Housing Careers Briefing Note 2

Moving distances and social mobility

Meixu Chen, Paul Longley, Rory Coulter
Estimating distances of residential moves and ensuing changes in neighbourhood quality from Linked Consumer Register data

EXECUTIVE SUMMARY

- The Linked Consumer Registers (LCRs) described in Briefing Note 1 enable analysis of migration and residential mobility patterns at annual time intervals and at more local scales than most other datasets.
- Here, we use the LCRs to examine (1) distances moved by individuals and (2) ensuing changes in neighbourhood quality measured using harmonized UK Index of Multiple Deprivation (IMD) percentile scores.
- Distances of residential moves and change in deprivation scores were estimated for movers (a) entering, (b) leaving and (c) moving within each UK Local Authority District at annual intervals between 1997 and 2020.
- These datasets provide a rich resource for understanding the geography and social consequences of residential moves. However, users should be aware that the LCRs are known to under enumerate both long- and short-distance moves, particularly in more recent years for which updates are periodically created on a rolling basis. Details of these issues are discussed more fully in the Further Reading listed at the end of this and other Briefing Notes.

INTRODUCTION

Migration and residential mobility are major events in people’s lives which, at the aggregate level, help to drive local population and housing market dynamics. However, the UK lacks a comprehensive administrative population register, making it difficult to analyse local patterns of population mobility outside of decennial census years.

To overcome these issues, the ESRC Consumer Data Research Centre (CDRC: https://data.cdrc.ac.uk) Linked Consumer Registers (LCRs) described in Briefing Note 1 were used to construct two experimental indices summarizing distances moved and the ensuing social changes associated with moves for each UK Local Authority District (LAD) during the period 1997-2020.

INDEX CREATION

Both indices were created separately for individual movers (1) entering, (2) leaving or (3) moving within each UK Local Authority District (LAD).
The *Distance of Residential Moves (DORM)* Index provides summary information about the distances that individuals moved between successive residences during the period 1997-2020. The Index was calculated as the median straight-line distance of all adult residential moves during the 1997-2020 timeframe, or annual periods drawn from it.

*Figure 1* shows the highest (A) and lowest (B) 10 median distances (in km) moved to LAD destinations over the entire period. Similar ranked lists can be calculated for inter-LAD moves from different LAD origins, or for intra-LAD moves. All statistics can further be created for different portions of the study period.

*Figure 1: (A) Highest and (B) lowest 10 median distances moved to LAD destinations (in km), 1997-2020.*

The *Social Mobility and Deprivation (SMD)* Index was created by first collating and then range-standardising UK constituent nation Indices of Multiple Deprivation (IMDs) at Lower Level Super Output Area or Scottish Data Zone (henceforth LSOA for brevity) level across England, Wales, Scotland, and Northern Ireland. Three ‘harmonised’ IMD datasets were assembled for circa 2004 (2004 English IMD, 2005 Welsh IMD, 2004 Scottish IMD, and 2004 Northern Irish IMD), 2010 (2010 English IMD, 2011 Welsh IMD, 2012 Scottish IMD, and 2010 Northern Irish IMD), and 2019 (2019 English IMD, 2019 Welsh IMD, 2020 Scottish IMD, and 2017 Northern Irish IMD).

‘Harmonised’ IMD values for these dates were then assigned to proximal years to cover the entire 1997-2020 period. This was achieved using 2021 postcodes and by linking the 2001 and 2011 Census geographies at LSOA level. LSOAs were ranked within each UK country and the results transformed to percentile scores, with low values denoting more deprived LSOAs. As LSOA and LAD boundaries were not consistent through the entire 1997-2020 period, the boundaries of 2011 LSOAs and 2020 LADs were applied in all years.
The SMD Index was then calculated by subtracting the percentile score of each LCR mover’s origin LSOA from that of their destination LSOA. Mean differences between these values were calculated for (a) movers to each destination LAD, (b) moves from each origin LAD and (c) moves within each LAD. Positive values indicate an upward social trajectory while negative values signal the opposite.

*Figure 2* identifies the 10 LADs where (A) in-movers and (B) out-movers experienced the greatest average improvement in their LSOA conditions. Although *Figure 2* summarises moves using the most proximal (2004, 2010, 2019) harmonized IMD measure over the entire 1997-2020 period, annual indicators, and the numbers of moves upon which they are based, have also been calculated using the most proximal (2004, 2010 or 2019) harmonised IMD – thus the 2004 IMD was used for 1997-2007, 2010 IMD was used for 2008-14, and 2019 IMD was used for 2015 onwards.

*Figure 2*: The 10 LAD (A) destinations and (B) origins for which (A) in- and (B) out-movers experienced the greatest average improvements in harmonized IMD scores, 1997-2020.

**CONCLUSIONS**

Linked Consumer Register data enable analysis of distances of residential moves and neighbourhood transitions on an annual basis for any convenient aggregation of LSOA units. The provenance and completeness of these estimates has been documented in the peer-reviewed academic literature (see Further Reading). Although users are reminded that repurposed consumer and administrative data are not the same as scientifically designed statistical resources, careful use — cognisant of the sources and operation of potential bias — offers rich potential for understanding population and housing market dynamics outside of census years.

The LAD data resources discussed in this note will be made available as an Open dataset on [https://data.cdrc.ac.uk](https://data.cdrc.ac.uk). LSOA estimates discussed in the note will be offered as a Safeguarded resource available to interested users upon successful application to CDRC.
FURTHER READING

AUTHORS

Meixu Chen is a Research Fellow at the UCL Department of Geography. Her primary research interests are urban mobility, housing market, urban analytics, machine learning and geographic data science.

Paul Longley is Professor of Geographic Information Science at the UCL Department of Geography, where he also directs the Economic and Social Research Council-funded Consumer Data Research Centre (CDRC).

Rory Coulter is a Lecturer in Quantitative Human Geography at the UCL Department of Geography. His research examines how people move between different types of homes and neighbourhoods over the life course. Rory is the Principal Investigator on the ESRC project ‘Modelling Housing Career Trajectories in Great Britain’: https://www.geog.ucl.ac.uk/research/research-projects/modelling-housing-career-trajectories.

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CONTACT
Rory Coulter
UCL Department of Geography, Gower Street, London, WC1E 6BT
r.coulter@ucl.ac.uk

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