Migration by minority ethnic groups within Great Britain in the early 1990s

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1. Introduction

Over the last few decades, the number of people resident in Great Britain from minority ethnic groups¹ has increased rapidly. Though small populations of people with origins from beyond Europe have been present in Britain for centuries, the major expansion of these population groups has occurred from the 1950s onwards (Haskey, 1997). Through the joint influence of international migration and births in the UK, the minority population had reached over 3 million by 1991, just under half of whom (46.8 per cent) had been born in the UK. The geographical impact of the growth of this section of the population has been highly uneven. Initial immigration from New Commonwealth countries was into the major cities, which were economically buoyant until the era of mass unemployment began in the mid-1970s, and represented a source of demand for labour, especially in lower-status occupations. Robinson (1993) has shown how the geographical distribution of different ethnic groups migrating at different periods in time was strongly influenced by the changing availability of employment and the existence of social and kin networks. Analysis of the 1991 Census (Rees and Phillips, 1996; Owen, 1992) has revealed that the bulk of the minority ethnic group population has remained concentrated in the environs of the original foci of settlement, with Greater London and the West Midlands metropolitan county containing the great majority of people from minority ethnic groups.

As these ethnic groups become longer established within the UK and with the emergence of second and third generations of British-born children, it might be expected that people from minority ethnic groups would begin to move away from the initial centres of concentration. Unfortunately, it has proved difficult to identify such trends due to the lack of data, both on the geographical pattern of population change by ethnic group and on the migration behaviour of minority ethnic groups. Until the early 1980s, most official data sets detailing the structure and characteristics of the population still identified minority ethnic groups on the basis of birth or ancestry in the New Commonwealth. Even after ethnic group questions were introduced into the major national social surveys, their level of geographical disaggregation was too poor to enable spatial patterns of change to be analysed in detail. The 1991 Census provides the first nationally comprehensive benchmark information on the characteristics of people from minority ethnic groups at the local level, and for the first time provides geographically detailed information on migration patterns by ethnic group during 1990-91. Information on longer term trends is available from the ONS Longitudinal Study (amongst other longitudinal surveys), which Robinson (1996) has used to show that the British-born children of immigrant parents from minority ethnic groups are more likely than first generation migrants to live in areas of low minority ethnic group concentrations, suggesting that a process of dispersal of minority ethnic groups may be taking place.

At the same time as rapid minority population growth has counterbalanced the slow growth (and net emigration for much of the post-war period) of white people (Coleman [1995] estimated that the population of England and Wales in 1991 was around 3 million greater than it would have been in the absence of New Commonwealth immigration), there hasalso been dramatic shifts in the spatial distribution of the population within Britain, with a general tendency for the population to become less concentrated into larger cities and to move to smaller cities and towns and rural areas. This "counterurbanisation" tendency (Champion, 1990) was perhaps at its strongest in the 1970s, since (at least in England) the rates of population change at different levels of the urban hierarchy tended to converge during the 1980s, and this tendency has continued into the 1990s (Atkins et. al., 1996).

This paper is concerned with the migration patterns of people from minority ethnic groups in the early 1990s, mainly using data from the 1991 Census of Population. These patterns are set within the context of recent population change by ethnic group, as revealed by a set of estimates of population change by ethnic group for local authority districts in England and Wales between 1981 and 1991. The influence of migration on the geographical population change by ethnic group is then considered.

2. Census data on migration by ethnic group

The 1991 Census of Population was the first to contain a question on the ethnic group of each individual in the population, and has therefore become the most comprehensive source of information on the ethnic composition of Great Britain. It is still the only reliable source (before or after 1991) of information on the ethnic composition of localities within Britain. The Special Migration Statistics derived from Census information for 1991 consists of a two data sets; one at the ward scale (set 1) and one at the local authority district scale (set 2). Set 1 disaggregates migration flows by broad age group, while set 2 contains 11 tables for each flow of migrants between districts. One of these tables (table 5 of SMS set 2) provides a breakdown of migration by ethnic group, but this is confined to migration flows between the 459 local authority districts for a four-fold breakdown of the population into white, Black, South Asian and "Chinese and Other" ethnic groups, rather than the ten-fold classification used in most Census output (migration flows between the 10.5 thousand wards in Great Britain are not disaggregated by ethnic group). This is a consequence of the need to protect confidentiality for the small numbers of people involved in many migration flows. A further measure to protect confidentiality was the suppression of an ethnic breakdown for those interdistrict flows involving fewer than 10 persons. The result of this is that there is some uncertainty in measuring the detailed geographical pattern of migration. For each district, the sum of migration flows reported is not equal to the total of out migration to other districts in Great Britain; similarly the total in-migration from identified origins does not equal the total of in-migration from other districts. Hence, a variable proportion of the in- and out-migration streams cannot be located. The same problem is encountered in using the county-level migration data, but by comparing the district-level and county-level flows, it is possible to identify the county of origin or destination of some district-level flows which cannot be traced to a particular district. One further problem (intrinsic with Census or survey data) is that while in-migration from outside the UK is identified in the data, it is not possible to identify the number of persons resident in a district in 1990 who had left the country by the time of the Census. Champion (1996) has provided a comprehensive review of 1991 Census migration data and a useful analysis of the broad patterns revealed. He shows at the county level that migration flows for minority ethnic groups are dominated by migration movements involving London, and demonstrates that net migration had a smaller redistributive effect upon the minority population than upon the white population.

3. Migration patterns for 1990-91

Table 1 summarises the overall magnitude and rates of migration by ethnic group for Great Britain as a whole, derived from the inter-district migration matrix. Just under a tenth of the population aged 1 and over moved address during the year 1990-91, but there was a marked

difference in the rate of mobility between white people and people from minority ethnic groups. Overall, an eighth of the minority population had moved, but this concealed the fact that Chinese & Other people (a fifth of whom moved) were twice as likely to move as South Asian people. The mobility rate of Black people was intermediate between the two, about 50 per cent higher than for white people. However, the bulk of migration was short distance; around 5 per cent of persons move within the same local authority district, this percentage being highest for Chinese & Other people and lowest for South Asians. Only 3.4 per cent of people moved between local authority districts, with a slightly higher percentage of people from minority ethnic groups moving between districts than white people. Once again, the migration rate was highest for Chinese & Other people, just higher for Black people than white people, and South Asian people were least likely to move between districts. International migration was more important for people from minority ethnic groups than for white people; 2.7 per cent of people aged 1 and over in the former had lived outside Great Britain in 1990, compared with 0.5 per cent of white people. This percentage was highest for Chinese & Other people, at 6 per cent. South Asian people were less likely to have moved internationally during the year than other people from minority ethnic groups. Overall. international migrants formed 6.3 per cent of all migrants, but this percentage varied from 5.2 per cent for white people to over 30 per cent of Chinese & Other migrants, while around a sixth of Black and South Asian migrants had lived outside Great Britain in 1990. This reflects the recent rapid growth of the Other-Asian and Black-African ethnic groups, resulting from an increasing number of overseas students studying in Britain, and (especially in the case of the former) an increase in the number of refugees and asylum seekers entering the country.

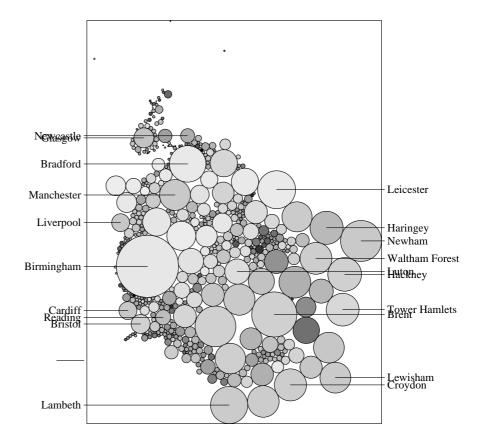
	White	Minorities Black So		South	Chinese &	Total
				Asian	Other	
Persons aged 1 and over	51198713	2948746	870510	1448805	629431	54147459
Changing address 1990-91	4964828	385638	124202	138500	122936	5350466
Percent moving	9.7	13.1	14.3	9.6	19.5	9.9
Moving within district	2713439	154507	49623	65436	39448	2867946
Percent intra-district movers	5.3	5.2	5.7	4.5	6.3	5.3
Moving between districts	1711695	108539	34269	39690	34580	1820234
Percent moving inter-districts	3.3	3.7	3.9	2.7	5.5	3.4
Moving from outside GB	256105	80551	21678	21152	37721	336656
Percent immigrants	0.5	2.7	2.5	1.5	6.0	0.6
Percent of all migrants from	5.2	20.9	17.5	15.3	30.7	6.3
outside Great Britain						
Origins unknown	283583	42041	18632	12222	11187	325624

 Table 1: Summary of migration by ethnic group

3.1 Geographical variations in migration rates

The geographical pattern of migration for minority ethnic groups at the district scale can be summarised through the overall in- out- and net migration rates, which are mapped in Figures 1a to 1d. These maps are based on cartograms calculated from the minority ethnic group population of each district in 1991. These diagrams distort space in order to provide a greater area for districts with a larger population, compressing the space devoted to less populous areas. They attempt to preserve the relative location of districts, but the geography of Britain is somewhat distorted by the procedure. Districts are represented by circles on the maps, shaded darker the larger the migration rate.





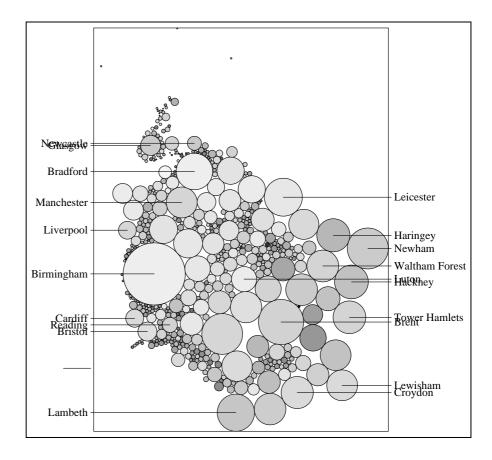


Figure 2: Out-migration rate

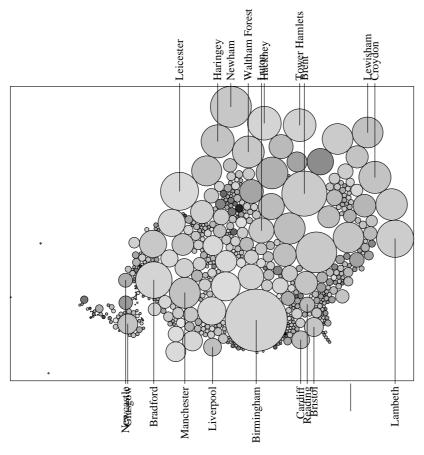


Figure 3: Net in-migration rate

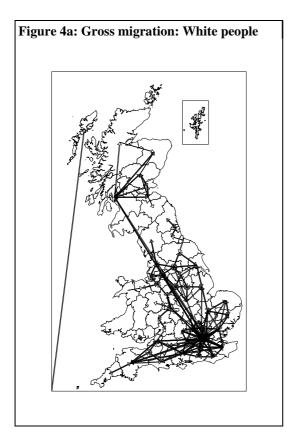
The percentage of persons aged 1 and over who were in-migrants (from all origins) presented in Figure 1 is compared with the percentage of out-migrants (Figure 2) and net migration (Figure 3). These maps emphasise the high rate of in-migration to the London Boroughs with large minority populations, especially in central parts of London. In migration rates to the larger cities (such as Birmingham) were much lower. The highest rate of gross in-migration were in districts with small minority populations in south-east England, along the south coast and in less populous

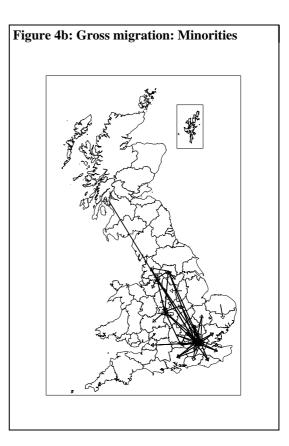
districts surrounding Birmingham. This appears to indicate that the bulk of minority migration was into London, but that there was also a degree of suburbanisation around the major cities with large minority populations. The pattern of out-migration has similarities with that of inmigration since in- and out- migration rates tend to vary together. Out migration rates are again high in populous London Boroughs, but tend to be higer than in-migration rates in northern cities such as Liverpool, but are lower than in-migration rates in smaller towns in the less urbanised parts of southern and eastern England. Net in-migration rates were highest in districts with small minority populations in south-east England, and higher in London Boroughs than in

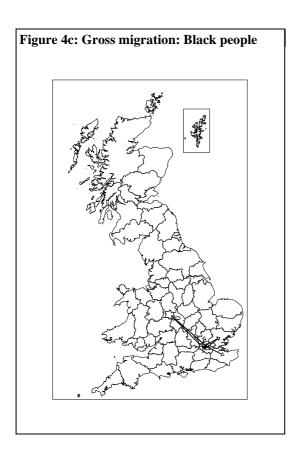
3.2 The pattern of gross and net migration

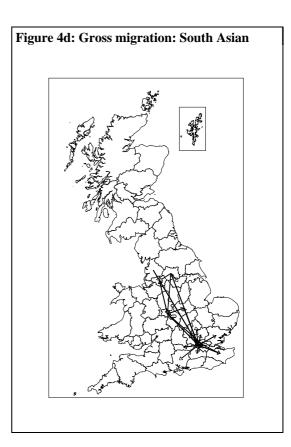
In the maps which follow, the geographical pattern of migration flows is depicted for the 67 counties and Scottish regions in Great Britain, in the form of the largest gross and net migration flows for the entire population, minority ethnic groups, Black people and South Asian people. Gross migration flows of more than 100 people and net migration flows of more than 50 people are drawn between the geometric centroids of the two counties involved in the migration flow. Clearly, the pattern of gross migration is much more complex than that of net migration, and often the flows in each direction are little different in magnitude.

Figures 4a to 4d present the pattern of gross migration for white people, all minority ethnic groups, Black people and South Asian people. The geographical dispersion of migration flows is much greater for white people than for the minority ethnic groups.









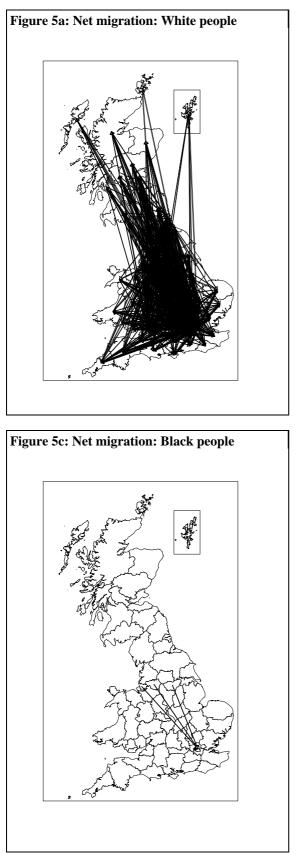


Figure 5b: Net migration: Minorities

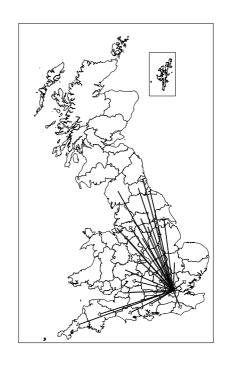
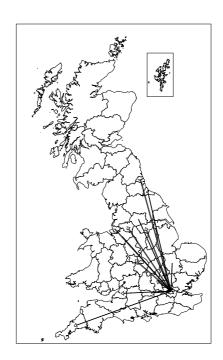


Figure 5d: Net migration: South Asian



For white people (Figure 4a), there are two broad 'axes' of migration, stretching northwestwards (along the main axis of urbanisation) and south-westwards from London, with radial migration flows between London and the surrounding counties, with a link from London to a separate migration system in Scotland, focussed on Strathclyde. For minority ethnic groups as a whole (Figure 4b), the pattern is simpler, with migration flows focussed upon London and the major cities of the midlands and northern England.

For the Black ethnic groups (Figure 4c), the largest flows were of migrants between Inner and Outer London and the surrounding counties, as well as from the West Midlands to Greater London. Gross migration flows for South Asian people (Figure 4d) were more dispersed geographically, with exchanges of population between Greater Manchester, West Yorkshire and Lancashire, which were also linked with the West Midlands and Leicestershire, superimposed on the same basic pattern as for Black people. There was also evidence of larger suburbanising flows around London, moving further south-westwards.

The pattern of net migration was more complex for white people (Figure 5a) because of the greater number of flows which exceeded the smaller threshold. However, it simplifies the broad trends of migration for minority ethnic groups (Figure 5b), and reveals a general tendency for migration from northern, midland and more rural counties to London, and for net out-migration from Inner and Outer London into the surrounding counties, counties to the south-west and major population centres in the north and midlands, such as Greater Manchester and the West Midlands. Relatively few net migration exchanges exceed the threshold of 50 for the Black and South Asian ethnic groups. For Black people (Figure 5c), the largest net migration flow was from Inner to Outer London, while there were net flows of more than 50 people from Merseyside, Greater Manchester and South Yorkshire to Inner London. For the South Asian ethnic groups (Figure 5d), the largest flow was again from Inner to Outer London and surrounding counties such as Berkshire, Bedfordshire and Buckinghamshire, while there were net transfers of population from Inner London to the West Midlands, Greater Manchester, South Yorkshire, Avon and Cornwall. In contrast, London gained South Asian people from Merseyside, West Yorkshire, Tyne&Wear, Cleveland and Cambridgeshire. These county-level patterns show similarities with some features of the regional pattern of migration between 1971 and 1981 revealed by Robinson (1992), using the ONS Longitudinal Study.

	percent	t moving re	esidence, 1	990-91	percent population increase due to net					
					inter-regional migration, 1990-91					
	White	Minor-	Black	South	White	Minor-	Black	South		
		ities		Asian		ities		Asian		
Rest of the South East	10.4	14.8	17.1	11.0	0.1	0.5	0.4	0.7		
East Anglia	11.4	22.8	27.0	14.2	0.6	0.7	1.0	0.4		
Greater London	11.1	13.3	14.1	9.5	-1.0	-0.1	0.0	-0.2		
South West	11.1	17.5	16.7	13.5	0.5	0.5	0.2	0.6		
West Midlands	8.2	9.4	9.6	8.1	0.0	-0.1	-0.2	-0.1		
East Midlands	9.0	10.5	12.4	8.2	0.1	0.0	0.1	0.1		
Yorkshire & Humberside	9.2	11.5	13.7	8.8	0.0	-0.2	-0.2	-0.3		
North West	8.3	12.6	14.7	9.9	-0.2	0.0	0.1	-0.1		
Northern Region	8.6	18.2	21.4	13.4	0.1	-0.2	-0.3	-0.1		
Wales	8.2	18.1	18.9	13.1	0.3	0.0	-0.2	0.7		
Scotland	10.4	20.3	28.6	14.0	0.2	-0.1	-0.9	0.2		

 Table 2: Summary of regional migration by ethnic group, 1990-91

The geographical scale of the ten standard regions, plus Greater London, is convenient for summarising the net effect of migration by ethnic group (Table 2). The rate of mobility in each ethnic group is calculated as the percentage of the resident population aged 1 and over in 1991 who had moved residence during the year before the Census. Between 8.2 and 11.1 per cent of white people has moved during the year, the great majority remaining within the same region. The rate of mobility was higher across southern England and in Scotland than in the remainder of Britain, being highest in East Anglia and lowest in the West Midlands and Wales. The percentage of people from minority ethnic groups moving during the year was much higher, but was still lowest in the West Midlands and highest in East Anglia. In contrast with white people, rates of mobility were much higher in Wales, Scotland and peripheral regions of England than in Greater London and the more urbanised regions of England. This pattern reflects the pattern of mobility rates for the Black ethnic groups, with more than quarter of Black people moving residence in Scotland and East Anglia (possibly reflecting the movement of Black people in the armed forces and in higher education), and a fifth or more moving in Wales and peripheral regions in England. Rates of mobility were lowest in the West Midlands and the more populous regions of northern England. A lower percentage of South Asian than white or Black people moved in the regions of central and northern England, and while their mobility rates were higher than those of white people in Wales, Scotland and peripheral England, these rates were lower than the corresponding rates for Black people.

The great bulk of movement in the year before the Census took place on a very localised scale, and hence did not affect the regional distribution of population; the percentage of the population moving inter-regionally was very small, accounting for only 1.2 per cent of white people, 1 per cent of people from minority ethnic groups, 0.7 per cent of Black people and 0.9 per cent of South Asian people (Champion, 1996, 147). The difference between the number of people arriving in a region from other parts of Great Britain and the number leaving for another region is presented as a percentage of all persons aged 1 and over in 1991 in the four right hand columns of Table 7. For white people, the most important effects of migration were to reduce the population of Greater London by 1 per cent, while the regions gaining most population due to inter-regional migration were East Anglia and the South West. For ethnic minorities as a whole, there was net out-migration from Greater London, and net inmigration into East Anglia, the Rest of the South East and the South West, suggesting a tendency for suburbanisation out of London into surrounding areas. This pattern was more marked for Black people, with gains in the Rest of the South East and East Anglia while the effect of migration upon greater London's population was neutral. There was a tendency for Black people to move away from Scotland, Wales, northern England and the West Midlands. The small net movement away from Greater London into surrounding regions was even more marked for the South Asian ethnic groups, for whom the population of the Rest of the South East grew by 0.7 per cent while that of Greater London fell by 0.2 per cent, due to interregional migration. Inter-regional migration reduced their population in northern England and the West Midlands, while increasing it in Wales, Scotland and the East Midlands.

The pattern of migration between 1990 and 1991 for minority ethnic groups will now be placed in the context of the geographical pattern of population change during the 1980s.

4. Estimating ethnic group population change, 1981-91

The analysis of population change by ethnic group in Great Britain is severely handicapped by the lack of data classified by ethnic group prior to the 1991 Census of Population and the inconsistencies in coverage and classification of the alternative sources used to provide an indication of the size of the minority ethnic group population. Previous Censuses estimated the minority ethnic group population from the number of persons born in the New Commonwealth, or assumed to have parents born in the New Commonwealth. However, with the continued growth of the British-born minority population, this was recognised to be an inadequate and inaccurate way of measuring the minority ethnic group population, and from 1979 onwards, the Labour Force Survey (collected annually, covering around 0.25 per cent of households in the UK) collected information on the (self-assigned) ethnic group of each individual surveyed. This source was used to identify trends in minority ethnic group populations during the 1980s, revealing that the minority population increased by 28 per cent between 1981 and 1989-91 (OPCS, 1992).

The main drawback of the LFS before it switched to a quarterly basis in Spring 1992 was that it could not produce reliable sub-national estimates of the populations of individual ethnic groups, because of the small sample size and the spatially clustered sampling strategy, which was abandoned in favour of simple random sampling (Sly, 1993). Haskey (1991) attempted to overcome this problem by combining LFS data with 1991 Census data in order to produce sub-national estimates of the population by ethnic group, but these estimates proved rather unsatisfactory, since the crude geographical basis of the LFS meant that the minority population of cities were underestimated, while those of the surrounding hinterlands were over-estimated.

The availability of the 1991 Census data has led a number of researchers to return to the question of devising methods of estimating the ethnic composition of small areas in 1981 in order to make geographically disaggregated estimates of population change by ethnic group over the decade 1981-91. Rees and Phillips (1996) derived a set of estimates for 1981, by calculating the ethnic breakdown of the population by country of birth (using data from table 51 of the 1991 Census Local Base Statistics), and applying these proportions to 1981 Census data on the population disaggregated by country of birth, summing across countries of birth to yield estimates of population by ethnic group for all local authority districts in Great Britain for 1981. The estimated population of an area by ethnic group is calculated from the formula;

$$P_{ij} = \sum_{k=1}^{nk} c_{ik} \times p_{ijk}$$

-- 1.

where P_{ij} is the estimated population of ethnic group j in area i, c_{ik} is the number of people born in country k living in area i, p_{ijk} is the proportion of persons born in country k who are from ethnic group j, living in area i.

Owen and Ratcliffe (1996) created an alternative set of 1981 estimates for the 1991 Census ward geography covering England and Wales, based upon a development of the Rees and Phillips approach. In this method, the first refinement was to adjust the matrix of ethnic group by country of birth to take into account the Census undercount, using factors derived by the ESRC Estimating with Confidence Project (Simpson, et. al., 1995). The second refinement is

to modify the elements of the matrix $p_{ijk.}$, in order to take into account changes in the relationship between country of birth and ethnic group during the 1980s, which meant that the percentage of persons born in the uk who were not white would have been higher in 1991 than was the case in 1981. Refinement of the matrix is achieved by calculating a similar matrix for people aged 10 and over in 1991 (using the Sample of Anonymised Records for the SAR area in which the ward was located). The ratios between each cell of this matrix for over ten year-olds and that for the population as a whole were calculated, and applied to Local Base Statistics table 51, adjusted to take Census underenumeration into account for each individual ward. The resultant matrix was used in the formula defined for method (2), and the resulting estimates constrained to sum to the 1981 mid-year estimate for the district. It did not prove possible to apply this method in Scotland², and hence estimates were only produced for England and Wales.

5. Patterns of population change, 1981-91

5.1 Overall trends for England and Wales

The estimated overall pattern of change by ethnic group, generated by aggregating estimated ward population data up for England and Wales as a whole, is presented in Table 3. The total population (from the mid-year estimate series) increased by 3 per cent over the decade, with the number of white people increasing at about half this rate, while the minority ethnic group population increased by just over 30 per cent. These estimates are broadly consistent with those provided by the Labour Force Survey and alternative demographic estimates of population change by ethnic group for Great Britain as a whole made by Owen (1995).

Table 5 : Estimated chang	ge in innority	etimic grou	p population	s for England	u anu wales,	, 1901-91
Ethnic group	1981	1991	Change	Percent	Percent of	Percent of
	population	population		change	population,	population,
					1981	1991
White	47290.5	48024.0	733.5	1.6	95.3	94.0
Minority ethnic groups	2343.7	3075.5	731.7	31.2	4.7	6.0
Black	783.4	926.1	142.7	18.2	1.6	1.8
Black-Caribbean	515.7	520.6	4.9	1.0	1.0	1.0
Black-African	135.9	221.2	85.4	62.8	0.3	0.4
Black-Other	131.9	184.3	52.4	39.8	0.3	0.4
South Asian	1087.9	1503.2	415.3	38.2	2.2	2.9
Indian	695.2	858.8	163.6	23.5	1.4	1.7
Pakistani	323.8	476.0	152.2	47.0	0.7	0.9
Bangladeshi	68.9	168.4	99.4	144.2	0.1	0.3
Chinese & Other	472.4	646.2	173.8	36.8	1.0	1.3
Chinese	120.0	152.4	32.4	27.0	0.2	0.3
Other-Asian	143.5	200.3	56.8	39.6	0.3	0.4
Other-Other	208.9	293.5	84.6	40.5	0.4	0.6
Total	49634.3	51099.5	1465.2	3.0	100.0	100.0

Table 3 : Estimated change in minority ethnic group populations for England and Wales, 1981-91

The fastest-growing ethnic groups were the Bangladeshis, Black-Africans and Pakistanis, all increasing by more than half over the decade, while Black-Others, Other-Asians and "Other-

Others" grew by about 40 per cent over the decade. The slowest growth was recorded by the Black-Caribbean ethnic group, while the Indian and Chinese ethnic groups grew by about a quarter. The change in the balance of Black population growth from the Black-Caribbean to the Black-Other ethnic group seems plausible, since many children of Black-Caribbean parents would be recorded as "Black British" or may have one white (or other ethnic group) parent. The very youthful age structure and the high percentage of British-born in the Black-Other ethnic group supports this conclusion.

There are some important differences between these and other estimates of population change. In these estimates, the Black-Caribbean ethnic group remains more or less stable in size over the decade, contrasting with a decline of 14 per cent in the number of West Indians and Guyanese in the Labour Force Survey estimates for Great Britain over the period from 1981 to 1989-91. The rate of increase in the Indian population was about twice that of the LFS data for Great Britain, while the estimated rate of increase in the Other-Asian, Other-Other and Black-Other ethnic groups was well under half that of the Mixed and Other ethnic groups in the LFS estimates. The results for Black-Caribbeans and Indians certainly seem more reasonable than those contained within other estimates, while it is more difficult to compare the Census "other" categories with the LFS "mixed" and "other" ethnic groups.

5.2 Population change within England and Wales

Table 4 presents the pattern of population change by region within England and Wales. The pattern is a familiar one of most rapid population growth in East Anglia and the South West, followed by the Rest of the South East (RoSE) and East Midlands, with population decline in the North West and Northern Region. Overall, the fastest growing region added nearly a tenth of its 1981 population over the decade, while the fastest declining region lost 1 per cent of its 1981 population.

Region/Country	1981	1991	Overall	Percent	Minority	Percent	Minority
Region/Country							5
	(000s)	(000s)	Change	U	-	U	
			(000s)		(000s)		change
East Anglia	1893.9	2081.9	188.0	9.9	8.2	21.6	4.3
South West	4381.4	4717.8	336.4	7.7	16.4	34.1	4.9
Rest of the South-East	10205.6	10746.9	541.2	5.3	88.4	32.8	16.3
East Midlands	3852.8	4035.4	182.6	4.7	45.3	30.3	24.8
Wales	2813.5	2891.5	78.0	2.8	14.4	50.3	18.5
West Midlands	5186.6	5265.5	78.8	1.5	84.1	23.4	106.7
Yorkshire & Humberside	4918.4	4982.8	64.4	1.3	57.9	34.4	90.0
Greater London	6805.6	6889.9	84.4	1.2	339.4	32.1	402.2
Northern Region	3117.4	3091.7	-25.6	-0.8	12.6	46.0	-49.3
North West	6459.1	6396.1	-63.0	-1.0	56.1	28.3	-89.0

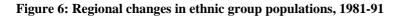
 Table 4: Regional population change in England&Wales, 1981-91

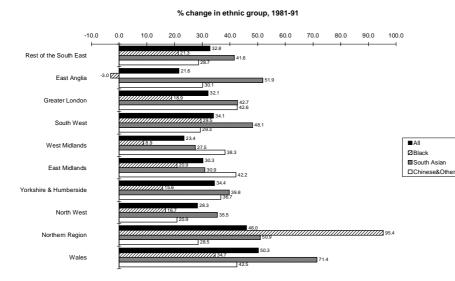
The minority ethnic group population increased in all regions over the decade, at a much faster rate than the white population. The range of increases was from 21.6 per cent in East Anglia, to over 50 per cent in Wales. In numerical terms, the increase in the minority ethnic group population was dominated by the South East, with the minority population of Greater London increasing by a third of a million over the decade. The other main foci of minority population increase were the West Midlands, Yorkshire & Humberside and the North West, with a smaller increase in the East Midlands. The last column of the table demonstrates the

contribution of minority ethnic group population growth to overall population change. The most dramatic feature to emerge is that the increase in the minority population of Greater London was four times greater than the overall population increase. Minority population growth also exceeded overall population growth in the West Midlands, was 90 per cent of the increase in Yorkshire and Humberside and almost matched the decline in the North West population change in East Anglia and the South West. These results suggest that Greater London, the West Midlands and Yorkshire and Humberside would have lost population in the absence of minority ethnic group population growth, while the decline in the North West's population would have been even more marked. The regions of most rapid population growth were gaining population predominantly through the increase in the white population, which was falling in the most urbanised regions, though there were also intermediate cases such as the Easy Midlands, of a slower rate of population growth, with strong growth of both the white and minority populations, in which minority population growth formed a smaller component of overall population change.

	All minorities		Black		South	Asian	Chinese&Other		
	1981	1991	1981	1991	1981	1991	1981	1991	
Greater London	15.5	20.3	6.9	8.1	5.5	7.8	3.1	4.4	
West Midlands	6.9	8.4	1.9	2.0	4.4	5.5	0.7	0.9	
East Midlands	3.9	4.8	0.9	1.0	2.5	3.1	0.5	0.7	
Yorkshire & Humberside	3.4	4.5	0.7	0.8	2.2	3.0	0.5	0.7	
North West	3.1	4.0	0.7	0.8	1.7	2.4	0.7	0.8	
Rest of the South East	2.6	3.3	0.6	0.7	1.2	1.6	0.8	1.0	
East Anglia	2.0	2.2	0.8	0.7	0.5	0.7	0.6	0.8	
Wales	1.0	1.5	0.3	0.3	0.3	0.6	0.4	0.6	
South West	1.1	1.4	0.4	0.5	0.3	0.4	0.4	0.5	
Northern Region	0.9	1.3	0.1	0.2	0.5	0.7	0.3	0.4	

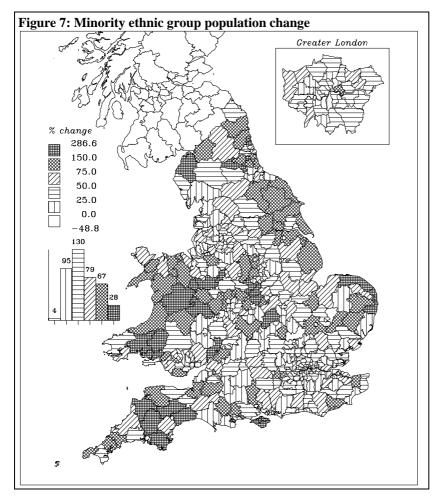
Table 5: Change in ethnic composition by region, 1981-91





The changing ethnic composition of regions in England and Wales is presented in greater detail in Table 5. The minority ethnic group share of the population was largest in Greater London and the West Midlands in both 1981 and 1991, and also increased most substantially

in these regions, by 4.8 per cent in the former and 1.5 per cent in the latter. In Greater London, the increase was relatively substantial in all the three broad ethnic groupings; Black, South Asian and Chinese & Other, but greatest in the South Asian category, whose share of the population was 2.3 per cent higher in 1991. The increase in the population shares of each minority ethnic grouping was far larger in Greater London than in other regions. Elsewhere, the Black share of the population was nowhere more than 0.1 per cent higher in 1991 than in 1981, and actually declined in East Anglia, mirroring the regional pattern of change for the Chinese & Other ethnic groups. The increase in the South Asian share of the population was only above 1 per cent in Greater London and the West Midlands, and declined as the minority share of the population declined, the South Asian share of the population only being between 0.1 and 0.3 per cent greater in 1991 than 1981 in the peripheral regions of England (The South West, East Anglia and the Northern Region) and in Wales.



The regional pattern of rates of change in ethnic minority populations was rather different. The minority population increased fastest (by 50.3 per cent) in Wales and the Northern Region, but increased by between a fifth and a third in most of the remaining regions of England (Figure 6). The slowest increase was in East Anglia, while the West Midlands and North West gained minority population more slowly than other regions. There were some extremely large regional changes in the populations of the broad ethnic groupings; for example. the Black population of the Northern Region almost doubled over the decade, though

the Black population of east Anglia declined, and that of the West Midlands only increased by 8.9 per cent. The South Asian population tended to increase most rapidly in the regions of most rapid population growth (East Anglia and the South West), but increased most rapidly in Wales (71.4 per cent). The increase in population of the Chinese & Other was greatest in Greater London, the Midlands and Wales.

The geographical pattern of minority population change is presented in Figure 7. The fastest rates of minority population growth are generally found in the more peripheral and rural areas of England and Wales. Some of the slower rates of increase, or declines occurred in more prosperous areas in the commuter belt or semi-rural areas, and rates of increase were relatively

low in areas of long-standing minority settlement. In Greater London (with the exception of Tower Hamlets) rates of increase were much higher on the periphery than in the inner areas.

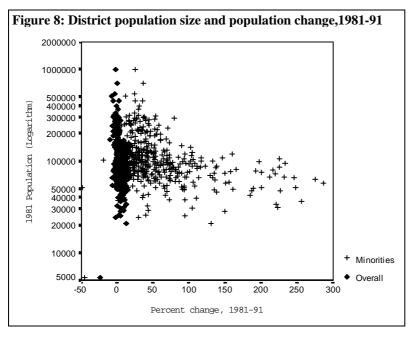


Figure 8 compares the rate of population change for the population as a whole with that of minority ethnic groups for the 403 local authority districts in England and Wales. It reveals that there was very little relationship between population size in 1981 and the rate of population change over the decade, though there was a slightly stronger tendency for the rate of minority population increase change to as population size decreased.

In order to explore the patterns of population change further, local authority district level population estimates for 1981 and 1991 were aggregated, using the Office for National Statistics' 1991 Census-based classification of districts (Wallace and Denham, 1996)³. Table 4 ranks these clusters, in descending order of minority ethnic group population change between 1981 and 1991.

All types of area except "areas of transient populations" (e.g. Richmondshire, containing the Catterick military bases) gained people from minority ethnic groups over the decade. Population increase was greatest in "areas with large ethnic minority populations" (e.g. Birmingham), "suburbs" (mainly Outer London), "cosmopolitan outer London boroughs", "pennine towns", "Newham & Tower Hamlets", "inner city LBs" and "central London", all of which gained more than 30 thousand persons over the decade. Percentage rates of growth were moderate, minority populations increasing by between a fifth and a quarter for most of The most rapid growth was for the "Newham & Tower Hamlets" and these clusters. "suburbs" clusters, in which the minority population increased by over 60 per cent and 40 per cent, respectively. With the exception of the "pennine towns" (which contains large towns such as Bolton and Rochdale) minority ethnic groups represented more than 10 per cent of the resident 1991 population in all these cluster types, demonstrating that the bulk of minority ethnic group population growth over the decade 1981-91 occurred within existing ethnic minority concentration in 1981. Overall, the population of these cluster types remained more or less static or declined (in "areas with large ethnic minority populations") over the decade, indicating that the rapid minority population growth was counteracting the loss of white population, rather than increasing the populations of these areas. However, fairly rapid rates of minority population growth in "areas with inner city characteristics" (e.g. Manchester, Liverpool) and "coastal industry" (e.g. Newcastle, Sunderland) were inadequate to counteract the relatively high rates of overall population decline. The most rapid rates of population growth occurred in areas with small populations, such as "remoter England & Wales" or the "heritage coast", where increases above 90 per cent only added around 3 thousand to the total minority ethnic group populations, which continued to form a very small percentage of the total.

ONS District-level cluster	1991	Percent	% Overall	Mino	rity ethnic gr	ethnic groups		
	Population	of England	population					
	(000s)	and Wales	change,		Change 81-	%change		
			1981-91	1991 pop	91 (000s)	1981-91		
Areas with large ethnic min. pop.	2988.2	6.0	-0.6	15.4	113.5	24.5		
Suburbs	2466.0	5.0	1.0	11.0	109.0	40.7		
Cosmopolitan Outer LBs	1414.2	2.8	0.1	23.1	74.8	22.9		
Newham & Tower Hamlets	389.4	0.8	8.7	39.6	58.2	60.7		
Pennine towns	2542.1	5.1	0.1	6.4	46.8	28.9		
Inner City LBs	845.2	1.7	2.8	27.2	45.6	24.7		
Central London	940.3	1.9	1.5	15.5	32.8	22.8		
New & expanding towns	2103.2	4.2	9.6	3.8	28.8	39.8		
Satellite Towns	3067.5	6.2	3.7	2.6	26.8	35.3		
Areas with inner city character	2008.0	4.0	-4.4	4.9	25.3	24.6		
Established service centres	2709.5	5.4	0.8	2.7	23.8	32.9		
Metropolitan overspill	1313.6	2.6	0.4	3.2	20.3	47.8		
Growth corridors	3048.3	6.1	9.0	1.8	17.8	35.9		
Industrial margins	2702.7	5.4	3.1	1.0	13.4	49.8		
Established high status	2169.3	4.4	2.2	1.8	13.1	33.6		
Coastal industry	1890.6	3.8	-3.0	2.1	12.8	31.2		
Mining & industry, Wales	1837.9	3.7	1.4	1.5	11.7	41.8		
Mining & industry, England	2792.8	5.6	0.1	0.9	10.5	40.4		
University towns	826.3	1.7	2.5	4.1	8.3	25.1		
Traditional seaside towns	1937.6	3.9	5.7	1.0	6.8	35.6		
Market towns	1732.1	3.5	7.0	0.6	5.6	60.9		
Accessible amenity	2613.8	5.3	4.9	0.6	5.1	33.1		
Towns in country	1494.4	3.0	5.7	0.6	4.1	52.5		
Concentrations of prosperity	392.6	0.8	11.1	2.0	3.6	51.8		
Remoter England & Wales	1249.2	2.5	8.3	0.3	3.2	96.0		
Heritage Coast	1043.9	2.1	21.1	0.4	3.1	93.1		
Mining&ind., Wales & Durham	1231.7	2.5	-1.9	0.3	3.0	67.6		
Smaller seaside towns	555.2	1.1	9.7	0.5	1.6	71.7		
Scottish towns	296.2	0.6	-0.5	1.2	1.0	28.6		
Areas with transient pop	387.2	0.8	8.2	3.9	-2.2	-15.9		

 Table 6: Population change by ONS cluster type, 1981-91

However, between these two extremes, there is evidence of suburbanisation in the pattern of minority population change. Areas such as the "new & expanding towns", "growth corridors" and "satellite towns" experienced both relatively rapid overall population growth and rapid minority population growth, representing relatively substantial numbers of people, but despite this growth, the minority share of the population remained well below the Great Britain average of 5.5 per cent in 1991. The areas of fastest overall population growth such as the "heritage coast" and "concentrations of prosperity" gained relatively small numbers of people from minority ethnic groups.

Table 7 examines this pattern further, by disaggregating population change by ethnic group in each cluster type. The table presents the percentage of overall population change accounted

for by the change in the population of each ethnic group, ranked in ascending order of the ratio of white population change to overall population change, multiplied by 100.

	Population	White	Black		Indian	Pakistani	Chinese &
	change, 81			Asian			Other
	91 (000s)						
Cosmopolitan Outer LBs	1.0	-7039.1	2072.5	3008.9	1801.4	810.3	2057.8
Pennine towns	1.6	-2771.6	145.6	2419.0	467.7	1542.4	307.1
Mining & industry, Engla	1.7	-519.8	87.6	393.6	93.9	265.2	138.5
Suburbs	24.3	-348.3	97.2	236.3	183.1	30.4	114.8
Metropolitan overspill	5.1	-295.6	66.0	217.4	172.8	24.8	112.3
Central London	14.3	-128.9	59.2	76.7	9.7	12.8	93.1
Inner City LBs	22.8	-100.2	99.3	37.3	9.8	3.3	63.6
Newham & Tower Hamlets	31.3	-85.8	28.6	132.1	21.6	13.7	25.1
Established service cent	20.6	-15.4	24.2	62.4	20.6	26.4	28.8
Mining & industry, Wales	25.9	54.8	6.8	24.0	4.9	9.8	14.4
University towns	20.4	59.1	12.3	20.2	3.8	11.1	8.4
Established high status	45.9	71.5	3.0	15.5	8.8	3.3	9.9
Satellite Towns	109.6	75.5	3.2	15.0	8.3	4.6	6.2
Industrial margins	82.1	83.7	2.6	8.9	4.2	4.0	4.8
New & expanding towns	184.6	84.4	2.8	8.5	4.3	3.1	4.3
Concentrations of prospe	39.1	90.8	1.7	3.9	2.5	1.2	3.6
Growth corridors	251.2	92.9	1.3	3.3	0.9	1.8	2.5
Traditional seaside town	105.1	93.5	1.6	2.5	0.8	0.5	2.4
Towns in country	80.8	94.9	1.2	1.2	0.6	0.3	2.6
Market towns	113.4	95.1	1.3		1.1	0.3	1.9
Accessible amenity	121.6	95.8	1.4	1.5	0.5	0.3	1.3
Smaller seaside towns	49.2	96.7	0.9	0.9	0.4	0.1	1.6
Remoter England & Wales	96.1	96.7	1.1	0.8	0.4	0.2	1.4
Heritage Coast	181.6	98.3	0.7	0.4	0.1	0.1	0.7
Areas with transient pop	29.2	107.6	-9.2	2.9	0.7	1.9	-1.4
Mining&industry, Wales&D	-23.9	112.4	-2.7	-5.5	-2.3	-1.4	-4.3
Coastal industry	-59.5	121.5	-2.9		-2.4	-6.6	-5.1
Areas with inner city character.	-92.4	127.4	-7.8	-14.5	-2.4	-10.0	-5.1
Scottish towns	-1.6	161.0	-8.5	-15.3	1.5	-9.8	-37.1
Areas with large ethnic	-19.3	688.1	-42.3	-485.8	-145.1	-265.3	-60.0

 Table 7: Ratios of population change by ethnic group to overall population change, 1981-91

At the top of the table are a number of clusters in which population was nearly stable, resulting from a loss of white population being just outweighed by a gain of population from minority ethnic groups. In each of these, South Asian population growth was the largest component of increase, more usually Indian, though Pakistani growth was the most important component of population growth in the "pennine towns". In London, suburbanisation of Black people was more significant, into the "cosmopolitan outer LBs" and "suburbs", but the growth of the population of the "inner city LBSs" and "Newham & Tower Hamlets" was a result of a falling white population being replaced by the growth of (mainly) the Black population in the former and the South Asian (Bangladeshi) population in the latter. Growth of the Chinese & Other ethnic groups assumed greater importance in "central London" and in "metropolitan overspill" areas. At the bottom of the table, there are a number of clusters losing population, in which the rate of loss of white population is faster than the overall rate. These are mainly economically depressed cities and towns and relatively deprived areas. In these areas, the

trend of minority population change is again opposite, partly compensating for the loss of white population, but not managing to sustain the overall population. In most of these areas, the main counterbalance to white population loss is the gain in South Asian population, more likely to be of Pakistani than Indian people, especially in deprived districts, such as the "areas with inner city characteristics", or "Scottish towns" (mainly located in North East England). The most striking of these clusters is "areas with large ethnic minority populations" (which includes Birmingham), in which the white population loss is nearly 7 times the overall decline, and in which the growth of South Asian population is nearly five times the overall decline (mostly due to Pakistani and Bangladeshi population growth).

In the middle of the table are a set of clusters ("mining & industry, Wales", "university towns", "established high status", "satellite towns", "industrial margins" and "new & expanded towns") in which white and minority ethnic groups are both gaining in population, but in which minority ethnic group population change has substantially increased population change. In most, the most important component of population change was the increase in South Asian people, usually Indian people, with a strong increase in the Chinese & Other ethnic group as well. However, "university towns" are distinctive for the large (relative to other clusters) increase in the Black population, and the greater increase of the Pakistani than the Indian ethnic group.

It is notable that white population growth dominates the population increases of clusters which are more prosperous or located in more rural areas and encompassing growing small towns. In clusters such as "concentrations of prosperity" or "growth corridors" the Black component of population change is very small, while the growth of the Chinese & Other ethnic groups equals that of South Asians. In more remote areas such as "towns in country", "smaller seaside towns", or "remoter England & Wales", the growth of the minority population is a very small part of total population change, dominated by increase in the population of the Chinese & Other ethnic groups.

Clearly, the contribution of different ethnic groups to population change varies considerably across the various different types of district in England and Wales. In the remainder of this paper, the contribution of migration to population change by ethnic group will be considered.

6. Components of population change between 1981 and 1991

An alternative source of useful contextual information on the influence of migration upon population change is provided by the Office for National Statistics estimates of the components of change in mid-year population estimates. Figure 9 presents the estimated components of population change between 1981 and 1991, aggregated into the 30 ONS clusters represented in England and Wales. The diagram contrasts the influence of natural increase upon population change with that of net migration (and other residual influences) over the decade.

Natural change was the most influential force behind the strong population growth of "Newham & Tower Hamlets" (reflecting the relative youth and high fertility rates of the local Bangladeshi population), and this component was also responsible for increasing the population by more than a tenth in "areas with large ethnic minority populations", "inner city LBs" and "cosmopolitan outer LBs", all of which had significant minority ethnic group

populations. In contrast, the influence of natural change was to reduce the population in resort and retirement clusters such as "smaller seaside towns" and "traditional seaside towns" (reflecting their elderly population structures), with a less marked influence upon the clusters "accessible amenity", "heritage coast" and "remoter England & Wales".

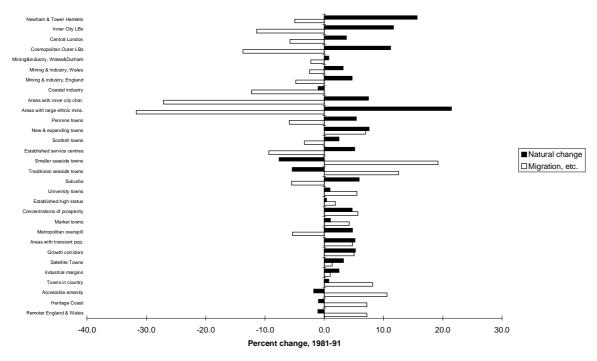


Figure 9: Components of population change, 1981-91

In most cases, the influence of migration was in the opposite direction to that of natural change. Loss of population as a result of net out-migration was most marked for "areas with inner city characteristics" and "areas with large ethnic minorities". In the four London clusters at the top of the diagram, strong natural increase was counterbalanced by net out-migration, strongest in the "cosmopolitan outer LBs" and "inner city LBs", but population loss due to net out-migration was greatly outweighed by natural increase in "Newham and Tower Hamlets". Net out-migration was also experienced in "mining and industrial" clusters, the "pennine towns", "Scottish towns", "established service centres", "suburbs", "metropolitan overspill" and "areas with transient populations". Most areas of net out-migration were in larger urban areas or economically declining areas. In contrast, more economically dynamic clusters such as "new & expanding towns", "concentrations of prosperity", "market towns", "growth corridors", and those in more environmentally attractive areas such as "smaller seaside towns", "traditional seaside towns", "towns in country", "accessible amenity", "heritage coast" and "remoter England & Wales" gained population through net in-migration.

Much of the influence of minority population growth in compensating for white population loss was probably therefore a result of natural increase (a relatively large number of births in a youthful population experiencing relatively few deaths), rather than the result of in-migration. In the next section, the pattern of net in-migration by minority ethnic groups will be compared with that of white people in order to identify whether, and in which parts of the urban system of England and Wales, net in-migration played a significant part in the manner in which minority population change influenced overall population change.

7. Net migration 1990-91 and population change

Fable 8: Net migration by ethnic group and population change by cluster (England and Wales) Population change, 1981- Net in-migration Share of net in-migration											
	Populati	on chang 91	e, 1981-	Net in-n	nigration	Share of net in-migration					
				(000s)	percent	Minor-	Black	South Chines			
	(000s)	change	ity %	(0008)	of 1991	ities	DIACK	Asian	&Other		
New & expanding towns	184.6		-	2.2	0.1	27.4	6.7	17.1			
Pennine towns	1.6		28.9		-0.1	27.4	2.8	16.9			
Satellite Towns	109.6		35.3			26.5	-0.5	21.9			
Inner City LBs	22.8	2.8	24.7	-12.1	-1.4	20.3	11.9	4.1	4.3		
Mining & industry, Wales	25.9	1.4	41.8		-0.1	19.1	2.3	4.9			
Newham & Tower Hamlets	31.3		60.7		-0.1	19.1	1.7	13.2			
Central London	14.3	1.5	22.8		-0.9	17.0	8.5	4.6			
Cosmopolitan Outer LBs	14.5		22.0		-0.9	17.0	-0.6	9.5			
Established high status	45.9	2.2	33.6		0.3	9.4	1.3	5.5			
Concentrations of prosperity	39.1	11.1	51.8			8.1	0.1	7.5			
Areas with large ethnic mins	-19.3	-0.6	24.5			8.0	0.3	7.9			
Areas with transient pop.	29.2	8.2	-15.9		0.8	6.3	4.8	-0.9			
Growth corridors	251.2	9.0			0.4	5.6	0.8				
Industrial margins	82.1	3.1	49.8	4.9	0.2	5.4	0.7	3.0			
University towns	20.4			-6.7	-0.8		0.9				
Established service centres	20.6						1.0				
Areas with inner city char.	-92.4	-4.4	24.6				-0.8				
Smaller seaside towns	49.2		71.7				1.2	0.7			
Scottish towns	-1.6						-0.4	-1.5			
Coastal industry	-59.5	-3.0	31.2			1.9	0.5	0.5			
Traditional seaside towns	105.1	5.7	35.6		0.2	1.5	0.3	1.0	0.1		
Accessible amenity	121.6	4.9		17.6	0.7	1.2	0.0	0.8			
Towns in country	80.8	5.7	52.5	10.6	0.7	0.9	-0.4	0.3	0.9		
Mining&ind. Wales&Durham	-23.9	-1.9	67.6	1.6	0.1	0.9	0.4	-1.7	2.1		
Remoter England & Wales	96.1	8.3	96.0	8.7	0.7	0.8	0.2	0.4	0.2		
Market towns	113.4	7.0	60.9	7.8	0.5	0.8	0.0	-0.2	0.9		
Heritage Coast	181.6	21.1	93.1	4.7	0.5	0.1	-0.2	0.9	-0.6		
Metropolitan overspill	5.1	0.4	47.8	-2.2	-0.2	-35.0	-7.9	-23.4	-3.7		
Suburbs	24.3	1.0	40.7	-7.7	-0.3	-59.1	-22.1	-24.1	-12.9		
Mining & industry, England	1.7	0.1	40.4	-0.2	0.0	-81.7	9.7	-45.7	-45.7		

In Table 8, the contribution of minority ethnic groups to net in-migration from elsewhere in Great Britain (ranked in descending order) is contrasted with population change across the 30 clusters of the ONS district-level classification. At the top of the ranking, minority ethnic groups accounted for more than a fifth of net in-migration to "new & expanding towns", "pennine towns", "satellite towns" and "inner city LBs", and formed almost as large a component of in-migration in other London clusters such as "Newham & Tower Hamlets". In all but "inner city LBs", South Asians formed the bulk of migrants from minority ethnic groups. The Black share was highest in the net out-migration of Black people in London. The rate of minority population growth was much higher than the average rate, which was moderately slow, except for "new & expanding towns" (which gained nearly ten per cent extra population over the decade) and "Newham and Tower Hamlets". At the bottom of the table, minorities were gaining population due to net-in migration in the "metropolitan overspill",

"suburbs" and "mining & industry, England" clusters which were growing slowly, but losing population overall due to net out-migration.

However, most of the clusters experiencing both rapid population increase and a high rate of population growth appear much lower down the table. "Growth corridors" gained a quarter of a million people, 9 per cent of their 1981 population, and while the minority population grew by more than a third, minority ethnic groups only made up 5.6 per cent of in-migrants. The "traditional seaside towns", "accessible amenity", "market towns" and "heritage coast" clusters also gained more than 100 thousand residents over the decade, increasing by 5 per cent or more, and while their minority populations were estimated to have increased rapidly (from a small base), minorities formed a very small percentage of net in-migrants.

The effect of net in-migration during 1990-91 ranged from a loss of 1.4 per cent of the population of "inner city LBs" to a gain of 1 per cent of the population of "smaller seaside towns". The highest rates of net in-migration occurred in resort, more remote and less populous areas such as "smaller seaside towns", "accessible amenity", "remoter England & Wales" or in areas of high population turnover, such as "areas with transient populations". Among the clusters of rapid population growth, only in "accessible amenity" did net in-migration comprise more than 0.5 per cent of the population. The rate of net out-migration was highest in London, in the clusters "inner city LBs", "Newham & Tower Hamlets", "cosmopolitan outer LBs" and "central London".

The picture which emerges from this is that the areas of most dynamic population growth were gaining population mainly due to high rates of natural increase and the net in-migration of white people (the main exception was the "new & expanding towns" cluster). Estimated rates of minority population growth were relatively high in these clusters, but occurring within small populations. This occurred in its most extreme form in clusters such as the "market towns" and "heritage coast" in which the minority population was estimated to have grown at very high rates, and while these areas gained population through relatively rapid net in-migration, the minority share of net in-migration was extremely small. Minority ethnic groups followed the overall trend for migration away from areas of population decline such as the "areas with inner city characteristics", "coastal industry" and "areas with large ethnic minority populations", but formed a relatively small part of the migrant flow. In contrast, for much of London (and, to a lesser extent, the "pennine towns") the minority ethnic group population increased fairly rapidly, but also formed a large part of a relatively substantial net out-flow of population.

8. Conclusions

This paper has analysed the pattern of migration for minority ethnic groups within Great Britain, and explored the influence which migration has had upon the changing distribution of ethnic groups within England and Wales. The rate of migration between 1990 and 1991 was higher for minority ethnic groups than for white people, but there were clear differences in the degree of mobility between ethnic groups. The smallest component of the minority population, the "Chinese & Other" ethnic groups were the most mobile (especially in terms of international migration), and South Asians the least mobile. Analysis of migration patterns for minority ethnic groups is greatly hampered by the four-fold aggregation of ethnic groups, which means that the mobility rates of Indian and Pakistani people cannot be contrasted, and the geographical suppression of smaller flows, which has a particularly marked influence upon district-level analysis. However, analysis of district level total migration rates and gross and net migration flows at the county scale reveals a picture of migration dominated in terms of numbers of migrants and the number of migration flows by London. Minority ethnic groups were moving from northern cities and towns into London, and diffusing from London into the surrounding suburbs and further into southern England. International migrants from minority ethnic groups predominantly chose London as their destination. However, rates of inmigration were highest in less populous and more remote areas with small minority populations. The same areas experienced very high rates of minority population change.

However, the main conclusion to be drawn from this analysis is of a continuing marked spatial divide in British population change. The white population continues to suburbanise and to move down the urban hierarchy, while minority population growth remains concentrated in the larger urban areas. This still dominates the emerging trend for people from minority ethnic groups (especially in London) to also move outwards to suburban areas.

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References

Atkins, D., Champion, A., Coombes, M., Dorling, D. and Woodward, R. (1996) *Urban Trends in England: Latest Evidence from the 1991 Census*, Department of the Environment Urban Research Report (London: HMSO).

Champion, A. (1989) *Counterurbanisation: The Changing Pace and Nature of Population Deconcentration* (London: Edward Arnold).

Champion, A. (1996) 'Internal migration and ethnicity in Great Britain', Chapter 4 of P. Ratcliffe (ed.) *Ethnicity in the 1991 Census Volume 3: Social geography and ethnicity in Britain: geographical spread, spatial concentration and internal migration* (London: HMSO).

Coleman, D. (1995) 'International Migration: Demographic and Socioeconomic Consequences in the United Kingdom and Europe', *International Migration Review*, 19(1), 155-206.

Haskey, J. (1991) 'The ethnic minority populations resident in private households - estimates by county and metropolitan district of England and Wales', *Population Trends*, 63, 22-35.

Haskey, J. (1997) 'Population review: (8) The ethnic minority and overseas-born populations of Great Britain', *Population Trends*, 88, 13-30.

Office of Population Censuses and Surveys (1992) Labour Force Survey 1990 and 1991 (London: HMSO).

Owen, D.W. (1992) 'Ethnic Minorities in Great Britain: Settlement Patterns', NEMDA 1991 Census Statistical Paper no. 1, Centre for Research in Ethnic Relations (Coventry: CRER). Owen, D.W. (1995) 'Ethnic Minorities in Great Britain: Patterns of Population Change, 1981-91', NEMDA 1991 Census Statistical Paper no. 10, Centre for Research in Ethnic Relations (Coventry: CRER).

Owen, D.W. and Ratcliffe, P. (1996) 'Estimating local change in the population of minority ethnic groups, 1981-91', Working Paper no. 1, Changing spatial location patterns of ethnic minorities in Great Britain, 1981-91 project, Centre for Research in Ethnic Relations (Coventry: CRER).

Rees, P. and Phillips, D. (1996) 'Geographical spread: the national picture', Chapter 2 of P. Ratcliffe (ed.) *Ethnicity in the 1991 Census Volume 3: Social geography and ethnicity in Britain: geographical spread, spatial concentration and internal migration* (London: HMSO).

Robinson, V. (1992) 'Move on up: the mobility of Britain's Afro-Caribbean and Asian populations', chapter 15 of J., Stillwell, P. Rees and P. Boden (eds.) *Migration Processes and Patterns volume 2: Population Redistribution in the United Kingdom* (London: Belhaven), 271-291.

Robinson, V. (1993) 'Making Waves? The contribution of ethnic minorities to local demography', chapter 10 of A. Champion (ed.) *Population Matters: The Local Dimension* (London: Paul Chapman), 150-169.

Robinson, V. (1996) 'Inter-generational differences in ethnic settlement patterns in Britain', chapter 5 of P.Ratcliffe (ed.) *Ethnicity in the 1991 Census Volume 3: Social geography and ethnicity in Britain: geographical spread, spatial concentration and internal migration* (London: HMSO).

Simpson, S., Tye, R., and Diamond, L. (1995) 'What was the real population of local areas in mid-1991?', Working Paper 11, Estimating With Confidence Project, Department of Social Statistics, University of Southampton, Southampton.

Sly, F. (1993) 'Estimating Britain's ethnic minority populations using the Labour Force Survey', Employment Gazette, September, 429-431.

Stillwell, J., Rees, P. and Boden, P. (1992) 'Internal migration trends: an overview', chapter 3 of J., Stillwell, P. Rees and P. Boden (eds.) *Migration Processes and Patterns volume 2: Population Redistribution in the United Kingdom* (London: Belhaven), 28-55.

Wallace, M. and Denham, C. (1996) *The ONS classification of local and health authorities of Great Britain*, Office for National Statistics Studies on Medical and Population Subjects no. 59 (London: HMSO).

Notes

¹ This term is used to refer to people with a skin colour other than white (who are alternatively referred to as ethnic minorities or visible minorities) and mainly have their origins in the Caribbean, Indian sub-continent or south-east Asia.

² Due to difficulties in generating data for 1991 ward boundaries, and the lack of estimates of the Census undercount at the time at which the research was carried out.

³ Four categories are not included, because they either contain no districts in England and Wales (e.g. "Glasgow & Dundee") or only one or two districts with small populations.