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Internal Migration of Ethnic Groups in England and Wales by Age and District Type

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TABLE OF CONTENTS

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Abstract

This paper examines how internal migration propensities vary by age and ethnic group using data from level 1 (district) scale in England and Wales extracted from the 2001 Census Special Migration Statistics and from tables specially commissioned from the Office of National Statistics. The paper identifies age-specific variation in migration propensities by ethnic group at national level before examining the spatial patterns of age-specific inter-district migration using the family and class groupings defined in a recent area classification, demonstrating how minority ethnic group propensities and patterns compare with those of white migrants.

Keywords: migration; ethnic group; age; district classification; net migration patterns

List of Tables

List of Figures

1 Introduction

People move home for a range of different reasons and migration intensity is well known to fluctuate with stage in life course (Rogers and Castro, 1981; Champion *et al.*, 1998). Age is a selective influence on migration rather than a causal driver (Stillwell, 2008). Children's migration propensity declines up to school-leaving age. Eighteen year olds move more than younger teenagers because they transfer into higher education, whereas highest propensities are found in the early 20s when young adults leave home or university for work reasons or to cohabit/marry. In most countries, the decline in migration with older working age levels out around retirement age and may increase in older old age as the need for institutional or family support becomes more necessary. In comparison with age, sex is much less differentiating in its influence on migration whilst the roles of different socio-economic characteristics tend to vary as socio-economic conditions change over time.

The question that we address here is whether there are distinctive variations in the propensities to migrate that are observed for different ethnic groups, whether these propensities vary similarly by age, and whether differences are apparent in the patterns of migration between different types of districts in England and Wales. The focus of the paper is on internal migration taking place in the 12 month before the 2001 Census. In contrast to popular press coverage in recent years that has tended to highlight immigration, relatively little attention has been paid to internal migration in the twenty-first century despite its importance as the key phenomenon responsible for population redistribution. The paper complements Stillwell and Hussain (2008) which considers aggregate levels of ethnic migration at the district scale.

We begin the paper with a selective review of geographical literature on ethnic distributions in Section 2 that focuses on issues of spatial concentration or segregation, the impact of immigration and characteristics of internal migration by ethnic group and by age. Section 3 outlines features of the data sets being used and the spatial units that constitute the district classification constructed by Vickers *et al*. (2003) that we have chosen to use for our spatial analysis. In the analysis sections that follow, we begin by examining ethnic

diversity and ethnic migration propensities at the national level in Sections 4 and 5 respectively. Thereafter, in Section 6, the geographical patterns of net migration are compared, particular attention being paid to differences between the propensities of non-white migrants and those of the white population which, as we shall see in Section 3, contains those classified as 'white Irish' and 'white other' as well as those we refer to as 'white British'. The final section contains some conclusions.

2 Context and previous studies

2.1 Spatial segregation debate

Whilst a review of literature on ethnic geographies in Britain has revealed an indisputable spatial concentration of ethnic minority populations in many cities and towns across England (Rees and Butt, 2004; Simpson, 2004; Champion, 2005, Johnston *et al.*, 2005; Stillwell and Hussain, 2008), there is much debate about the extent to which non-white groups are geographically polarised within these cities and whether these communities are becoming increasingly segregated as ethnic populations grow through natural increase and immigration. The debate, which centred in the 1990s on the question of whether or not Britain had ghettos (Peach, 1996) has been catapulted into the public arena in the twenty-first century as a result of local and global events such as the 2001 riots in Bradford, Oldham and Leeds, the bombings of the Twin Towers in 2001 and the London Underground in 2005. Dramatic events such as these have fuelled debate on whether ethnic minority communities are sufficiently integrated and whether it is a result of residential self-segregation that ethnic groups view themselves as being separate and distinct communities with inhabitants living 'parallel lives' (Phillips, 2006). As a result of the perceived negative impact of ethnic segregation, policy makers have become increasingly interested in ethnic geographies and community cohesion (Stillwell and Phillips, 2007).

Simpson (2007) summarises why segregation is such an emotive topic and a process which requires policy attention: *"From one political angle, segregation indicates the result of racial discrimination and hostility and is the mark of how far from equal society is. From another political angle, segregation indicates the gulf between cultures that remains to be bridged. Either way segregation is bad, is the opposite to integration, and is associated with social decline, ghettos and a spiral of distrust and conflict"* (Simpson, 2007, p. 407). Fears and predications of increasing segregation and ghettoisation have led to reports of

Leicester and Birmingham becoming Britain's first minority white cities by 2019 and 2024 respectively (Herbert, 2007; Gaines, 2007). Such reports were a result of academic findings on the emergence of 'plural cities' being misinterpreted within the public sector and by the popular press (Finney and Simpson, 2008). A plural city, where no racial or ethnic group makes up the majority of the overall city population, is likely to emerge as a result of immigration and natural change, particularly given the young age structures of most ethnic groups.

There are a growing number of studies which question claims of increasing segregation. Peach and Rossiter (1996) and Simpson (2006) have presented evidence that ethnic ghettos do not exist in Britain. Three key findings that emerge from research by Johnston *et al.* (2005) on ethnic enclaves are as follows. Firstly, with regard to residential concentration among minority ethnic groups, the white Irish are considered to be the least concentrated whilst the Asians are the most concentrated; black groups rank in an intermediate position and this step-like gradient reflects the different periods of settlement as well as overall cultural differences in terms of language and religious affiliation. Secondly, amongst the Asian groups, Bangladeshis demonstrate the highest level of residential concentration and this again can be explained by the period of settlement and associated dispersal trajectories. Thirdly, white groups are the most ethnically segregated of all the groups. The overwhelming majority of whites reside in areas where they form 80% or more of the local population. This results in an asymmetrical pattern of concentration, in that the majority of non-white ethnic groups live in areas where the white population are still the majority, whereas white groups generally live in predominately white residential areas. Therefore, even where non-white groups do cluster they tend to live in relatively mixed areas. Johnston *et al*. concluded that the *"use of fine geographical detail available in the census data has explored the special structure of ethnic residential patterns in English cities in considerably greater detail than can be portrayed by simple indices of segregation or exposure…our results clearly suggest the overall importance of the assimilation model, with the clustering of some ethnic groups reflecting the first stages of concentration followed by dispersal"* (Johnston *et al.,* 2002, p. 609).

Simpson (2004) argues that Bradford in the north or England, with its significant Asian population, is not becoming increasing ethnically polarised despite influences of natural change such as high fertility rates and continued change migration in the form of overseas

marriages and kinship networks. In fact, in a later study, Simpson found from his analysis of the 1991 and 2001 Census data using the indices of segregation and diversity, that there was more mixing through a natural process of growth of ethnic minorities and a greater evenness of population distribution (Simpson, 2006, p. 423). For the most part, debates about segregated communities are fraught with moral panics and insufficient contextualisation. As Simpson states, *"social policy for localities is better informed by a sociological and historical understanding of class, housing, employment and educational dynamics of neighbourhood and residential change. At the same time, the racially motivated barriers to movement and integration need to be dismantled and the structural causes of sustained poor inner-city neighbourhoods addressed"* (Simpson, 2004, p. 677).

2.2 The impact of immigration on settled communities

Ethnic minority populations are increasing in size and this is primarily due to natural change propelled by higher fertility rates and higher proportions of young people with minority communities. However, whilst demographic processes are likely to be important drivers of ethnic expansion and concentration, immigration from overseas of both white and non-white ethnic groups must be considered also. There has been interest in the US about the impact immigration has on internal migration of the indigenous majority. The work centres on Frey's theory of 'demographic balkanisation' which essentially creates spatial segmentation by ethnic group as a result of immigration and internal migration (Frey, 1996). In this view, increased immigration and settlement of non-white populations are prompting intolerant white communities to leave such areas resulting in a process dubbed 'white flight', investigated back in the 1960s in American cities by Tauber and Tauber (1965).

Ellis and Wright (1998), however, argue that immigrants settle in areas which have already been seen as less desirable and abandoned by white communities whose exit therefore creates vacant housing opportunities to be taken up by immigrants. Such pull/push factor theories are long established within the discourse on ethnic minorities and housing in the UK as well as in the USA. Historical accounts of settlement of immigrant populations demonstrate how discriminatory housing markets and modest financial means resulted in ethnic minority communities settling for housing in neighbourhoods which had been left behind and which no-one else wanted. Communities began to be established within such areas as a result of chain migration and a tightening of immigration laws, which meant that

wives and children of immigrant workers, who had previously remained within the country of origin, were prompted to join their spouses. An example of such a study in Britain is that by Robinson (1993) who demonstrated how the geographical distribution of ethnic groups migrating at different periods in time was strongly related to change in economic pulls such as available employment and the existence of social and kin networks.

The 2001 Census has shown us that in comparison with approximately 6 million internal migrants during the count period, there were only 400,000 immigrants, 70% of whom were classified as white (Stillwell and Duke-Williams, 2005). Of the remaining 30% non-white immigrants, only 5-6% were of black and South Asian individuals. In addition, 456,700 people were shown to have migrated in the year before the census but did not provide origin details. It is not possible to determine exactly what proportion of these migrants came from overseas, although it is possible to identify their ethnicity. Four out of five of those with no previous address listed were white, 5.5% were black, 5.2% were Pakistani and other South Asian, 2.6% were Indian and 2.5% were of mixed ethnicity. Stillwell and Duke-Williams (2005) conducted analysis to look at linkages between immigration and white internal out-migration from areas gaining immigrants. The largest flows of white immigrants were those into the London boroughs of Kensington and Chelsea, Westminster, Camden, Wandsworth and Fulham. Outside of London, Edinburgh, Oxford, Leeds, Glasgow and Cambridge were also amongst the districts receiving the largest white flows. The largest non-white flows were to Birmingham, Manchester, Leeds, Brent, Westminster, Ealing, Barnet and Newham. They concluded that *"the evidence here indicates that those areas that have relatively high rates of immigration do also tend to have relatively high rates of net out-migration and rates of net migration loss falls as immigration rates decline. However, there are a number of districts that do not confirm to this pattern and this suggests the need for a closer look at the types and locations of the areas concerned"* (Stillwell and Duke-Williams, 2005, p.27).

2.3 Internal migration and dispersal

A number of studies have looked at the internal migration patterns of ethnic minorities in the UK, including Owen and Green (1992), Robinson (1993), Rees and Duke-Williams (1995), Rees and Phillips (1996), Owen (1997) Simpson (2004), Champion (2005), Stillwell and Phillips (2006), Finney and Simpson (2008) and Stillwell and Hussain (2008). Using the 1987 Labour Force Survey, Owen and Green (1992) found that non-white groups

had higher rates for internal migration than whites. Their analysis showed that the rate for Bangladeshis (22.5%) was over twice the rate for whites (10.5%) and the rate for Arabs (33.5%) was three times the white rate. When looking at distance moved, Arabs demonstrated the highest rate (18.7%) for inter-regional migration, followed by Chinese (7.9%) compared with only 2.5% of the white migrant population. Rees and Phillips (1996) analysed 1991 Census data and found variation between migration rates of non-white groups, reporting Chinese and black Africans as being twice as mobile as Indians, black-Caribbeans and Pakistanis. In terms of distance moved, Chinese were found to have the highest rates for longer-distance migration.

Owen (1997) conducted analysis of the 1991 Special Migration Statistics (SMS). These data sets were broken down into only four ethnic categories; white; black; South Asian; and Chinese and other. He found that mobility rates were higher for the ethnic minority groups than whites. Approximately one in eight people from minority groups as a whole migrated during 1990-91. However, when broken down further, such high figures are not representative of all ethnic minority groups with the Chinese and other category being twice as likely to move as South Asians and the rate for the black category being 50% higher than for whites. In terms of distance, Owen reported that Chinese and other groups were most likely to move longer distances and South Asians least likely to move between districts. Champion's (1996) analysis of the 1991 Census data, however, showed that when controlling for age, minority groups move less frequently than whites. He also found that the greatest net losses of ethnic minorities were experienced in Greater London, West Yorkshire, West Midlands and Lancashire – all areas with significant ethnic minority populations to start with. The largest net gains were found in a diagonal strip of counties from Suffolk to Dorset (Champion, 1996, p.172). This demonstrates that ethnic minority communities follow migration trends of the population as a whole in moving away from urban to less urban and even rural areas. Rees and Duke-Williams (1995) argue that their analysis suggests ethnic minority groups migrate to outer areas of such cities where there are already concentrations of ethnic minority groups. They found that with London, whites were leaving boroughs in Outer London and ethnic minorities were leaving Inner London boroughs and moving towards Outer London. It was found that Indians of all groups were experiencing this type of migration to the greatest extent and were leading migration from London and other large cities to non-metropolitan areas. The processes of decentralisation

between boroughs in London` have been confirmed in 2000-01 by Stillwell and Hussain (2008).

Using 2001 Census data, Stillwell and Duke-Williams (2005) found the ethnic composition of internal migration in Britain was similar to the ethnic composition of the population as a whole. For example the white ethnic group make up 91% of the total population of Britain and 92% of all internal migrants in Britain. Similarly Pakistanis and other South Asians make up 2.2% of the population and of internal migrants. However, internal migrants were slightly lower as a proportion amongst Indians and slightly higher for all other groups. When looking at where ethnic groups migrated to and from, Stillwell and Duke-Williams used four broad area classifications – London boroughs, metropolitan areas, unitary authorities and other local authorities. They found that there was a gain of Chinese in the London boroughs and metropolitan areas and losses for the other areas. The other non-white groups also had marginal gains in urban areas and unitary authorities but losses from rural local authorities. The majority white group showed gains for unitary authorities and other local authorities and losses for London boroughs and metropolitan districts. The patterns of ethnic group net migration using this district classification are analysed further in Stillwell and Hussain (2008).

3 Data sources and spatial units

3.1 Migration data

Until 1981, it was not possible to obtain data on the structure and characteristics of Britain's ethnic minorities other than that based on country of birth or ancestry in the New Commonwealth. Even when ethnic group data were collected post-1981 through the use of official surveys, the detail did not permit analysis of change in spatial patterns (Owen, 1997). It was not until the question on ethnicity was introduced in the 1991 Census that geographically detailed information on ethnic minorities was available to conduct analysis on ethnic distributions and migration patterns.

Migration may be measured in various ways but the two most common forms of data measure changes of residence either as 'transitions' or as 'moves/events'. Transition data are collected in the national census which asks respondents for their usual address on census day (29 April in the case of 2001) and one year prior to then. It is therefore possible

to identify migrants by comparing addresses. The data used in this paper therefore relates to migration that occurred between April 2000 and April 2001 and are limited by excluding return or multiple moves over the period as well as migrants who were born and/or died during the course of the year (Bell *et al*., 2002). The Census is, nevertheless, one of the only data sources that provides reliable and comprehensive data on migration by ethnic group. The data that we use are for ethnic groups that have been defined by the Office of National Statistics (ONS) and used to categorise migration flows at level 1 (district) in the Special Migration Statistics (SMS Table 3). The SMS are produced for seven ethnic groups that are defined as aggregations of the 16 groups used in the Key Statistics (Table 1).

Table 1: Ethnic groups defined in the 2001 Census

Ethnic group defined in Special Migration Statistics (Level 1)	**Ethnic group defined in Key Statistics**
White	White British; White Irish; Other white
Indian	Indian
Pakistani and other South Asian	Pakistani; Bangladeshi; Other Asian
Chinese	Chinese
Caribbean, African, Black British and Black Other	Caribbean; African; Other black
Mixed	White and black Caribbean; White and black African; White and Asian; Other mixed
Other	Other

Whilst data from the 2001 Special Migration Statistics (SMS) are available by ethnic group disaggregated by sex at the district scale, there is no breakdown available by age group. Given the importance of age as a selective influence on migration as mentioned in the introduction, we requested a commissioned table from ONS (Table CO711a) based on a set of age bands that reflect stages in the life course: children aged 0-15 who tend to migrate with their parents; teenagers aged 16-19 whose age range captures the movement away from home of those into their first independent living arrangement, including those moving to higher education; young adults aged 20-24 likely to be moving on from university into work as well as those moving between jobs or leaving the parental home for the first time; those in their late 20s (25-29) also likely to be driven by economic forces or the desire to get onto the housing ladder; those aged 30-44 who are more likely to be moving to residential space more suitable for families; the 45-59 age group which involves more mature migrants of working age who may be looking to downsize their homes after their children have moved away; and the final 60+ age group which contains a mixture of

migrants including those moving for retirement reasons as well as those in elderly age groups seeking to be nearer to service facilities or family members.

Whilst these broad age bands are aligned with life course stages, they have also been determined through negotiation with ONS so as to minimize the effect of small cell adjustment (SCAM) applied to all 'cell' counts of data produced from the raw 2001 Census records for statistical disclosure reasons so that they do not contravene confidentiality legislation. In practical terms, it is understood that ONS have applied a methodology of adjusting all cell counts of 1 or 2 to values of 0 or 3. Stillwell and Duke-Williams (2006) have conducted a detailed analysis of the impact of SCAM on the 2001 interaction data, demonstrating the particularly destructive influence of the adjustment at output area and ward level and showing the irony of creating a range of counts of total migration depending on which table is used when the aim was to produce a 'one-number' census in 2001. Commissioned Table CO711a is therefore a table of counts of migrants between districts of England and Wales for seven ethnic groups and seven age groups which have been adjusted for SCAM. (Table CO711b, incidentally, contains flows into the districts from a set of overseas regions). The cells representing the overall total flow between districts in Table CO711a are consistent with an aggregation of the component flows disaggregated by ethnic group and age. Consequently, the total flows in England and Wales are not exactly the same as flows derived from the SMS. In total, due to adjustment, there are approximately 2,000 fewer migrants in the SMS table than in the commissioned table. Table 2 shows those districts with the most extreme differences between inflows (and outflows) derived from SMS Table MG103 and Commissioned Table CO711a, both of which are available online from the Web-based Interface to Census Interaction data (WICID) (Stillwell and Duke-Williams, 2003). In most cases the differences shown in Table 2 are a relatively small percentage of the gross flows which include flows talking place within each district.

Table 2: Main differences in total district outflows and inflows derived from SMS Table MG103 and Commissioned Table CO711a

District	SMS inflow	CO711a inflow	Diff.	District	SMS outflow	CO711a outflow	Diff.
Hillingdon	24,805	24,661	144	Castle Point	6,449	6,318	131
Havering	15,373	15,237	136	St. Albans	13,375	13,249	126
Waltham Forest	22,915	22,785	130	Epsom & Ewell	6,393	6,288	105
East Devon	14,719	14,591	128	East Dorset	7,129	7,025	104
Birmingham	99,907	100,021	-114	Flintshire	12,726	12,832	-106
Mid Bedfordshire	12,529	12,651	-122	Colchester	18,615	18,738	-123
Sheffield	63,587	63,719	-132	Haringey	30,891	31,028	-137
Penwith	6,635	6,889	-254	Penwith	6,293	6,572	-279

Sources: SMS Table 3; ONS CO711a

Standard Table (ST101) was the source for corresponding populations at risk (PAR) used to compute migration rates for each age-specific ethnic group. This standard table provides data for eleven ethnic categories and 22 age groups cohorts, so aggregation was required to derive PAR corresponding with the 49 age-specific ethnic groups used in this paper.

3.2 Spatial units

The data counts in Table CO711a were supplied by ONS for migration flows between 376 local authority districts in England and Wales including 33 London boroughs, 36 metropolitan districts, 68 unitary authorities and 239 other local authorities, as well as flows originating from 32 Scottish council areas with destinations in England and Wales, although the latter have not been used in this analysis since further data on flows from districts in England and Wales to Scotland were not provided by ONS in the commissioned data. For reasons of practicality, it is not sensible to attempt an analysis of migration at district level for each of the age groups by age. In principle, the matrix contains 367x367x7x7 or nearly 66 million potential cells, although many of these would be empty. Consequently, we have decided to use a national area classification which places each district into a group according to key characteristics of the people who live in each area. By clustering districts in this way, a valuable simplification of the original data can be achieved. As a result patterns and relationships are easier to recognise and can be explained in more detail. Previous studies have used classifications such as ‘rural’, ‘urban’, ‘metropolitan’ and ‘non-metropolitan’ to identify trends in migration and which areas have greater losses and gains (Champion, 1989, 2006; Fielding, 1992). Vickers *et al*. (2003, p. 2) indicate that *“classification will aid understanding of socio-geographic make up of our society and provide a research tool for analysing the inequalities”*. The classification of

districts developed by Vickers *et al.* (2003) using 2001 Census Key Statistics assigns each district in the UK to each of three levels of classification depending on its socioeconomic, demographic or geographic characteristics. By using a classification such as this, rather than a simple urban/rural type dichotomy, means that more detail about spatial patterns can be summarised. For example, as we are focusing on migration by ethnicity and age for this analysis, it will be possible to see whether ethnic groups have a greater propensity to migrate to areas classified as having multicultural populations or whether young people migrate to areas identified as having a young age profile. The classification developed by Vickers *et al.* does not incorporate any migration data and so provides a framework for the migration analysis which is independent of the influence of migration variables.

The Vickers classification involves three tiers of district classification: 'family', 'group' and 'class'. For the purposes of the analysis for this paper only the top (family) and bottom (class) levels have been used as the intermediate level analysis does not add greatly to the insights gained from the other two levels. As depicted in Figure 1, the districts are clustered into one of four 'families' or one of 23 'classes'. Although the ONS also has a similar national area classification at district level, the methodology and rationale for the selection of variables and clustering techniques used by Vickers *et al.* are more comprehensive and more transparent (Vickers *et al.*, 2003; Dennett and Stillwell, 2008).

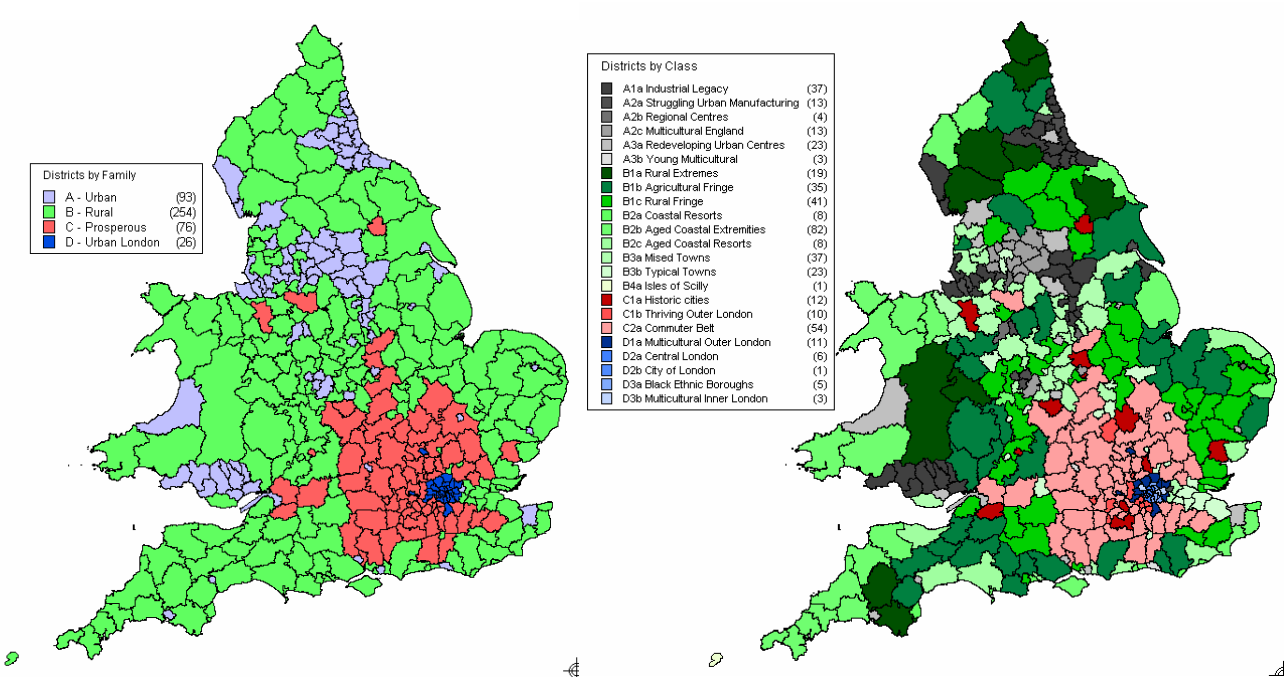


Figure 1. The family and class tiers of the UK district classification in England and Wales

4 Britain's ethnic diversity in 2001

Due to a labour shortage at the end of the Second World War, migrant workers were recruited from the New Commonwealth to take up residence and employment in Britain. This eventually resulted in a significant ethnic minority presence, growing from 74,000 people in 1951 to 4.6 million in 2001 (Owen, 2006). The largest flows of immigrant workers took place over the decades of the 1950s, 1960s and 1970s. However, since the mid-1990s, net immigration to the UK has increased again to approximately 200,000 per annum with immigrants originating from across the world rather than overwhelmingly from New Commonwealth countries (Salt, 2005).

The majority of post-war migrant workers found themselves in the most disadvantaged jobs which were essentially positions the indigenous population had refused to take. As a result of continued disadvantage and discrimination in the labour and housing markets, subsequent generations of British-born non-white populations still remain in similar positions to their predecessors, although different ethnic minority communities do appear to have differing levels of disadvantage and social and economic trajectories (Modood *et al.*, 1996). Ethnic minority disadvantage, discrimination and diversity have been given a

great amount of attention in recent years, including the influential and comprehensive study conducted by Modood *et al.* (1996) using the Fourth National Survey of Ethnic Minorities.

Owen argues that the 2001 Census data highlights that ethnic minority groups remain distinctive in a number of ways, including family formation, socio-economic composition and demography. It is understandable that the first two characteristics will have an impact on the third. Family formation and fertility rates result in differing population compositions and have an impact on rates of community expansion and natural change. Socio-economic success (or lack thereof) can impact on housing and neighbourhood choices. Owen summarised the key distinctions resulting from his analysis of the census data. Firstly, ethnic minority communities on average have a much younger age profile. In addition and partly as a result of such young age profiles, ethnic minority populations were found to be growing rapidly. Owen also found that in comparison with the white population, ethnic minority communities still demonstrated higher levels of economic disadvantage due to high unemployment rates and low employment rates and, overall, are highly concentrated geographically, more often in deprived localities (Owen, 2006 p.253).

The overall picture presented here does mask potential diversity amongst the different ethnic groups, however. In this section, we explore the ethnic mix, age structure and settlement pattern in detail to provide a greater understanding of the ethnic composition of the population before focusing on ethnic migration patterns in Section 6.

4.1 Ethnic mix in 2001

In terms of population size, the 2001 Census data show that the white population of England and Wales remains by far the most predominant group (Table 3) with non-white groups combining to constitute only 8.7% of the population of England and Wales. The Pakistani and Other South Asian (POSA) category makes up the largest minority group followed by black, Indian and mixed. The Chinese and other groups are less than half a percentage each of the total population of England and Wales.

Table 3: Ethnic composition of England and Wales, 2001

Ethnic group	Population count	Percentage
White	47,520,866	91.31
Mixed	661,036	1.27
Indian	1,036,807	1.99

POSA	1,236,929	2.38
Black	1,139,575	2.19
Chinese	226,950	0.44
Other	219,754	0.42

4.1 Age Structure

The most prominent variation between ethnic groups is the obvious difference in age structure between white and non-white groups (Table 4). White people are older on average than people from non-white ethnic groups. Half of those of mixed parentage were under the age of 15. This compares with a third of POSA populations, 26% of black populations, 19% of white and other groups and 18% of Chinese. The proportion of people aged between 16 to 29 are higher for all ethnic minorities than for whites. In the 30-44 cohort, black and other groups are 10% higher than the white and national average. The groups with highest proportions of young people, namely mixed and POSA begin to lower in comparison to the white figure. Blacks and Indians demonstrate the highest proportions of ethnic minority groups in the 60 plus age cohort and this is likely to be a result of length of settlement. It is likely that, if disaggregated, the Pakistanis would have a slightly higher proportion of people within this age cohort than Bangladeshis, reflecting their slightly longer period of settlement.

Table 4: Age profile by ethnic group in England and Wales, 2001

Ethnic group	0-15	16-19	20-24	25-29	30-44	45-59	60+
White	19.20	4.68	5.73	6.39	22.33	19.58	22.09
Mixed	50.01	8.33	7.84	6.81	16.87	6.03	4.11
Indian	22.89	6.94	8.88	9.20	25.21	16.67	10.21
POSA	33.53	8.19	10.32	9.81	20.81	10.59	6.75
Black	25.97	6.04	6.79	7.75	32.05	11.28	10.12
Chinese	18.33	9.36	13.39	9.73	25.43	15.92	7.84
Other	19.27	5.86	9.62	12.61	31.47	16.33	4.84
All people	20.15	4.91	6.00	6.60	22.55	18.93	20.86

The place of birth statistics in the 2001 Census show that much of the change in the minority populations has come about through natural increase rather than immigration. The

young age structures of Pakistani, Bangladeshi and Indian communities are a result of second and subsequent generation families with British-born children.

4.2 Geographical distribution

As the primary pull factor for migrants originating from the New Commonwealth was to find employment, the majority settled in urban industrial centres and large cities where jobs in manufacturing were largely based (Mason, 1995). Analysis of the 1991 Census showed that the majority of ethnic minority populations had remained concentrated in and around areas of original settlement. Greater London and the West Midlands were in 1991, as the main localities for the highest concentrations of ethnic minority communities (Rees and Phillips, 1996; Owen, 1992). The 2001 Census has also demonstrated that concentrations remain around the key areas of Greater London, the West Midlands, and Greater Manchester, West Yorkshire and the Leicester/Nottingham corridor in the East Midlands (Owen, 2006). Analysis of the 2001 Census data shows that within these localities, over a quarter of the population of Greater London and a fifth of the West Midlands belong to ethnic minorities. In terms of ethnic minority population shares across the country, half of all people of ethnic minorities reside in Greater London, with 20% living in Inner London. One eighth of all ethnic minorities reside in the West Midlands. In terms of ethnic breakdown, the largest percentage of black communities can be found in Greater London, with over two thirds of these groups living there. The vast majority of the remaining black communities can be found in the West Midlands and the South East. Over one third of all Asians live in Greater London. The second largest concentration of Asians is found in the West Midlands, followed by Lancashire, West Yorkshire and the East Midlands. At district level, the boroughs of Newham and Brent are home to the largest concentrations of ethnic minorities.

Figure 2 shows the population distributions across England and Wales for the seven ethnic groups using the Vickers *et al.* area classifications at each family level. Each bar shows the actual percentage of people from each ethnic group living in each area type. Urban London has the largest proportion (35%) of non-white residents, of which the black population contributes the largest number. Non-white ethnic minority residents constitute less that 10% in the other three families, with the POSA group being the largest non-white group in Urban UK. Approximately 5% of people in Prosperous Britain and only 3% of those living in Rural UK are non-white.

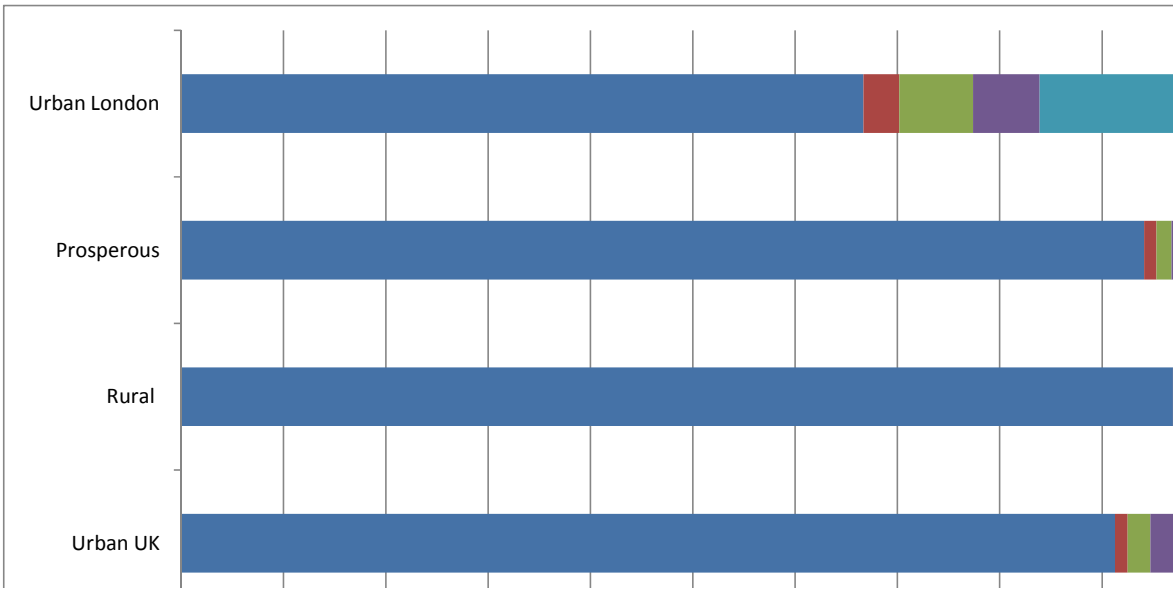


Figure 2: Percentage shares of district family type populations by ethnic group, 2001

An alternative method of comparing these data is to compute percentages of each ethnic group that live in each of the four types of district family (Figure 3). This clearly illustrates the large proportion of white people who reside in Rural UK districts but also highlights the concentration of over 60% of the black population in Urban London and almost half the POSA population in Urban UK districts, although these figures conceal significant differences between sub-groups; a higher proportion of Bangladeshis live in Urban London, for example. The Chinese and mixed groups have similar proportions of people within each area type. They both have the largest proportions (for non-white groups) living in Rural and Prosperous Britain.

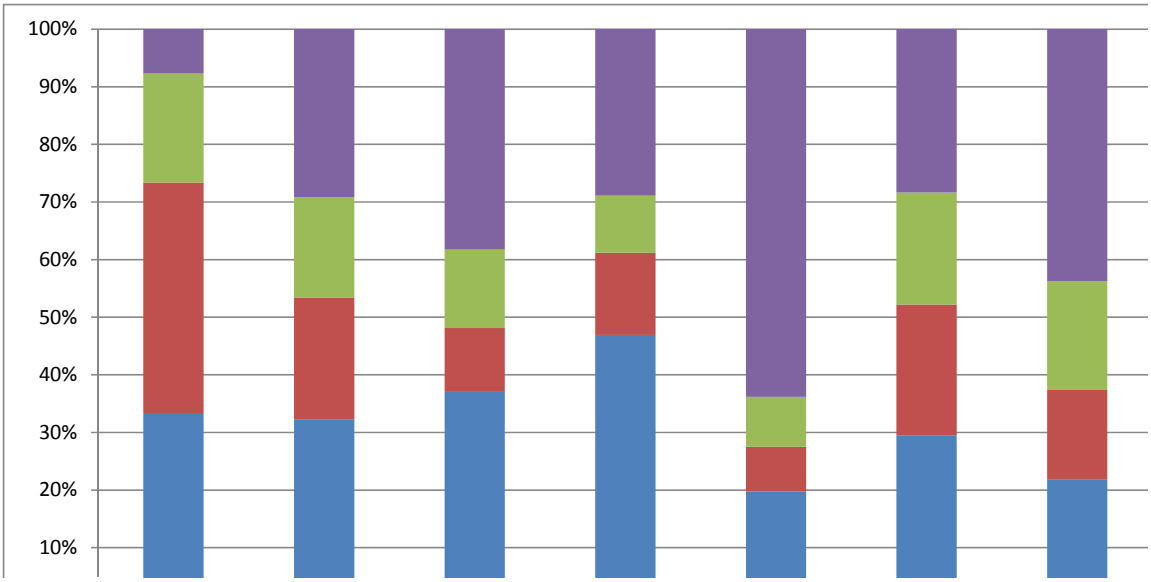


Figure 3: Percentage shares of ethnic populations by district family type, 2001

Further detail about the distribution of ethnic populations across England and Wales is revealed at the district 'class' level (Figure 4). Within the Urban London family, it is unsurprising that Multicultural Inner London has the highest proportion of ethnic minority residents, with over 50% of all people living in this area type being of non-white ethnic groups. Over one third of Black Ethnic Boroughs and a quarter of Central London and the City of London are made up of non-white residents. The largest ethnic minority group in all three areas is black. Over 30% of Multicultural Outer London is comprised of non-white groups although Indians and then the black groups make up the largest percentage of ethnic minority communities in the area class. The class outside of London with the largest percentage of ethnic minority groups is, as expected, Multicultural England, with approximately 20% of residents being non-white. At the other end of the spectrum, the Rural UK class containing only one district, the Isles of Scilly, has the lowest proportion of non-white residents. Apart from its small mixed population, the Isles of Scilly has no counts of any the other ethnic minority individuals.

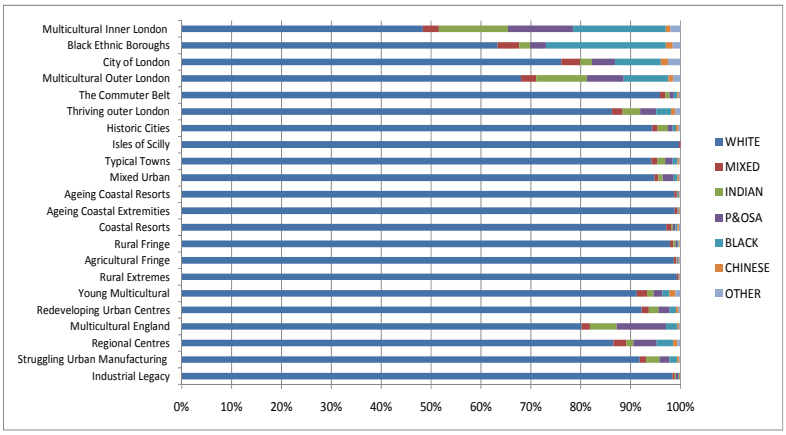


Figure 4: Percentage shares of district class type populations by ethnic group, 2001

The percentage share of each ethnic population according to the district class (Figure 5) indicates that for the white group there is no one class type which is predominant. The three classes with the largest shares of the white population are the Commuter Belt, Industrial Legacy and Mixed urban (with approximately 13%, 11% and 10% of the white population respectively). The class type with the smallest share (less than 1%) of the white group is Multicultural Inner London.

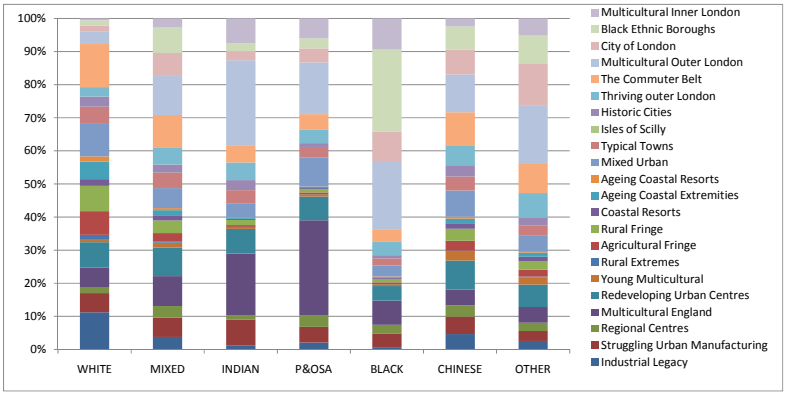


Figure 5: Percentage shares of ethnic populations by district class type, 2001

A quarter of all Indians live in Multicultural Outer London and just under 20% in Multicultural England. Indians also have a larger share (8%), compared with all other groups, in Struggling Urban Manufacturing districts. There are also large shares of other groups living in specific types of district. Nearly 30% of POSA population can be found in Multicultural England and a further 15% in Multicultural Outer London. A quarter of the Black group live in Black Ethnic Boroughs and approximately 20% can be found in Multicultural Outer London. The black group also has the largest share for any of the groups living in Multicultural Inner London with approximately 10%. The mixed and Chinese groups show similar distributions across the district classes, with the exception of a very small percentage of mixed residing in the Isles of Scilly and a smaller proportion of Chinese residing in Multicultural England. In addition, the proportion of the mixed group in multicultural England is greater than that of the black group, white and other. Only the POSA, Indian and black groups have over 20% of their total population residing in a single class of district: Multicultural England and Multicultural Outer London for POSAs and Indians respectively and Black Ethnic Boroughs and Multicultural London for the black group.

5 Internal migration propensities by ethnic group – national level

Internal migration is the major contributing factor to population change *vis à vis* natural change due to differential fertility and mortality rates. Internal migration contributes not only to changes in the number of people but also to changes in the composition and structure of local populations, which have implications for the physical environment but also the economic development of an area. In addition, as discussed in Section 2, exploring the changing compositions of ethnic minority populations is particularly relevant for issues of equal opportunities, service provision and social cohesion.

5.1 National trends – ethnicity and age

It is widely accepted that one of the most characteristic and persistent patterns of population redistribution through migration in Britain is that associated with the process of counterurbanisation with greater propensities for populations to migrate from metropolitan to non-metropolitan areas or to urban areas lower in the settlement hierarchy (Stillwell and Boden *et al.* 1987; Champion 1989; Owen and Green 1992, Champion, 2005, Dennett and

Stillwell, 2008). Champion (2005, p.92) refers to the *"urban-rural shift (the movement of people from inner cities to the suburbs and more rural areas)"*, implying that there is also a process of suburbanisation taking place as well as counterurbanisation. Moreover, other processes are continually occurring at an intra-city scale such as gentrification, city centre living and residualisation which are causing new flows of migrants, while flows of 16-19 year olds into cities with big universities has been recognised by Rees and Phillips (1996) and Champion (2005). Movements motivated by employment opportunities in the young adult age groups also generate patterns of urbanisation than run counter to the processes of decentralisation that are more associated with middle and older age.

At the national level, calculation of the number of migrants in each ethnic group expressed as a percentage of the population of each ethnic group (Figure 6) allows for a comparison of migration intensities in 2000-01. The crude rates of migration, computed using end-of-period populations, indicate that Indians and then POSAs are less likely to migrate than whites but whites are less likely to migrate than each of the remaining ethnic groups.

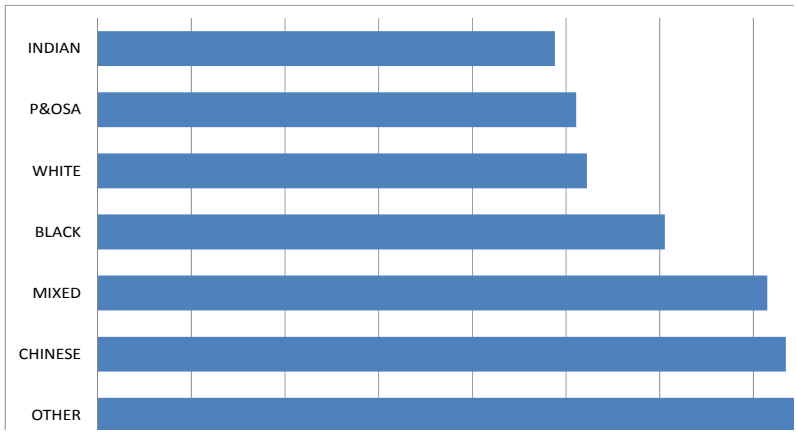


Figure 6: Migration rates in England and Wales by ethnic group, 2000-01

Propensities to migrate and variations in types of migration destination have been found to be significantly influenced by age and this is reflected in changes that occur during the life course (Champion *et al.*, 1998). In a discussion of the 'laws' of migration, Tobler wrote *"one of the most studied regularities is the age profile of migrants"* (1995: 335) and Raymer and Rogers stress that *"the age structure of migration has become a fundamental concept, one that can be expressed in the form of a model migration schedule"* (2007: 219). Champion (2005) and Dennett and Stillwell (2008) have shown using 2001 Census data, as have others using previous data sources (Owen and Green 1992; Warnes and Ford, 1995),

that migration rates are high for young children and then decline until 16 before rising to a peak in the early 20s. Young adults at this age have the highest propensity to migrate across all age cohorts and this can be explained by moving to universities or to employment after school/college or to jobs after completing university. This is followed by a reduction in migration from the mid-20s to mid-30s associated with establishing families and early child rearing. Migration rates do not pick up again until well after retirement age in the 70s and 80s which can be associated with greater need for care and moving to be in close distance to family members for the elderly. This is known as the life course theory which is influenced by key stages in people's lives rather than simply a result of biological age itself (Warnes, 1992). Age can therefore be crucial in understanding greater propensities for communities to migrate and, as Champion suggests *"14.1% of people in non-white ethnic groups changed address within the UK in the pre-census year, a rather higher proportion than for the white population (11.2%). This difference probably arises from the younger average age of the former"* (2005, p. 96).

In terms of the absolute volume of migration flows taking place in England and Wales by age group and ethnic group (Table 5), it is interesting to observe that, amongst the non-white groups, it is the POSA group that are most numerous in the child age range and blacks have the most migrants in the student age range. POSAs dominate again in the early adult ages but blacks are more numerous in older ages, significantly so in middle working age.

Table 5: Migrant numbers by age and ethnic group

	ALL	White	Indian	POSA	Chinese	Black	Mixed	Other
Total	5,434,372	4,909,144	100,868	125,491	33,253	137,719	94,051	33,846
0-15	1,072,292	938,732	18,147	35,533	3,829	31,244	39,201	5,606
16-19	391,498	349,409	8,423	9,041	3,898	10,025	8,577	2,125
20-24	964,354	869,943	20,838	22,314	10,647	18,711	16,047	5,854
25-29	787,218	709,696	17,035	19,576	4,997	18,711	10,676	6,527
30-44	1,320,495	1,188,119	25,945	27,857	7,261	45,345	15,368	10,600
45-59	484,654	455,130	6,636	7,111	1,842	8,568	2,862	2,505
60 +	413,861	398,115	3,844	4,059	779	5,115	1,320	629

Source: ONS Commissioned table C0711a

When age-specific migration rates are computed (Figure 7) using end-of-period populations at risk as the denominators, the schedules tell a rather different story. Despite their relative magnitude, the Indians and POSAs experience the lowest migration rates in

almost all ages and the rate differentials are most noticeable at ages 16-19, 20-24 and 25-29. At age 20-24, the POSA rate is only about 17%, less than half the rate of migration for the Chinese, the most mobile group at this age and at age 16-19 years also.

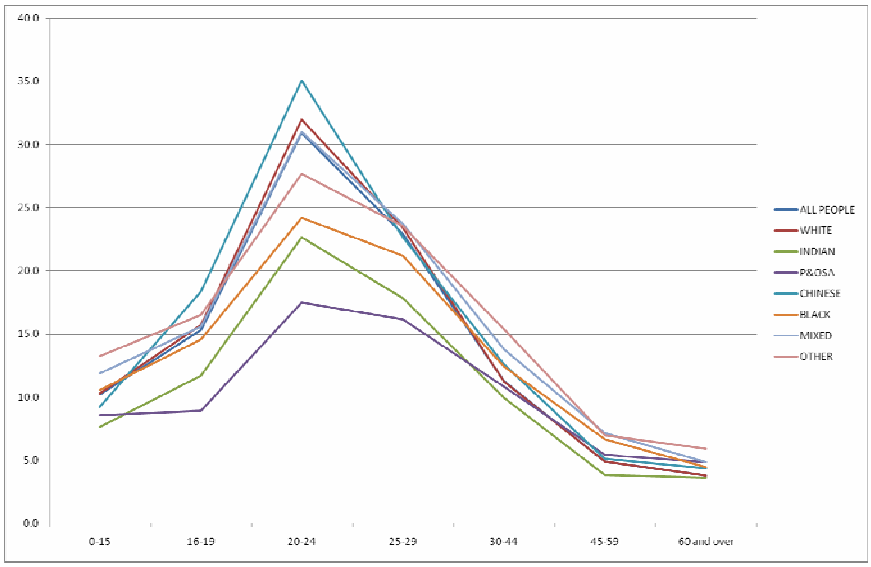


Figure 7: National migration rates for ethnic groups by age, 2000-01

The difference between ethnic group migration intensities are most noticeable in the 20-24 age range although the gap between the rates for Asians and others is apparent for those in their late teens. It is particularly interesting to note that POSA migrants aged 16-19 are only marginally higher than those aged 0-15. Given the inclusion of students on the 2001 Census migration counts, we conclude that POSAs are less inclined to move away from home to study in higher education or in fact to leave home aged 20-24. Evidence from elsewhere (Phillips *et al.*, 2004; Johnson *et al.*, 2005) indicates that Bangladeshis have the highest levels of segregation amongst all ethnic groups.

5.2 Inter and intra-district shares

In addition to age being an important selective influence on migration, there are also likely to be marked differences in distance of migration according to age and ethnicity (Champion, 2005; Finney and Simpson, 2008). Using data from the 1991 Census, Stillwell *et al.* (1996) found that migrants of working age were more likely to move longer distances, from region to region, when compared with migrants as a whole, children and the elderly who were more likely to confine movement to shorter distances. In this instance, we use the distinction between movements between and within districts to examine distance variations by ethnic group and by age (Figure 8).

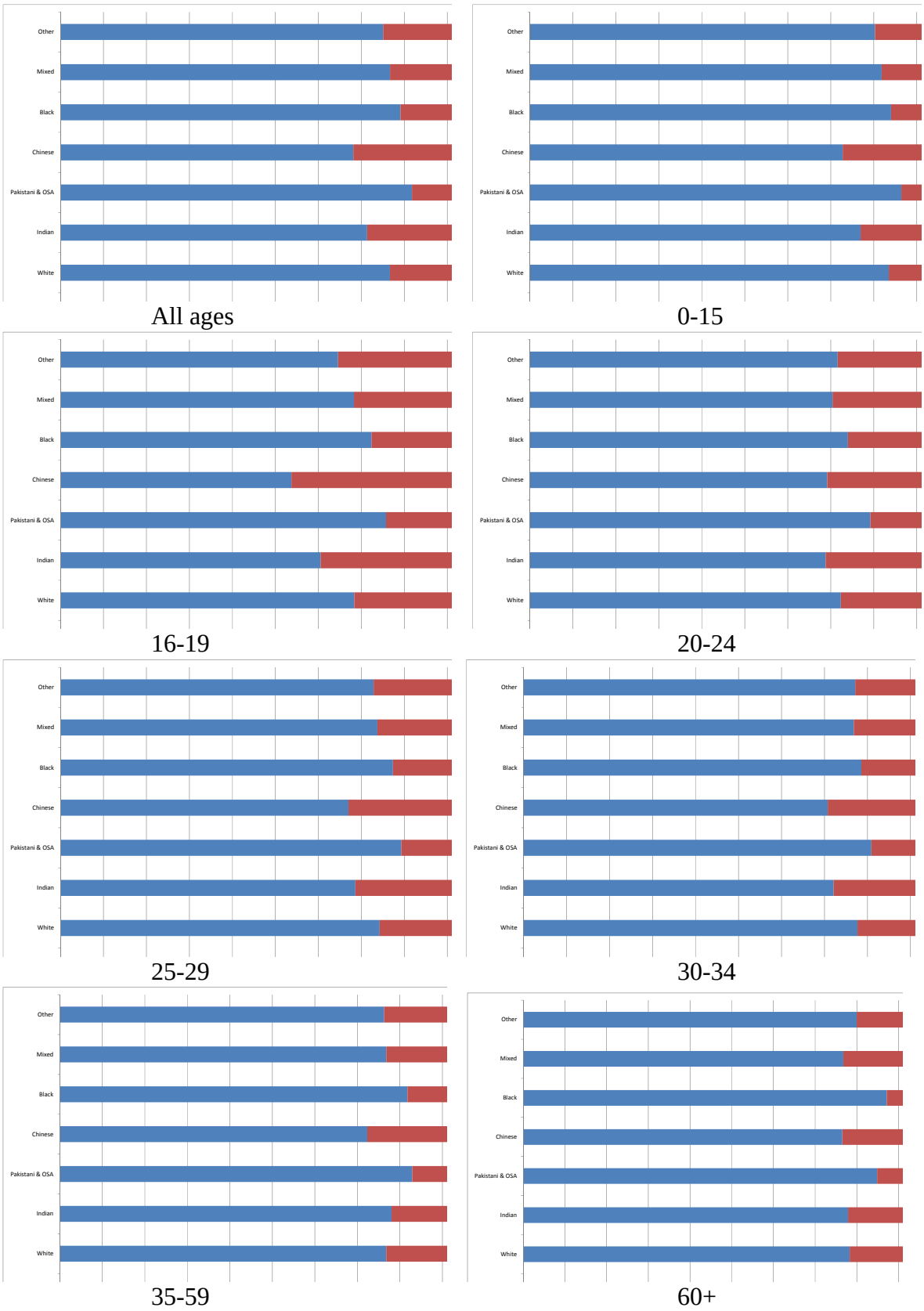


Figure 8: Percentages of migrants by age and ethnicity between or within districts, 2000-01

Overall, about 77% of all migrants move within districts and 23% move between districts in England and Wales. The Chinese have the highest proportion of inter-district migrants whereas the Pakistanis and Other South Asians have the highest proportion of intra-district migrants. Moreover, the Chinese demonstrate the highest propensity to move longer distances for all age groups apart from 20-24 when the Indians also have over 30% moving between districts. The age group 16-19 is the one in which the overall proportion of migrants between districts exceeds 30% and where the ethnic differentials are most apparent. Nearly half the Chinese of this age group move longer distances whereas only one quarter of Pakistani and OSA migrants move between districts. The POSA group has the lowest proportions of inter-district migrants in all age groups apart from those aged 60+ where the black migrant share is even less, with only about 12% moving between areas.

6 Internal migration using the district classification

6.1 Net migration balances by area type

Table 6 provides a summary of the aggregate net migration balances by each family and class of the Vickers *et al.* typology (column 3) and also the net balances by each of the seven ethnic groups.

Table 6: Net migration balances by ethnic group and area type, 2000-01

Area		All	White	Indian	P&OSA	Chinese	Black	Mixed	Other
A	Urban UK	-2075	-4404	-979	216	242	2137	562	151
A1a	Industrial Legacy	-2261	-1818	-289	-187	-161	107	55	32
A2a	Struggling Urban Manufacturing	-8156	-8992	-449	119	25	1204	6	-69
A2b	Regional Centres	3536	2708	367	143	238	27	-63	116
A2c	Multicultural England	-10694	-9921	-1030	-214	-13	390	-147	241
A3a	Redeveloping Urban Centres	15076	13005	406	413	285	415	594	-42
A3b	Young Multicultural	424	614	16	-58	-132	-6	117	-127
B	Rural UK	54812	53033	384	105	-696	1445	905	-364
B1a	Rural Extremes	1453	1476	-16	29	-33	14	-20	3
B1b	Agricultural Fringe	14538	14709	-79	69	-345	68	250	-134
B1c	Rural Fringe	15815	14859	387	37	-140	312	346	14
B2a	Coastal Resorts	5904	6276	-65	57	-126	-57	2	-183
B2b	Ageing Coastal Extremities	12286	12206	-59	147	-104	38	61	-3
B2c	Ageing Coastal Resorts	7775	7812	-4	-8	-18	7	-26	12
B3a	Mixed Urban	-2393	-2535	139	-462	75	237	188	-35
B3b	Typical Towns	-566	-1770	81	236	-5	826	104	-38
C	Prosperous Britain	-4001	-12316	2496	1084	517	3017	865	336
C1a	Historic Cities	4925	3986	455	115	165	229	-59	34
C1b	Thriving outer London	-4086	-7713	949	730	163	1399	174	212
C2a	The Commuter Belt	-4840	-8589	1092	239	189	1389	750	90
D	Urban London	-48736	-36313	-1901	-1405	-63	-6599	-2332	-123
D1a	Multicultural Outer London	-21730	-23958	-397	612	88	1901	-515	539
D2a&b	Central and City of London	-12576	-8605	106	-641	45	-2183	-828	-470
D3a	Black Ethnic Boroughs	-7726	-688	-310	-564	-217	-5095	-689	-163
D3b	Multicultural Inner London	-6704	-3062	-1300	-812	21	-1222	-300	-29

Source: Computed from ONS Commissioned table CO711a

At the top level of the area hierarchy, Urban London is the family type that shows overwhelming losses of population through net migration; over 48,700 migrants leave Urban London for the rest of England and Wales whereas the Rural UK family gains almost 55,000 migrants in net terms and is the only family to gain. The net losses from Urban UK and Prosperous Britain are small in comparison. The pattern of net loss from Urban London is consistent across all ethnic groups as are net gains in Rural UK for all groups apart from the Chinese and Other, where losses are recorded. In both families, the balances are dominated by the net flows for whites. In the case of Urban UK, however, net losses of Indians as well as whites are evident whereas the loss of whites from Prosperous Britain is significantly offset by gains in all the other ethnic groups, particularly blacks and South Asians.

At the class level, more interesting variations exist within families. Whilst all classes of Urban London lose through net migration of whites, Regional Centres, Redeveloping Urban Centres and Young Multicultural districts in Urban UK all gain white net migrants. In Rural UK, Mixed Urban and Typical Towns also lose white migrants while Historic cities in Prosperous Britain gain whites. In Urban London, it is not only whites that are leaving Black Ethnic Boroughs and Multicultural Inner London; net migration losses are apparent for virtually all ethnic groups, whereas in Multicultural Outer London, net gains are recorded for all non-white groups except Indians and mixed. Central and City of London gains Indians and Chinese through net migration but loses through net out-migration of other non-white groups, particularly blacks. The processes of decentralisation of migration within Greater London are considered in more detail in Stillwell and Hussain (2008).

As far as Urban UK is concerned, the most significant balances in absolute terms are those of net gain by blacks in Struggling Urban Manufacturing districts and net losses of Indians from Multicultural England. Apart from gains by blacks and those of mixed ethnicity, Multicultural England loses migrants in other non-white groups, whereas white gains in Young Multicultural districts are partially offset by net losses by those in the POSA, Chinese, black and other groups. In Rural UK, the balances of net migration are all relatively small, with the Chinese only gaining in Mixed Urban districts and blacks only having net losses in Coastal Resorts. In contrast, absolute net migration balances for non-

white ethnic groups in Prosperous Britain are rather more significant. Whereas whites are leaving Thriving Outer London and The Commuter Belt in net terms, these areas are gaining migrants from all non-white groups, particularly blacks. This is the reason for the relatively high rates of net migration gain for Prosperous Britain that are shown in Figure 9. Net migration gains, relative to population size, are most significant in Prosperous Britain for all non-white groups, although the black and mixed groups also have positive net migration rates for Rural UK, whilst the Chinese and other groups have negative net migration rates for this family of districts. Rates of Chinese net out-migration from London, however, are low compared with those of other groups, particularly the mixed group.

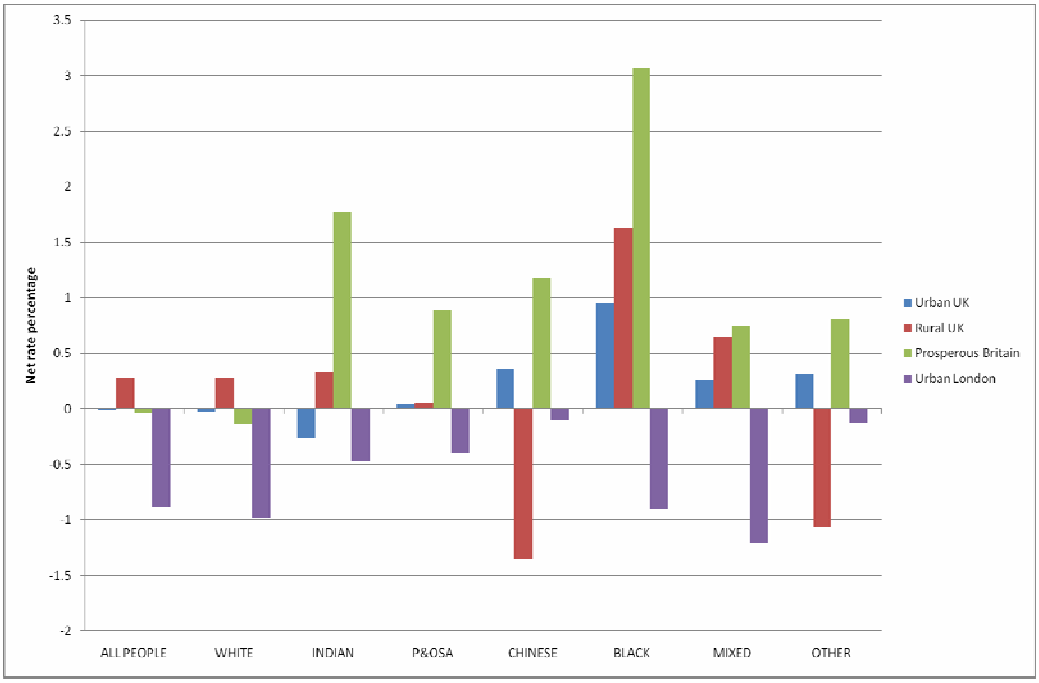
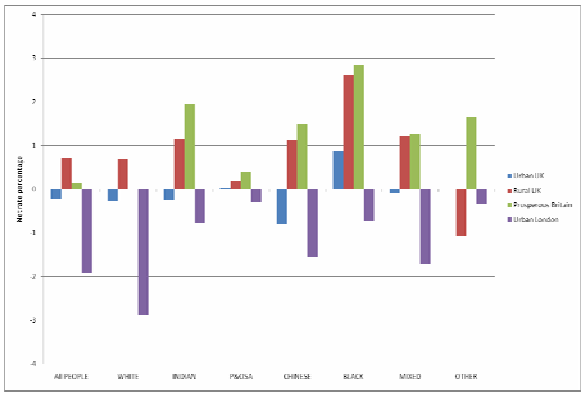


Figure 9: Rates of net migration by ethnic group and family type, 2000-01

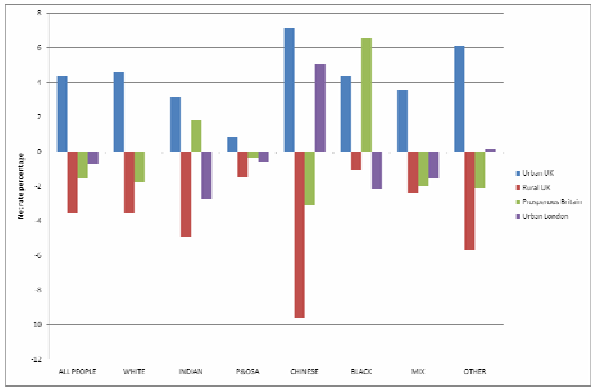
6.2 Age disaggregation

The ethnic group net migration rate patterns that we have presented in Figure 9 can be disaggregated by age to reveal more of the complexity of the interactions between districts in different family types, as illustrated in Figure 10. In all age groups, the aggregate net rates are determined by the white ethnic groups because of their numerical dominance of the migration flows as well as the population denominators. However, there are some interesting differences in the age-specific net migration rates between the ethnic groups, not

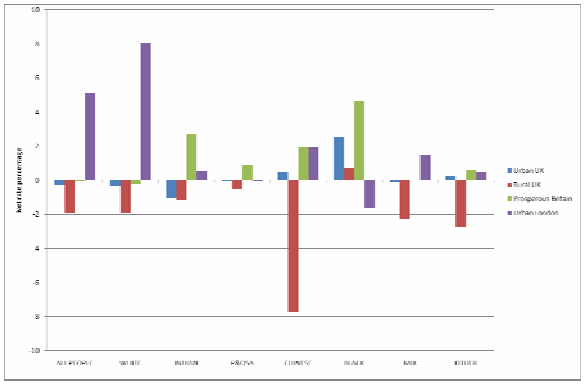
least when we compare the first two graphs in Figure 10, the net rates for 0-15 and 16-19 year olds.



0-15

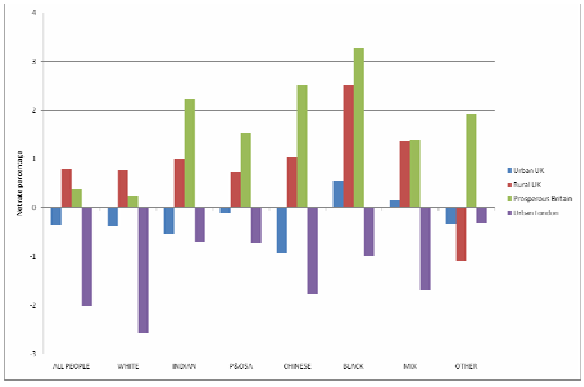


16-19

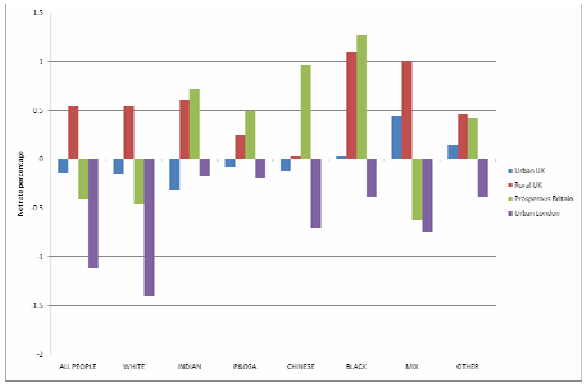


20-24

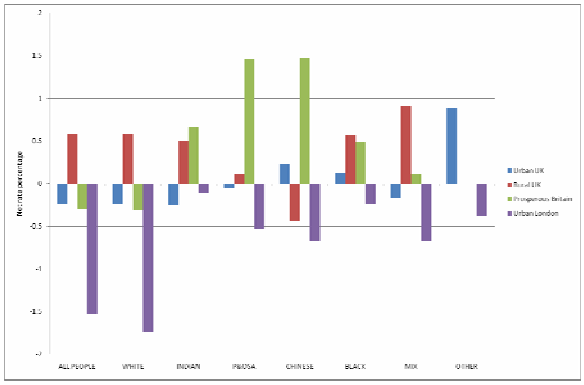
25-29



30-44



45-59



60+

Figure 10: Net migration rates by ethnic group, age group and family type, 2000-01

Rates for the 0-15 age group in each ethnic group show some degree of conformity with net losses from Urban London, although these are dominated by high rates of net-outmigration for whites of a similar magnitude to those in the parental age group, 30-44. Apart from children of other ethnicity, all the remaining rates are positive for Rural UK and Prosperous Britain, with highest rates in both these family types being associated with blacks. In direct contrast, the ethnic rates of migration for the older teenagers are mostly negative for these two families whereas rates are mostly positive for Urban UK. The Chinese group experience the highest rates of net loss from Rural UK yet have the highest rates of net gain from Urban UK and Urban London, whereas the rates of black net in-migration to Prosperous Britain is more than double that of the 0-15 age group. Other than the Chinese, London is not attractive in net migration rate terms to internal migrants from non-white ethnic groups, and the balance for white is zero; there are as many older white teenagers leaving Urban London as there are arriving.

The variations between ethnic groups in net migration rates are equally disparate for the two age groups of those in their 20s. London benefits hugely from high rates of white net in-migration of those aged 20-24, partly reflecting the net inflow after graduation, but only marginally from those aged 25-29. The highest rates of net in-migration in the latter age group are of blacks and Asians into Prosperous Britain, with Urban UK having rates of net loss for all ethnic groups except blacks. Ethnic group net migration rates for the two older working groups conform much more with those of the 0-15 age group, although rates of net gain or loss are lower in those aged 45-59. Negative rates of net migration in the oldest category, 60 and over, are for whites from Urban London, although rates for this family type are negative across all ethnic groups. Positive net migration rates for this age group of

migrants are highest for the Pakistani and OSA and the Chinese groups moving into Prosperous Britain.

Figure 11 illustrates the variations in net migration rate between ethnic group by class of district. The graph juxtaposes histograms of net migration rates for 21 classes for each ethnic group, enabling some contrasting features to be identified, such as the different spatial patterns of net rates for Indians compared with Pakistanis and Other South Asians, and the relatively high rates of net loss for Chinese from Rural UK classes compared with the gains in these classes by blacks.

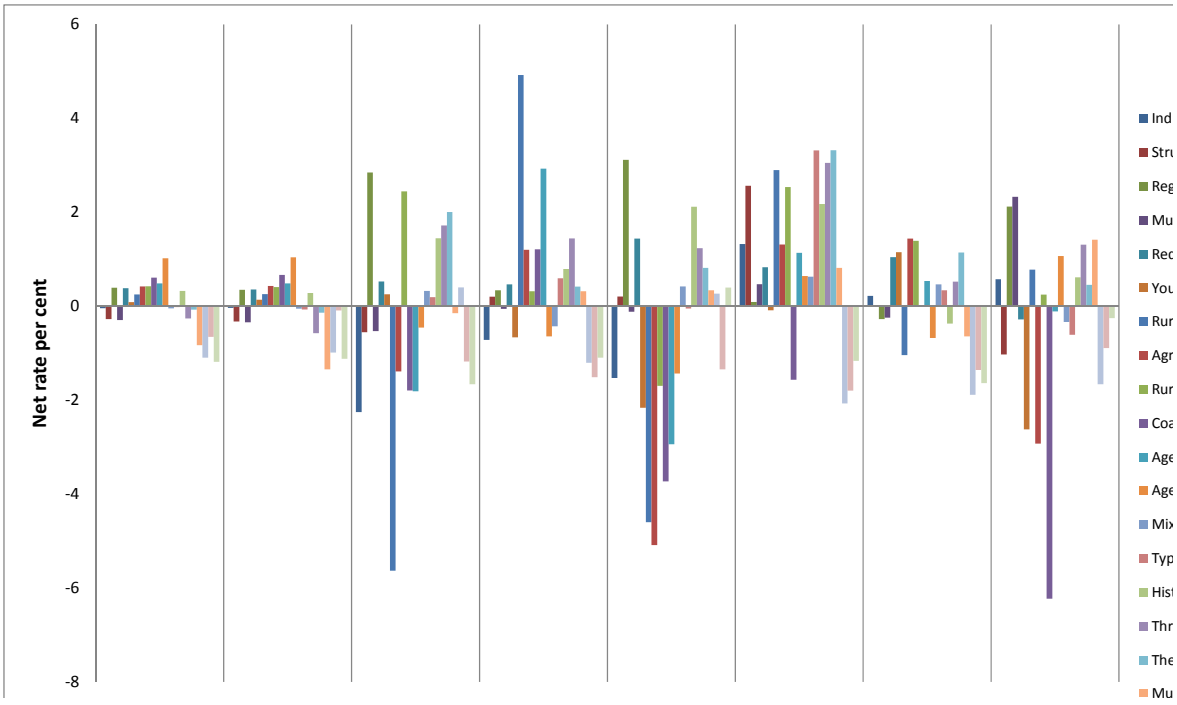


Figure 11: Rates of net migration by ethnic group and class type, 2000-01

Table 7 provides a summary of the rates of net migration loss and gain for all migrants and each ethnic group that are higher than 1%. Thus, Ageing Coastal Resorts are the only class of districts that gain at a rate over 1%, whereas the City of London and Multicultural Inner London are the two classes of districts that lose by rates of over 1%. Across the spectrum of ethnic minorities, negative and positive net migration rates range between -5% and +6%. Analysis at the class level shows considerable diversity among ethnic groups in net migration rates and there is no clear pattern of losses and gains for any two groups. For example, Indians and POSAs do not follow similar patterns of net rate gains or losses in a consistent enough way for general conclusions to be drawn about preferences among all South Asians.

There are similarities however between Indians and Whites in terms of net rate losses and gains within all the Urban UK classes. Indians consistently mirrored whites in terms of whether there were net losses or gains to the area type. However, this was not the case for classes that are subcategories of Rural UK. Here the white group showed gains in all the rural classes with the exception of Typical Towns and Mixed Urban. POSAs also showed gains in all rural classes except for Ageing Coastal Resorts and Mixed Urban. Indians, on the other hand, showed gains in only three of the eight rural classes.

Table 7: Class types with rates of net migration gain or loss >1% by ethnic group, 2000-01

Ethnic group	Gain classes	Net rate (%)	Loss classes	Net rate (%)
All	Ageing Coastal Resorts	1.02	City of London	-1.10
			Multicultural Inner London	-1.18
White	Ageing Coastal Resorts	1.04	Multicultural Outer London	-1.35
			Multicultural Inner London	-1.12
Indian	Regional Centres	2.85	Industrial Legacy	-2.26
	Rural Fringe	2.45	Rural Extremes	-5.63
	Historic Cities	1.45	Black Ethnic Boroughs	-1.18
	Thriving Outer London	1.72	Multicultural Inner London	-1.66
	The Commuter Belt	2.00		
P&OSA	Rural Extremes	4.92	City of London	-1.21
	Agricultural Fringe	1.20	Black Ethnic Boroughs	-1.51
	Coastal Resorts	1.21	Multicultural Inner London	-1.09
	Ageing Coastal Extremities	2.93		
	Thriving outer London	1.44		
Black	Industrial Legacy	1.33	Coastal Resorts	-1.57
	Struggling Urban Manuf	2.56	City of London	-2.07
	Rural Extremes	2.90	Black Ethnic Boroughs	-1.80
	Agricultural Fringe	1.31	Multicultural Inner London	-1.16
	Rural Fringe	2.54		
	Ageing Coastal Extremities	1.13		
	Typical Towns	3.32		
	Historic Cities	2.18		
	Thriving Outer London	3.05		
	The Commuter Belt	3.32		

Chinese	Regional Centres	3.12	Industrial Legacy	-1.53
	Redeveloping Urban Centres	1.44	Young Multicultural	-2.17
	Historic Cities	2.12	Rural Extremes	-4.60
	Thriving Outer London	1.72	Agricultural Fringe	-5.09
	The Commuter Belt	2.00	Rural Fringe	-1.70
			Coastal Resorts	-3.73
			Ageing Coastal Extremities	-2.94
			Ageing Coastal Resorts	-1.43
			Black Ethnic Boroughs	-1.35
Mixed	Redeveloping Urban Centres	1.05	Rural Extremes	-1.04
	Young Multicultural	1.15	City of London	-1.89
	Agricultural Fringe	1.44	Black Ethnic Boroughs	-1.36
	Rural Fringe	1.39	Multicultural Inner London	-1.64
	The Commuter Belt	1.14		
Other	Regional Centres	2.12	Struggling Urban Manuf	-1.03
	Multicultural England	2.33	Young Multicultural	-2.62
	Ageing Coastal Resorts	1.07	Agricultural Fringe	-2.93
	Thriving Outer London	1.31	Coastal Resorts	-6.23
	Multicultural Outer London	1.42	City of London	-1.66

Within Urban UK, Regional Centres showed rates of net gain for all ethnic minorities except for the mixed group. The only groups who gained within Multicultural England were black and other. Young Multicultural showed a mixture of net losses and gains for the ethnic groups. Redeveloping Urban Centres showed gains for all groups except other. Amongst the classes within Prosperous Britain, Thriving Outer London and the Commuter Belt gained for all ethnic minority groups. Historic Cities showed gains for all groups, including Whites, but not mixed.

Within Urban London, there were losses for whites in every class. The only class that showed losses for every ethnic group is Black Ethnic Boroughs. Central and City of London had gains of Indians and Chinese but losses for all other groups and Multicultural Inner London showed losses for all groups except for Chinese. Multicultural Outer London showed losses for Indians and the mixed group and gains for POSAs, Chinese, black and other.

Although the net rates for the total population fall within an 11% range, when broken down by age, net rates for losses and gains are much higher. This is both as a result of a smaller population at risk denominator in some cases, whilst in other cases, it is due to high propensities to migrate among some age cohorts. As expected, 16-19 year olds produce the largest net rate increases and losses to different types of area. Regional Centres were

popular among all ethnic groups aged 16-24, with net gains across all groups. Historic Cities was a popular class for 16-19 year olds with gains for all groups. Young Multicultural also gained for all migrants aged 16-19. Agricultural Fringe showed losses for all 16-19 year olds with the exception of the black group. Both Mixed Urban and Typical Towns showed losses for all 16-19 year olds, although the latter gained for all 25-44 year olds. All ethnic groups aged 20-29 experienced rates of gain within Thriving Outer London. Central and City of London was unpopular for all groups after the age of 30, as was Black Ethnic Boroughs after the age of 25. The Commuter Belt showed gains for all groups aged between 30-44 and Rural Fringe was a popular destination with gains for all groups from the age of 30 onwards.

7 Conclusions

This paper has demonstrated that whilst aggregate flows of migration between and within districts in the year before the 2001 Census were dominated by flows of white migrants, with relatively coherent counterurbanisation patterns of net losses from large urban areas and net gains to more rural areas, the rates of migration for non-white ethnic groups vary in magnitude with Asians having relatively low rates compared with whites and other ethnic minorities having relatively high rates, and with different groups having different spatial patterns of redistribution. It is the POSA group that has the lowest migration propensities and which has the highest proportion of migrants travelling over relatively shorter distances. Moreover, when the age dimension is added, we observe distinctive age-migration profiles for each ethnic group with POSA migrants on the one hand having propensities to move in the 16-19 age group that are no higher than for children aged 0-15, yet the Chinese on the other hand having rates that are more than double those of the POSA group. These differences in propensity are due to a range of different cultural, familial and socio-economic factors associated with each of the groups concerned which also partly determine the spatial pattern of out-migration and in-migration. A further exploration of these issues using additional data sources could add insight into understanding the low rates. Comparing proportions of students from these ethnic groups living in university halls of residence or all student households, for example, could provide an indication of whether these ethnic groups have a greater propensity to move away from home for study.

The complexity of the spatial patterns is difficult to understand effectively, especially if the spatial analysis involves the full matrix of flows between all the districts in England and

Wales. The need to summarise spatial patterns is the reason why we have adopted an existing classification district system as an organising framework and in this paper we have chosen to examine net migration taking place at two levels: between four families and 23 classes of district. The result is a series of findings about the intricacies of non-white migration when compared with white migration. Whilst all ethnic groups are leaving London in net migration terms, the Chinese and other groups are also leaving rural areas; whites and Indians are leaving Urban UK whereas these areas are gaining migrants from all the other ethnic minorities; and while Prosperous Britain has a negative net migration rate for whites, the districts in this family gain overall from all non-white groups.

Vickers *et al*. identified five classes characterised by concentrations of ethnic minority groups or as being particularly distinctive because of their ethnic minority populations. These are Black Ethnic Boroughs, Multicultural Inner London, Multicultural Outer London, Multicultural England and Young Multicultural. When the net flows for these areas are aggregated all ethnic minority groups demonstrate greater net out-migration with the exception of other. This is in keeping with the arguments regarding dispersal presented in Section 2. Therefore, using national area classifications such as these, it can be asserted that ethnic minority communities are moving away from areas with high concentrations of ethnic minorities rather than relocating to them.

By definition, groups who do not have an established presence in a country tend not to be given political representation and recognition in the form of their own category within official data collection (Thernstrom, 2001). It could be argued that this is the case with the other group, who were largely comprised of recent migrants to the United Kingdom. If this were true, in keeping with debates covered in section two (Ellis and Wright, 1998) new migrants move to areas with the most assessable vacant housing, often areas where there are established ethnic enclaves.

Further disaggregation by age group and by district class demonstrates the extent to which more aggregate flows conceal many differences in propensities and patterns of small sub-groups. This paper has concentrated on net migration balances and rates, which themselves conceal information about the magnitude and patterns of outflows and inflows. Further work might usefully explore the gross flow components as well as the flows taking place

within the families and classes using migration efficiencies, inflow/outflow ratios and rates of turnover and churn.

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