

# **Are People Moving Home Less? An Analysis of Address Changing in England and Wales, 1971-2011, Using the ONS Longitudinal Study**

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Data analyses in this paper are based on micro-data from the Office for National Statistics' (ONS) Longitudinal Study (LS), linking England and Wales Census data for a (roughly) 1% sample of the population, accessed securely via the Virtual Microdata Laboratory at ONS. Census output is Crown Copyright and is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland. The permission of ONS to use the LS is gratefully acknowledged, as is the help provided by staff at the Centre for Longitudinal Study Information & User Support (CeLSIUS), notably Christopher Marshall, and the advice of Kevin Lynch at ONS. CeLSIUS is supported by the ESRC Census of Population Programme (Award Ref: ES/K000365/1). The presentation has been cleared by ONS (Clearance Number 401006), but the authors alone are responsible for the interpretation of the data. The authors would also like to thank Paul Norman for his assistance in calculating the 10-year migration distances for 1971-81, and Tom Cooke for his advice during the analytical stages of this work. Additionally, the authors are grateful for comments received at the presentation of an earlier version of this paper at the SERC Annual Conference 2014.

## **Abstract**

Expectations of migration and mobility steadily increasing in the longer term, which have a long currency in migration theory and related social science, are at odds with the latest US research showing a marked decline in internal migration rates. Given the similarity in demographic, economic and social trends between the USA and the UK, this paper reports the results of research that investigates whether the latter has been experienced any similar change in more recent decades. Using the Office for National Statistics Longitudinal Study (ONS-LS) of linked census records, it examines the evidence provided by its 10-year migration indicator, with particular attention to a comparison of the first and latest decades available, 1971-1981 and 2001-2011. This suggests that, as in the USA, there has been a marked reduction in the level of shorter-distance (less than 10km) moving that has involved almost all types of people. In contrast to this and to US experience, however, the propensity of people to make longer-distance address changes between decennial censuses has declined much less, though the 2.6% fall between the 1970s and the 2000s may be an underestimate owing to the inclusion of moves to and from university in the latest decade. This finding is consistent with the results of a companion study which analysed data on migration between the health areas of England and Wales (Champion and Shuttleworth, 2015). There is therefore a strong case for now probing the causes of the sharp reduction in shorter-distance moving in Britain as well as the USA, as well as for investigating why the two countries differ in terms of their experience of longer-distance migration trends.

**Keywords:** Internal migration, Migration intensity, Long-term trend, Longitudinal Study, England and Wales, Microdata

**JEL Classifications:** J11, J61, O15, R23

## **Introduction**

The literature is full of mentions of an increasingly mobile world such as ‘all the world is on the move’ and ‘the age of migration’, as detailed below. Yet it is becoming clear that this is not true of all forms of mobility nor of all parts of the world. In particular, there is now irrefutable evidence that rates of local residential mobility and longer-distance migration have been falling in the USA not just as a result of the 2008-09 recession but over several decades. This observation has started to prompt research on the experience of other countries in order to see whether they too have witnessed a similar decline in migration intensities.

Little work on trends in migration rates has been undertaken recently for the UK on a comprehensive and long-term basis. As noted below, both the companion study to this one (Champion and Shuttleworth, 2015) and a study by Lomax et al. (2014) are based on a data set that excludes the vast majority of shorter-distance moves, while also the latter study covers just the single decade 2001-2011. This paper reports the results of new research based on the Office for National Statistics Longitudinal Study of England and Wales (ONS-LS), which identifies all inter-censal address changes made between 1971 and 2011 and then investigates whether there has been any significant change in the intensity of these events by distance of move. Its primary ingredients are the ‘10-year migration indicator’ for each of the four inter-censal periods from 1971-1981 onwards and the calculated distance between addresses at the start and end of each period for each of those whom this indicator flags up. These allow the tracking of the rates of address changing both in aggregate and for a selection of population subgroups that can be defined consistently across the five censuses involved.

The answer to the question in the paper’s title has substantial implications for both theoretical and applied arenas. As regards the former, if a decline in home moving has been taking place, it would to some extent challenge the prevailing notion of an ever more mobile society, though it could also be the case that home moving is being substituted by other forms of mobility, as predicted in one of the classic models of migration theory (see below). If no decline is evident, then the question alters to why the UK has not been following the path of the USA in the way that it has done in some other aspects of socio-demographic change. As regards policy, a change in

home-moving rates can have both positive and negative connotations, most notably for national prosperity which is normally seen to gain from labour mobility but also at the individual level where greater local rootedness is usually seen as beneficial unless it arises from people being unable to move when they want to.

The rest of the paper is arranged in five sections. The first sets out the background to and the case for the present study. The next one justifies the choice of data source and approach, describing the key advantages as well as some limitations of the ONS-LS. Thirdly, the presentation of the descriptive results begins by looking at the overall proportion of people who were living at an address at the end of each inter-censal period that was different from that at the outset, both in aggregate and by distance-of-move bands, and then goes on to examine the extent to which rates and trends varied between types of people. Next, modelling is used to determine the odds of moving associated with each characteristic allowing for the effect of all the others, before drawing the findings together in a concluding discussion.

## **Background**

Much social theory assumes that migration and mobility will increase over the long term because of social and economic change. Common discourses point to ‘modernity’, ‘dislocation’ and ‘hypermobility’ eroding attachment to place and, indeed, eroding the very concept of ‘place’ and substituting the themes of ‘flows’ and ‘networks’. Theories of a ‘liquid modernity’ (Bauman, 2000) are associated with post-national ‘deterritorialisation’ processes and the end of states as containers for societies, helping us to understand why we now live in ‘the age of migration’ (Castles and Millar, 2009). Globalisation theory also identifies mobility, migration and related population flows as being central to the constitution of the global (Robins, 2000). Furthermore, occupational trends in western societies might be assumed to be raising migration rates because the composition of the labour market has been switching away from blue-collar manual work and becoming increasingly skewed towards higher-skilled ‘service class’ groups with a long tradition of greater geographical mobility (Green, 1992; Fielding, 2012).

These, and similar, ideas have a long currency in migration theory and related social science. Most notably, the notion of increasing population movement was highlighted by Lee (1966) in his refinement of Ravenstein's nineteenth-century 'laws of migration': 'Unless severe checks are imposed, both volume and rate of migration tend to increase with time' (Lee, 1966, p.53). Zelinsky (1971) also drew on the idea in his 'hypothesis of the mobility transition', designed to sit alongside the demographic or, in his terminology, the 'vital' transition and its two components of the epidemiological and fertility transitions. His model delineates the shift from the situation of 'little genuine residential migration' characteristic of pre-modern traditional society through the early and late transitional phases to the advanced society. In the latter, 'For the individual migrant, ... one can postulate a lifetime cycle of residential shifts, along with an elaborate schedule of circulatory trips' (Zelinsky, 1971, pp. 245-246). This is 'a state in which the term "sedentary" no longer seems apposite' and people 'frequently migrate in the sense of formal change of residence', with an annual rate of 20 per cent being quoted for the US population then (p.247).

Such ideas have underpinned the rise of the New Mobilities Paradigm. Cresswell (2006, p.15) notes the centrality of mobility within modernity, quoting from Florence Luscomb's 1911 journal: the 'modern individual is, above all else, a mobile being'. According to Sheller and Urry (2006, p.207), 'All the world seems to be on the move'. In the words of Hannam et al. (2006, p.2), 'The global order is increasingly criss-crossed by tourists, workers, terrorists, students, migrants, asylum-seekers, scientists/ scholars, family members, business people, soldiers, guest workers and so on. Such multiple and intersecting mobilities seem to produce a more "networked" patterning of economic and social life...'. As a result, 'A "mobility turn" is spreading into and transforming the social sciences, not only placing new issues on the table, but also transcending disciplinary boundaries.... It seems that a new paradigm is being formed within the social sciences'. This is the justification that Hannam et al. (2006, pp. 1-2) used for the launch in 2006 of the journal *Mobilities*, designed to 'address this emerging attention to many different kinds of mobilities, both by those engaged in practising and regulating diverse mobilities and by those involved in researching and understanding present-day and historical mobilities.'

Against this background, it is perhaps not so surprising that commentators seem to have found it difficult to acknowledge that migration rates are not continuing to increase in some parts of the world and accept that they have been undergoing a secular decline for some considerable time, most notably in the USA. A picture of rapidly declining migration rates in the USA was particularly strongly highlighted by Cooke's (2011) analysis of the 1999-2009 change in inter-state and inter-county migration in *Population Space and Place*, with much emphasis then being put on the depressing effect of the Great Recession of 2008-09. When it was subsequently recognised that this decadal fall in rates had been exaggerated by time-series data inconsistencies relating to 1999-2005 (Cooke, 2013; Kaplan and Schulhofer-Wuhl, 2012a), the main impact on the academic debate was to reinforce previous observations that US migration rates had peaked in the 1980s and that some signs of a long-term downturn could be traced back another quarter of a century. In particular, Long (1988) and Gober (1993) both identified an almost uniformly downward trend on overall residential mobility dating back to the early 1950s. Fischer (2002) even traces the phenomenon back into the nineteenth century, concluding that 'Americans today move less often than did their ancestors' (p. 193) and prompting his paper title 'Ever-more rooted Americans'. Small wonder, therefore, that there was more than a hint of frustration in Wolf and Longino's 2005 paper 'Our "increasingly mobile society"? The curious persistence of a false belief'!

A decade on from Wolf and Longino's (2005) lament, however, it is difficult to believe that anyone could still be labouring under this misapprehension, even if the researchers and commentators are primarily drawn from and live among those groups for whom hyper-mobility remains the norm for their work and careers. The statistical record of declining residential mobility and migration rates in the USA has been set out in a succession of reports on geographical mobility by the US Census Bureau, culminating in its 2011 edition which announced the lowest ever 5-year mover rate recorded by the Current Population Survey since its inception in 1948 (USBC, 2011). The one-year change of address data from the CPS indicates that the USA's overall mobility rate remained rather consistently around 20% for the first two decades after the Second World War before falling gently over the next decade and a half through the two recessions of the 1970s. There was some recovery in rate in the mid 1980s, but this was only temporary and was then followed by a much steeper and more



sustained decline, with – impressively – the rate of fall hardly accelerating during the Great Recession.

This message of declining rates in the USA has now been relayed widely by media reports (e.g. Jaffe, 2012; Lowery, 2013) as well as a number of recent academic papers including Cooke (2011, 2013), Frey (2009), Kaplan and Schulhofer-Wuhl (2012a, 2012b), Molloy et al. (2011, 2013) and Partridge et al. (2012). Moreover, these studies make it clear that decline in migration rates has been occurring at all spatial scales: it has been just as strong for inter-state migration as it has been for between-county within-state moves and within-county address changes.

The sharp decline in US internal migration rates since the mid 1980s prompts the question as to whether any other countries have experienced any similar reduction over the past 30 years. Bell and Charles-Edwards (2013) found declining migration intensities for three of the other five more developed countries for which they had obtained five-year migration data from the 1990 and 2000 census rounds, these being Australia, Canada and Switzerland, with the exceptions being Greece and Portugal. The latest research on the UK (Lomax et al., 2014; Champion and Shuttleworth, 2015) suggests that, while migration rates dropped during the 2008-09 recession, there has been no long-term reduction on anything like the scale observed for the USA. These two studies, however, are based on data sets that record only between-area migration and omit the vast majority of short-distance moves, so there remains the need for a comprehensive analysis that covers all distances of address changing.

### **The study: aim, data and approach**

Against this background, the primary purpose of this paper is to see whether the intensity of internal migration in England and Wales has been falling in the longer term in the same way as has been observed for the USA. Following on from this, the aim is to probe the direct explanations for any such change in terms of how home moving rates vary between population subgroups. These two research questions require a dataset on address changing that (1) covers all distances of move; (2) spans as long a time period as possible; and (3) contains a range of personal characteristics defined on a consistent basis for this period of time. This section sets out the reasons

for choosing the ONS-LS for this study and details its relevant features, including certain limitations that need to be borne in mind when interpreting the results.

The selection of the ONS-LS for this study involved a number of stages. Official surveys were ruled out at an early stage, primarily because of sample size, even more so the panel and cohort data sets. The National Health Service Central Register (NHSCR) and the Population Census are the sources that have most commonly been used for monitoring migration trends and patterns since the 1960s (see, for instance, the essays in Stillwell et al., 1992), but both were found to suffer certain weaknesses for present purposes. As documented by Champion and Shuttleworth (2015), the NHSCR can be used to track migration annually from 1971, but it covers only between-area moves and differentiates people by only age and gender. Meanwhile, the Census collects a wealth of information on people's characteristics including (from 1961) usual address 12 months earlier, with the latter covering all moves irrespective of distance. These enumerations, however, take place only once a decade (apart from the 10% Census of 1966), with the difference between each year's rate being determined very largely by timing in relation to the business cycle, thus not permitting any long-term trend to be identified robustly (Champion and Shuttleworth, 2015).

By comparison with these various sources, the migration data in the ONS-LS was found to be much superior in terms of the criteria set out above. The ONS-LS contains the complete census records of a sample of just over one per cent of the population of England and Wales, starting with the 1971 Census and now incorporating the 2011 Census, with individuals linked between Censuses on an anonymised basis. In addition to the information derived from the one-year change of address question from each of the five Censuses, it includes a variable derived from the usual address of each sample member for which this information is available at each pairing of adjacent censuses, known as the '10-year migration indicator' and in theory covering all distances of move (see below). Moreover, there is a variable giving the straightline distance between each person's addresses at the start and end of each of these four inter-censal decades, where these are different. At the outset this was not available for 1971-1981, but this omission was subsequently rectified (see Acknowledgements). As pointed out by Niedomsyl and Fransson (2014), this precise measure of migration distance is greatly preferable to one based on whether or not a move involves crossing

an administrative boundary, given that boundary crossings include a proportion of shorter-distance moves as well as longer-distance ones. This also gives us the opportunity of comparing trends over time for a range of distances of move, which are recognised to differ in terms of their nature and motivation (Gordon, 1982).

At the same time, it is important to be aware of some limitations in the ONS-LS data. Firstly, while linkage rates are high (see Lynch et al, 2015), the tracing of ONS-LS members between censuses cannot be perfect. Obviously, there can be a valid reason why someone can appear in one census but not the next or vice versa, these being primarily due to births, deaths and migration in and out of the country during the period. For others, though, this may arise from a person being missed off the census return or through different information on name or date of birth being given at the two censuses.

Secondly, the range and specific nature of questions asked by the census has altered over time, as some issues rise in salience while others become less important, with the result that it is not possible to get the full benefit of the wealth of information on personal characteristics. Two questions which today are accorded great prominence are ethnicity and health status, but these were first asked only in 1991 and so cannot be included in any systematic analysis that spans the full 1971-2011 period. Additionally, for some questions that have been asked by all the relevant censuses, there have been changes in the form of the question and/or in the type of answers and the way that they have been categorised in the released variable. For these, it is necessary to combine the detailed responses into a set of broader categories that are consistent across the censuses.

A more intractable issue is posed by the change in definition of usual residence for students living away from their home during term time, in that for the first time in 2001 this was defined as the term-time rather than the vacation address. It is also the case that there are differences between censuses in the precision with which people's usual address was coded, meaning that there is likely to be slight variation between periods in the coverage of the most localised moves. According to ONS Geography Division (2015), the method was least precise for 1981-1991 (when differences of under 500 metres between the Enumeration District centroids were treated as non-

moves), while it was most accurate for 1971-1981 (when actual addresses were compared manually) and for 2001-2011 (when addresses were coded to the nearest 1 meter and 0.1 meter at these two censuses respectively) (see also Gleave, 1995; CeLSIUS, 2015). The approach adopted here is to be vigilant in interpreting the findings and, in particular, give less weight to the results for 1981-1991 and focus more on the longer-term changes between 1971-1981 and 2001-2011, while recognising that for the latter period the migration rates are likely somewhat inflated by including some moves of students from and to term-time addresses.

Lastly, two minor drawbacks of the ‘10-year migration’ approach should be noted. One is that the time between adjacent censuses is never 10 years to the precise day. While the census has always been held in the spring before local government elections in early May, its precise timing has varied somewhat, mainly to avoid the Easter weekend which is dictated by the lunar cycle. As the maximum discrepancy is only around 1% of the decade, it is conventionally ignored in census-based comparisons of population change between ‘decades’, and so too it is here. Secondly, the approach picks up only one move per person in an inter-censal period, so it cannot identify any additional address changes that might have occurred, and in a similar vein, it will treat someone who has moved away from and back to the same address as a non-mover. But these features are also characteristic of studies of the one-year change of address data from censuses and other sources. While multiple address changing by individuals is going to be more prevalent over 10 years than one, the assumption here is that any change in the extent of multiple address changing across the decades will be highly correlated with any change in the 10-year migration rate.

In sum, there is no data set that is ideal for this study and so we opt for the best one available. The ONS-LS dataset provides a four-decade time span back to the early 1970s. It contains a ‘10-year migration indicator’ and precise distances between its members’ addresses at the beginning and end of each inter-censal period, together with information on a range of personal characteristics that are known to be associated with the likelihood and distance of moving home. In now proceeding to use the ONS-LS to see whether or not the internal migration rate for England and Wales has declined in the longer term, it is merely necessary to ensure that any such observed tendency is not likely to have arisen through statistical artefact.

## **The extent of and trend in 10-year address changing rates**

This section begins by looking at the overall proportion of people who were living at an address at the end of each inter-censal period that was different from that at the outset and compare this across the four decades. These are then disaggregated by distance in order to discover whether any change was distributed evenly across all the lengths of move or was more common among longer- or shorter-distance moves.

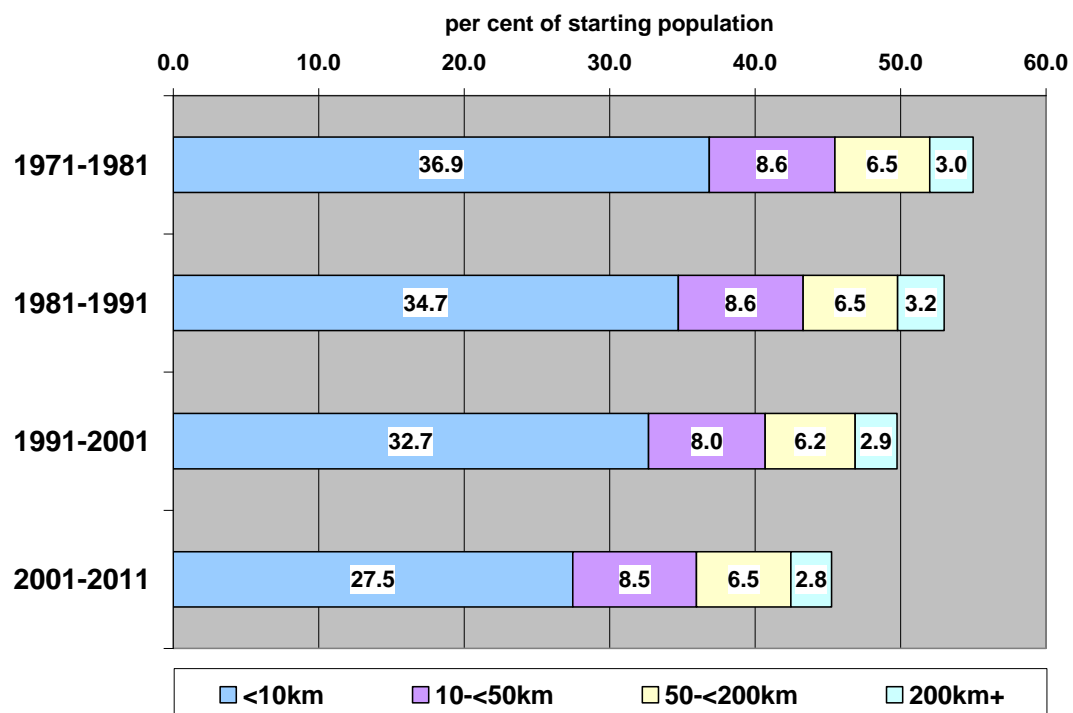
In the first study period 1971-1981, the number of people who were recorded as usual residents of England and Wales in both censuses and whose birthday fell on one of the four dates eligible for ONS-LS membership was 397,258. Of these, 178,807 were deemed to be living at the same address in 1981 as in 1971, while those with a 10-year migration flag numbered 218,451, thus comprising 55.0% of the total. This might seem a surprisingly low level to those familiar with the level of around 1 in 10 people moving in England and Wales in an average pre-census year, but it is a well-established observation, dating back at least to Long (1991) and confirmed most recently by Bell et al (2015), that the rate of address changing over longer periods is not a simple multiple of the one-year rate. In countries where the census asks people's addresses both one year and five years ago, the latter rate is only about three times the former, this being because there is a significant minority of people who make more than one move over five years but will be recorded as making just a single address change in the 5-year data. This effect can be expected to be more pronounced in 10-year address change data, as is the case here.

How has the rate of address changing altered over the three decades since the 1970s according to the ONS-LS? On the one hand, the total number in the equivalent cohorts has risen progressively to 404,947 for 1981-1991, to 409,421 for 1991-2001 and then to 419,431 for 2001-2011, as would be expected as the country's population has grown. By contrast, the number of 10-year address changers has declined progressively from its 1970s volume of 218,451 to 214,622, 203,724 and 189,820 for these next three decades respectively. As a result, the 10-year migration rate fell steadily across the four decades, reducing from its 55% level for the 1970s to 53.0% for the 1980s, 49.8% for the 1990s and 45.3% for the 2000s, an overall fall of 9.7 % points between the first and last decades and a relative decline of 17.7% from the

1970s rate. Clearly, in answer to the primary question posed for this study, according to this measure of migration intensity, the population of England and Wales would appear to have been moving home substantially less in recent years than was the case three decades ago. At the very least, even if more recently a minority may be moving home even more frequently within the 10-year period (see above), an increasing proportion has been staying put.

The first step in understanding why the 10-year address changing rate has been falling is to disaggregate the overall rate by the distance between people's addresses at the start and end of the decades. Figure 1 displays the rates for four distance bands. It is immediately apparent that the fall in overall rate is almost entirely the result of reduced short-distance moving, with the proportion changing address by less than 10km dropping by 9.4 % points from 36.9% to 27.5%, a relative decline of almost a quarter (24.5%). By contrast, the rates for the three longer-distance bands altered only marginally, with the 2001-2011 rate for 200km+ moves lower than that of 1971-1981 by just 0.2 points, that for 10-<50km down by 0.1 and that for 50-<200km unchanged.

Figure 1. Proportion of the starting populations with a different address at the end of the decade from that at the start by distance of move (Source: calculated from ONS-LS. Crown copyright)



This finding is significant for at least two reasons. In the first place, the main change appears to have taken place in the types of moves that are largely missed by the primary continuous migration recording systems that are based on health records, such as that used by Champion and Shuttleworth (2015). As mentioned above, the latter have only ever counted between-area moves, where the areas are no smaller than the local and unitary authorities and, for most of the period since the 1970s and for most of the country, were the larger county-level units. This would explain why these recording systems suggest very little, if any, reduction in migration rate over time, aside from the short-term fluctuations related to economic cycles. Secondly, the evidence of Figure 1 suggests that the sharp reduction in migration rate associated with the deep recession of 2008-09 observed by Lomax et al (2014) has not significantly reduced the scale of longer-distance migration in the longer-term picture, perhaps not surprisingly given that each of the previous three decades also experienced a mixture of boom and bust conditions.

How much confidence can be placed in these findings, given the two main uncertainties over the data mentioned above? As regards the possibility of the shortest-distance address changing being undercounted in 1981-1991, the only effect of this would be to raise the proportion moving less than 10km somewhat beyond the calculated rate of 34.7%, which would also increase the overall migration rate. This would make the profile for 1981-1991 look more like that of the previous decade, but it would not alter the general conclusion that 10-year address changing has generally been declining during our study period, only that perhaps it started somewhat later than suggested by Figure 1. The corollary of this would be that the rate actually fell faster, once it had got underway.

The other main source of concern about the data – that relating to the change in the definition of usual address for students – could also be deemed to accentuate rather than undermine the main finding of address changing rates falling over time. The inclusion of moves to university in 1991-2001 will have artificially swelled the overall rate for that decade somewhat, with the inclusion of moves both to and from university in 2001-2011 doing this even more for that decade. If the address changing of these two decades could have been put on the same basis as for the first two, then the decrease in rate across the study period would likely have been even more marked.

The only rider to this is that, as such education-driven migration is normally longer distance, that step would have its main effect there, meaning that the rate of moves of 50km and over might not have held up quite as well as shown in Figure 1.

Nevertheless, these student moves will form a relatively small part of the wider picture, because they relate only to those attending university at the time of the censuses: the data will miss those who moved both to and from university within the course of an inter-censal decade.

There is therefore no question that 10-year address-changing has decreased over recent decades nor that this is primarily due to shorter-distance moving. The only uncertainty is whether the decline started after the 1970s or the 1980s. In now going on to examine the trend in greater detail, our approach is to focus primarily on how much different the pattern for 2001-2011 is from that of our first decade 1971-1981, for which we have the greater confidence in the quality of the short-distance moving data, but caution still needs to be exercised over the possible swelling of the longer-distance rates for 2001-2011 arising from the student issue.

### **Variation in 10-year address changing between people**

This section of the paper has two principal objectives. The first is to become more familiar with the nature of 10-year address changing, as this measure is not commonly used in migration studies, as mentioned above. In particular, are the types of people who do or do not stay put over a decade-long period the same ones that are less or more residentially mobile according to sources that monitor continuously or provide data on one-year change of address? Secondly and more importantly, the aim is to discover which types of people are the ones most involved in the observed decline in 10-year address changing since the 1970s. In particular, which have seen their propensity to make a move of less than 10km drop the most by 2001-2011? But also, in relation to the apparent stability in rates of longer-distance moving, is it the case that no types of people have experienced a significant change in this between the 1970s and the 2000s, or does the overall pattern of little change arise from the effect of falling rates for some groups of people being offset by an increase in rates for others? All the relevant data for answering these questions are listed in Table A1 (see annex).



***Which people are most and least migratory over a 10-year period?***

This question is tackled using the address changing rates for our first decade 1971-1981. A wealth of previous studies gives a very clear idea of what to expect. Probably the most comprehensive is that of Owen and Green (1992), who drew on a variety of sources on one-year or continuous address changing including the 1981 Census, the Labour Force Survey and Building Society data to portray differentials in migration propensities for the 1980s. They found virtually no difference in rate between males and females, but considerable differences by age (with the 16-34s being most mobile), by occupation (highest for managerial and professional, plus those in personal and protective services), by highest qualification (highest for those with degrees and A Levels) and by housing tenure (much the highest for the private-rented sector). How does this profile of migration intensity compare with that for 10-year address changing?

To answer this question, the left-hand panel of Table 1 lists in rank order the 15 types of people with the highest rate of address changing over any distance for 1971-1981 out of the full list of types analysed for this study (see Table A1 in the annex). The characteristic refers to status at the start of the period, i.e. 1971, and the importance of age is immediately apparent. All age groups from 10 to 29 (becoming 20-39 by the end of the period) are included, along with 0-4s that will no doubt be members of families headed by many of the former. Younger age will also be instrumental in the appearance here in the list of 'student' (these defined here as aged 15 and over and still in education), singles (mainly children and young adults in an era when early marriage was the norm) and private renting (mainly younger people saving up for a mortgage or on a council housing waiting list), as well as younger adults probably making up a fair proportion of the unemployed. Members of the armed forces (included in Owen and Green's 'personal and protective services') have the highest rate of all, not surprising given their enforced relocations between defence establishments and their departure from these when returning to civilian life. The most highly educated and those in professional and skilled white-collar jobs also parallel those identified as most likely to be one-year migrants by Owen and Green, along with people born outside the UK. The other end of the spectrum (not shown in Table 1, but see Table A1) is dominated by the older age groups (the lowest being the 45-49s at just 36%, markedly below the overall rate of 55%) and related types such as the

retired and widowed, along with part-time employees (these most commonly being married women at this time).

Table 1. The 15 types with the highest rate of 10-year address-change 1971-1981, by distance of move

Rank	All distances of move		Less than 10km		50km and over	
	Type	%	Type	%	Type	%
1	Armed forces	88.2	15-19	53.7	Armed forces	60.1
2	Student aged 15+	87.6	20-24	51.4	Student aged 15+	33.0
3	15-19	87.3	Private renter	45.6	Degree	19.0
4	20-24	84.3	10-14	44.7	Professional	16.6
5	Private renter	71.5	25-29	43.3	15-19	16.4
6	25-29	70.3	Divorced	43.2	20-24	15.3
7	10-14	68.0	Single	42.7	Intermediate	13.9
8	Single	65.6	Unemployed	42.4	Private renter	13.7
9	Divorced	63.1	0-4	42.3	25-29	13.1
10	Unemployed	62.6	Social renter	41.6	10-14	12.2
11	0-4	62.3	Non UK Born	41.0	Single	11.6
12	Non UK born	61.2	Unskilled	40.1	Skilled non-manual	11.1
13	Skilled non-manual	58.7	30-34	38.2	85+	11.0
14	Degree	58.5	Skilled manual	38.1	Non UK born	11.0
15	Professional	58.2	Partly skilled	37.2	Owner occupier	10.6

Note: Degree includes other tertiary qualifications. Intermediate refers to Social Class II.

Source: Table A1 in Annex.

Table 1 also lists the types of people with the highest propensity to make the shortest and longest moves over the decade. As is recognised in the literature on the motives for moving differing by distance or, more usually, by whether a migrant crossed a regional boundary or not), the more skilled and educated appear high up in the 50km+ list but not in the <10km one, and vice versa for the less skilled, while military personnel are especially highly mobile over long distance as expected. Higher rates of local-scale turnover are also characteristic of social renters and more vulnerable people such as the divorced and unemployed. Younger age groups and associated types like singles and private renters, however, feature strongly among both distances of address changing. Again, these patterns of differentiation accord strongly with what is known about variations in migration rates measured over periods much shorter than a decade, suggesting that any findings from the ONS-LS about which types of people have seen the greatest decreases in 10-year address changing would very likely also be exhibited by a continuous sequence of data on one-year address changing if such a source covering more than just gender and age had been available for this study.

***For which people has the 10-year address-changing rate declined most?***

This question is answered by calculating the percentage change in address-changing rate between 1971-1981 and 2001-2011, with people classified on the basis of their status at the start of the each of the two decades respectively. Table 2 ranks the 15 population types of Table A1 (see annex) in order of greatest decline for each of three distances of move.

Table 2. The 15 types with the greatest relative decrease in their 10-year address-change rate between 1971-1981 and 2001-2011, by distance of move

Rank	All distances		Less than 10km		50km and over	
	Type	%	Type	%	Type	%
1	Retired	-44.7	65-69	-53.6	Degree	-33.6
2	65-69	-44.6	Retired	-53.0	85+	-31.7
3	70-74	-43.5	70-74	-50.7	0-4	-29.9
4	60-64	-40.0	60-64	-47.2	60-64	-29.6
5	75-79	-37.8	55-59	-43.7	Intermediate	-28.8
6	Widowed	-34.7	Widowed	-43.2	70-74	-27.5
7	55-59	-33.0	75-79	-42.0	Divorced	-27.4
8	Non UK born	-31.4	80-84	-39.3	Armed forces	-26.2
9	Divorced	-31.1	50-54	-38.4	Married	-25.4
10	Married	-30.7	Non UK born	-36.5	65-69	-25.3
11	80-84	-29.6	Divorced	-36.0	Retired	-24.8
12	Sick	-27.4	Unskilled	-35.9	Professional	-23.6
13	Unskilled	-25.8	Married	-35.3	Non UK born	-22.6
14	50-54	-25.7	Sick	-32.3	Employed part-time	-21.3
15	Self-employed	-23.9	45-49	-30.2	Owner occupier	-21.1

Note: Degree includes other tertiary qualifications. Intermediate refers to Social Class II.

Source: Table A1 in Annex.

Looking first at all distances of move (left-hand panel of Table 2), it is evident that older age is a key driver of declining rates: not only did the older age groups generally have the lowest rate at the outset in the 1970s (see Table 1 above), but they have experienced the largest relative decline in rate since then, getting on for a halving of rate for those aged 65-69 (becoming 75-79 by the end of the decade). The appearance of the retired and widowed in this list merely confirms the importance of age. Self employment also tends to be more common in the older working-age population. There is also probably an age element in presence of 'sick' (i.e. economically inactive because of permanent illness) in the list, so too that of the divorced and married, reinforced by the trend towards delayed marriage which will have shifted the composition of these groups towards the less migratory ages. The latter factor may also have helped to put the non-UK-born into this list, as the rate of immigration slowed between the 1970s and 1990s and the non-native population thus aged. (In the next section we will use modelling to separate out the effect of age.)

The picture is very similar for the change in the rate of moving less than 10km (middle panel of Table 2), not surprisingly given the high, albeit sharply declining, importance of shorter-distance moving already seen in Figure 1. Older age is even more emphatically the main driver here, with the 10-year address-changing rate more than halving for the 65-74s between the 1970s and the 2000s. The pattern is, however, somewhat different for longer-distance migration (see the right-hand panel). Older age still features quite strongly in this, but the greatest relative contraction in the proportion of people moving 50km or more between censuses is for those holding a degree or equivalent tertiary qualification, down by fully one-third in marked contrast to the overall decline of just 2.6%. This may well be linked to the reduction in long-distance moving by the top two occupational skill groups of professional and intermediate non-manual workers, with rates down by over a quarter, and also possibly to the appearance in the list of owner-occupiers, down by one-fifth.

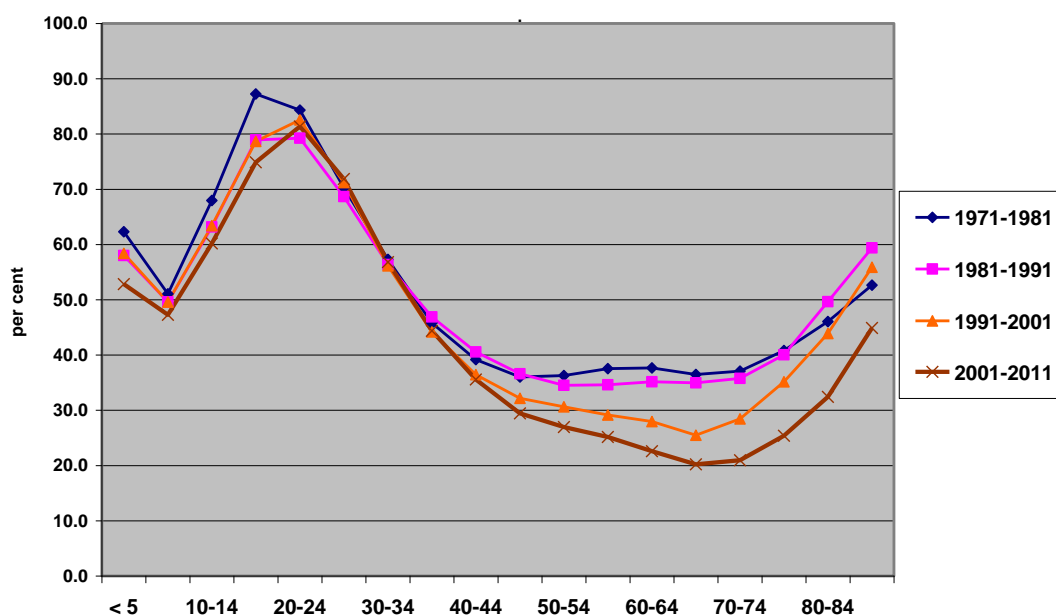
To get a better handle on what is behind these declining rates, it is helpful to contrast the types of people involved with those that have experienced least reduction in 10-year address changing over the study period (not shown here, but see Table A1 in the annex). In fact, for all distances of move, there are two cases where the rate has actually risen against the overall trend, namely private renters (up by 7%) and 25-29 year olds (up by 2%). Next, in terms of the smallest falls in rate, are the 30-34s and 35-39s, confirming that there is no artificial ‘student issue’ factor behind these. As regards the shortest-distance moves (under 10km), again there are two types where the rate actually rose between the 1970s and the 2000s, but this time featuring members of the armed forces (with a 4% increase) as well as 25-29 year olds again just a 1% increase). As for all address changing, the smallest reductions in rate are for the next older groups spanning 30-39, their putative children (0-4s), private renters and ‘students’ (this type being restricted to those beyond compulsory-schooling age who are economically inactive).

For longer-distance moving, the pattern is considerably different, as would be expected from the earlier observation that at least some types have experienced a marked reduction in rate despite the very small reduction in overall rate. In all, 13 of the types shown in Table A1 display a higher rate of 50km+ moving for the 2000s than the 1970s. Indeed, 8 of them post increases of at least 10%, but several of these

types – those starting the decade as 5-9s, 10-14s, 15-19s, 20-24s, singles and private renters – are likely to be partly driven by the ‘student issue’. The other types, however, are unlikely to be affected by this artificial swelling of rates, namely unskilled or partly skilled workers (both with increases of over 25%) and also skilled manual workers and those renting from a social landlord (with increases of 7% and 9% respectively).

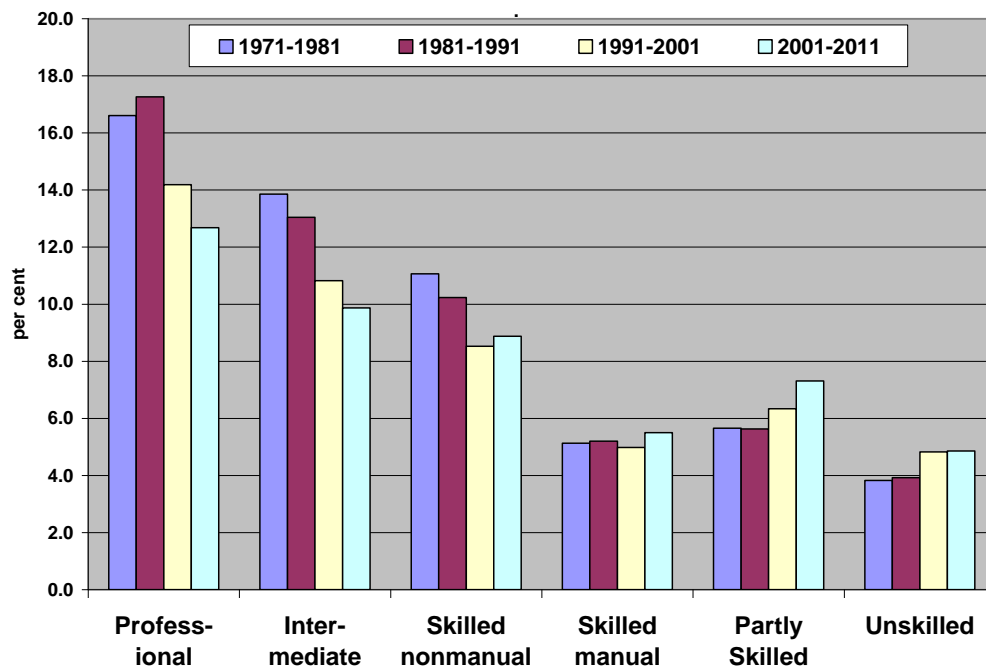
From the findings so far, it is apparent that age is the single most important discriminator in trends in the all-moves rate as well as linking through to several other features there, so a closer look is now taken at this, drawing on data for all four decades. Figure 2 confirms that the reductions in 10-year migration rate have been much greater for some age groups than others, with the steepest falls being for those aged 50 and over at the start of the decade. Going further, it also reveals a fairly consistent progression across the four decades, though there is no major difference between the 1970s and the 1980s and indeed the rate for the oldest age groups is lower in the 1970s than for the next decade or two. At the other extreme, there has been virtually no change in moving rate for those aged between 25 and 39. In between come those in their 40s and the under-20s, with relatively modest reductions in rate compared to those aged 50 and over.

Figure 2. Proportion of all people with a different address at the end of the decade from the start, by age group (Source: calculated from ONS-LS. Crown copyright)



Meanwhile, in relation to longer-distance address changing, it is occupational status, along with age, that helps to account for the only very limited reduction in the overall rate between the 1970s and the 2000s. As Figure 3 shows, across the four decades there is a broad contrast in the trend in 50km+ moving rate between the three more highly skilled social/skill groups and the three lower ones. The former have each seen a progressive decline in rate, apart from slight uplift for the professional group (Social Class I) between the 1970s and 1980s and an even slighter one for the skilled non-manual group (Social Class IIIN) in the last decade. By contrast, there is no sign of a decline in the rate for the three less skilled groups, but instead a rather flat trajectory for skilled manual workers (Social Class IIIM) and an increase in rate for the partly skilled and unskilled groups (Social Classes IV and V) after 1991. The result is a considerable convergence in the 50km+ migration rate across these six main groups, with occupational status becoming less of a discriminator by the 2000s.

Figure 3. Proportion of all people with an address at the end of the decade at least 50km away from that at the start, by Social Class (Source: calculated from ONS-LS. Crown copyright)



## **Modelling the separate role of each personal characteristic**

Up to this point, the findings on address changing have been based on separate analyses of each type of person. As a result, there has been speculation that the difference in rate between such categories has not been driven entirely by that characteristic but also by variations in their composition of other attributes that are related to address changing, most notably age and – for longer-distance migration – by social/skill status. This final section of the paper uses binary logistic regression to reveal how much each variable affects the odds of people making a 10-year address change over a particular distance when allowance is made for the effect of all the other variables included in the model.

For this stage of the study, the population at risk is restricted to people aged 15-74 at the start of the decade, because outside this span people were not classified in terms of economic position, educational qualification and occupational grouping consistently across the censuses. This restriction also helps to side-step the ‘student issue’, in that the 2001-2011 cohort will include very few people who were still students in 2011 (when aged 25-84). As an additional precaution, any students aged 15 or over in 2001 are also excluded, so as to remove the ‘going-down’ moves of those who were at university then, thereby putting this period’s address changing on the same basis as for the 1970s. In terms of modelling procedure, one value of each characteristic is excluded from the regressions and acts as the reference category (with value of 1.000) against which the parameters assigned to the remaining categories are benchmarked. By comparing the results for the 2000s with those for the 1970s, one can see how each category has altered over time in its role with respect to the other values of that characteristic. Also, by examining the change in the range of the parameters for each characteristic, one can then detect whether or not each has become a more salient factor in the intensity of internal migration of England and Wales.

The results of this modelling are shown in Table 3, both for all distances of 10-year address changing (which are dominated by moves of less than 10km as seen above in Figure 1) and for just the longest-distance ones of 50km and over (which comprise less than one-fifth of all moves even in 2001-2011 after the decades of reducing short-distance moving).

Table 3. Modelling of the propensity to be living at a different address at the end of the decade from that at the start, by distance of move

Characteristic	All distances			50km and over		
	1971-1981	2001-2011	Shift	1971-1981	2001-2011	Shift
<i>Female</i>						
Male	0.965**	1.020*	+0.055	0.990	1.060***	+0.070
<i>15-24</i>						
25-34	0.342***	0.474***	+0.133	0.752***	0.787***	+0.036
35-44	0.143***	0.200***	+0.057	0.447***	0.512***	+0.065
45-54	0.107***	0.119***	+0.012	0.406***	0.487***	+0.082
55-64	0.111***	0.104***	-0.007	0.520***	0.520***	+0.000
65-74	0.110***	0.094***	-0.016	0.416***	0.415***	-0.001
<i>Non UK Born</i>						
UK-Born	0.726***	1.069***	+0.343	1.004	1.159***	+0.155
<i>Single</i>						
Married	0.847***	0.787***	-0.060	1.037***	0.888***	-0.148
Widowed	1.092***	1.010	-0.082	0.921	0.926	+0.005
Divorced	1.615***	1.258***	-0.357	1.308***	1.076*	-0.232
<i>Owner Occupier</i>						
Social Renter	1.087***	0.992	-0.095	0.501***	0.748***	+0.247
Private Renter	2.462***	3.765***	+1.303	1.330***	2.261***	+0.931
<i>Employed Full-time</i>						
Employed Part-time	0.768***	0.772***	+0.004	0.850***	0.799***	-0.051
Self-employed	1.091***	1.038*	-0.053	0.709***	0.892***	+0.183
Unemployed	1.162***	0.903***	-0.259	1.376***	1.105*	-0.271
Sick	0.998	0.970	-0.028	0.680***	0.922*	+0.241
Retired	0.868***	0.799***	-0.070	0.950	0.905*	-0.045
Other Inactive	0.854***	0.835***	-0.019	1.093	1.046	-0.046
<i>No degree</i>						
Degree	1.257***	1.142***	-0.115	1.719***	1.601***	-0.118
<i>Professional</i>						
Intermediate	1.140***	1.060**	-0.081	1.041	0.889***	-0.152
Skilled Non-Manual	1.058*	0.958	-0.100	0.874***	0.764***	-0.110
Skilled Manual	0.814***	0.851***	+0.037	0.432***	0.554***	+0.121
Partly Skilled	0.875***	0.808***	-0.067	0.508***	0.565***	+0.057
Unskilled	0.917**	0.819***	-0.098	0.375***	0.486***	+0.111
Armed Forces	3.739***	2.294***	-1.445	6.252***	5.719***	-0.533
Unclassified	0.948	0.828***	-0.120	0.632***	0.505***	-0.127
<i>Constant</i>						
Constant	7.508***	3.592***		0.231***	0.139***	
<i>Nagelkerke R Square</i>						
Nagelkerke R Square	0.227	0.231		0.087	0.071	
<i>-2 Log Likelihood</i>						
-2 Log Likelihood	331782	347213		150107	145777	
<i>Number of cases</i>						
Number of cases	276,940	297,801		276,940	297,801	

Note: Significance levels: \*\*\* 0.001, \*\* 0.01, \* 0.05. Table shows the odds of a 10-year address change of the specified distance compared to the reference case (1.000) for each variable (shown in italics), and the shift in coefficient between the two periods. The populations at risk are people aged 15-74 at the start of the decade and not students then.

Source: calculated from ONS-LS. Crown copyright.

The first data column of Table 3 reveals the independent effect of each variable on the odds of a person changing address over any distance between 1971 and 1981 while allowing for the effect of all the other variables shown. In particular, it confirms the negative relationship between address changing and age, with the next older group of 25-34s having odds barely one-third of those of the 15-24 group (which forms the



reference category) and the four oldest age groups displaying odds that are at least 85% lower. Indeed, this is an even steeper gradient across age than the one shown for the relevant age groups in Figure 2 that did not allow for the effect of the other variables, all the more impressive for its omission of students.

Also clear from this column of Table 3 is that, even allowing for age and the other characteristics, the private rented sector retains its status as the housing tenure with the highest turnover, with a rate nearly two and a half times that of owner occupation, again a much bigger differential than suggested by the 72%/50% contrast in Table A1. The same is the case for armed forces personnel, for whom the odds are almost four times those of professional workers once other characteristics are taken into account. The three lowest-status worker groups all display lower odds than the three highest ones, paralleling the broad contrast in rates shown in Figure 3. Those with degrees have higher odds than those without, and those born outside the UK than natives, both as for the rates shown in Table A1. For economic position, the ranking across values for odds is almost identical to that for rates, with the unemployed being the most likely to move. With marital status, however, now that age and other characteristics are allowed for, both widowed people and especially divorcees have higher odds of moving than singles. Also, the relative position of the genders has flipped over in favour of females, though the difference is significant only at the 1% level.

Three decades on (second data column of Table 3), virtually all these broad patterns are still evident, the exceptions being that now males and the UK-born are somewhat more mobile than females and immigrants respectively and the unemployed are now less mobile than their reference category of full-time employees. Additionally, however, there are a number of changes in degree with respect to the benchmarks, as can be most easily read from the third data column. In particular, starting the decade as a private renter now confers almost four times the odds of a 10-year address change compared with being an owner occupier, while the odds for a member of the armed forces compared to a professional worker have dropped back substantially. As regards the other characteristics, in the 2000s there is now a clear progression of odds reducing with increasing age, with those aged 55 and over being even more different from the 15-24s than in the 1970s but the 25-54s seeing some convergence towards them. Even allowing for age, retirees have seen their odds of moving home drop

further away from their reference category. In terms of occupation, the reference category of professionals has increased its moving odds relative to all the other groups apart from skilled manual workers, as also has being single compared to the other three marital-status categories. Possessing a degree or equivalent tertiary qualification now confers a less positive effect than three decades earlier.

As regards longer-distance moving, there are a number of differences from the all-distance results, which is indicative of a different pattern from shorter-distance moving, as seen by comparing the last three data columns of Table 3 with the first three:

- For age, the odds of a 50km+ move decline much less rapidly with increasing age in both periods, with a lift in rate at age 55-64 (becoming 65-74) that may be associated with retirement migration, but the trend over time is similar to that for shorter moves, namely with the middle age groups becoming less different from the 15-24s.
- Married people were more likely to move 50km or more than singles in the 1970s, unlike for shorter-distance moving, with marital status becoming a less powerful discriminator by the 2000s.
- In terms of economic position, part-time employees have become significantly less mobile compared with full-time ones, widening the gap, but the overall pattern here is towards convergence on the reference category, again suggesting a less powerful role in determining the odds of moving.
- For occupational group, the main change is that by the 2000s there is a more regular reduction in odds with lower status, most notably produced by the Intermediate group changing to significantly lower odds than the reference category, but here too the range across the six main 'social classes' has narrowed.
- Having a degree is a more important driver of long-distance than is the case for shorter-distance moving, but its discriminatory power has waned somewhat over time.
- Social renters have seen their odds of a long-distance move rise to be more like owner occupiers, though private renters have become even more mobile relative to the latter.

- Relative to immigrants, the UK-born were the more mobile over long distance, unlike over shorter distances, with their odds of making a long-distance move rising over time.
- Males were significantly more likely than females to have moved a long distance in the 2000s, whereas there was no significant difference in the 1970s, this change closely paralleling the pattern for shorter-distance moving.

Overall, this process of allowing for the effects of the other characteristics (together with using a more restricted population) does not greatly alter the rates-based findings of the previous section. For both the 1970s and the 2000s and over short and long distance, age even enhances its role as a key factor behind address-changing differentials, as also does renting privately, having a degree and being a member of the armed forces. One exception is that, once that allowance is made, it is females that are found to have been the more migratory in the 1970s, but this was no longer the case by the 2000s. Other significant changes between the 1970s and the 2000s are found in both rates and odds results, including the switch of the UK-born from being less to more migratory than immigrants, private renters becoming notably more migratory over time and the unemployed and the armed forces becoming considerably less so.

What the regression results in Table 3 also confirm is the marked difference in the trend over time between shorter- and longer-distance address changing. The all-distance model, in which address changes of less than 10km predominate, provides a much closer fit to the data, with a Nagelkerke R Square of 0.227 for 1971-1981 compared to one of just 0.087 for the model of the odds of moving 50km and over. Moreover, whereas the level of explanation for the former rises somewhat to 0.231 in 2001-2011 for the former, the fit falls a little for the long-distance moves. These contrasts reflect the fact that the spread of the coefficients for each characteristic around the reference case in 1971-1981 was generally wider for the all-distance model (though not for occupational status) and in some cases was even widen in 2001-2011, whereas a degree of convergence on the reference case is found for 50km+ model.

Finally, however, there is one key similarity between the two models, though more one of direction than degree. In both cases the constant is lower in 2001-2011 than in 1971-1981, indicating that the underlying rate of 10-year address changing has declined between the two periods for both shorter- and longer-distance moving. But the drop is considerably more marked for the shorter-distance moving that dominates the all-distance model. Indeed, the contrast with the smaller decline for long-distance moving would no doubt have been greater if the modelling had been able to include students, because while part of the rise in 50km+ moving rate for the age groups 5-24 (becoming 15-34) shown in Table A1 will have been due to statistical artefact owing to the 2001-2011 data including moves to and from university unlike for 1971-1981, a part of that rise is likely to be real, in that increases in higher-education participation since the 1970s mean that the number of school-leavers going away to university was very much higher in the 2000s.

### **Summary and concluding comments**

This study of long-term trends in the intensity of address changing in England and Wales was prompted partly by the now well-documented phenomenon of migration decline in the USA (see Cooke, 2011, 2013) but also by Champion and Shuttleworth's (2015) finding that, according to migration data derived from health service records, there has been no substantial fall in overall migration rates there since the start of continuous recording in 1971, merely the ups and downs associated with the booms and busts of the business cycle. This paper has reported the results of interrogating an alternative data source, namely the ONS-LS with its variable on 10-year migration that helps to even out short-term cyclical effects. According to this analysis, address changing in England and Wales has declined markedly in recent decades, with the 10-year rate reducing from 55 per cent for 1971-1981 to barely 45 per cent changing it between 2001 and 2011, representing a percentage decrease of some 18 per cent.

Yet these two sets of headline results for England and Wales are not as incompatible with each other as it would seem at first glance. This is principally because the data used in the present study covers all distances of address changing whereas the NHSCR data set used by Champion and Shuttleworth (2015) records only moves between quite large areas and is thus dominated by longer-distance moving. The

distance breakdown available in the ONS-LS confirms that over the past four decades the overall propensity of people to move longer distances has not declined by nearly as much in England and Wales as in the USA. The really big changes have been restricted to moves of less than 10km, for which the rate dropped by a quarter between the 1970s and the 2000s according to the ONS-LS data, these being the moves that very largely go unrecorded in the NHSCR. Moreover, despite the differences between the two data sets, there is also some consistency in that they both show change in migratory behaviour of older people as being a significant element in the lowering of rates over this period.

At the same time, the present study has been able to probe further than the previous one by virtue of the ONS-LS containing information on a much wider range of personal characteristics than just the age and gender of the NHSCR. For one thing, it is now clear that the decline in overall migration rate is a widespread phenomenon, involving not just older people but shared by virtually all the population subgroups tracked in this study, albeit to varying extents but with only a couple of exceptions, notably those living in the private rented sector. The latter has also been shown to be key to the relative resilience of longer-distance moving, no doubt associated in part with the rising numbers going into higher education. Less expected in terms of the propensity of people to move 50km or more over a decade, however, is the steep rise registered by the less skilled sections of the labour force at the same time as the rate for higher-status occupations has fallen by around the same amount in relative terms. This apparent convergence of long-distance moving rates across the social scale merits further investigation, though one can speculate that the growth of white-collar work at the expense of blue-collar – which in itself is shifting population composition towards the traditionally more mobile groups – is moving the less migratory types of people and work up the official social-class scale.

In sum, the two principal findings of the long-term decline in short-distance moving and the relative resilience of longer-distance migration merit further attention. The fall in local residential mobility since the 1970s is so marked that it is surprising that the present study represents the first systematic attempt to document it. Perhaps, as occurred previously in the USA, the emphasis given to the notions of ever-increasing mobility has distracted attention from this development or, at best, has tempted

commentators to treat it as a temporary phenomenon related to economic recession. Given that the latter seems to be far from the case, the challenge now is to investigate this trend more thoroughly in order to identify the factors behind it and provide a basis of understanding that can help to anticipate whether the trend will continue. This is vital because this trend is one that has all manner of implications for individuals, communities and national well-being. As regards there being evidence of only a small reduction in the propensity to migrate over longer distances, the task is somewhat different, with the emphasis initially needing to be put on the verification of this finding and then, if confirmed, proceeding to investigate the reasons behind the contrast with US experience.

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**Table A1. Change between 1971-1981 and 2001-2011 in the proportion of all people with a different address at the end of the decade from that at the start, by characteristic and distance of move**

Age group	All distances			Under 10km			50km and over		
	1971-1981	2001-2011	% change	1971-1981	2001-2011	% change	1971-1981	2001-2011	% change
<b>All people</b>	55.0	45.3	-17.7	36.5	27.5	-24.5	9.5	9.3	-2.6
<b>Age</b>									
0-4	62.3	52.8	-15.2	42.3	37.8	-10.8	10.4	7.3	-29.9
5-9	51.1	47.3	-7.4	35.6	29.7	-16.7	8.4	10.5	24.9
10-14	68.0	60.2	-11.4	44.7	31.4	-29.8	12.2	18.6	52.3
15-19	87.3	74.9	-14.2	53.7	42.3	-21.1	16.4	18.4	12.0
20-24	84.3	81.4	-3.5	51.4	45.2	-12.0	15.3	19.4	27.0
25-29	70.3	71.8	2.2	43.3	43.6	0.7	13.1	12.6	-3.9
30-34	57.3	56.8	-0.8	38.2	36.4	-4.7	9.6	9.3	-3.5
35-39	45.8	44.4	-3.1	31.5	29.0	-7.8	7.5	7.0	-6.5
40-44	39.2	35.6	-9.2	27.8	23.1	-16.9	6.0	5.6	-5.6
45-49	36.0	29.4	-18.3	26.0	18.1	-30.2	5.2	5.5	4.5
50-54	36.3	27.0	-25.7	25.3	15.6	-38.4	6.2	6.0	-3.9
55-59	37.5	25.1	-33.0	25.7	14.5	-43.7	7.1	6.0	-15.5
60-64	37.6	22.6	-40.0	25.8	13.6	-47.2	7.2	5.0	-29.6
65-69	36.5	20.2	-44.6	26.7	12.4	-53.6	5.6	4.2	-25.3
70-74	37.1	21.0	-43.5	26.6	13.1	-50.7	5.7	4.2	-27.5
75-79	40.8	25.4	-37.8	28.3	16.4	-42.0	6.2	5.0	-19.5
80-84	46.1	32.4	-29.6	33.7	20.5	-39.3	6.8	5.9	-13.7
85+	52.6	44.9	-14.7	34.4	29.6	-14.0	11.0	7.5	-31.7
<b>Gender</b>									
Male	55.3	45.4	-17.9	36.6	27.2	-25.8	9.6	9.5	-1.0
Female	54.7	45.2	-17.4	36.3	27.8	-23.4	9.5	9.1	-4.1
<b>Birth country</b>									
UK	54.6	45.6	-16.6	36.2	27.7	-23.6	9.5	9.4	-1.0
Non UK	61.2	42.0	-31.4	41.0	26.1	-36.5	11.0	8.5	-22.6
<b>Marital status</b>									
Single	65.6	60.2	-8.2	42.7	35.7	-16.3	11.6	13.3	15.3
Married	47.1	32.6	-30.7	31.6	20.5	-35.3	8.2	6.1	-25.4
Widowed	42.2	27.5	-34.7	31.6	17.9	-43.2	5.7	4.8	-15.1
Divorced	63.1	43.5	-31.1	43.2	27.6	-36.0	9.7	7.0	-27.4
<b>Housing tenure</b>									
Owner occupied	50.3	41.2	-18.2	30.6	24.8	-18.9	10.6	8.4	-21.1
Social renting	53.3	45.5	-14.7	41.6	33.3	-20.0	4.9	5.4	9.4
Private renting	71.5	76.4	6.8	45.6	41.7	-8.6	13.7	20.0	46.2
<b>Economic position</b>									
Employed fulltime	56.4	48.8	-13.6	37.1	29.2	-21.3	9.4	8.9	-4.6
Employed parttime	42.1	35.9	-14.7	29.5	24.7	-16.3	6.9	5.4	-21.3
Self employed	52.6	40.0	-23.9	35.6	25.1	-29.4	7.2	6.6	-8.7
Unemployed	62.6	51.8	-17.3	42.4	34.0	-19.7	10.4	8.6	-17.4
Student	87.6	77.3	-11.8	34.2	33.6	-1.8	33.0	28.4	-13.9
Sick	48.0	34.9	-27.4	35.3	23.9	-32.3	4.9	5.0	2.1
Retired	37.5	20.7	-44.7	26.7	12.5	-53.0	6.1	4.6	-24.8
Other inactive	47.7	41.6	-12.8	32.3	28.4	-11.9	8.4	6.8	-19.0
<b>Social class</b>									
Professional	58.2	44.6	-23.4	28.0	21.5	-23.0	16.6	12.7	-23.6
Intermediate	55.2	44.7	-19.1	30.0	24.6	-17.9	13.9	9.9	-28.8
Skilled non-manual	58.7	44.8	-23.7	35.2	26.9	-23.6	11.1	8.9	-19.8
Skilled manual	50.6	39.4	-22.0	38.1	26.9	-29.4	5.1	5.5	7.2
Partly skilled	49.6	41.8	-15.7	37.2	27.6	-25.7	5.7	7.3	29.2
Unskilled	48.6	36.1	-25.8	40.1	25.7	-35.9	3.8	4.9	27.1
Armed forces	88.2	74.6	-15.4	17.3	18.0	3.7	60.1	44.4	-26.2
Other/unclassified	50.6	49.8	-1.4	32.4	30.5	-5.7	10.1	11.1	9.4
<b>Top qualification</b>									
Degree etc	58.5	48.0	-18.1	27.6	24.2	-12.3	19.0	12.6	-33.6
Below 3rd level	51.3	41.6	-19.0	34.7	26.4	-23.9	8.2	7.4	-10.4

Source: calculated from ONS-LS. Crown copyright.

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