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INTERNAL MIGRATION
IN THE
UNITED KINGDOM

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Abstract

The paper reviews trends in internal migration in the United Kingdom drawing on Census and register data, and on recent research findings. A comparison of data from the last two censuses shows a considerable decrease in migration activity but evidence from NHS register counts indicates moderate recovery to 1986. Migration continues to shift people from "North" to "South", from metropolitan core to non-metropolitan areas with the latter pattern tending to dominate. The age selectivity of migration continues to be pronounced at all spatial scales with labour force and early childhood peaks, and troughs in early adolescence and beyond age 35. Migration rates associated with retirement cause only a small "blip" in the overall rate schedule, but for selected flows between metropolitan areas and favoured retirement regions the peaks at retirement are pronounced and in a few cases exceed those in the early 20's. For the future there is some evidence of slowdown in decentralization, but not as yet sufficient to actually reverse the pattern.

1. INTRODUCTION

The population of the United Kingdom as a whole has experienced very low rates of growth over the past decade and a half, an average of 1 per thousand per annum over the period 1971-86. For some years during that period, growth was negative. Yet despite the close approach to zero population growth, redistribution of the population has been very substantial. Writing about population changes in local labour market areas over the decade between the 1971 and 1981 censuses, Champion *et al* (1987, p 18) say

"Altogether, 62 places saw their population grow by more than 10 per cent ... while almost half (134) of the 280 places in Britain recorded growth rates in excess of 5 percent. Meanwhile 66 places - over 1 in 5 - registered population decline during the decade."

At the broader scale, one region (East Anglia) gained 18% in population over the 1971-86 period, while another (Greater London) lost 10%. There are instances in which fertility differences (such as the high fertility level in Northern Ireland) or mortality differences (the higher mortality rates for the elderly in Northern Britain) or the pattern of external migration (gains to London in particular) have an important influence on population change. Most of the redistribution, however, is effected by internal migration. This chapter is devoted mainly to examination of the principal population movements which have changed and continue to change the demographic map of the country. Comments on the characteristics and motivations of migrants, and in the consequences of migration are of necessity brief.

2. DATA ON MIGRATION

2.1 Definitions of migration

There is broad agreement that a migration constitutes a change in a person's place of usual residence. No definitional restrictions are placed on the time interval or spatial distance over which migration may be measured. Moves from one apartment to another in a block or moves from Cornwall to Shetlands (the furthest extremes of the United Kingdom) are equally regarded as migration.

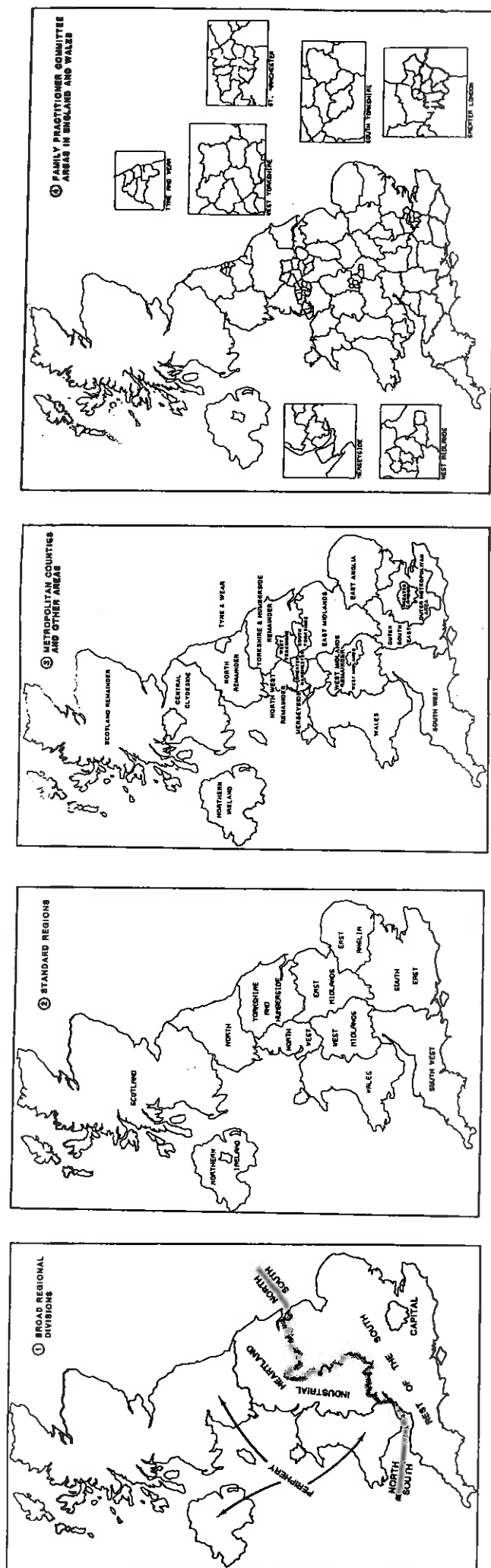
This eclecticism is forced on British researchers because no ideal source of migration statistics exists. However, for present purposes, attention is confined to migration with both origin and destination within the United Kingdom of Great Britain and Northern Ireland.

Operational definitions of migration constrain the general definition in various ways. Fixed period questions in a census or survey measure person migration as the shift in location between two set points in time, with intermediate moves being ignored. These data we refer to as "transitions". The UK has employed such questions in the last four censuses and we make extensive use of the one year time interval data. Questions about length of residence at current address or about last residence occupied have been used in British surveys but not in the census.

An alternative procedure is to focus on the move rather than the person involved in migration. Extensive use is now made of the register of the National Health Service patients to count moves between places. Although this does not provide a comprehensive account of migration it does provide annual estimates of internal migration in contrast to the decade separated census counts. These data we refer to as "movements".

2.2 Sources of data: censuses

Questions with one year intervals (where were you living one year ago?) were asked in the April censuses of 1961, 1966, 1971 and 1981, and extensive use is made of these data later in the chapter, particularly from the last two censuses. They are referred to the periods 1970-71 and 1980-81 (April to April). Tabulations of migrants into an area are available at all spatial scales employed in the census: countries, regions, counties, districts, wards and enumeration districts (see Figure 1 for boundaries of the first four units, the latter two of which are the principal administrative units of the UK). Interaction data in which both origin and destination are identified are available in full for districts and larger units, although our later analyses



Great Britain = England + Wales + Scotland

Figure 1. The spatial units used in analysing internal migration in the UK

focus on migrations amongst a set of 12 regions, or amongst a set of 20 county amalgams. The quality of census data is generally high but migration data are probably the least reliable because most of those missed in the census are likely to have been migrants and because of mis- or non-reporting of origin by the recorded migrants. The Post-Enumeration Survey held after the 1981 census suggests that up to 14% should be added to the fully reported figures for migrants (Devis and Mills, 1986, pp 18-19) to allow for these shortcomings. Our practice, where possible, is to redistribute origin - not stated migrants across origins using reported distributions.

2.3 Sources of data: population registers

Virtually all UK residents are registered as patients with the National Health Service (NHS). The Central Register of the NHS (or NHSCR) keeps a record for the Office of Population Censuses and Surveys (OPCS) of all patient re-registrations which involve transfers of patient records from one Family Practitioner Committee Area (FPCA) to another. The FPCAs are either counties or districts within (former) metropolitan counties in England and Wales (see Figure 1). A similar system operates within Scotland covering Area Health Boards (AHBs).

Records of inter-FPCA re-registrations are provided for each quarter. Because of the marked seasonal pattern of migration, quarterly figures are aggregated to annual counts either for calendar years or years between mid-year dates (June 30/July 1), applying a lag of three months to reflect the average delay between migration and re-registration with the NHS. Thus, the re-registrations occurring in July to September, 1987, would be recorded as migrations between April and June, 1987. Some population groups such as families with children, women in general and the elderly re-register very soon after migration; young men do so less diligently. So, there may be some bias in the statistics towards those groups making most current use of the NHS. The NHSCR records an average 1.245 moves for each transition recorded in the census. The reasons for this result are complex, in part due to differences in

population at risk covered in the two sources, in part due to differences in underenumeration, and in part due to the recording of multiple, return, infant and non-survivor moves in the NHSCR but not the census. However, despite the marked difference in the way in which the census and NHSCR statistics on migration were collected, there is close agreement between the two sources as to migration pattern (Devis and Mills, 1986; Boden, Stillwell and Rees, 1987). The correlation coefficient (Pearson's) between inter-region flows from the two sources is 0.996, and between FPCAs is still 0.980. We can be confident, therefore, in using NHSCR re-registration data to update the picture of internal migration provided by the 1981 census to 1985-86, and they are employed extensively in the chapter.

2.4 Sources of data: surveys

Two national surveys administered by OPCS provide information on migration: the annual General Household Survey (GHS) and the biennial Labour Force Survey (LFS). They provide valuable data on the household and socioeconomic context of migration but cannot be regarded as providing any reliable spatial detail (the regional samples are rather small - less than 1000 households on average), or even, because of biases in the sampling frames used, any reliable account of how the level of migration activity is changing over time. Use is made of the GHS in the chapter to examine how households are migrating amongst tenure types, from one segment of the housing market to another.

The account of what these data sources reveal about the nature of internal migration in the UK begins with a description of the volume and rate of movement in the country as a whole.

3. **PRINCIPAL POPULATION MOVEMENTS**

3.1 The national level: the volume of movement over time

At what rate do British people engage in internal migration activity? Table 1 attempts to synthesize the results of the one year migration question in the last four censuses and the annual rate of inter-FPCA re-registrations over the

Table 1. The level of migration activity in the UK, 1960-61 to 1985-86, various measures

Year	Migration within England, Wales & Scotland a	Rate of migration (percent)				Migration in England & Wales Total inter- region c	Synthetic index (1960-61 = 100) d
		Migration within Great Britain		Migration within Great Britain			
		Total Internal	Total inter- district b	Total inter- county	Total inter- region		
1960-61	9.58						100
1965-66	9.70						101
1970-71	10.45	10.88	4.61	2.86	1.55		109
1975-76						3.62	109
1980-81	8.40	8.98	3.46	2.25	1.16	2.93	88
1985-86						3.23	97

Sources: a & b Stillwell and Boden. 1986, Tables 1 & 2: original OPCS sourced cited in paper;

c NHSCR re-registration computer summaries supplied by OPCS;

d Computed by authors

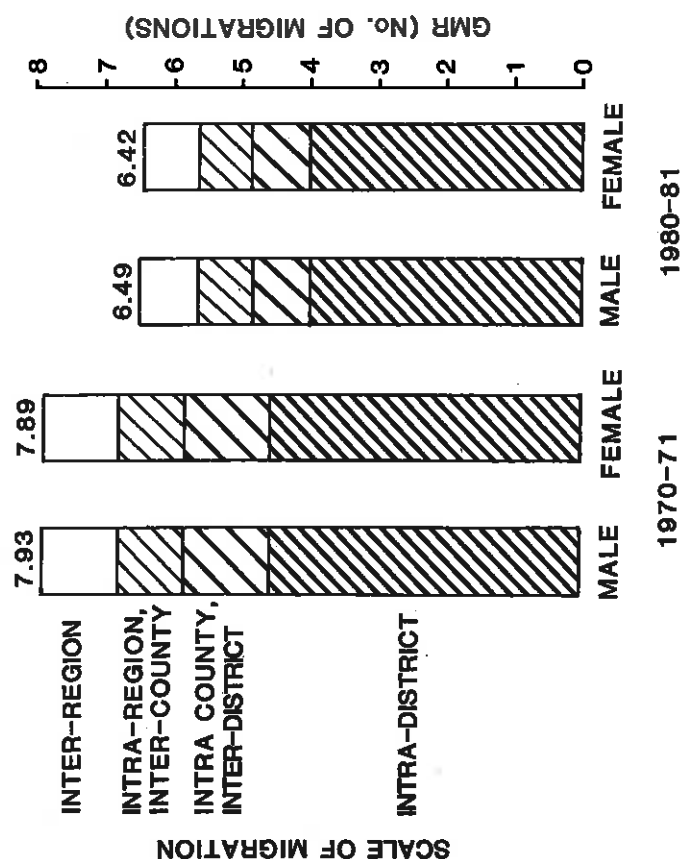
last decade. The broad picture is that between 8.5 and 10.5% of the UK population migrates each year (or allowing for underenumeration, between 9 and 11%). This is well below migration rates in other Anglophone countries (USA, Canada, Australia) but above rates in France, the Netherlands or Japan (quoted in Long and Boertlein 1976). From 1960-61 to 1973-74 (most probably), migration activity increased by about 10%. It then fell to 1981-82 in tandem with the shrinkage of new vacancies in the job and housing markets. The level of migration activity has then revived since the early 1980s though it is not yet back to the peak levels of the early 1970s.

A more refined measure of migration that avoids any of the age structure bias involved in the crude migration rate is the sum of the age-specific migration rates, commonly called the gross migration or migration rate (GMR). This can be interpreted as the total number of migrations that people would make over their lifetime if they were exposed to the current, observed schedule of age-specific migration rates. Technically, if the GMR is based on the census one-year migration question this should read the total number of "one year transitions" over a lifetime. To obtain a GMR for "moves", the census-based measure should be multiplied by between about 1.1 and 1.3 depending on scale of move. Figure 2 displays both the overall GMRs for the Great Britain population and the degree of variation in GMR across districts. In 1970-71 Britons migrated at the rate of nearly 8 transitions per lifetime: $4\frac{1}{2}$ of these transitions would be within local government districts (459 in Great Britain); $1\frac{1}{4}$ between districts within counties or Scottish Regions (67 in Great Britain); just under 1 between counties within regions (10 in Great Britain); and just over 1 between regions. Women were slightly less migratory than men. By 1980-81 the GMR had decreased to just under $6\frac{1}{2}$ transitions per lifetime. The decrease was least at the most local scale and greatest at inter-district, intra-county scale.

The variation in migration activity across England is depicted in the graphs on the right hand side of Figure 2, which are frequency distributions of

GMRs for Great Britain by sex

Source : plotted from Stillwell and Boden
(1986, Table 3)



GMRs for districts in England

Source : plotted from Bates and Bracken
(1987, Table A.1)

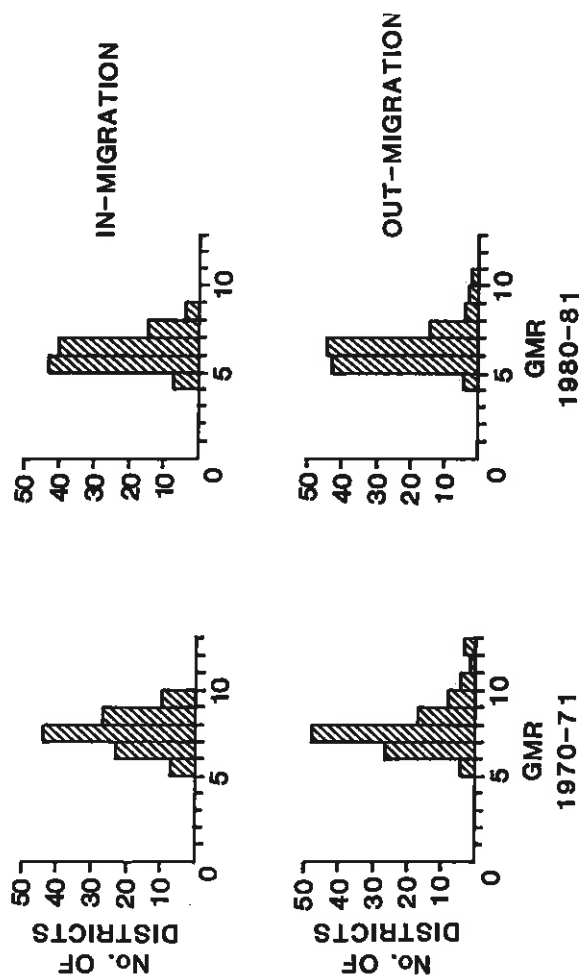


Figure 2. Gross migration rates (GMRs), 1970-71 and 1980-81

GMRs for districts within England, measured using in-migration rates and out-migration rates. The variation in the latter is greater, ranging from 5 to 13 in 1970-71 and 4 to 11 in 1980-81. The right tail of the out-migration distributions consists of the boroughs of Inner London, out of which large numbers of migrants move. This tail does not appear on the in-migration graphs because those same boroughs fail to attract migrants at the same rate. Of course, at the local level the GMR is merely an index of migration; people do not spend their lifetimes making migrations out of the same area, by definition!

3.2 The national level: the age and sex structure of movement over time

The propensity of a person to migrate varies by almost 5 times over a lifetime. At some stages in a life cycle the probability of migration is low, at others it is high. The form of the migration rate with its life cycle-related peaks and troughs is now a thoroughly familiar one. Figure 3 shows the observed schedules at six different spatial scales for male and female one year migrants within Great Britain recorded in the censuses of 1971 and 1981. The age scale refers to single years of age at the time of the census. Thus, the migration rate plotted at age 16 refers to persons migrating between ages 15 and 16 at an average age of $15 \frac{1}{2}$. The Rogers-Castro migration function has been fitted to each schedule (see Stillwell and Boden, 1986, and Stillwell, Boden and Rees, 1987, for details). Here we summarize the conclusions of the fitting exercise qualitatively with reference to the Figure 3 graphs.

The first part of each schedule is that for child dependants which parallels the descending adult part of the schedule, separated from it by "roughly" the average age of parents of children at given ages. We say "roughly" because it is the migration rate of married adults with children which is directly tied to the dependants' curve. The rate of descent of the child dependant portion of the curves is always slightly less than the corresponding adult portion, implying that migration rates in the parental ages are higher, reflecting the higher migration propensity of non-family adults in this age

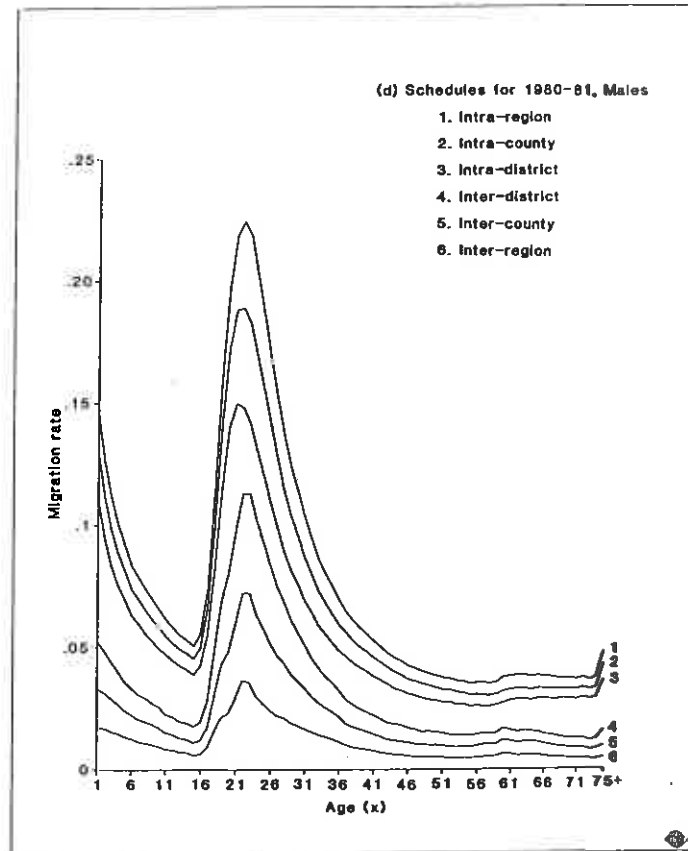
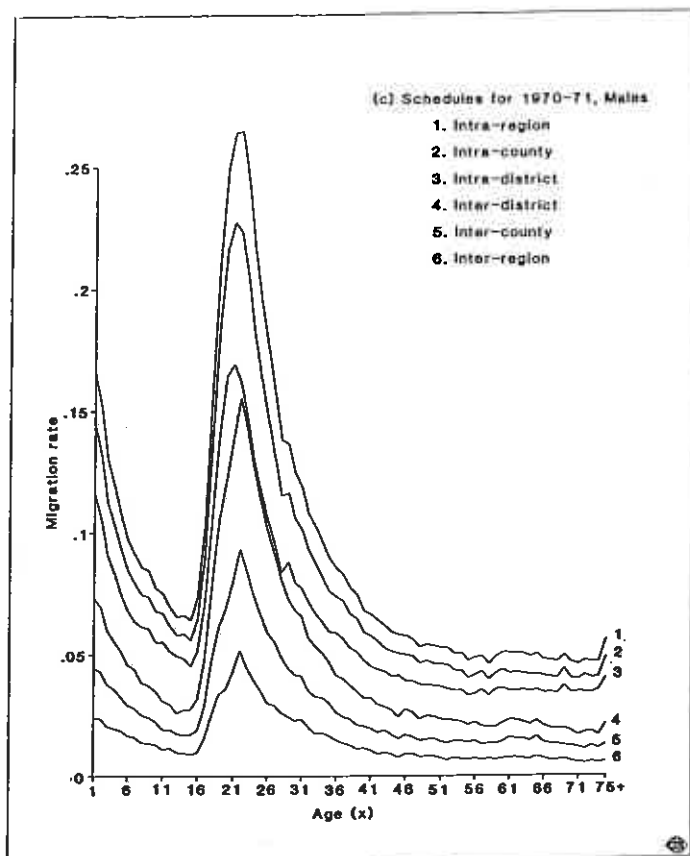
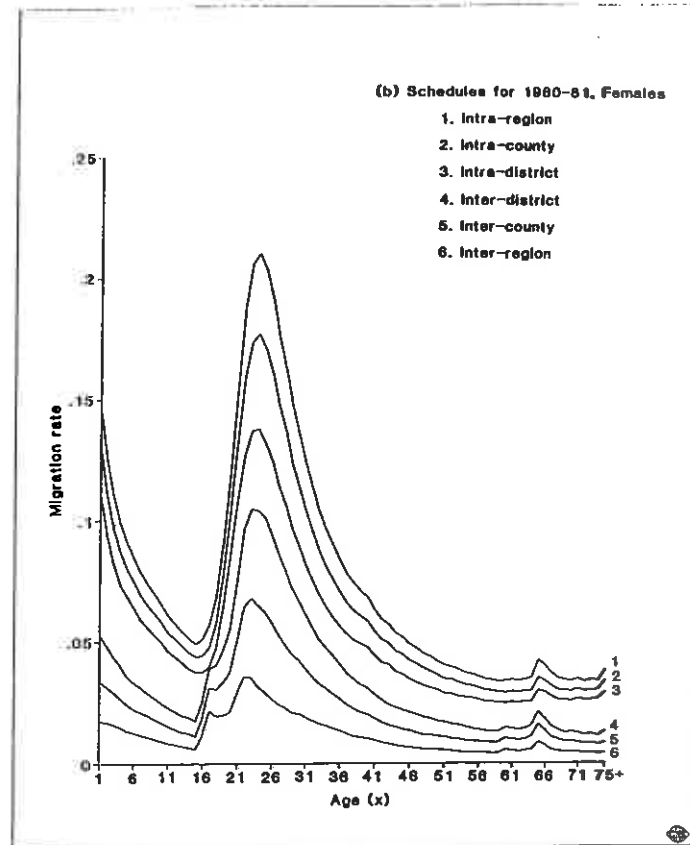
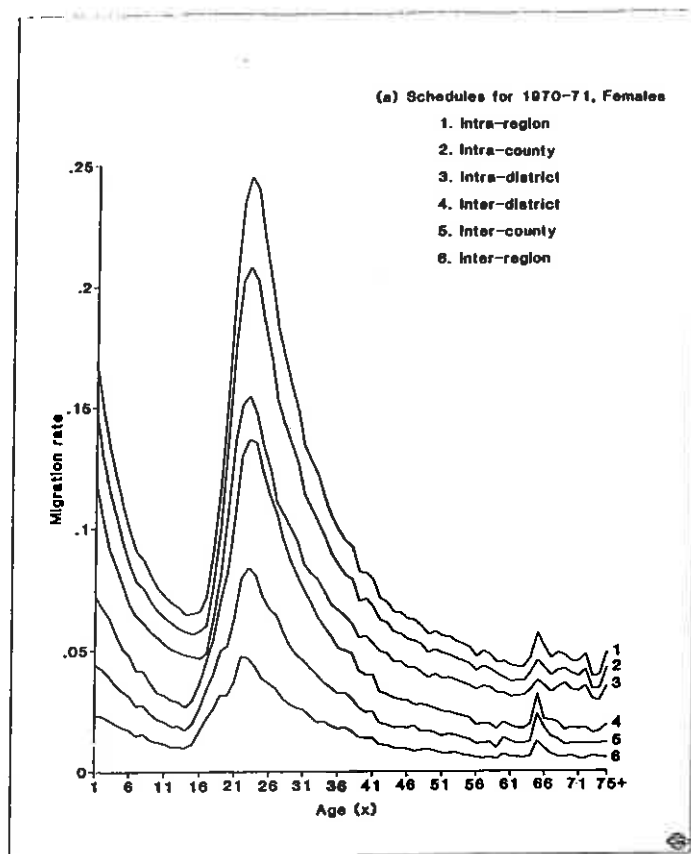


Figure 3. Migration rate schedules, Great Britain, 1970-71 and 1980-81
Source: Stillwell and Boden, 1986

range. The child dependant curve ends slightly later in 1980-81 than in 1970-71, and the labour force components' mean age is slightly greater. This probably results from the shift in the age at which compulsory schooling ends from 15 to 16 in the 1970s.

The next section of the migration age schedule is referred to as the labour force curve. Entry into the labour force necessitates many migrations before comfortable niches are found in middle age. However, our interpretation should be broader since the curve characterizes spatial scales (eg intra-district) where the predominant motives for migration are related to the housing not the job market. The steeply rising migration curve between ages 15 (1970-71) or 16 (1980-81) and 21-22 (females) or 22-24 (males) signals the creation of new households by late adolescents and young adults independent of their parents. This transition to independence is effected for part of the population through entry into higher education which is frequently accompanied by a migration. Twenty percent of migrants in ages 16-20 are recorded as students (OPCS, 1983, Table 5).

One idiosyncratic feature of the labour force peaks is the interruption of the rising limb for longer distance migrants (inter-region or inter-country migrants). This is most pronounced for males in 1980-81, but is present in subdued form in 1970-71, and in the female schedules. It is most probably an artefact of the rules governing the treatment of students. The census instructions require that students be recorded as resident at their parental homes rather than at their term time addresses. In many cases the term-time address constitutes the student's true usual residence rather than the parental home, and this instruction is not followed. The date of the 1981 census (April 5) fell in the vacation period of most higher education institutions, whereas in 1971 it did not (April 25), perhaps explaining why the "bite" out of the schedule was more pronounced in 1980-81. The impact on female schedules was less pronounced because a smaller proportion are students in higher education.

The more local migration curves were unaffected because there is little ambiguity about the student's usual residence at this scale.

The final feature of note on the migration schedules are the small peaks at retirement age (65) for males, slight rises at age 60 (retirement age) for women, with peaks more pronounced for longer distance migration. The peak at retirement is not a universal feature of all migration streams but is found to characterise migration from metropolitan cores to favoured retirement areas. It is largely absent in short distance migration, where it is replaced by an upturn in the rate of migration for the very old (75+), reflecting migrations, precipitated by the deaths of spouses or ill-health (see Rees and Warnes, 1986, for more detail).

3.3 Inter-regional migration: the volume of net movement over time

The United Kingdom can be divided into 12 major geographical regions (Figure 1) and these can be grouped into 4 broad regional divisions (following Champion et al, 1987, Chapter 1). Table 2 assembles net migration statistics on this basis over the past two decades. The estimates for 1971-76 refer to total net migration including external flows, whereas those for 1966-71 and 1976-86 refer to net internal migration although the sources differ. The 1971-76 figures for all regions bar the capital (which was a net gainer of external migrants) should be adjusted upwards to make them comparable with those for 1966-71 and 1976-86. Thus, net internal losses were smaller than the estimates shown for Northern regions and net internal gains were greater for regions in the Rest of the South in 1971-76.

Despite these statistical difficulties, clear patterns of net internal movement are revealed in Table 2. The regions of the Periphery have been net losers over the two decades but these losses have been less marked in the last decade, with one region, Wales, recording net inflows. The regions of the Industrial Heartland have been consistent net losers in both 1966-76 and 1976-86, and these losses have probably increased in the second decade. The

Table 2. The pattern of net migration for Uk regions and broad regional divisions, 1966-1986

Broad regional division ^a and region	Net migration (1000's)			
	Internal 1966-71	Total ^b 1971-76	Internal 1976-81	Internal 1981-86
<u>NORTH</u>				
<u>Periphery</u>				
Northern Ireland	-10	-55.5	-18.1	-15.1
Scotland	-41	-59.3	-34.8	-37.4
Northern	-36	-27.7	-31.3	-32.2
Wales	7	35.1	22.5	14.3
Sub-total	-80	-107.4	-61.7	-70.4
<u>Industrial Heartland</u>				
North West	-38	-84.7	-89.3	-104.6
Yorks & Humb	-37	-11.7	-17.6	-35.7
West Midlands	-38	-42.1	-55.6	-62.4
Sub-total	-113	-138.5	-162.5	-202.7
North, sub-total	-193	-245.9	-224.2	-273.1
<u>SOUTH</u>				
<u>Rest of the South</u>				
East Midlands	45	48.1	41.2	30.3
East Anglia	74	95.4	81.7	75.4
South West	133	164.6	137.7	163.8
Rest of the East	414	214.5	255.2	196.0
Sub-total	666	522.6	515.8	465.5
<u>Capital</u>				
Greater London	-473	-461.4	-291.3	-192.2
Sub-total	-473	-461.4	-291.3	-192.2
South, sub-total	193	61.2	224.5	273.3
United Kingdom	0	-184.7	0.0	0.0

Notes

- The broad regional divisions are those adopted in Champion *et al*, 1986, Figure 1.4
- Estimates for 1971-76 include external flows. Figures for all regions bar the capital (which was a net gainer of external migrants) should be adjusted upwards for comparison with 1966-71 and 1976-86 figures

Sources: 1966-71: Rees and Stillwell (1984), Table 3 from the 1971 Census migration statistics

1971-76: Rees (1979) from OPCS population estimates & vital statistics

1976-86: NHSCR re-registrations from OPCS computer tabulations and OPCS MN Monitors

Southern regions outside of London have been consistent net gainers through the four quinquennia, but these gains have decreased in the 1980s compared with the 1970s or 1960s. Finally, the capital region has been a consistent loser of net migrants, at least 1.5 millions over 1966-86, although the volume of loss has been considerably reduced. Summarizing, the net migration statistics suggest a broad regional pattern of losses in the North and gains in the South, interacting with a pronounced pattern of loss from regions containing the nation's largest cities (London, Birmingham, Manchester, Liverpool, Leeds, Sheffield) and gains or lesser losses in other "non-metropolitan" regions. We return to this theme at a finer spatial scale later in the chapter.

3.4 Inter-regional migration: the rates of movement over time

Employing information from the NHSCR, Figure 4 displays the trends in inter-regional migration over the 1975-1986 period (migration is recorded annually between mid-years). The in- and out-migration totals have been converted into time series indices with the level for 1975-76 set at 100.

The UK graph shows that inter-regional migration declined, with fluctuations, to 84% of the 1975-76 level in 1981-82 and then rose, more smoothly, to 96% of the 1975-76 level in 1985-86. The pattern of out-migration followed the national trend in all regions, more or less, except in Northern Ireland and in Greater London.

Not too much notice should be taken of the fluctuations in the time series for Northern Ireland for 1982-83 onwards as the estimates are rather rough, but on average in 1982-1986 the level of out-migration was only 73% of its mid-1970s level, and in-migration was only 79% of its 1975-76 level. These decreases reflect the difficulty of workers from a depressed region far from the centre of the national economy gaining access to mainland vacancies, when those vacancies themselves are much reduced.

The reduction in outflows from Greater London (1985-86s flows were 88% of 1975-76s) reflects a different phenomenon, that of slowing down of urban

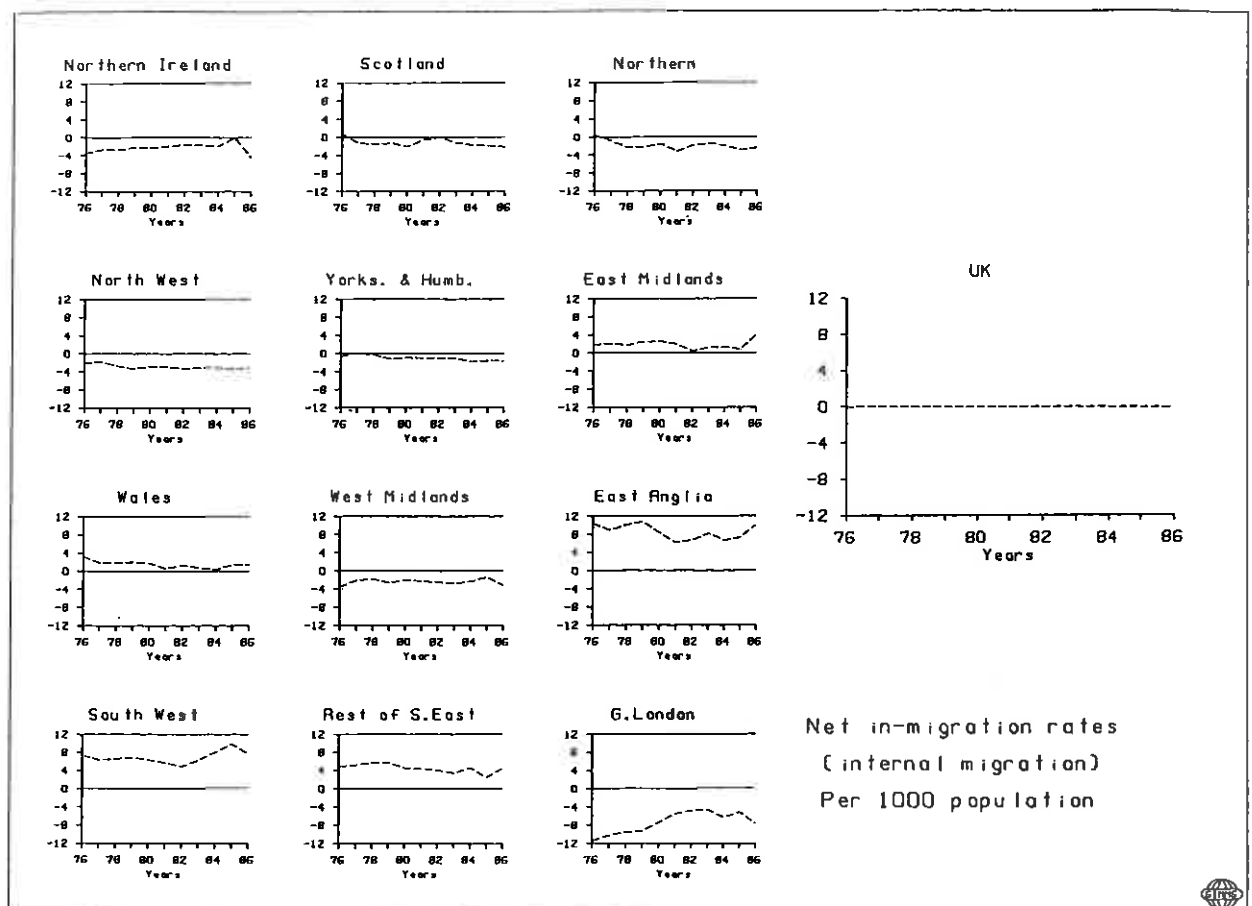
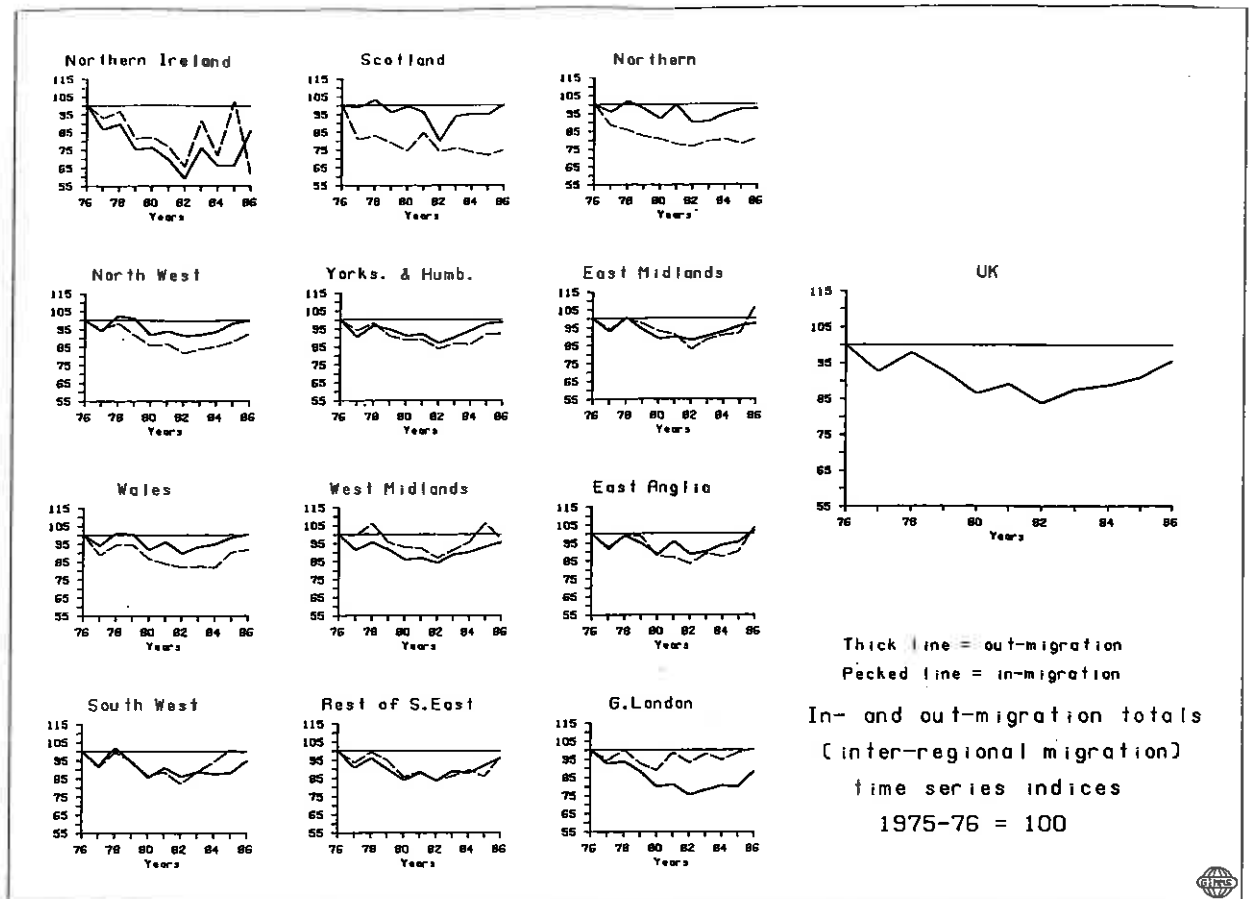


Figure 4. Trends in inter-regional migration, UK regions, mid-year to mid-year, 1975-76 to 1985-86

decentralization through urban redevelopment and the development of the financial and services economy of London. The rate of net out-migration in the post-1981 period has been half that of the later 1970s.

The trends in in-migration are more varied. The Peripheral regions (Northern Ireland, Scotland, Northern, Wales) all show greater decreases and smaller recoveries in in-migration than the UK. The Industrial Heartland regions follow roughly the national trends in in-migration. The Rest of the South and the Capital regions follow the national trend to 1981-82, but experience above average increases in in-migration since then. All Northern regions have experienced less decline in out-migration than in-migration over the period to 1981-82, and better recovery since 1981-82, while the reverse pattern applies in Southern regions.

To account for these trends in internal migration, it is necessary to relate them to the performance of the regional economies over the period since 1975. Table 3 gathers together some relevant statistics. First, we note that the share of in-migrants attracted to all Northern regions falls well below their share of the population. The reverse is true for Southern regions. The economic indicators show above average unemployment rates in Northern regions, and below average rates in Southern. However, the trends in neither employees in employment nor unemployment mirror those we have found in migration. The number of employees in employment continues to rise from 1975 to 1979 while migration rates fall, although a rise in employees parallels the rise in migration levels. If the migration series followed unemployment rates closely, we would expect greater falls in the 1979-82 period and no recovery from 1982-83 in migration activity.

Several important components of labour market change have been omitted from Table 3: the natural rate of growth of the labour force, the change in female activity rates and the role of net emigration. The natural increase in the labour force over the 1975-86 period has been strong as the high birth cohorts

Table 3. Trends in regional shares in population and in-migration and in regional economic performance

Broad regional division and region	Population share (% of UK)		In-migration share (% of UK)		Employees in employment (%)		Unemployment rate (rate per 100 labour force)					
	1975	1986	1975-76	1985-86	1975	1979	1982	1986	1975	1979	1982	1986
NORTH												
Periphery												
Northern Ireland	2.7	2.8	0.8	0.5	2.2	104	95	98	7.9	9.1	16.1	18.8
Scotland	9.3	9.0	5.1	4.0	9.1	101	95	91	5.2	6.9	13.0	14.3
Northern	5.6	5.4	4.4	3.8	5.6	98	86	86	5.9	7.9	15.5	17.1
Wales	5.0	5.0	4.7	4.5	4.4	104	91	86	5.6	6.5	13.8	14.5
Sub-total	22.6	22.2	15.0	12.8	21.3							
Industrial heartland												
North West	11.7	11.2	7.6	7.4	11.8	100	89	85	5.3	6.1	13.6	14.5
Yorks. & Humb.	8.8	8.6	7.0	6.7	8.7	101	91	91	4.0	5.1	12.2	13.8
West Midlands	9.2	9.1	6.5	6.6	9.7	101	89	92	4.1	4.8	13.6	14.0
Sub-total	29.7	28.9	21.1	20.7	30.2							
North, sub-total	52.3	51.1	36.1	33.5	51.5							
SOUTH												
Rest of the South												
East Midlands	6.7	6.9	7.6	8.5	6.5	105	97	103	3.6	4.0	9.9	11.3
East Anglia	3.2	3.5	5.6	6.0	3.0	105	101	109	3.4	3.7	8.5	9.1
South West	7.6	8.0	11.2	11.6	6.7	105	100	104	4.8	4.8	9.1	10.2
Rest of the S. East	17.5	18.5	25.6	25.8	16.1	104	100	98				
Sub-total	35.0	36.9	50.0	51.9	32.3				2.8	3.0	7.7	8.7
Capital												
Greater London	12.8	11.9	13.9	14.5	16.1	100	96	102				
Sub-total	12.8	11.9	13.9	14.5	16.1							
South, sub-total	47.8	48.8	63.9	66.4	48.4							
Index	100.0	100.0	100.0	100.0	100.0	102	94	95	100	120	266	290
United Kingdom (1000's)	(56,226)	(56,723)	(1,175)	(1,124)	(22,710)	(23,157)	(21,400)	(21,593)	% (4.1)	(4.9)	(10.3)	(11.9)

Notes

a. The UK figures are in 1000s and are the absolute numbers of population, in-migration and employees.

b. Sources: Populations - OPCS estimates in Population Trends 42 and 44.

In-migrations - NRSR re-registrations from OPCS computer tabulations and OPCS MN monitors.

Employees : unemployment - from Regional Trends, 17 to 22 (Central Statistics Office)

of 1960-1971 enter working ages, and at the same time there have been significant transfers of women from economic inactivity into part-time jobs in the service sector of the economy. Migration was therefore not needed to fill such job vacancies as were occurring. In addition, over the 1979-82 period severe job losses occurred in all regions: migration does not occur between mutually depressed areas. Where migrants did go in this period of severe recession in the UK but much better economic conditions in other developed countries, was abroad: in the four years 1979 to 1982 there was a net emigration of 325,000 British citizens. The balance cut was only 33,000 in 1983 to 1985 when economic conditions elsewhere worsened, and 175,000 in 1976-78 when conditions were less depressed in Britain.

3.5 Migration in the metropolitan-non-metropolitan context

The broad regional trends in migration discussed to date mask very important changes occurring between and within Local Labour Market Areas. Considerable work at this fine spatial scale has been carried out by several groups of British geographers (elegantly summarized in the volumes by Spence et al, 1982, and Champion et al, 1987), but virtually all recent work is confined to examining inter-censal change in population, rather than the migration flows which are assumed to underly these changes. We can be fairly confident in making the assumption that population change is predominantly a function of migration for most places although there are some exceptions such as the continued growth due to high rates of fertility of the Northern Ireland population despite net migration losses, and the importance of inter-area differences in mortality at the older ages in explaining shifts in elderly population (Rees, 1986).

Champion et al (1987) classify small areas in the country on the basis of their journey to work connections into some 228 functional regions (FRs). Functional regions are classed as dominant if they are the largest functional region contained within the 20 largest metropolitan regions in the country

(Great Britain) and subdominant is they are one of the smaller FRs within metropolitan regions. Freestanding FRs lie outside the metropolitan regions and cover the rest of the country. Within each functional region small areas are assigned to one of four concentric zones; core, ring, outer and rural depending on the level of commuting to principal workplaces and population density.

Figure 5 reproduces population change figures for the decade between the 1971 and 1981 censuses from Table 2.2 in Champion et al (1987). The dominant theme is one of decentralization in the urban system: from core to ring and beyond in each functional region type; from dominant functional regions to subdominant within metropolitan regions; and from metropolitan regions to the rest of the country. These trends characterize all regions within the country, though they are more pronounced in the South than the North (Champion et al, 1987, Figures 2.5 and 2.6).

Some idea of the migration flows that underly the decentralization from metropolitan regions to the rest of the country can be obtained by aggregating the inter-FPCA migration matrix for 1980-81 into a simple four by four table (Table 4). The four categories are broad region - North and South - as used in the regional analysis, and metropolitan status distinguishing metropolitan counties from region remainders and regions without metropolitan counties (Figure 1). Of the 1,717,500 moves that took place in that year between FPCAs, 53% did not involve a change of broad region-metro status class. The largest migration streams in gross and net terms were between metropolitan counties and their non-metropolitan areas within each broad region: 187,200 gross moves and 65,300 net moves were recorded into non-metropolitan areas in the South from metropolitan areas in the South; 130,500 gross moves and 35,700 net moves were recorded into non-metropolitan areas in the North from metropolitan counties in the North. When migrations between broad regions are examined, each South zone gains from each North zone, so that there is a net gain from non-metropolitan

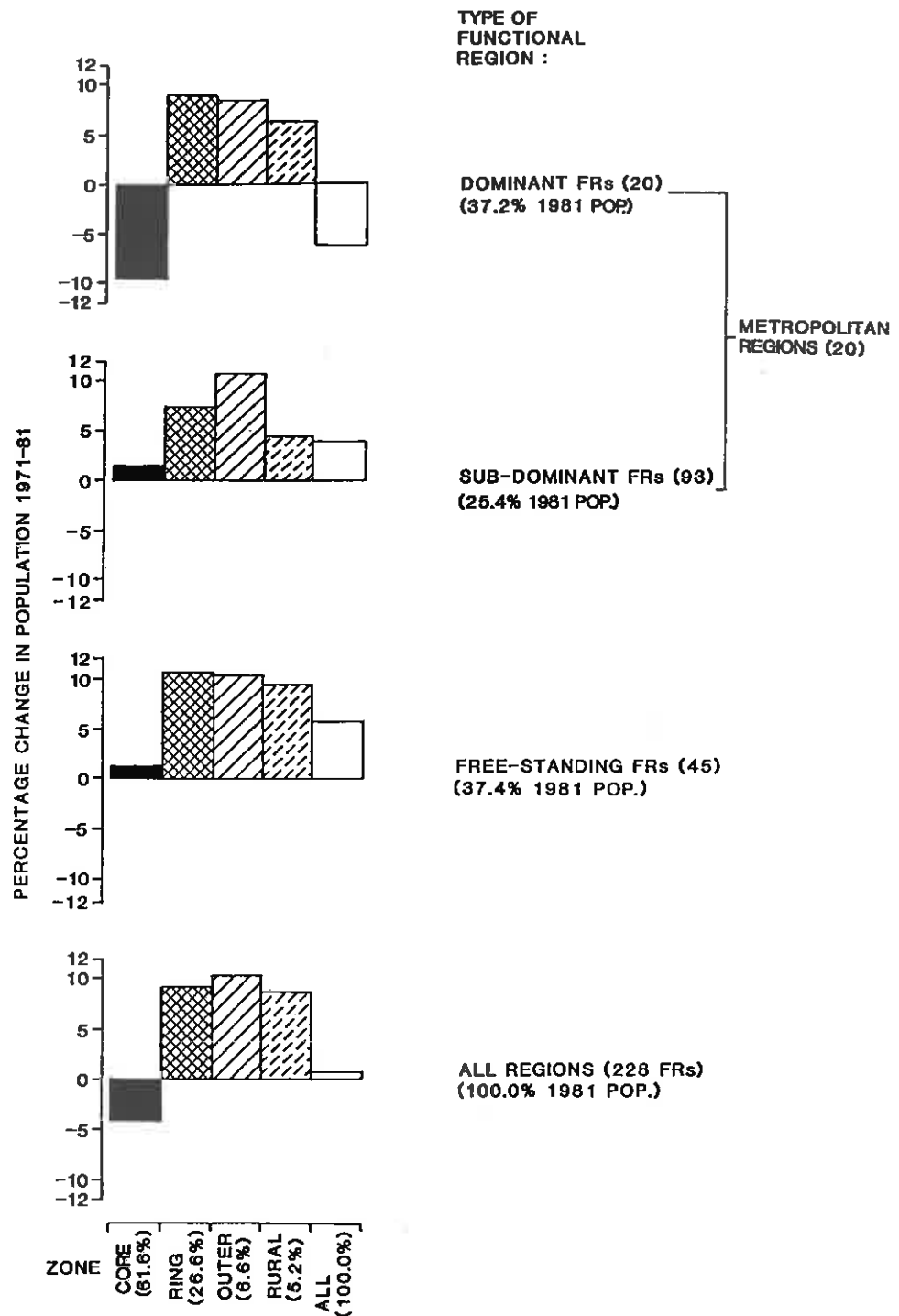


Figure 5. Population change 1971-81, by type of functional region and zone

Source: Table 2.2 in Champion et al (1987)

Table 4. Inter-FPC area migration by broad regional and metropolitan status, 1980-81

Broad region and metropolitan status	NORTH			SOUTH			UK		
	Metro county	Non-metro area	Sub-total	Metro county	Non-metro area	Sub-total	Metro county	Non-metro area	Totals
NORTH									
Metro county	146.0	130.5		41.9	58.0		187.9	188.5	376.4
Non-metro area	94.7	111.6		53.9	81.7		148.6	193.3	341.9
Sub-total			482.8			235.5			718.3
SOUTH									
Metro county	29.1	44.8		310.9	187.2		340.0	232.0	571.9
Non-metro area	42.7	68.3		121.9	194.4		164.6	262.7	427.3
Sub-total			184.9			814.4			999.2
UK									
Metro-county	175.1	175.3		352.8	245.2		527.8	420.5	948.3
Non-metro area	137.4	179.9		175.8	276.1		313.1	456.0	769.2
Totals	312.5	355.2	667.7	528.5	521.3	1,049.9	841.0	876.5	1,717.5

Source: Computed from tabulations of NHSCR re-registrations for FPCAs in England and Wales, supplied by OPCS. Figures are in 1000's

areas in the North by metropolitan cores in zones in the South of 9,100. These are predominantly net gains at the young adult ages to the London region (students, young workers).

To summarize, there was a net gain of 50,700 migrations from the North regions to the South but a net gain of 107,400 migrations from metropolitan zones into non-metropolitan. The metropolitan/non-metropolitan dimension of migration shifts was thus twice as important in number terms as the North/South shift.

3.6 Migration in the metropolitan-non-metropolitan context: age structure

The national profiles of migration rates discussed earlier appear in reduced form in individual area to area migration (eg Rees, 1979, Figure 16), but the presence of a peak at retirement varies with the nature of the migration stream. Figure 6 shows migration rate profiles for the late working and retirement ages out of Greater London to metropolitan counties and non-metropolitan regions. The rates are computed using one year migrant data from the 1981 census and 1981 census populations. Pronounced retirement peaks are characteristic of flows to the Outer South East, East Anglia, the South West and the East Midlands in the 65-69 age group. These peaks rival in level those in the early working ages. Lesser retirement peaks characterize the much smaller outflows to non-metropolitan areas in the North, while it is difficult to discern peaks in the very low flows to other metropolitan regions. Flows within Greater London itself exhibit no peak but do show a rise in migration rate at age group 75+.

4. WHO MOVES

Enough has already been said about the role of age and life course characteristics in influencing the rate at which Britons migrate. Here we concentrate on selected socioeconomic attributes of migrants.

Almost three quarters of male migrants aged 16 and over who moved in the year prior to the 1981 census were working (Table 5). About 1 in 8 were seeking work (unemployed), about 1 in 15 were retired and 1 in 20 were students

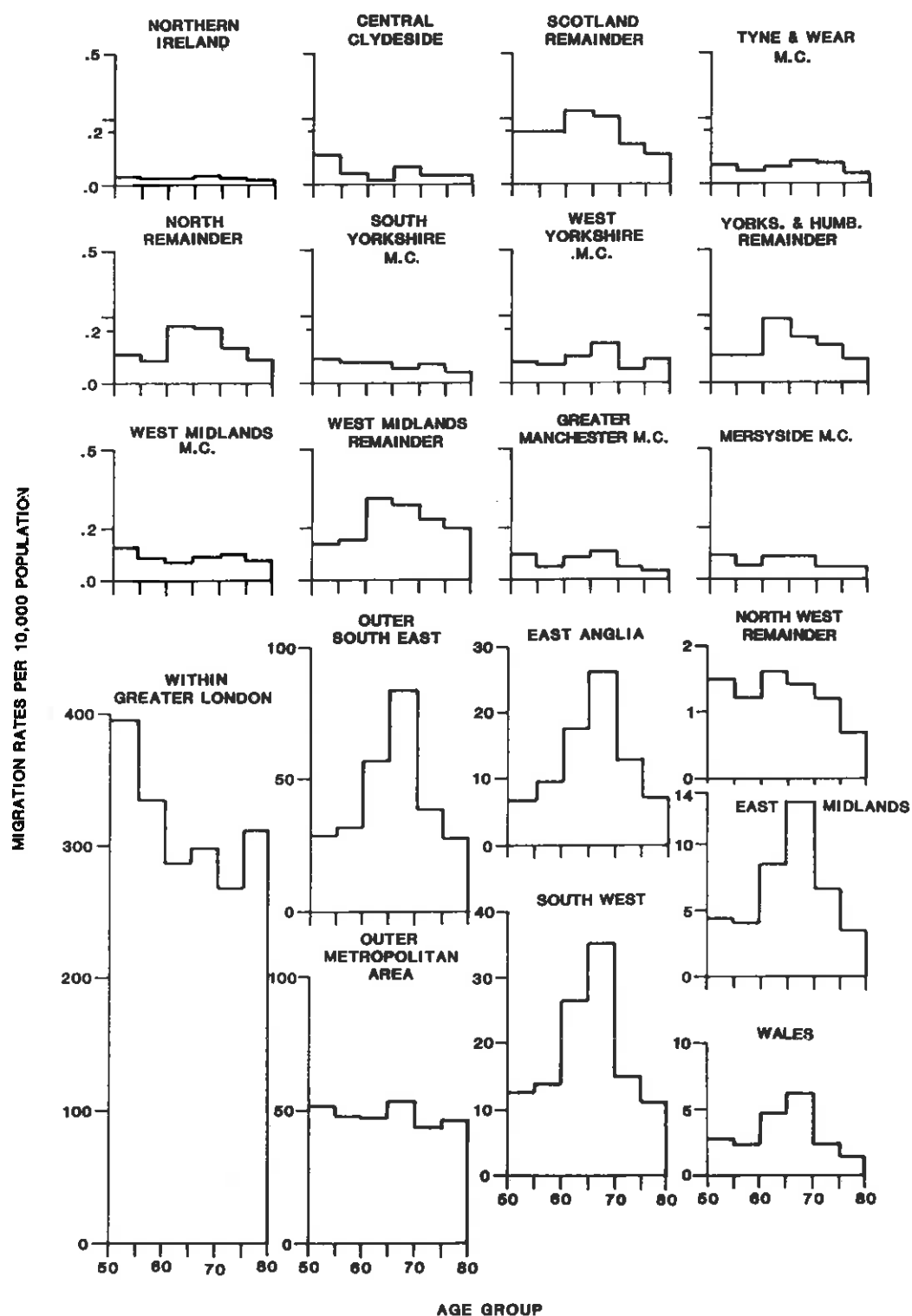


Figure 6. Migration rate schedules for ages 5) and over, Greater London, males, 1980-81

Source: Rees and Warnes (1986, Figure 10)

Table 5. Composition of migrants aged 16 and over resident in Great Britain by economic position, 1980-81

Economic position	Males		Females	
	Percent of total	Migration rate (%)	Percent of total	Migration rate (%)
Economically active				
Working	72.7	10.5	47.3	10.5
Seeking work	12.1	15.1	6.2	19.6
Temporarily sick	0.8	9.8	0.6	12.8
Economically inactive				
Permanently sick	1.7	3.2	1.4	8.1
Retired	6.7	4.5	5.7	6.4
Student	4.9	10.9	3.8	9.0
Other inactive	1.0	20.3	35.0	8.1
All migrants	100.0	9.9	100.0	9.3

Source: OPCS (1983)

Table 6. Interregional migration by university students, males, 1980

Region	% of students from region moving to university in another region	% of students at region's universities recruited from another region
South West	89.2	85.2
East Midlands	88.4	90.2
East Anglia	86.5	93.3
West Midlands	81.0	91.4
Rest of South East	76.5	} 78.6
Greater London	75.8	
North West	68.6	69.6
Yorks & Humb	67.9	} 59.2
Northern	58.7	
Wales	57.1	70.8
Northern Ireland	33.1	3.3
Scotland	16.1	34.4

Source: Rees (1986a)

(though the true number of student migrants is probably underestimated in the census). Just under half of female migrants aged 16+ were working at the time of the census, 1 in 16 were seeking work, 1 in 17 were retired and 1 in 26 were students. Just over a third were economically inactive (housewives). The unemployed had the highest rates of migration (apart from the small male "other inactive" group) - 53% (male) or 111% (female) greater than the average. Even in the depths of the worst post-war recession the UK has experienced, the unemployed were prepared to get "on their bikes" (to borrow Norman Tebbit's infamous phrase). Those working had a migration rate just above average, as did male students. The other inactive groups had below average rates.

Table 5 shows male students to be experiencing about average rates of migration. As argued earlier this is probably a substantial underestimate if moves between parental and term-time residences are regarded as migrations. They are not in the census but are in the NHSCR if they lead to re-registration by the student with a new FPCA. One group of students, those attending UK universities, have a very high rate of inter-regional migration, if they originate from regions in England and Wales. Table 6 shows that the majority of English students migrate to another region to attend university, particularly those from regions in the South. By contrast students in Scotland and in Northern Ireland attend universities in their own regions. This low percentage leaving Scotland to attend university in part reflects differences in the educational system between Scotland and the rest of the country, in part a cultural tradition of attending a local institution, and in part the higher costs of travel to other regions. Very few students from the mainland attend Northern Ireland universities (only 3.3% of their student body).

A high level of inter-regional migration experienced by higher education students launches them on work careers characterized by much higher long distance migration than those in manual occupations (Figure 7). The highest migration rates are experienced by Armed Forces personnel, whose careers are

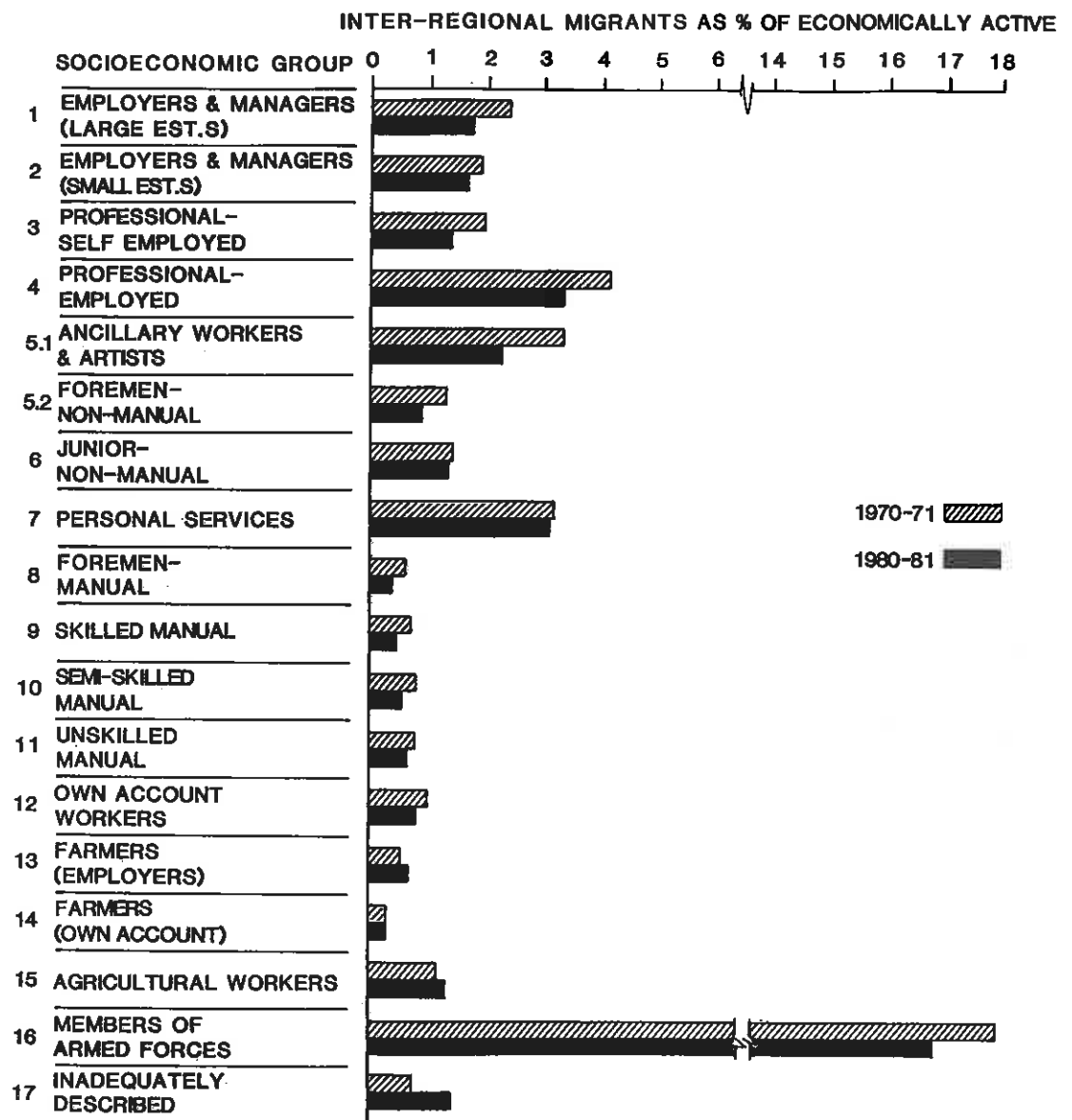


Figure 7. Inter-regional migration rates of different occupation groups, 1970-71 and 1980-81

Source: Salt and Flowerdew (1986), Table 3 from the 1971 and 1981 censuses

characterized by a progression of planned re-postings. Within the white collar occupations, planned career moves within the large firm or government organization probably account for a large proportion of moves, as the public or private corporation seeks to match labour supply and demand from within its ranks. The specialized skills in many of these occupations necessitate inter-regional movement because job opportunities are widely but thinly spread across the country. Conversely, manual skills are more universal in their occurrence and tend to be filled first from the local labour market, and inter-regional migration occurs only when labour shortages appear. There is some anecdotal evidence that since 1985 local shortages in skilled manual occupations (particularly construction) in regions in Southern Britain are being filled by temporary migrants ("domestic Gastarbeiter") who return to their permanent homes in Northern Britain.

5. WHY PEOPLE MOVE

In the chapter so far the temporal and spatial trends and patterns in non-local migration have been described and interpreted. The interpretations have constituted an informal answer to the question "why do people move?" There is insufficient space to give this vast topic detailed treatment here but some general observations will usefully put the previous material in context.

Migrants can be divided into perhaps three groups classified on the basis of their stage in the life course. Each group has different motivations for migration and responds to different push and pull factors. The three life course groups are members of the labour force without family responsibilities, families with children with one or more parent in the labour force and retired persons. For the first group migration results from the need to find a job or an educational place; the person's status (educational level, skills, seniority, maturity) is changing fast and frequent moves result. Members of the second group will also be motivated by labour market opportunities but since their status is not changing as fast and since family responsibilities usually

mean more permanent investment in a home or location or children's education, moves become less frequent. In this final group, ties to the job market are broken, and migration can be motivated by residential, environmental or social factors: the distribution of career opportunities no longer matters.

In making the decision to move, the potential migrant has to select from among competing opportunities (these differing by life course group) and here the role of information and geographical proximity become important. British internal migrants are constrained heavily by distance between origin and destination. Frictions caused by distance are highest for migrants originating in the Industrial Heartland regions, least in the two peripheral regions of Scotland and Northern Ireland, and at intermediate levels elsewhere (Stillwell and Boden, 1986, Figures 15 and 16). Distance frictions appear to be inversely related to the mean distance of migration both over time (Stillwell and Boden, 1986, Figure 14) and over the age range from early working ages (15-19) (Rees and Warnes, 1986, Figure 10). The latter relationship parallels the falling rate of mobility, but means also that the longer distance moves tend to drop out as age increases (from about 98 miles to about 73 miles for males migrating between EC2 regions in 1980-81). Temporal fluctuations in distances moved are within much narrower limits (91-93 miles on average for inter-EC2 region migration over 1975-1983).

6. THE CONSEQUENCES OF MIGRATION

It is clear from the population trends listed in Table 3 and the population changes analysed in Figure 5 that internal migration is having a profound and ongoing impact on the distribution of population. Here we report just one consequence of that ongoing redistribution: the likely future population distribution for 20 metropolitan counties and non-metropolitan areas in 2031. The projections are produced using a multi-regional accounts-based forecasting model with rates of internal migration, emigration, mortality and fertility set at their observed 1976-81 levels with immigration set at constant numbers. The

projections thus enable us to examine the consequences of current redistribution patterns, but must be regarded as underestimates of the absolute size of future regional populations because mortality rates have continued to improve, fertility rates have recovered marginally, and external migration is closer zero balance than in 1976-81.

Table 7 sets out the projected populations, associated shares of the UK total, and changes in shares that occur between 1981 and 2031. The South moves in a majority position with 51.4% of the national population by 2031 with 30.8% in the Rest of the South outside the capital (up from 26.5%) and 20.6% in the Capital region (down from 21.7%). Metropolitan counties in the North lose very heavily, having less than 1 in 5 of the nation's population in 2031 (19.0%) compared with just under 1 in 4 in 1981 (23.2%). Region remainders in the North lose population (they did not do this between 1971 and 1981) but not share of the national total (this increases from 20.9 to 21.2%). Wales shares these trends, but Northern Ireland continues on a path of increasing population growth, driven by high fertility rates.

There is some evidence from our earlier analyses of trends in regional migration (see Figure 4) that the redistribution implied by the migration pattern of 1981-86 would be less than that projected using 1976-81 rates. (That analysis, however, awaits the processing of computer tapes for the most recent years). Other authors have also suggested that the process of urban decentralization at all scales is slowing down, though it has not in any case, reversed.

Although the changes in the population of individual places may be very large (Central Clydeside loses 39% of its population for example), the process of redistribution in the United Kingdom is a fairly measured one by international standards. The British response to major events continues to be Herbert Asquith's "Wait and see" rather than Winston Churchill's "Action this day".

Table 7. Population projections for metropolitan counties and non-metropolitan areas, UK 1976-2031

Regions	Populations (1000's)		Ratio of 2031/1981 population x 100	% of UK population		Change in %
	1981	2031		1981	2031	
<u>NORTH</u>						
<u>Metro Counties</u>						
Central Clydeside	1,705	1,045	61	3.04	1.97	-1.07
Tyne and Wear	1,144	850	74	2.04	1.60	-0.44
Merseyside	1,516	1,109	73	2.71	2.09	-0.62
Greater Manchester	2,619	2,111	81	4.68	3.98	-0.70
West Yorkshire	2,043	1,776	87	3.65	3.35	-0.30
South Yorkshire	1,310	1,161	89	2.34	2.19	-0.15
West Midlands	2,658	2,041	77	4.75	3.85	-0.90
<u>Region remainders</u>						
Scotland Rem	3,425	3,210	94	6.12	6.06	-0.06
North Rem	1,924	1,671	87	3.44	3.15	-0.29
North West Rem	2,310	2,200	95	4.12	4.15	0.03
Yorks & Humb Rem	1,516	1,486	98	2.71	2.80	0.09
West Midlands Rem	2,508	2,665	106	4.48	5.03	0.55
<u>Other regions</u>						
Northern Ireland	1,562	1,800	115	2.79	3.40	0.61
Wales	2,769	2,623	95	4.94	4.95	0.01
<u>REST OF SOUTH</u>						
East Midlands	3,780	3,783	100	6.75	7.14	0.39
East Anglia	1,878	2,126	113	3.35	4.01	0.66
South East	4,349	4,670	107	7.77	8.81	1.04
Outer South East	4,830	5,763	119	8.63	10.87	2.24
<u>CAPITAL</u>						
Outer Metro Area	5,344	5,192	97	9.54	9.79	0.25
Greater London	6,808	5,730	84	12.16	10.81	-1.35
United Kingdom	55,998	53,015	95	100.0	100.0	0.00

Source: projections carried out using a multiregional forecasting model and rates of migration, mortality and fertility observed in 1976-81. See Rees (1986c) for further details.

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