

Longitudinal Studies Centre - Scotland

Home of the Scottish Longitudinal Study



Examining geographical effects on the formation and migration of mixed-ethnic unions using longitudinal data

Zhiqiang Feng

Paul Boyle, Maarten van Ham, Gillian Raab

University of St Andrews

05-07 July 2010

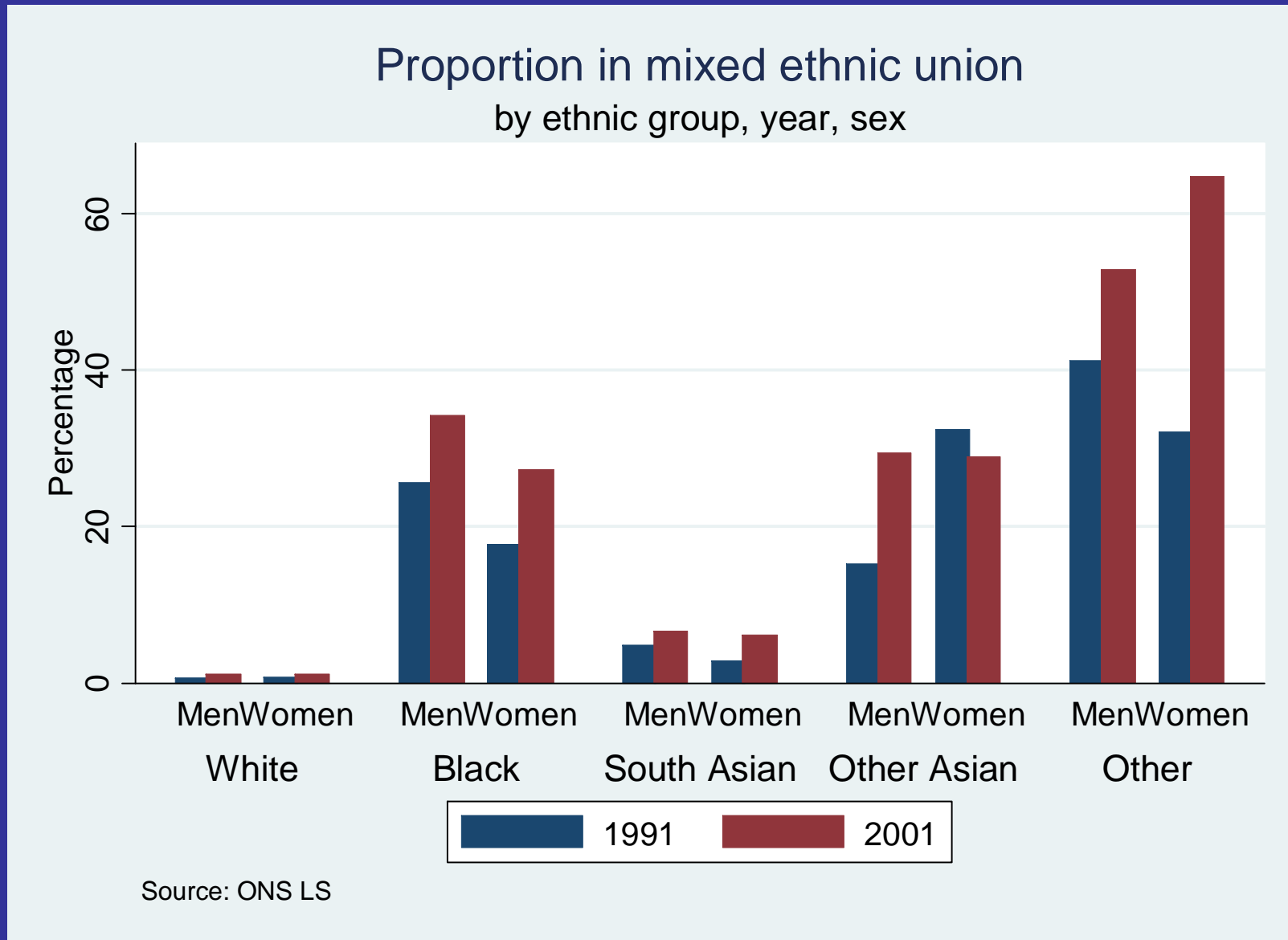
Research Methods Festival



Mixed ethnic unions (MEUs) in Britain

- Mixed ethnic unions are defined as opposite-sex couples who are either married or cohabiting
- Indicative of degree of breakdown of ethnic barriers
- Mixed ethnic unions increased from 1.2% in 1991 to 2.4% in 2001

Proportions of people in mixed-unions by ethnicity/gender



Why study geographical effects?

- Segregation reduces contacts between ethnic groups
- Neighbourhoods are important locations for social contacts
- Places can be racialised – predominantly ethnic neighbourhoods may create “local cultures” which encourage or discourage mixed-ethnic unions

Why study geographical effects?

- Our research follows previous studies which find mixed-ethnic couples are more likely to live in mixed-ethnic neighbourhoods
- However, it is not clear whether this is because mixed-ethnic couples form there or move there after marriage / cohabitation

Longitudinal analysis

- For the formation of mixed ethnic unions:
 - Identify people who were already in Britain before partnering occurred
 - Have data on pre-marriage / cohabiting situations
- For the migration of mixed ethnic unions:
 - Have data on pre-movement status
- First British study to use the ONS LS and to identify *geographical* influences on mixed-ethnic unions

Research questions

1. Does living in an ethnically less concentrated neighbourhood makes it more likely that people will end up in mixed-ethnic couples?
2. Are people in mixed-ethnic couples are more likely to move into ethnically less concentrated neighbourhoods?

Data source

- Office for National Statistics Longitudinal Study (ONS LS)
 - Longitudinal 1971, 1981, 1991 and 2001
 - Anyone with one of four dates of birth is included
 - 1% sample of England and Wales (500,000)
 - Ethnicity question introduced from 1991
 - Geocoding allows the linkage of small area statistics

Definition of ethnic groups

Presentation group in the study	1991 (ETHNIC9)	2001(ETHGRP0)
White (W)	White	British Irish Other white
Black (B)	Black-Caribbean Black-African Black other Black & White	Black-Caribbean Black-African Other Black White & Black Caribbean White & Black African
South Asian (SA)	Indian Pakistani Bangladeshi	Indian Pakistani Bangladeshi
Other Asian (OA)	Chinese Other Asian	Chinese Other Asian
Others (O)	Other ethnic group: non-mixed origin Other ethnic group: mixed origin	White & Asian Other mixed Other ethnic group

Source: ONS LS

05-07 July 2010

Research Methods Festival

Classifications of mixed-ethnic unions

	White	Black	South Asian	Other Asian
White	W-W			
Black	B-W	B-B		
South Asian	SA-W	SA-B	SA-SA	
Other Asian	OA-W	OA-B	OA-SA	OA-OA

Number of mixed-ethnic unions England & Wales

Mixed-ethnic unions	1991	2001
Black / White (B-W)	1231	1737
South Asian / White (SA-W)	641	902
Other Asian / White (OA-W)	643	730
Other / White (O-W)	998	1770
Total	3513	5139

Source: ONS LS

Definition of ethnic areas

District level 1991

	%Min	%Max	#district	White	Black
Low	0	4.2	378	4.21e+07	295717
Medium	4.3	11.2	18	3779845	313654
High	11.3	22.0	7	1036649	274796

	%Min	%Max	#district	White	South Asian
Low	0	5.7	368	4.04e+07	486528
Medium	5.8	13.5	25	5081356	564006
High	13.6	24.7	10	1408762	396549

	%Min	%Max	#district	White	Other Asian
Low	0	0.7	335	3.65e+07	113639
Medium	0.8	2.4	51	8023667	113123
High	2.5	4.6	17	2460169	112449

Source: Census SAS 1991

05-07 July 2010

Research Methods Festival

Definition of ethnic areas

Ward level 1991

	%Min	%Max	#wards	White	Black
Low	0	5.1	9027	4.37e+07	293723
Medium	5.2	15.3	348	2393667	294933
High	15.4	46.6	134	814534	291692

	%Min	%Max	#wards	White	South Asian
Low	0	8.2	9070	4.39e+07	481595
Medium	8.3	27.4	340	2502201	481898
High	27.5	78.7	99	552121	479766

	%Min	%Max	#wards	White	Other Asian
Low	0	0.9	8360	3.93e+07	111695
Medium	1.0	2.7	845	5769979	111926
High	2.8	12.2	304	1854538	111430

Source: Census SAS 1991

05-07 July 2010

Research Methods Festival

Definition of ethnic areas

District	Ward		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Low</u>	Low & Low	Low & Medium	Low & High
<u>Medium</u>	Medium & Low	Medium & Medium	Medium & High
<u>High</u>	High & Low	High & Medium	High & High

Definition of ethnic areas

District	Ward		
	<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Low</u>	Low & Low	Low & Medium Low & High	
<u>Medium</u>	Medium & Low	Medium & Medium	Medium & High
<u>High</u>	High & Low High & Medium		High & High

Question 1-Methodology

- Whether minority people in less concentrated areas are more likely to form a mixed-ethnic union with a White partner
 - Sample
 - LS members aged 6+ & single in 1991, present in 2001
 - outcomes are:
 - married/cohabiting with a person from the same ethnic group (0),
 - married/cohabiting with a white partner (1)
 - single (2)
 - Method: Multinomial logistic model

Individual variables

Gender

Age

Highest level of qualification

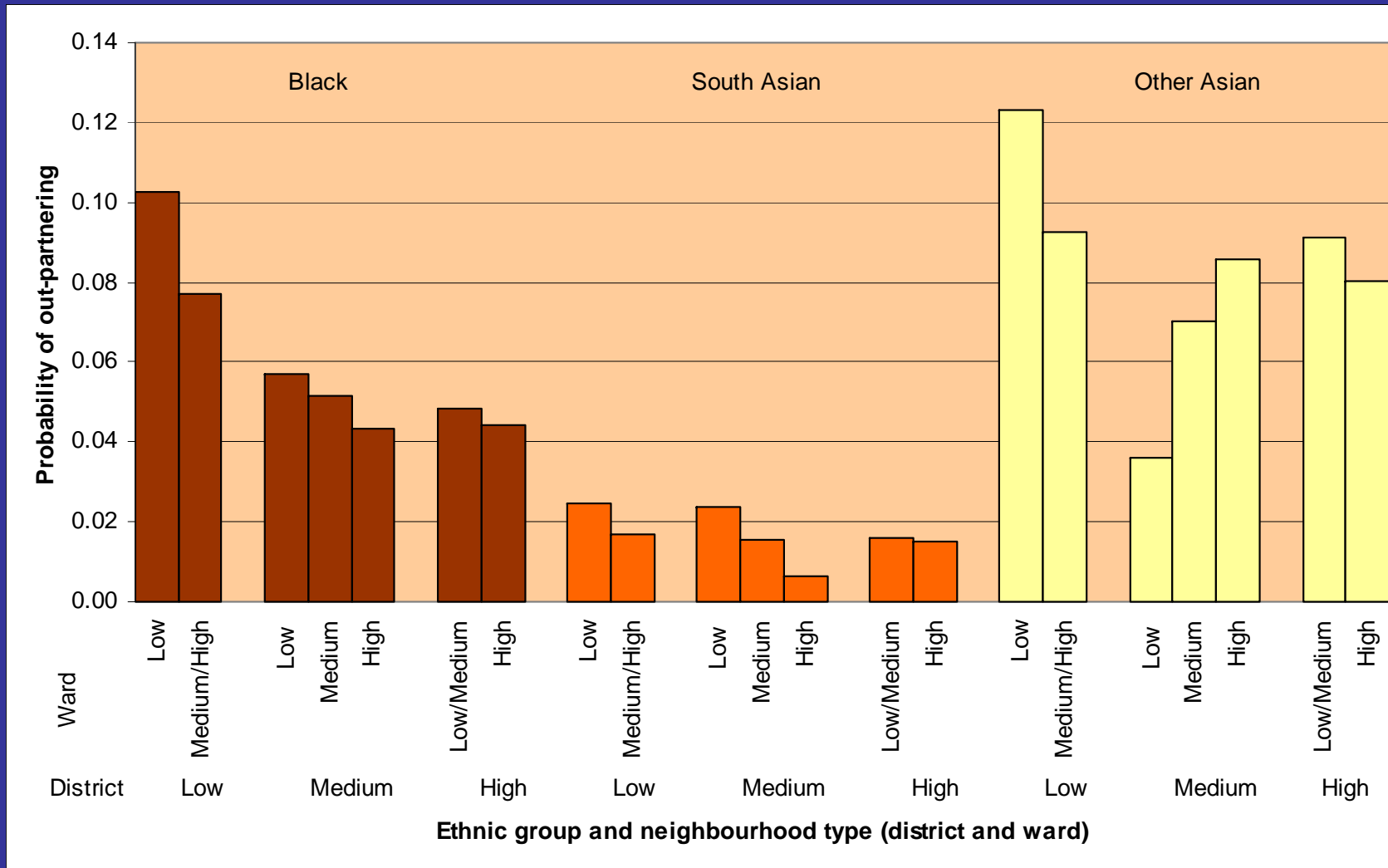
Social class

Geographic region

Housing tenure

Country of birth

Question 1--Predicted probability from multinomial logistic model
 Base category: people in same ethnic unions
 Neighbourhoods – districts and wards, full model



Source: ONS LS, Authors analysis

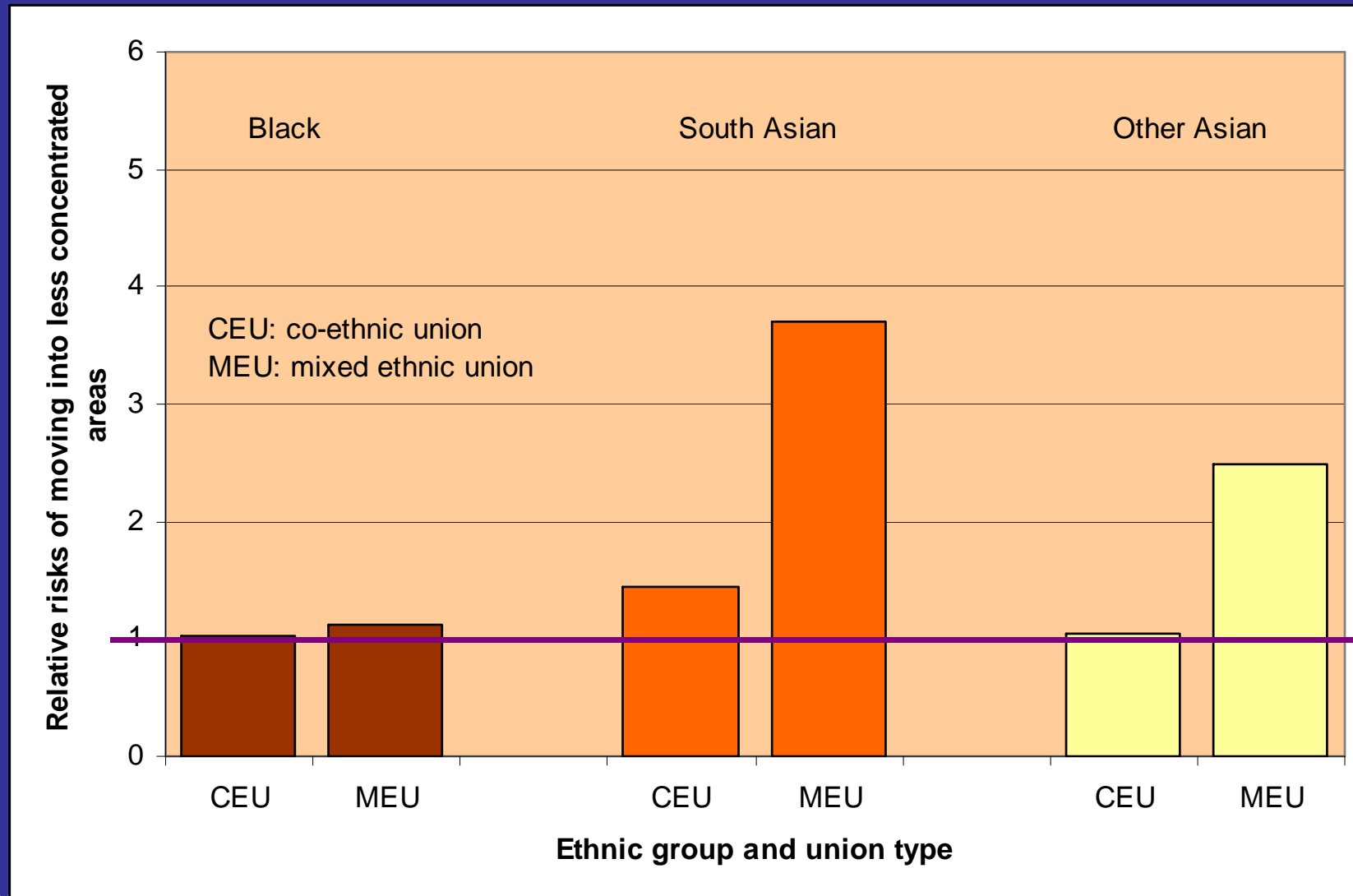
05-07 July 2010

Research Methods Festival

Question 2-Methodology

- Whether mixed-ethnic couples more likely to move to less concentrated ethnic neighbourhood
 - Sample:
 - People who were married or cohabiting in 1991, present & remained as couples in 2001
 - outcomes are:
 - non-mover or moved between the same type area (0)
 - moved to less concentrated neighbourhood (1)
 - moved to more concentrated neighbourhood (2)
 - Method: Multinomial logistic model

Question 2 – Relative risk of moving to less concentrated wards over moving to more concentrated wards derived from multinomial logistic model
 Base category: people who did not move or moved between same type of areas, Neighbourhoods – **wards, full model**



05-07 July 2010

Research Methods Festival

Source: ONS LS, Authors analysis

Conclusions

The formation of MEUs

1. Single people from all three ethnic groups were more likely to partner a white person if living in less concentrated places
2. Both districts and wards were associated with the propensity of out-partnering

Conclusions

Movement of MEUs

1. Minority ethnic people in MEUs were more likely to move to less concentrated areas than to move to more concentrated areas in comparison to those in CEUs



Acknowledgements

- This research is funded by the ESRC under the Understanding Population Trends and Processes (UPTAP) programme (Award Ref: RES-1563-25-0045)
- The permission of the Office for National Statistics to use the Longitudinal Study is gratefully acknowledged, as is the help provided by Julian Buxton of the Centre for Longitudinal Study Information & User Support (CeLSIUS). CeLSIUS is supported by the ESRC Census of Population Programme (Award Ref: RES-348-25-0004). The authors alone are responsible for the interpretation of the data