0096	−0.0018, 0.0210
Single	0.0289***	0.0166, 0.0412	0.0495***	0.0313, 0.0677
Couple	0.0556***	0.0425, 0.0687	0.0309**	0.0120, 0.0499
Lone parent	−0.0453***	−0.0611, −0.0294	−0.0313**	−0.0545, −0.0081
Couple with children	−0.0393***	−0.0494, −0.0291	−0.0491***	−0.0647, −0.0335
No degree	−0.0239***	−0.0320, −0.0159	−0.0006	−0.0091, 0.0078
Degree	0.0239***	0.0159, 0.0320	0.0006	−0.0078, 0.0091
In employment	−0.0335***	−0.0433, −0.0236	−0.0493***	−0.0635, −0.0351
Student	0.0528***	0.0333, 0.0722	0.0459***	0.0208, 0.0711
Unemployed	−0.0030	−0.0192, 0.0133	0.0142	−0.0129, 0.0413
Inactive	−0.0163*	−0.0289, −0.0038	−0.0108	−0.0295, 0.0078
Owner-occupied	−0.0308***	−0.0413, −0.0202	0.0257**	0.0098, 0.0415
Social rent	0.0277***	0.0140, 0.0413	0.0213*	0.0009, 0.0417
Private rent	0.2421***	0.2278, 0.2564	0.1608***	0.1443, 0.1772
Parental home	−0.2390***	−0.2513, −0.2268	−0.2077***	−0.2255, −0.1899
South	0.0233***	0.0121, 0.0344	0.0258**	0.0098, 0.0418
London	−0.0009	−0.0163, 0.0146	−0.0311**	−0.0529, −0.0092
Midlands	0.0022	−0.0104, 0.0149	0.0049	−0.0139, 0.0237
North	0.0063	−0.0047, 0.0172	−0.0025	−0.0183, 0.0133
Wales	−0.0069	−0.0289, 0.0152	0.0241	−0.0069, 0.0551
Scotland	−0.0034	−0.0191, 0.0123	0.0091	−0.0157, 0.0339
Northern Ireland	−0.0206	−0.0419, 0.0006	−0.0303**	−0.0524, −0.0082
Constant	0.2956***	0.2806, 0.3106	0.2104***	0.1930, 0.2277
Unweighted n	29655		14252	
N clusters	21,022		10,081	
Adjusted r^2	0.1709		0.1327	

Abbreviation: CI, confidence interval.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Source: Own analysis of Labour Force Survey data.

the composition of the 2019 cohort. Put another way, in the absence of behavioural change, shifts in population composition are predicted to have exerted substantial upward pressure on young adults' relocation rates over recent decades.

In contrast, Table 3 shows that behavioural changes have pushed down on the mobility rate. The behavioural estimate of −0.0504 indicates that the 1997 mobility rate is predicted to have been roughly 5 PP lower if the 2019 coefficients were applied to the 1997

TABLE 3 Overall Blinder-Oaxaca decomposition results.

Measure	Estimate	95% confidence interval
1997 mean of y	0.2232	0.2171, 0.2293
2019 mean of y	0.1885	0.1797, 0.1973
Difference	−0.0346	−0.0453, −0.0239
Composition effect	0.0461	0.0390, 0.0532
Behaviour effect	−0.0504	−0.0611, −0.0397
Interaction effect	−0.0303	−0.0376, −0.0231

Source: Own analysis of LFS data.

sample. In essence, behavioural changes have driven down address changing since 1997 by more than compositional changes have pushed the other way. This downward behavioural pressure on mobility has been reinforced by a negative interaction of composition with behaviour (−3 PP). Overall, it seems that mobility-favouring compositional change has been outweighed by a strong behavioural reduction in long-term address changing in young adulthood.[3]

Table 4 shows the detailed decomposition estimates breaking down the overall totals in Table 3 into portions attributable to each variable (Jann, 2008). The effects in each column (B, C and I) sum to the total effect at the base and one can also calculate an overall effect for each variable by summing its row values. However, the intractable identification issues discussed in Section 3 and in Kim (2013) mean that these precise values can be misleading as these may vary depending on how the decomposition is specified. In what follows, discussion thus concentrates on interpreting the general pattern of effects in Table 4 while drawing on additional information gleaned from inspecting additional decompositions in which reference categories were varied (Section 3 for details).

The estimates in the first column of Table 4 indicate how the mobility rate of the 1997 sample would change if its composition were, ceteris paribus, changed to the 2019 counterfactual value. A positive compositional effect thus indicates that the 1997 mobility rate is predicted have been higher had the distribution of values on that variable matched the distribution observed in 2019. Fully interpreting these effects thus requires consulting the observed changes recorded in Table 1 (Cooke, 2011). The estimated interaction effects for each variable shown in Table 4 are tricky to interpret and are included primarily for completeness. Most interactions are small but substantial negative interactions for degree qualifications, owner-occupation and private renting indicate that simultaneous changes in composition and behaviour on these variables have pushed down on moving propensities. The opposite is meanwhile true for living in the parental home, which has a positive interaction estimate.

In terms of composition, the positive effects of ages 20–24 and 30–34 indicate that growth in the share of 20–24 s and a concomitant reduction in the share of 30–34-year-olds between 1997 and 2019 have placed upward pressure on mobility rates. Further upward pressure has come from (i) growth in the share of migrants and (ii) family status shifts as the share of childless singles

and couples has grown while lone parenthood and living as a couple with children has become less common. Further positive compositional effects are associated with increased levels of higher education and the growth of student populations. The effects of housing composition are particularly pronounced. While a reduction in the share of owner-occupiers is predicted to have slightly increased mobility from 1997 to 2019,[4] the much stronger private rental estimate indicates that greater levels of private renting in 2019 has exerted considerable upward pressure on relocation rates over this period. This is to an extent counterbalanced by the negative effect that growing rates of parental co-residence have had on mobility.

The detailed behavioural effects in the second column of Table 4 are the most susceptible to the identification issue and so need careful interpretation. Many are small but the nativity estimates indicate that the overall mobility decline from 1997 to 2019 can be partly attributed to reduced mobility among immigrants. Reduced mobility among couples in 2019 as compared with 1997 has also exerted downward pressure on relocation levels, as has reduced mobility among the degree educated.

Housing once again emerges as a crucial variable in the second column of Table 4. Here, a positive effect of owner-occupation indicates that owner-occupiers became relatively more likely than those in other housing states to change address over this period. In contrast, the negative effect for private tenants corroborates prior evidence of an unexplained decline in levels of address changing in the private rented sector (Judge, 2019). Looking beyond housing, the negative London effect suggests that mobility rates in the capital have fallen over time in ways that cannot be simply attributed to changes in London's population composition. Finally, Kim (2013) cautions that it is tricky to interpret the intercept term as this gives the rather meaningless expected difference in y assuming the sample in each cohort is evenly distributed across categories of the predictors (for instance one-third in each age band, half males and females, one quarter in each family type and so forth). Nevertheless, it is clear from the much-reduced intercept in both Tables 2 and 4 that in general levels of address changing in 2019 were considerably lower than in 1997. On the face of it this fits more with Cooke's (2011) notion of growing secular rootedness than with narratives of neoliberal nomadism or an increasingly footloose phase of emerging adulthood.

5 | CONCLUSIONS

Levels of population mobility are changing across the Global North in ways that defy straightforward explanation. Britain is no exception and previous U.K. studies report slowing residential mobility and reduced migration propensities among formerly mobile population subgroups (Judge, 2019; McCollum et al., 2021; Shuttleworth & Champion, 2021). This study sought to further our understanding of these trends by using survey data and regression decompositions to examine how rates of address changing in early adulthood have evolved since the 1990s. Focusing on this life course phase is crucial

TABLE 4 Detailed Blinder-Oaxaca decomposition estimates.

Variable	Composition effect (C)		Behaviour effect (B)		Interaction effect (I)	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
Aged 20–24	0.0024***	0.0014, 0.0034	−0.0037	−0.0083, 0.0009	−0.0004	−0.0009, 0.0001
Aged 25–29	0.0000	−0.0001, 0.0001	0.0002	−0.0042, 0.0045	0.0000	0.0000, 0.0000
Aged 30–34	0.0020***	0.0011, 0.0028	0.0048	−0.0006, 0.0103	−0.0003	−0.0008, 0.0001
Male	0.0001	0.0000, 0.0002	−0.0003	−0.0037, 0.0032	0.0000	−0.0001, 0.0001
Female	0.0001	0.0000, 0.0002	0.0003	−0.0032, 0.0038	0.0000	−0.0001, 0.0001
Born in United Kingdom	0.0028***	0.0016, 0.0040	0.0141*	0.0001, 0.0280	−0.0017	−0.0034, 0.0000
Born abroad	0.0028***	0.0016, 0.0040	−0.0014*	−0.0028, 0.0000	−0.0017	−0.0034, 0.0000
Single	0.0020***	0.0010, 0.0029	0.0079	−0.0005, 0.0163	0.0014	−0.0001, 0.0029
Couple	0.0016***	0.0008, 0.0023	−0.0053*	−0.0102, −0.0004	−0.0007	−0.0014, 0.0000
Lone parent	0.0006***	0.0003, 0.0009	0.0010	−0.0010, 0.0029	−0.0002	−0.0006, 0.0002
Couple with children	0.0033***	0.0023, 0.0042	−0.0033	−0.0095, 0.0029	0.0008	−0.0007, 0.0024
No degree	0.0040***	0.0027, 0.0054	0.0199***	0.0099, 0.0298	−0.0039***	−0.0059, −0.0019
Degree	0.0040***	0.0027, 0.0054	−0.0035***	−0.0052, −0.0017	−0.0039***	−0.0059, −0.0019
In employment	−0.0008***	−0.0012, −0.0004	−0.0116	−0.0243, 0.0011	−0.0004	−0.0008, 0.0001
Student	0.0018***	0.0010, 0.0026	−0.0004	−0.0024, 0.0016	−0.0002	−0.0013, 0.0009
Unemployed	0.0001	−0.0003, 0.0005	0.0011	−0.0009, 0.0031	−0.0004	−0.0012, 0.0004
Inactive	0.0006*	0.0001, 0.0010	0.0008	−0.0024, 0.0039	−0.0002	−0.0009, 0.0006
Owner-occupied	0.0051***	0.0033, 0.0069	0.0262***	0.0174, 0.0351	−0.0093***	−0.0125, −0.0061
Social rent	−0.0013***	−0.0020, −0.0006	−0.0010	−0.0048, 0.0028	0.0003	−0.0008, 0.0014
Private rent	0.0331***	0.0295, 0.0368	−0.0141***	−0.0180, −0.0103	−0.0111***	−0.0143, −0.0080
Parental home	−0.0178***	−0.0206, −0.0150	0.0065**	0.0020, 0.0109	0.0023**	0.0007, 0.0040
South	−0.0002	−0.0005, 0.0001	0.0007	−0.0049, 0.0064	0.0000	−0.0002, 0.0001
London	0.0000	−0.0003, 0.0003	−0.0045*	−0.0084, −0.0005	−0.0006	−0.0013, 0.0000
Midlands	0.0000	0.0000, 0.0000	0.0004	−0.0032, 0.0040	0.0000	0.0000, 0.0000
North	0.0000	−0.0002, 0.0001	−0.0021	−0.0068, 0.0025	0.0001	−0.0001, 0.0002
Wales	0.0000	0.0000, 0.0000	0.0014	−0.0003, 0.0031	0.0000	−0.0002, 0.0002
Scotland	0.0000	−0.0001, 0.0001	0.0011	−0.0015, 0.0037	−0.0001	−0.0002, 0.0001
Northern Ireland	0.0000	0.0000,0.0001	−0.0003	−0.0012, 0.0006	0.0000	0.0000, 0.0001
Constant			−0.0852***	−0.1082, −0.0623		
Column total	0.0461		−0.0504		−0.0303	

Note: Rounding means the column totals differ slightly from the sum of column estimates.

Abbreviation: CI, confidence interval.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

Source: Own analysis of LFS data.

because a large share of all moves are made by the under 35 s and because migration may be a learned behaviour.

Three conclusions can be drawn from the results. First, the findings add to the accumulating evidence that U.K. relocation rates fell in the two decades leading up to the COVID-19 pandemic (Shuttleworth & Champion, 2021). Crucially, declining rates of address changing seem especially pronounced among younger adults whose propensity to relocate fell by around 3.5 PPs (roughly 15% in relative terms) from 1997 to 2019. Although this fall was particularly marked through the early twenties, the fact that declines are observed (i) across demographic and socioeconomic subgroups and (ii) for moves of all distances

suggests that factors other than just jobs and incomes may be important drivers (Judge, 2019).

Second, the regression decompositions indicate that mobility rates in young adulthood have fallen as upward pressure from changing population composition has been more than counterbalanced by a reduced behavioural tendency to move. To put it another way, it seems that changes in mobility means, motives and opportunities in young adulthood have shifted in ways that increasingly favour staying put. Moving in young adulthood is also becoming harder to predict as demographic and socioeconomic variation declines as subgroups' mobility rates converge around lower levels of address changing (McCollum et al., 2021). Future research urgently needs to examine whether this broad-based behavioural trend is volitional or down to exogenous constraints and, linked to this, what implications lower rates of long-term address changing might have for other life course careers. Disentangling how trends in different types of move (e.g., in long- vs. short-distance moves or by stated reasons for relocation) have unfolded over time should also be a priority for research using other datasets.

Finally, although this study could not find a 'smoking gun' causing these trends, two strands of evidence point the finger of suspicion towards Britain's increasingly dysfunctional housing system. First, the results show that young homeowners' mobility propensities have held up since the 1990s with declining aggregate mobility rates attributable to (i) more young people living with their parents and (ii) a deep fall in young renters' mobility (Judge, 2019). The fact that declining mobility rates are confined to the growing pool of young housing market 'outsiders' but appear less evident among the dwindling pool of advantaged 'insiders' hints that housing-related constraints may be reducing relocations. Second, we know from other studies that slowing local residential mobility rates are responsible for much of the decline in United Kingdom address changing (Shuttleworth & Champion, 2021). Most residential mobility is housing-related and stronger declines in this form of relocation implies that housing-related forces are at work. One speculative hypothesis is that greater financial difficulties of accessing owner-occupation together with rent inflation, economic insecurity, more fluid life courses and public austerity are leading young adults to try and stay longer in rental units or the parental home to avoid transaction costs, to save up and/or to avoid paying market rents when taking up a new tenancy. Such systemic 'housing stickiness' would chime with Myers and colleagues' (2023) evidence that a lack of affordable rental vacancies has dampened U.S. residential mobility since 2010.

One final issue is reconciling this study's evidence of declining rates of address changing in young adulthood (see also Judge, 2019) with census and administrative data analyses reporting no such trend (Champion & Shuttleworth, 2017; Duke-Williams et al., 2021). The explanation probably lies with the different definitions of mobility and the different ways of measuring address changes that are used in the various data resources. While the LFS only records long-term changes of usual address and will miss some student mobilities, census and administrative data probably pick up at least some of those more temporary residential moves (e.g., to and from term time addresses) that are very common in early adulthood. It seems possible that these more temporary and potentially more precarious forms of residential movement have thus increasingly been substituting for household formations and more permanent address changing since the 1990s. Young people may thus have become more rooted in some ways but also more footloose in others as the transition to adulthood becomes more protracted, unequal and fraught with risk. Testing this possibility now requires triangulating evidence from multiple data sources to better understand trends in the full gamut of forms of residential movement through the early adult life course.

CONFLICT OF INTEREST STATEMENT

The author declares no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are detailed in the reference list and are available through the U.K. Data Service (https://ukdataservice.ac.uk/).

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ENDNOTES

[1] Full-time students are retained in the sample because a large share of U.K. students move away from home to attend university. Simply discarding all students would therefore yield downwardly biased estimates of mobility in both 1997 and 2019. Discarding students would also prevent a like-for-like cohort comparison as higher educational enrolments expanded and diversified across the study period. In any case, rerunning Figure 2 without students (plot not included) yields very similar trends to those shown, with an even stronger decline in mobility among nonstudent 20–24 s indicating that the expansion of higher education has helped to offset a sharp fall in moving propensities among those in their early twenties (see also Table 1).

[2] The combined effects for all levels of each predictor must therefore sum to the overall change of −3.5.

[3] This interpretation is strengthened by re-estimating the decomposition from the perspective of the 2019 cohort. This reformulation yields a larger behavioural effect (8PP) counterbalanced by a weakened compositional effect (−1.5 PP) plus the interaction term (unchanged).

[4] Most compositional effects are basically inverted if 2019 rather than 1997 is considered the focal cohort. Intriguingly, this is not the case for owner-occupation, which always has a positive compositional effect. This is because in 1997 owner-occupiers were relatively immobile (Table 2) and so if 1997 is the focal cohort then applying the observed decline in the share of homeowners to 2019 is predicted to boost young adults' mobility. However, from the perspective of 2019 homeowners are relatively mobile (Table 2) and so applying the greater levels of owner-occupation in 1997 to the 2019 coefficients is also predicted to increase mobility. This illustrates the importance of carefully unpacking detailed Blinder-Oaxaca decompositions while not placing too much emphasis on particular point estimates.

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