



Using the 2001 Census to measure the migration of ethnic groups in relation to concentration

John Stillwell

School of Geography, University of Leeds

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Research Question

- Antonia Simon's research question:
Do people in different ethnic groups move into and out of wards with high or low density of their own group?
- John Stillwell's research question:
Is there any evidence in London of ethnic groups moving away or towards areas of ethnic concentration?

What spatial patterns of ethnic migration are evident in London at the ward level and does the geographical variation tell us anything about processes of ethnic concentration or dispersal?

Comparison of approaches

	Simon	Stillwell
Spatial units	8,796 wards in England and Wales	628 wards in London
Source of data	2001 Census Commissioned table: CO355 (same/different district to ward; ward to same/different district)	2001 Census Commissioned table: CO723 (region to ward; ward to region)
Ethnic groups	8: White British; White Irish; White Other; Black; Indian; Pakistani and Bangladeshi; Mixed; Other	7: White British; Black; Indian; Pakistani and Other South Asian; Chinese; Mixed; Other
Concentration measure	Proportion of ward residents in an ethnic group	Ethnic location quotient for ward
Research method	Relate net migration to own ethnic group concentration using quintile analysis and regression	Relate net migration to mean ethnic location quotient using decile analysis

Presentation

- 1 Context:
 - London's ethnic populations
 - Ethnic composition of London's migration
- 2 Steps in research method
- 3 Some results
- 4 Conclusions
- 5 Further research

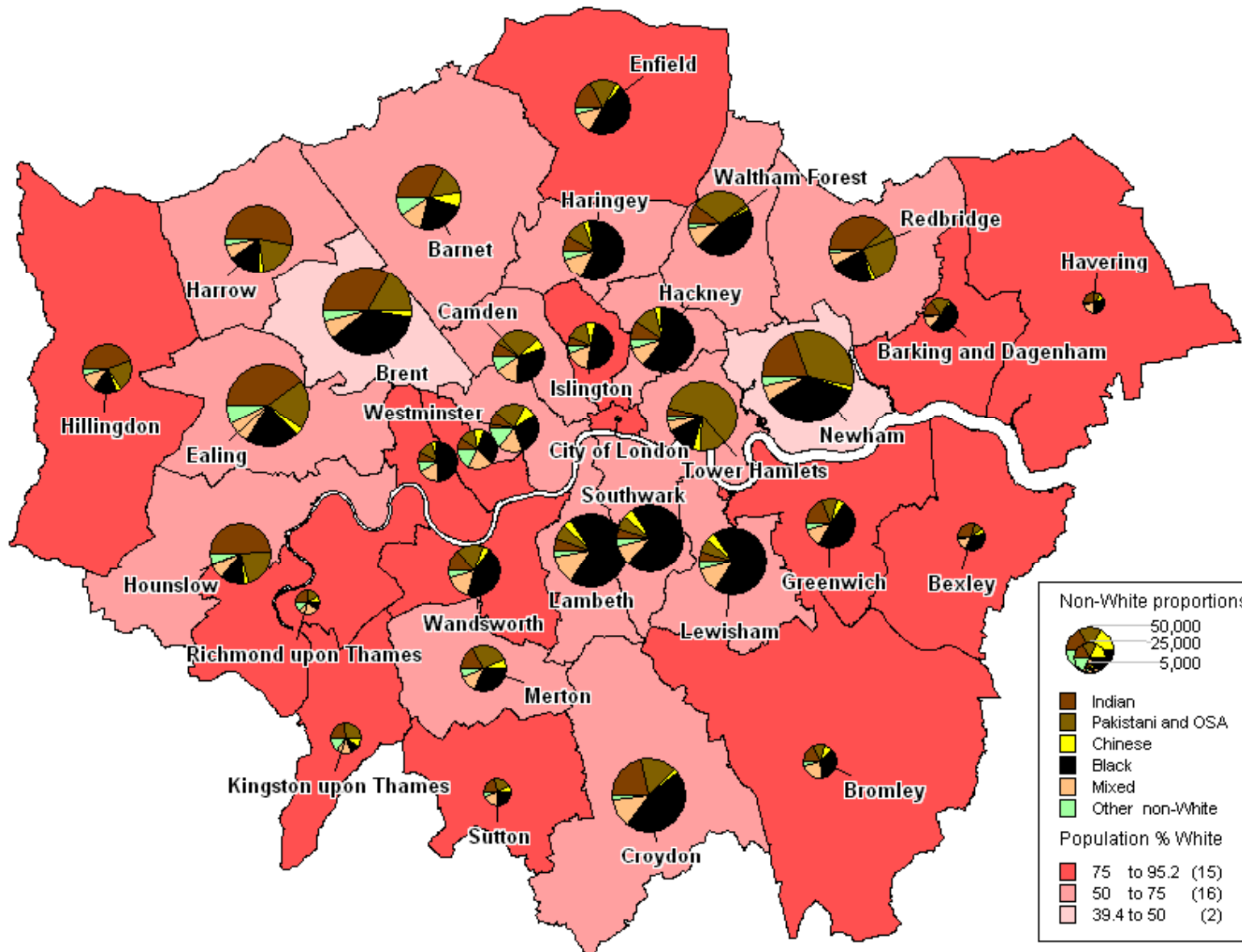
1. Context

London's ethnic population, 2001

Ethnic group	Population	% pop in London	% pop in GB	London share of GB population	IoS* GB	IoS* London
White	5,103,203	71.2	91.9	9.7	0.53	0.36
Black	782,849	10.9	2.0	68.2	0.65	0.32
Indian	436,993	6.1	1.8	41.5	0.57	0.40
POSA	429,700	6.0	2.2	33.6	0.56	0.45
Mixed	226,111	3.2	1.2	33.6	0.34	0.21
Other	113,034	1.6	0.4	49.3	0.44	0.32
Chinese	80,201	1.1	0.4	33.0	0.32	0.31
Total	7,172,091	100	100	12.6		

* Index of segregation = $0.5 \sum |P^{ie}/P^{*e} - P^{ir}/P^{*r}|$ computed at district level

London's ethnic population by borough, 2001

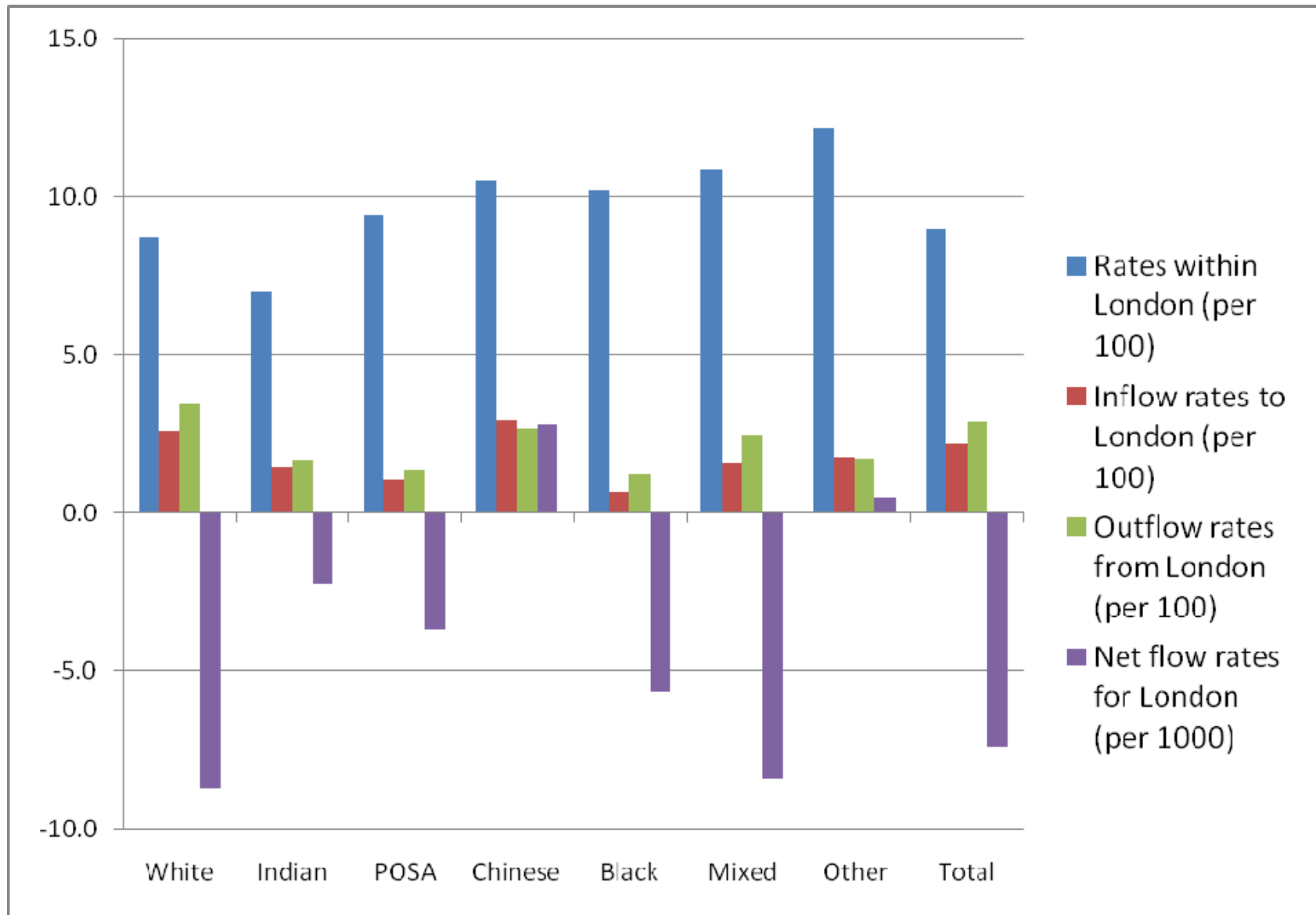


Ethnic composition of London's migration, 2000-01

Ethnic group	Flows* within London	Inflows to London from R of GB	Outflows from London to R of GB	Net flows for London with R of GB
White	444,000	124,337	169,116	-44,779
Black	79,809	5,091	9,413	-4,322
POSA	40,585	4,093	5,642	-1,549
Indian	30,573	6,074	7,033	-959
Mixed	24,549	3,517	5,357	-1,840
Other	13,720	1,884	1,885	297
Chinese	8,483	2,227	2,071	156
Total	641,718	147,223	200,487	-53,264

* Average of the inflows and outflows from Table C0723

Migration rates by ethnic group, 2000-01



Inflow, outflow and net flow rates are between London boroughs and rest of GB

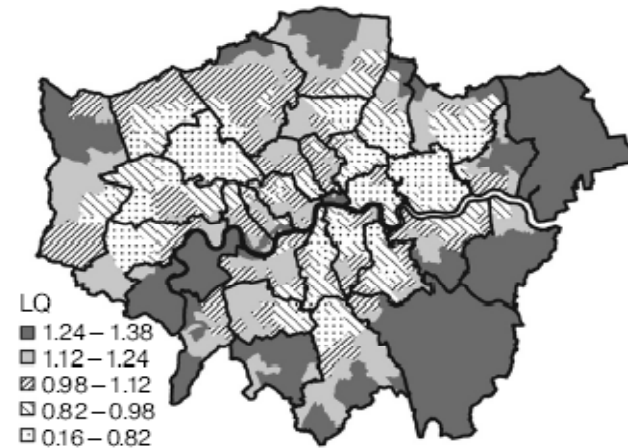
2. Steps in research method

(i) Obtain migration data from ONS

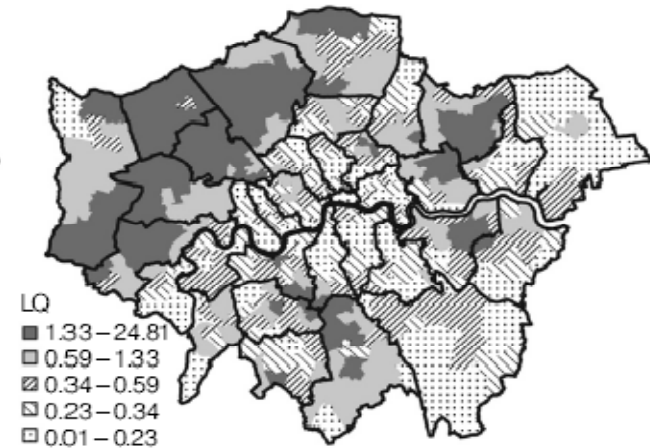
- Special Migration Statistics only provide origin-destination statistics at ward level for White and non-White groups
- Negotiate with ONS for commissioned table with flows disaggregated by ethnicity and age at ward level so as to meet confidentiality constraints but minimise incidence of small cell adjustment
 - only ward to region and region to ward data available for 7 ethnic groups and 7 age groups requested
- Check the data supplied

(ii) Obtain ethnic group population data and compute location quotients

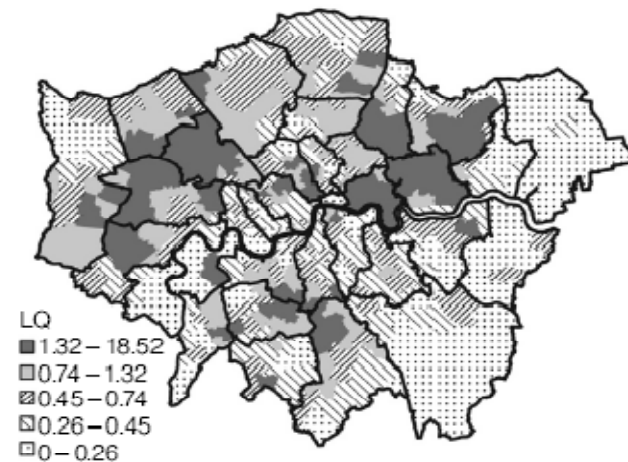
- Obtain ethnic populations for London wards from ST Table via casweb
- Compute ethnic location quotients for wards as $LQ^{ie} = (P^{ie}/P_i)/(P^e/P^{**})$
- Ward LQs mapped in quintiles



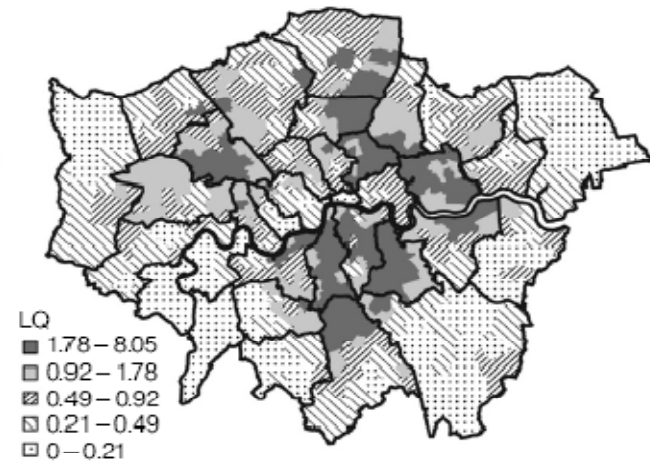
(a) White



(b) Indian



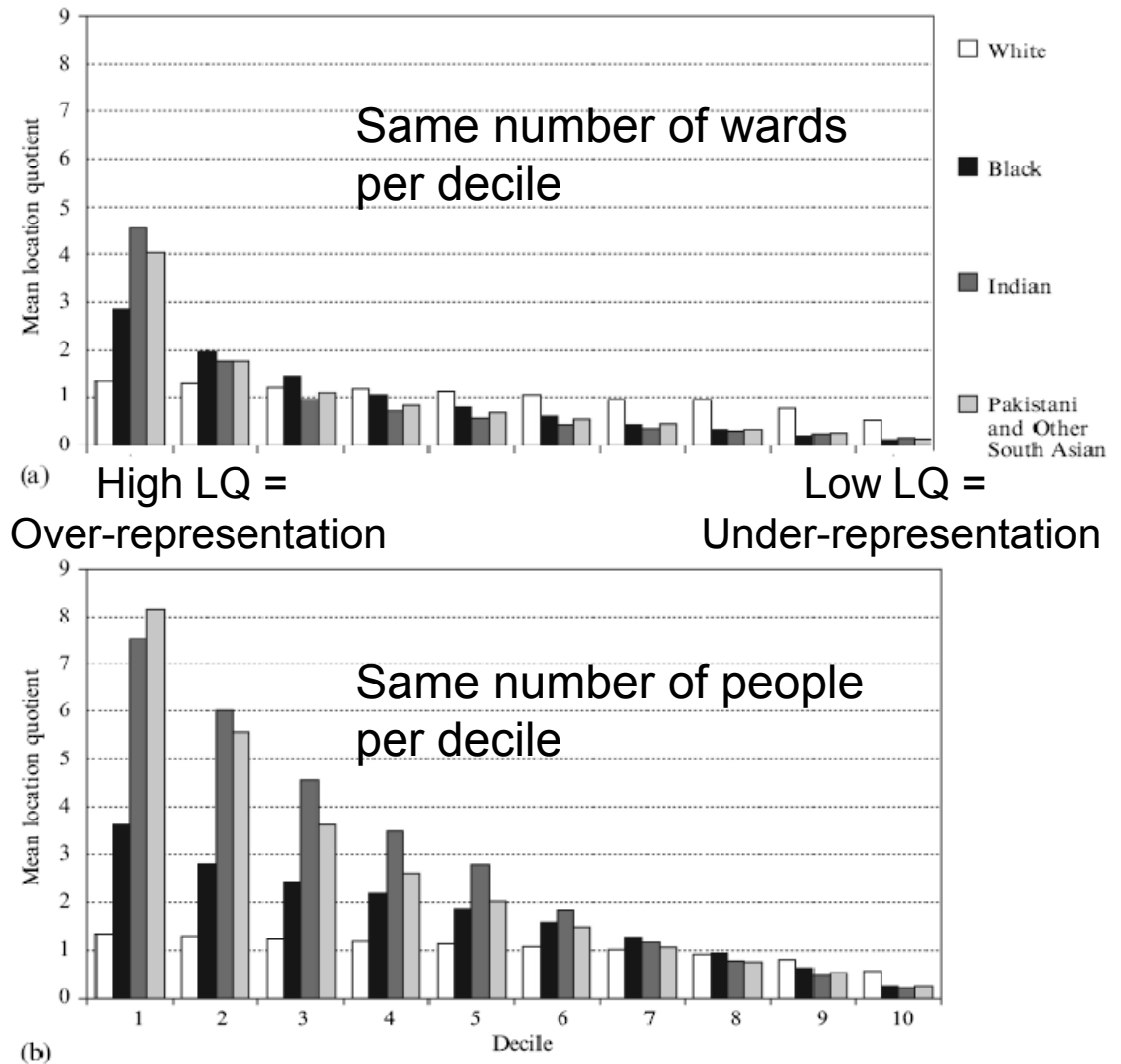
(c) POSA



(d) Black

(iii) Produce mean location quotients by decile group for each ethnic group

- For each ethnic group, rank the wards by location quotient (LQ)
- Choose deciles based on *either* the same number of wards per decile *or* the same population per decile
- Compute the mean LQs for each decile



(iv) Compute ward net migration balances

- Compute net migration balances for each ward for each ethnic group based on flows *within London GOR*



a. White internal



b. White external

- Compute net migration balances for each ward for each ethnic group based on flows to and from *outside London GOR*



c. Black internal

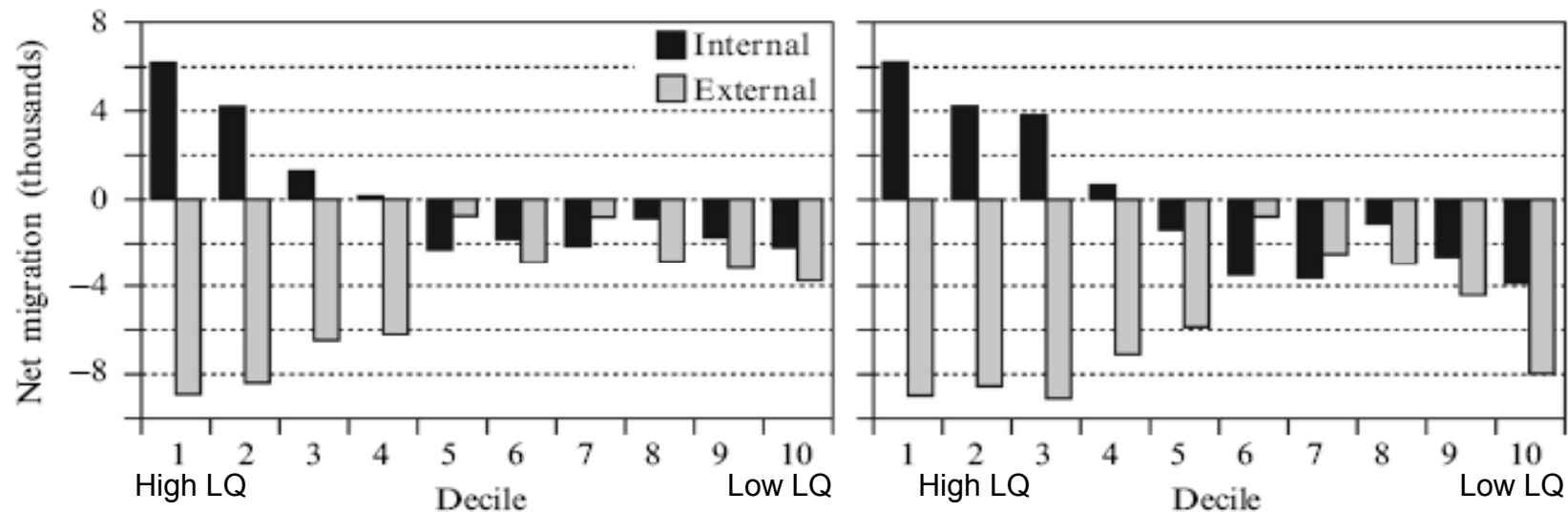


d. Black external

(v) Calculate total net migration per decile

- Sum the internal and external net migration for wards in each decile

White



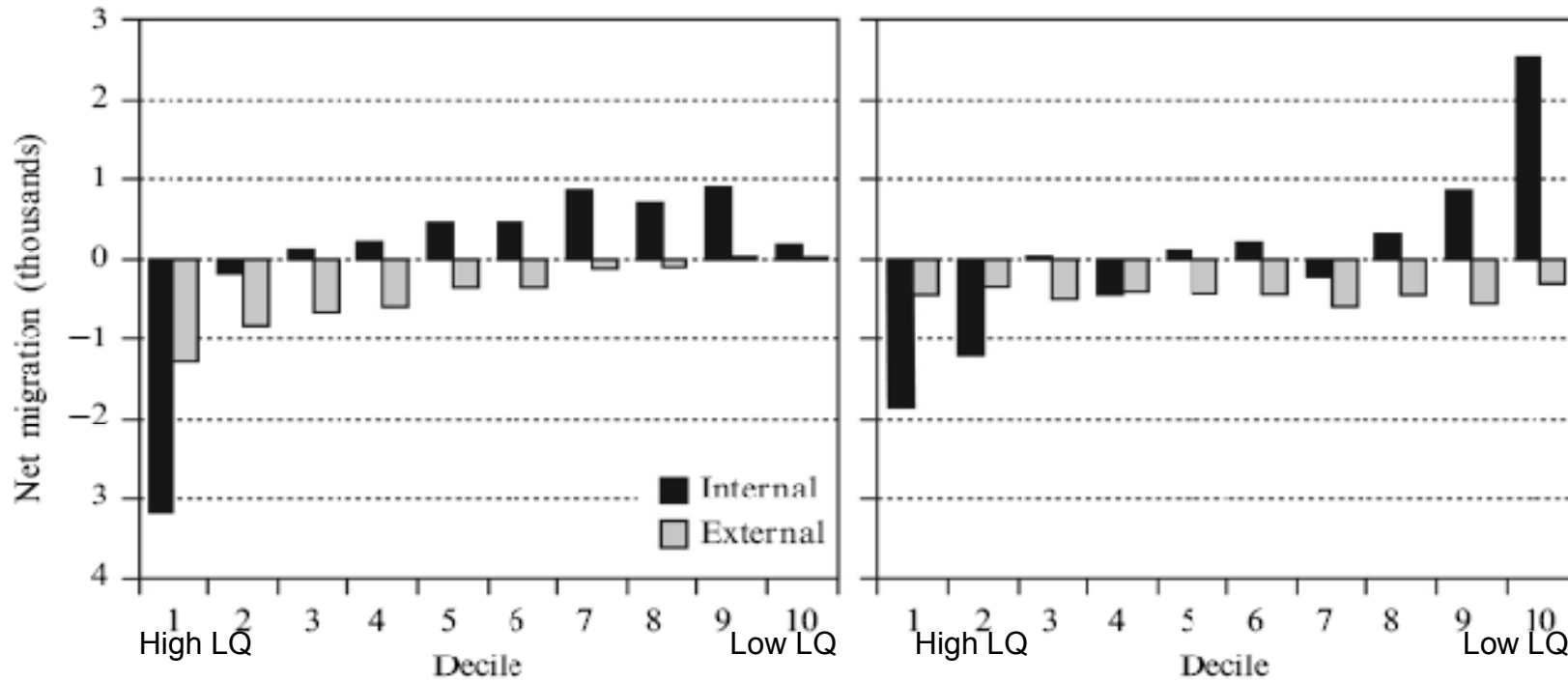
(a) Same number of wards per decile

(b) Same number of people per decile

Note: Internal net balances sum to zero

4. Results (for ethnic minority groups)

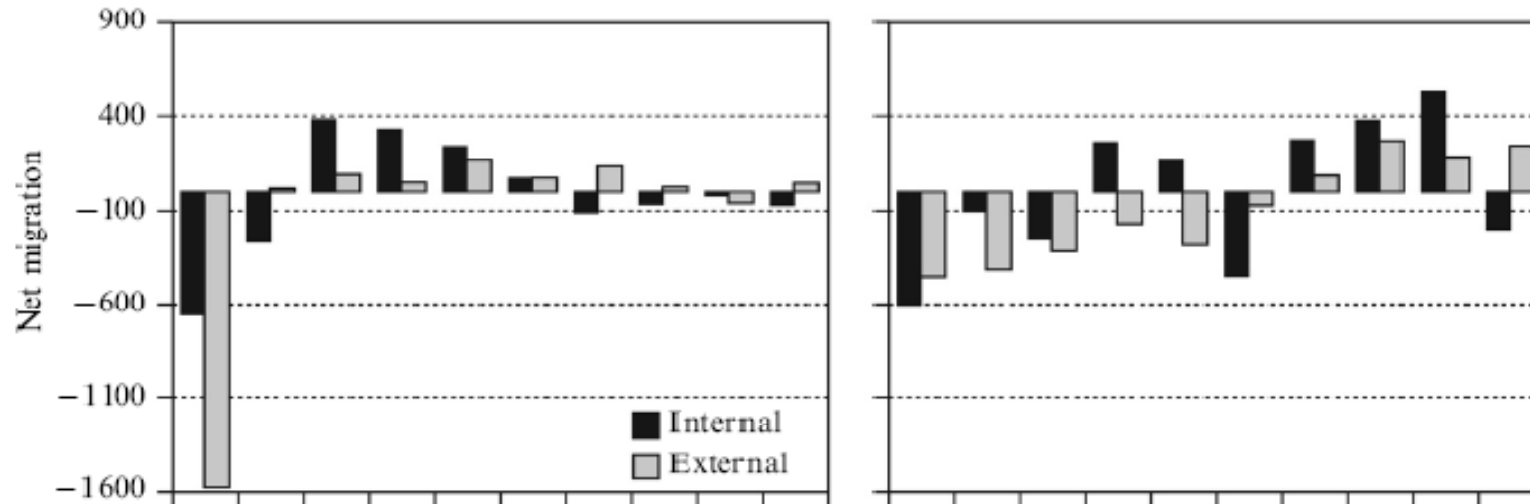
Black



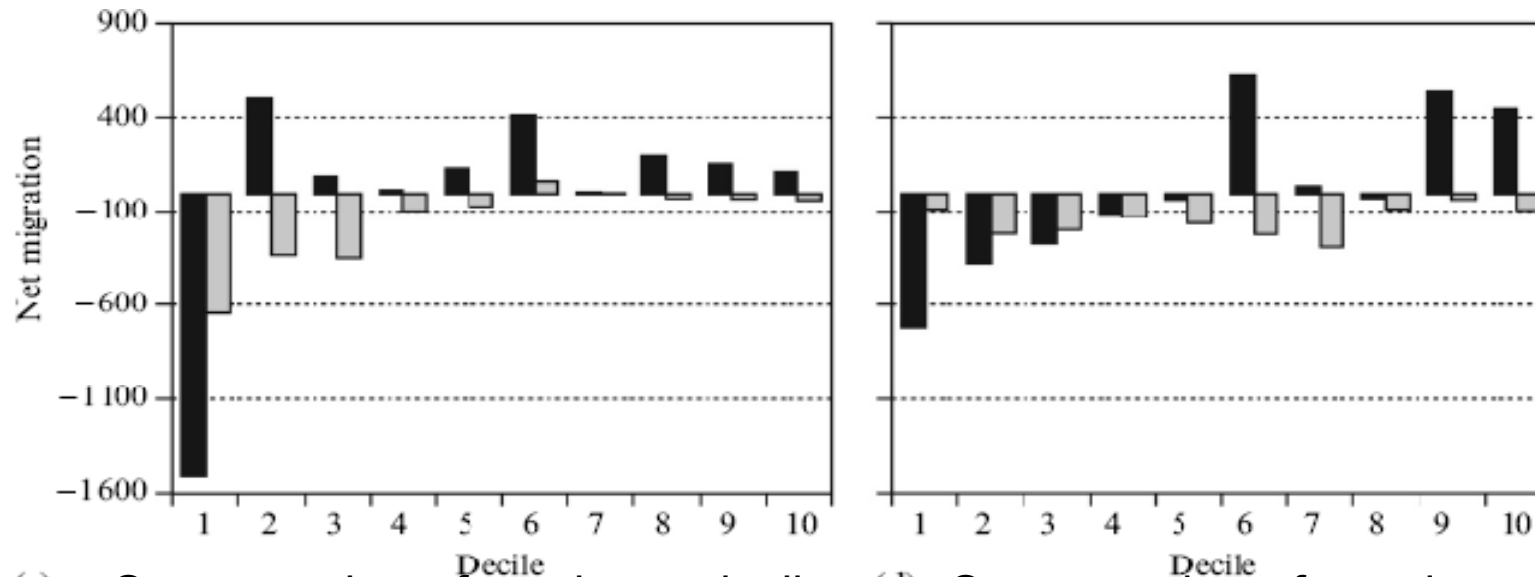
(a) Same number of wards per decile

(b) Same number of people per decile

Indian



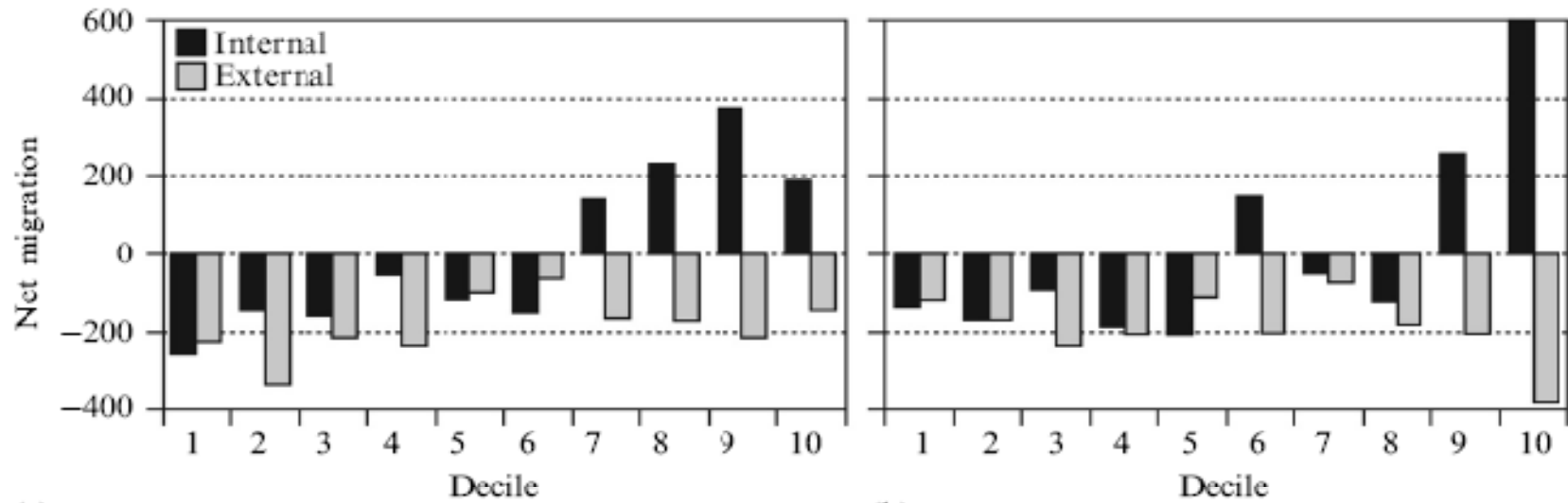
Pakistani and Other South Asian



Same number of wards per decile

Same number of people per decile

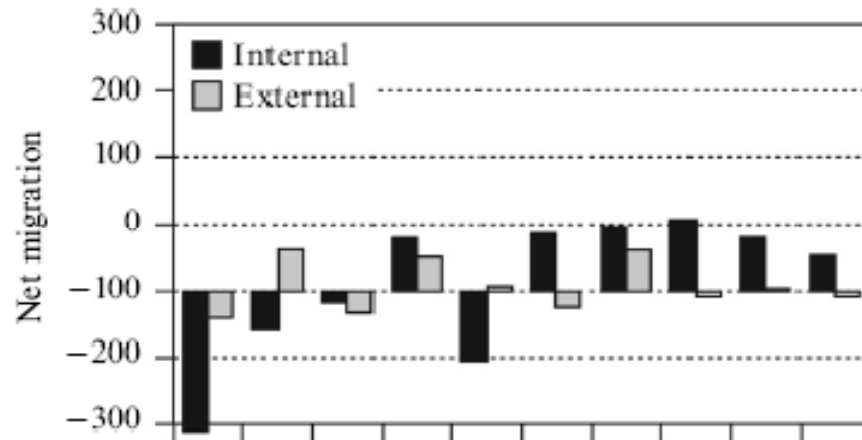
Mixed



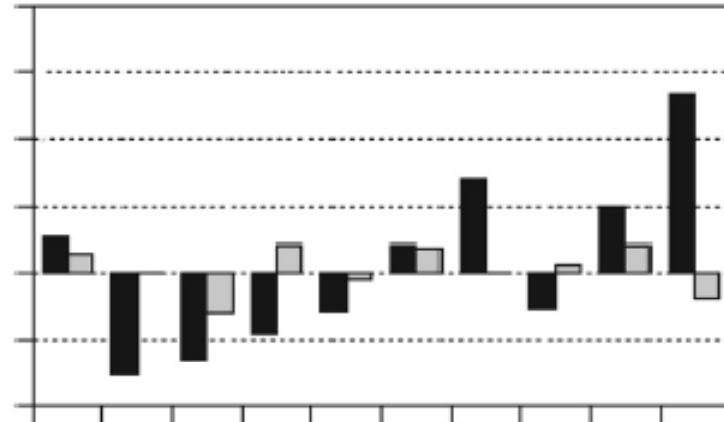
(a) Same number of wards per decile

(b) Same number of people per decile

Other

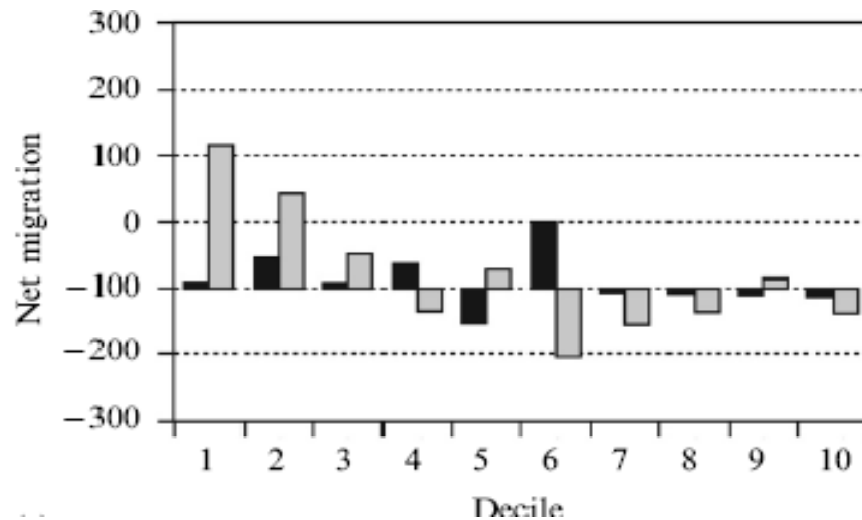


Same number of wards per decile

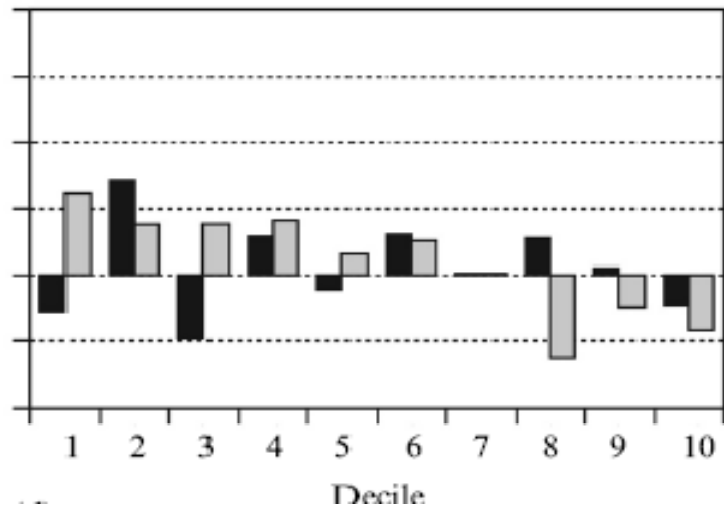


Same number of people per decile

Chinese



Same number of wards per decile



Same number of people per decile

Conclusions

- *Decomposing net migration balances* into flows ‘within’ and ‘beyond’ London exposes key processes of suburban decentralisation, outward dispersal and inward concentration
- Five main ethnic populations experienced *net migration losses from London* during 2000-01
- Method of *defining deciles* can be important for smaller ethnic groups
- White migration within London is *accentuating White concentration* in outer suburbs but this is reduced by net outflows to rest of GB
- Migration for most non-White groups is *dispersing rather than concentrating* non-White populations (not Chinese) i.e. internal migration has been an agent of dispersal for the non-White community, rather than producing greater spatial segregation for non-Whites – as Antonia Simon also suggests

Further research

- Investigation of ward level ethnic migration patterns outside London
- Investigation of ethnic differences in migration for different age groups
- Investigation of the links between ethnic internal migration and immigration
- Investigation of changes in ethnic migration between 2000-01 and 2010-11

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Contact

j.c.h.stillwell@leeds.ac.uk

www.uptap.net

Reference

Stillwell, J. (2010) Ethnic population concentration and net migration in London, *Environment and Planning A*, 42: 1439-1456