Understanding Ethnic Segregation in Britain through Consumer Data

Tian Lan, Paul Longley
Department of Geography, University College London.

Abstract

Recent decades have seen an increasing ethnic diversity in Britain due to the natural demographic process, particularly immigration streams from the EU accession countries and commonwealth countries. It leads to a wide public and policy debate on whether Britain is sleepwalking into a segregated society. To understand ethnic segregation of the British society is nontrivial to address issues such as community cohesion and social inclusion. Previous studies on ethnicity and segregation mostly rely on population data from the decennial censuses. However, census data are not that updated for contemporary studies, whose temporal resolution is relatively coarse-grained to capture more details about ethnicity changes during the inter-censual years. In addition, there exists comparability issues within census data.

As an increasing share of the Big Data harvested from use of consumer services, consumer data can be one of the promising supplementary data sources for ethnic segregation research. In this study, ethnicity data are derived from consumer data by linking to ethnicity classifications based on forename and surname pairs of the customers. Ethnic segregation is then re-examined with the traditional index of dissimilarity across census Output Areas in Britain. A decrease in the overall residential segregation level in Britain can be identified from dissimilarity indices for most ethnic groups except for a small increase for the White British group. These findings reinforce the existing claims of a more mixing Britain in related studies in the literature with empirical evidence. Ethnic segregation in Britain can be better understood with more details during the inter-censual years from the perspective of consumer data.