The North West *A regional study*

Fig. 1. Economic planning regions of Great Britain

Regions for economic planning purposes have, at time of going to press, been defined for all areas of Great Britain except the South East (See Appendix, Table 1)

Department of Economic Affairs

The North West

A regional study

London: Her Majesty's Stationery Office: 1965

Preface

This report on the North West Economic Planning Region summarises the results of a study made by a group of officials from Government departments concerned with regional planning, with the object of providing a basis on which future plans for the region can be drawn up. It consists of a general survey and analysis of information at present available about the region; an appraisal of its principal characteristics and problems; some suggestions about the way in which the more urgent needs might be met; and proposals for further research.

In the course of the study the group received a great deal of help from people in the region who reflect a wide range of local interest and experience—in industry and commerce, in universities, in voluntary organisations and in local government. The local planning authorities in particular provided valuable information, estimates and general views about the problems in their areas. The contents of the report are, however, the responsibility of the group alone.

The report has been referred to the North West Economic Planning Council and is being published so as to enable others concerned with the problems of regional planning to express their views on the findings contained in it. These should be communicated, in writing, to the Secretary, North West Economic Planning Board, Sunley Building, Piccadilly Plaza, Manchester, 1.

In referring the report to the regional Economic Planning Council, the Government have made it clear that they are not in any way committed by the study group's findings, and that any proposals for action which may be made will have to be considered in the light of the National Economic Plan and of programmes and policies for the country as a whole.

DEPARTMENT OF ECONOMIC AFFAIRS — 1965

Contents

TABLES INCLUDED IN THE TEXT

ILLUSTRATIONS

The maps and diagrams in this study have been prepared by the Ministry of Housing and Local Government

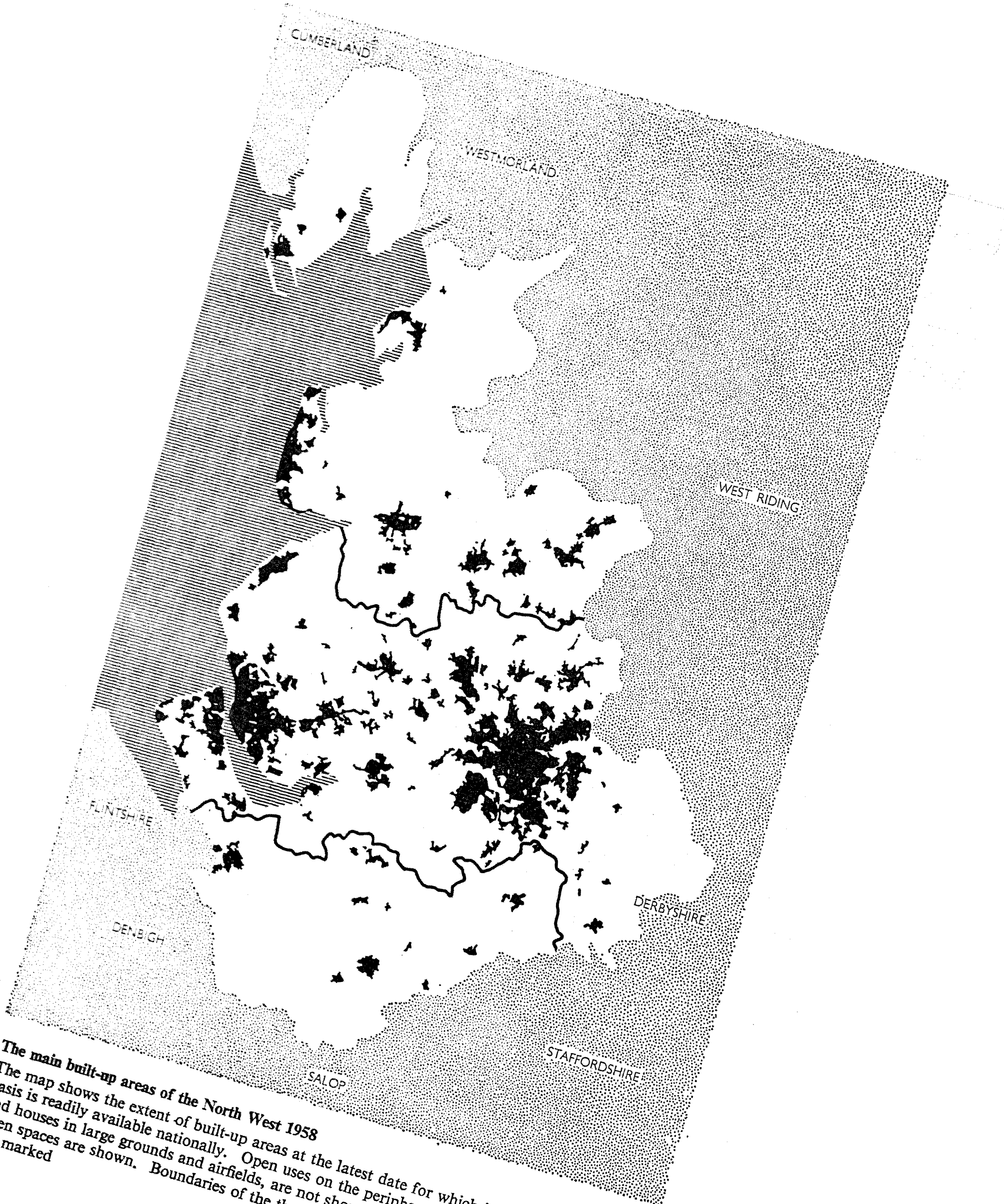

Fig. 2. The main built-up areas of the North West 1958

The map shows the extent of built-up areas at the latest date for which information on a uniform basis is readily available nationally. Open uses on the periphery of towns, e.g. hospitals, institutions and houses in large grounds and airfields, are not shown as built-up; within towns only the largest open spaces are shown. Boundaries of the three divisions of the North West (see Appendix, Table 2) are marked

1 The North West Region

THE REGION

The North West Economic Planning Region consists of the two counties of Lancashire and Cheshire and the small part of Derbyshire known as the High Peak District. No more than any other region is it a self-contained or precisely defined area: but most people would probably agree that it has as clear an identity as a region as any part of England. To some extent this is a result of geography: a narrow strip, nowhere much wider than seventy miles from east to west, and barely more than one hundred from north to south, it is broadly bounded by the Lake District mountains, the Pennines, the Irish Sea, and the Mersey and Dee estuaries.

2. More important to its character, the bulk of the region's 6½ million population is concentrated in comparatively small areas—the most important of which is the belt dominated by Manchester and Liverpool (referred to in this report as the "Mersey Division").[1] Although the North West covers only about 3½ per cent of the total land acreage of Great Britain, its population accounts for more than one in eight of the country as a whole. Nearly 5 million people live in the Mersey Division, which after London is the most densely populated area on this scale in the country and one of the greatest urban industrial complexes in the world. There are also further concentrations in the Ribble Valley, North East Lancashire, and the coastal resorts.

3. The result of this concentration is that much of the region still remains predominantly rural—particularly in South Cheshire, and in Lancashire north of Preston (including Furness). It is one of the region's advantages that none of its towns is very far from attractive countryside, and that it contains several areas of exceptional natural beauty, including parts of the Lake District and Peak District National Parks. Agriculture continues to be of importance—nearly three quarters of the land in the region is still used for farming; and the Lancashire and Cheshire plains lying north and south of the conurbations contain some of the finest agricultural land in the country. (See Figure 3.)

4. But despite its large acres of countryside, it is the industrial complex which makes the most lasting impression on all who come to the region, or live in it; and it is on the industrial complex that the past has left its most unpleasant scars. The tracts of derelict industrial land which blight many of the towns, the drab, huddled shopping centres, the ugly obtrusive factories and mills, above all the streets and streets of old, mean and dilapidated houses—these are constant reminders that the character of the region was forged during the heyday of the Industrial Revolution. Throughout the nineteenth century the economy of the North West boomed, its population grew at a tremendous pace and its towns doubled and redoubled their size. Manchester could then claim with some justice to be the centre of gravity of industrial Britain.

5. The First World War marked the end of this long period of buoyant self-confidence. In the inter-war years, the North West began to pay the penalty for its earlier distinction of being one of the areas where modern industrial civilisation first began to flourish. The industries on which its economy had been founded—coal, shipbuilding and, of course, cotton—met with growing international competition and could no longer hold their traditional markets; its ports suffered from the slackening in Britain's overseas trade; unemployment was a persistent problem and

[1] The area covered by the Mersey Division is shown in Figure 1 and defined in Table 3 of the Statistical Appendix.

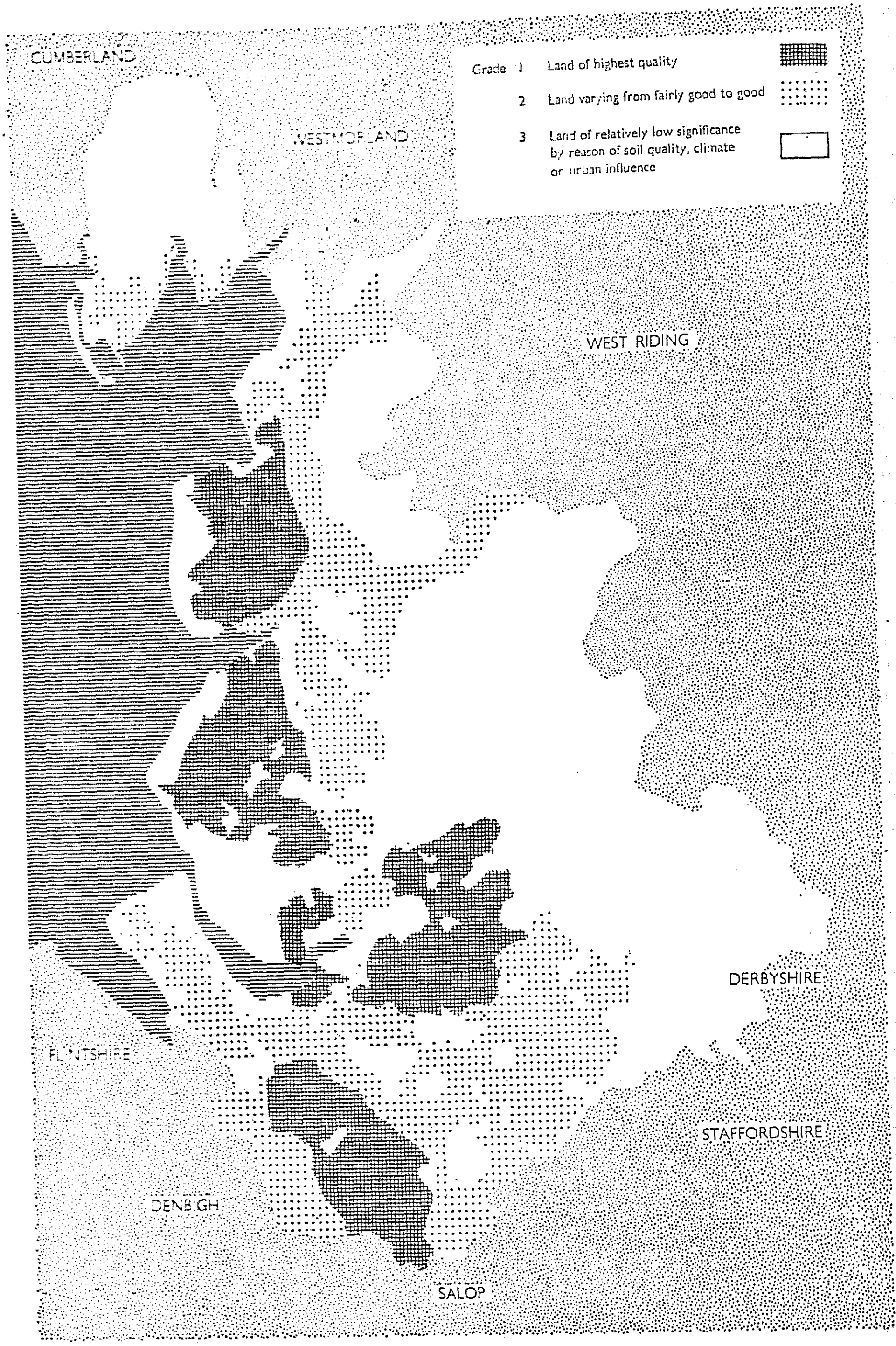

Fig. 3. Agricultural land quality
The classification of land in the Furness sub-region is based on the Land Utilisation Survey of Britain and in the remainder of the Region on an assessment by the Ministry of Agriculture, Fisheries and Food

population began to drift away. The consequences of this history have built up into a formidable task to be faced in the future—both in replacing outworn housing and the many other forms of social capital, and in revitalising the region's economy.

6. These handicaps are of course to a great extent shared by most of the older industrial areas of Britain. Nor should it be inferred that the people of the region are not tackling the job. Much has been done or will soon be done, the benefits of which are yet to come—for example, the M6 motorway, the railway electrification scheme, and plans for the renewal of Manchester and Liverpool and other towns. Much still remains to be done, so as to ensure that there is not only a strong and vigorous economic base, growing at a much faster rate than for many years, but also that the region's physical rehabilitation is pushed forward at much greater speed.

THE PATTERN OF THIS REPORT

7. This report starts by showing how the region's population stands in relation to the nation, and what shifts have taken place through migration and natural change. It attempts some guesses about future population. It then examines employment trends, some indicators of the region's prosperity, and possible employment prospects—since undoubtedly these are of the first importance to everyone, and are the most likely to influence decisions to live in the region or to go elsewhere.

8. Next, the report reviews the transport network and assesses the region's principal transport needs for the future—for transport is one of the most important elements of physical environment, particularly in determining attractiveness for industrial development and expansion.

9. An attempt is then made to assess total housing needs, the implication for house building rates, and the need for housing land, so as to see how far, if people have jobs to do, they can be equally sure that they will have fit homes in which to live. As part of this assessment, other aspects of physical environment are reviewed—the provision of green belts, availability of water, town centres in need of renewal, derelict land, and air pollution.

10. The report concludes with a summary of its own analysis; and finally with a chapter on the future, which sets out what seem to be the main implications of the analysis for action and decisions. Some urgent decisions which will have an important influence on the future development of the North West have already been made while this report has been in preparation. In particular, it has been announced that a large new town is to be created in the Leyland/Chorley area and that investigations are to be undertaken into the feasibility and likely cost of constructing barrages across the Solway Firth, Morecambe Bay and the Dee Estuary.

11. In the various sections of the report an attempt is made to show the extent to which the experience of different parts of the North West has varied from that of the region as a whole. These sub-regional variations are very striking and merit a fuller examination than has been possible at this stage. However, some detailed work has been done into the position and prospects of certain areas. A full analysis has been made of Merseyside's employment problem and this is to be published as an appendix to this report. The part of Lancashire north of the Ribble (including Furness) is included within the area being covered by an economic and social survey which has been commissioned from a research team in the Department of Economics at Lancaster University, under the supervision of Professor S. G. Sturney. The first results of this survey are expected to be available shortly and will be presented to the North West Economic Planning Council and Board. So too will the results of a preliminary factual study which has been made of the special problems of North East Lancashire.

12. This report is not intended to be a comprehensive survey or to give definitive answers to the North West's problems. Quite apart from the lack of a fuller analysis of sub-regional problems, there are many other aspects of the North West's position into which further research is needed. Some of these are outlined in the chapters which follow. But it is hoped that this report will provide a useful starting point for the work of the North West Economic Planning Council and of the North West Economic Planning Board.

Part Two

Population trends

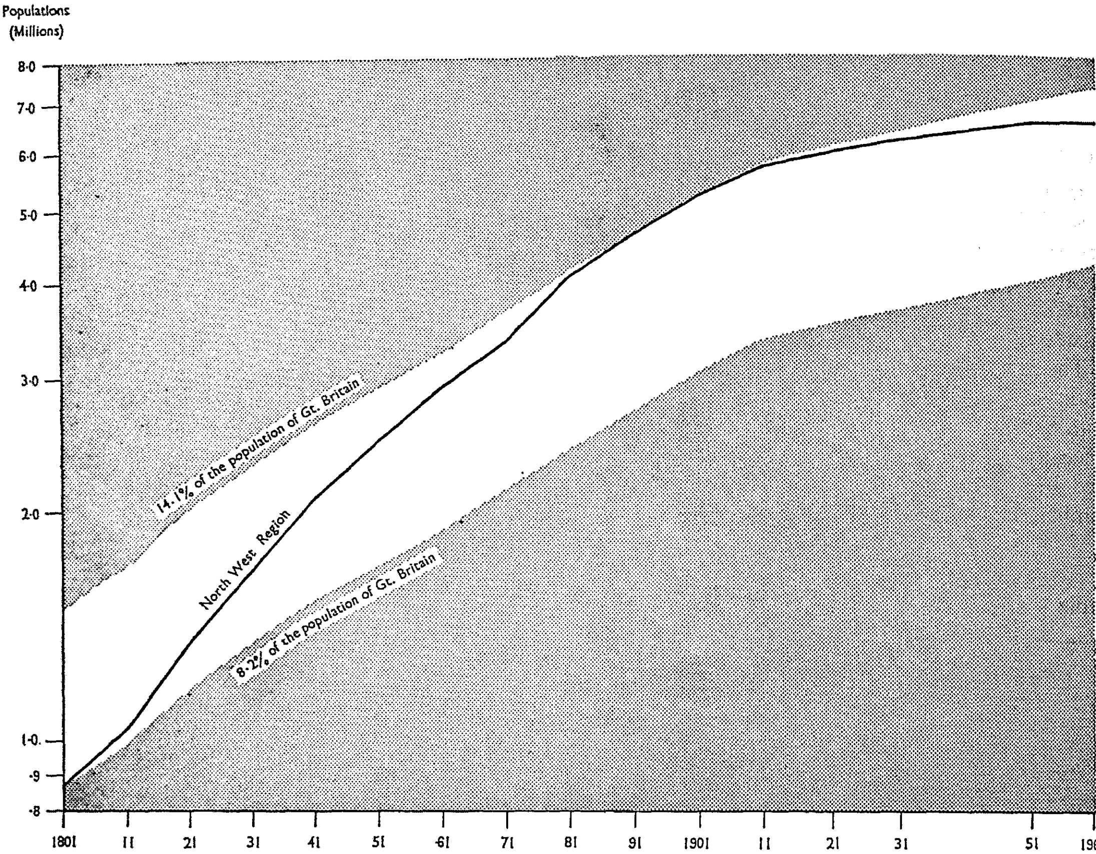

Fig. 4. Great Britain and the North West Region: population changes: 1801-1961

During the 160 years since the first Census in 1801 the proportion of the total population of Great Britain living in the North West has ranged between 8.2 per cent (in 1801) and 14.1 per cent (in 1901). In the diagram the population of the North West Region at each Census is plotted on a logarithmic scale; populations equivalent to 8.2 per cent and 14.1 per cent of the population of Great Britain as a whole at each census are also depicted. The diagram thus affords a comparison between rates of population growth in the North West and in Great Britain and shows how the region's share of the country's population has fluctuated

2 Past trends and present position

THE GENERAL PICTURE

1. In mid-1964, the population of the North West Region was a little over 6,660,000. This represented 12·7 per cent of the population of Great Britain as a whole—about one person in eight—and was the highest total for any region outside the South East.

2. The North West's share of the national population rose steadily in the nineteenth century, from 8 per cent in 1801 to 14 per cent in 1901. Since then, however, it has gradually declined. (See Figure 4.) In other words, although the number of people living in the North West has increased considerably since the end of the First World War, population growth in the country as a whole has been more rapid.

3. Both net outward migration from the region, and a rate of natural increase which has been below the national average, have contributed to the North West's slow population growth. (See Figure 5.) Outward migration has not been so heavy in recent years as it was in the 1920's, and seems to have been quite negligible since 1961. The region's rate of natural increase has been affected by death rates which have been a good deal higher than the average for England and

Table 1 **Civilian Population and Population Density 1964**

Area/Economic Planning Region	*Civilian Population 1964 (Thousands)*		*Area in acres (Thousands)*		*Gross population density Persons/acre*
	Nos.	*%*	*Nos.*	*%*	
Great Britain	52,319	100·0	56,805	100·0	0·9
Scotland	5,180	9·9	19,463	34·3	0·3
Wales	2,668	5·1	5,130	9·0	0·5
North West	6,662	12·7	1,973	3·5	3·4
S.E. Lancs. Conurbation	2,449	4·7	243	0·4	10·1
Merseyside Conurbation	1,385	2·6	96	0·2	14·4
South East	18,129	34·7	9,863	17·4	1·8
Greater London Conurbation	8,170	15·6	462	0·8	17·7
West Midlands	4,913	9·4	3,216	5·7	1·5
West Midland Conurbation	2,384	4·6	172	0·3	13·9
East Midlands	3,226	6·2	3,014	5·3	1·1
Yorkshire and Humberside	4,672	8·9	3,503	6·2	1·3
Northern	3,287	6·3	4,781	8·4	0·7
South West	3,584	6·8	5,862	10·3	0·6

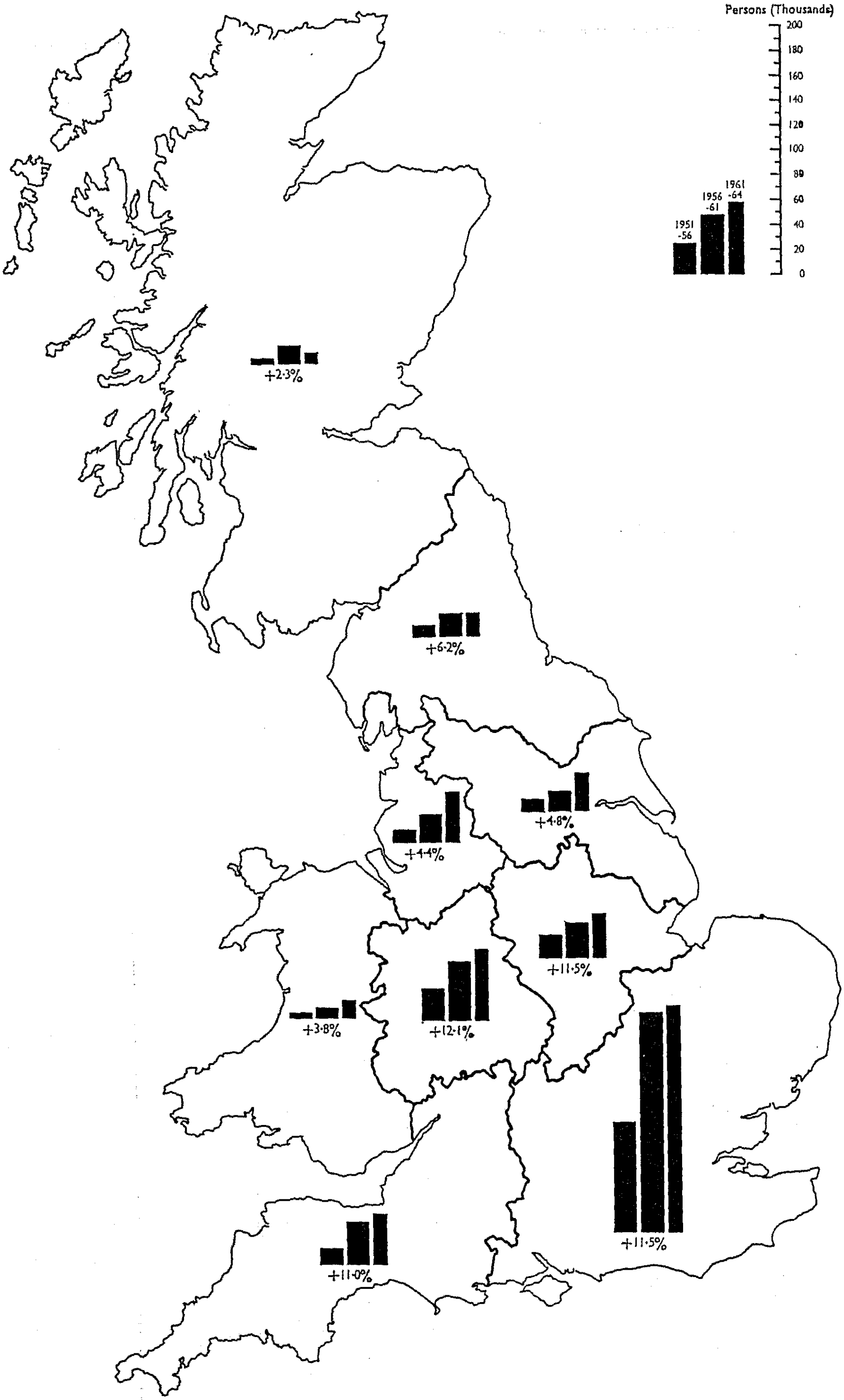

Fig. 5. Civilian population: total change: 1951-56, 1956-61, and 1961-64

The heights and widths of the columns are proportional to the mean annual total change and to the length of the period respectively. Thus, volume of change is represented by the area of the columns. Percentage growth over the period 1951-64 as a whole is given in figures. The total increase 1951-64 in Great Britain was 3,986,000 or 8.2 per cent (see Appendix, Tables 6-9)

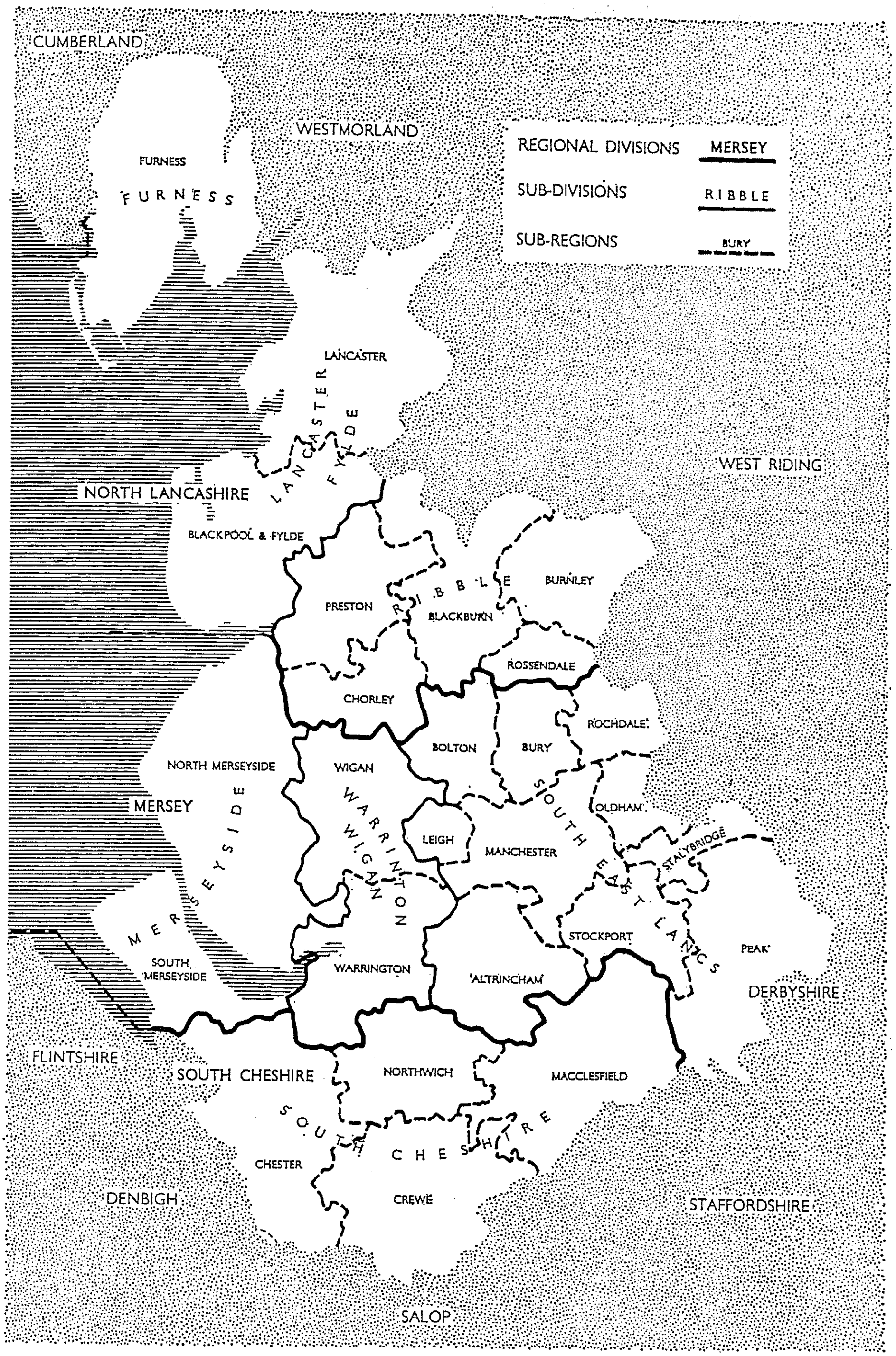

Fig. 6. **Divisions, sub-divisions and sub-regions of the North West Region (see Appendix, Tables 2-5)**

Wales, and which have more than offset the effects of birth rates slightly above the national level. (Migration is discussed in more detail in paragraphs 8-12; natural increase in paragraphs 13-16.)

4. Nevertheless, the North West remains one of the most densely populated areas of Great Britain. In 1964, the gross density of population in the North West was 3·4 persons per acre—by far the highest figure for any of the regions. By comparison, the figure for the South East was only 1·8 persons per acre and for the whole of Great Britain 0·9. Moreover, extensive areas of the North West are not built up and the density of population in those that are is very much higher even than the regional average.

5. For the purpose of analysing the past and present distribution of population within the region, the total area has been divided as shown in figure 6. The three main units are the North Lancashire, Mersey and South Cheshire divisions. These have been broken down into sub-divisions and sub-regions, the basic units of which are local authority areas. The same groupings of local authority areas have also been used in later chapters for the purpose of making population projections and calculating housing needs.

6. The population of the North West is in fact heavily concentrated in the Mersey division, which includes the South East Lancashire and Merseyside conurbations. In 1964, nearly 5 million people (about three-quarters of the region's population) were living in this area. Another 1¼ millions lived in the North Lancashire division, while only about 400,000 lived in the South Cheshire division.

7. Within the region, there has been a clear, but gradual shift in population patterns going on in recent years. Population has been declining in the older industrial towns on the Pennine slopes to the north and east of Manchester and in the centre of the conurbation itself. On the other hand the areas of most rapid population growth have been the southern fringes of both conurbations, the coastal towns of the Fylde and certain urban areas on the main north-south communications route now followed by the M6 motorway.

MIGRATION

8. In common with Scotland, Wales and other northern regions of England, the North West has experienced a net loss of population as a result of migration virtually throughout the whole of the period since the end of the First World War. However, the rate of net migration away from the North West has generally been lower than for any of the other "exporting" regions.

9. Outward migration from the North West was heaviest in the 1920's, but was substantially reduced during the 1930's. Meaningful figures cannot be given for the war, and immediate post-war, years, but those for the early 1950's show outward migration continuing, at a higher rate

Table 2 **Mean Annual Migration in Great Britain**

	(% of total population)			
Standard Region	1921/31	1931/39	1951/61	1961/64
Great Britain	−0·13	+0·14	+0·01	+0·15
Scotland	−0·80	−0·06	−0·55	−0·67
England and Wales	−0·04	+0·16	+0·07	+0·24
ENGLAND AND WALES:				
Northern	−0·78	−0·61	−0·24	−0·16
East and West Ridings	−0·13	−0·13	−0·25	−0·01
North West	−0·26	−0·12	−0·19	—
Wales	−0·97	−0·88	−0·18	+0·07
North Midland	−0·04	+0·14	+0·16	+0·35
West Midland	−0·19	+0·34	+0·11	+0·31
South East	+0·46	+0·66	+0·28	+0·35
South West	+0·01	+0·19	+0·29	+0·67

NOTE:

Corresponding data for all economic planning regions is not available for the periods 1921-1939. For periods after 1951 see Table 10 in the Statistical Appendix.

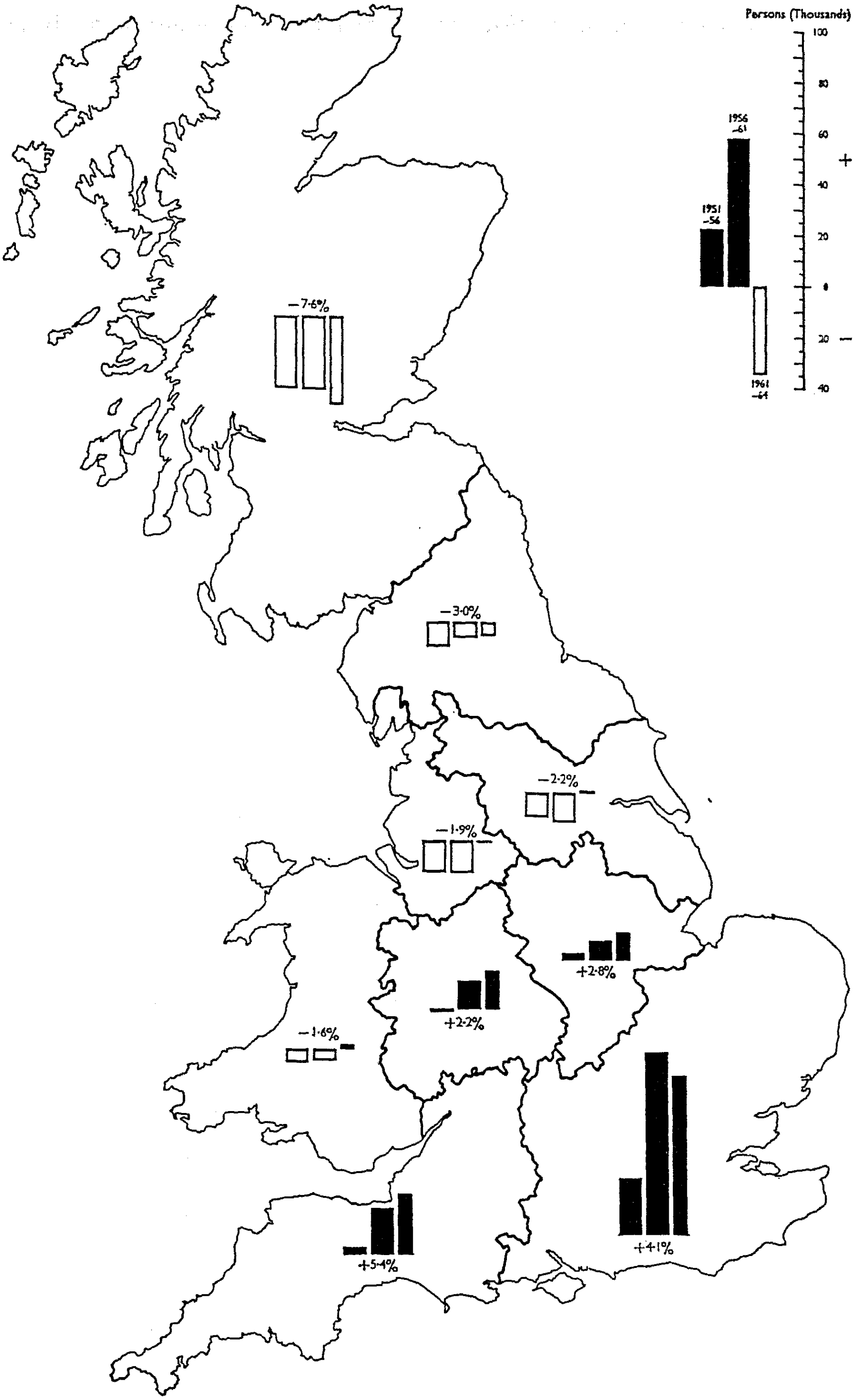

Fig. 7. Civilian population: estimated net migration: 1951-56, 1956-61 and 1961-64

The heights and widths of the columns are proportional to the mean annual net gain or loss by migration and to the length of the period respectively. Thus, volume of net migration is represented by the area of the columns. Percentage change over the period 1951-64 as a whole is given in figures. The total net migration 1951-64 for Great Britain produced a gain of 268,000 or 0.6 per cent (see Appendix, Tables 6-9)

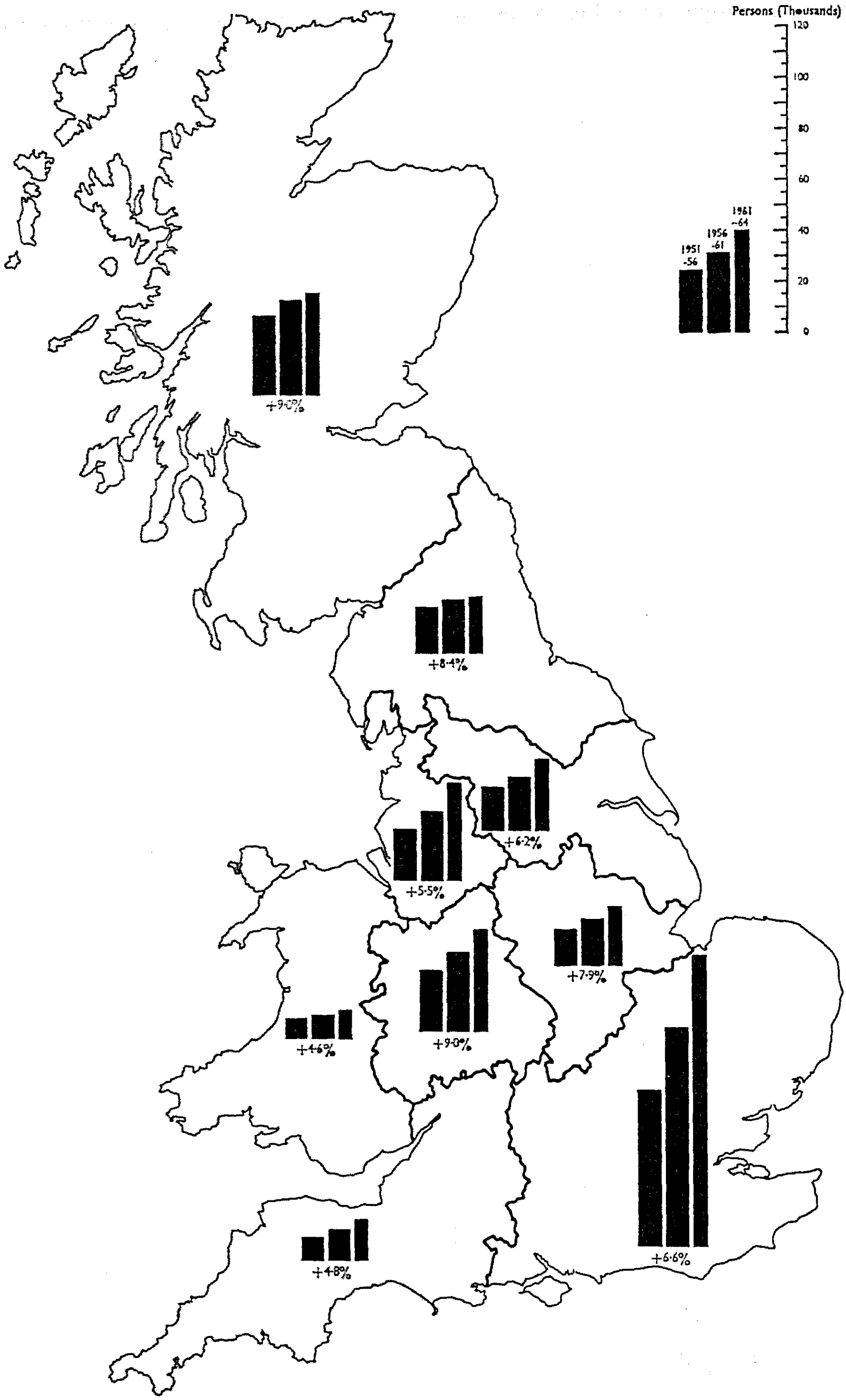

Fig. 8. Civilian population: natural increase: 1951-56, 1956-61 and 1961-64

The heights and widths of the columns are proportional to the mean annual natural increase and to the length of the period respectively. Thus, volume of natural increase is represented by the area of the columns. Percentage growth over the period 1951-64 as a whole is given in figures. The total natural increase 1951-64 in Great Britain was 3,307,000 or 6.8 per cent (see Appendix, Tables 6-9) than in the 1930's although not so high as in the 1920's. Towards the end of the 1950's net outward migration appears to have declined to a rate similar to that in the 1930's. The latest figures suggest that migration from the region has virtually ceased.

10. Net migration is known to be the product of very much larger gross movements of population into and away from the region, but little is at present known about the exact size and composition of these gross movements. However, something can be learnt from the figures of interregional migration of employees which the Ministry of Labour derive from their annual one per cent sample of National Insurance cards.[1]

11. Between 1951 and 1962 there was a net loss of 45,000 employees from the North West, which was the result of just over 650,000 workers moving into the region and just under 700,000 moving out. Gross movements have tended to increase since 1957, but the annual net loss from the region has varied very little and over this more recent period has averaged only 0·15 per cent of the region's total employees. It appears that over the ten years 1952-62 there was a continuous net loss of male employees to South-East England averaging just short of 4,000 each year while losses to the South West, the West Midlands and the East and West Ridings were relatively insignificant. On the other hand, there seems to have been an average net gain of about 1,200 male workers from Scotland annually and small net gains from the Northern Region and Wales.

12. Some of the effects of past migration on the composition of the region's population are revealed by an analysis of the statistics of birthplace obtained from the 1951 and 1961 censuses. People born outside England and Wales make up a much smaller proportion of the population in the North West than in the country as a whole.[2] The proportion born in the rest of the British Isles, including the Irish Republic, is roughly the same as the average for England and Wales, but there are considerably fewer immigrants from the Commonwealth and foreign countries.

NATURAL INCREASE

13. The rate of natural increase in population in the North West has been consistently below the average in England and Wales since the end of the First World War. (See Figure 8.) This has mainly been due to relatively high death rates which have outweighed the effects of birth rates only slightly above the average for England and Wales. Between 1951 and 1962, the crude birth rate[3] in the North West averaged 16·7 per thousand population or 3 per cent above the average for England and Wales. Over the same period, the crude death rate averaged 12·8 per thousand—10 per cent above the comparable figure for England and Wales.

14. This high death rate cannot be explained solely by differences in age structure between the population in the North West and that in England and Wales. The standardized death rate

Table 3 **Population Changes—1921-1964**

Period	*Total Increase*		*Natural Change*		*Estimated Gain from Armed Forces*	*Balance of Migration*		*Thousands Mean Annual Migration*
	No.	*%*	*No.*	*%*		*No.*	*%*	
1921-31	126	2·1	282	4·7	—	−156	−2·6	−15·6
1931-39	40	0·6	99	1·6	—	− 59	−1·0	− 7·4
1951-56	51	0·8	101	1·6	10	− 60	−0·9	−12·0
1956-61	110	1·7	134	2·1	37	− 60	−0·9	−12·1
1961-64	120	1·8	114	1·7	6·5	—	—	—

[1] These figures are shown in detail in Tables 35 and 36 of the Statistical Appendix.

[2] See Table 17 of the Statistical Appendix.

[3] The crude birth rate is the number of births per annum in relation to the total size of home population. The standardized birth rate is the crude rate adjusted to take account of the age-sex-marital structure of the population. The standardized death rate is a similarly adjusted version of the crude death rate.

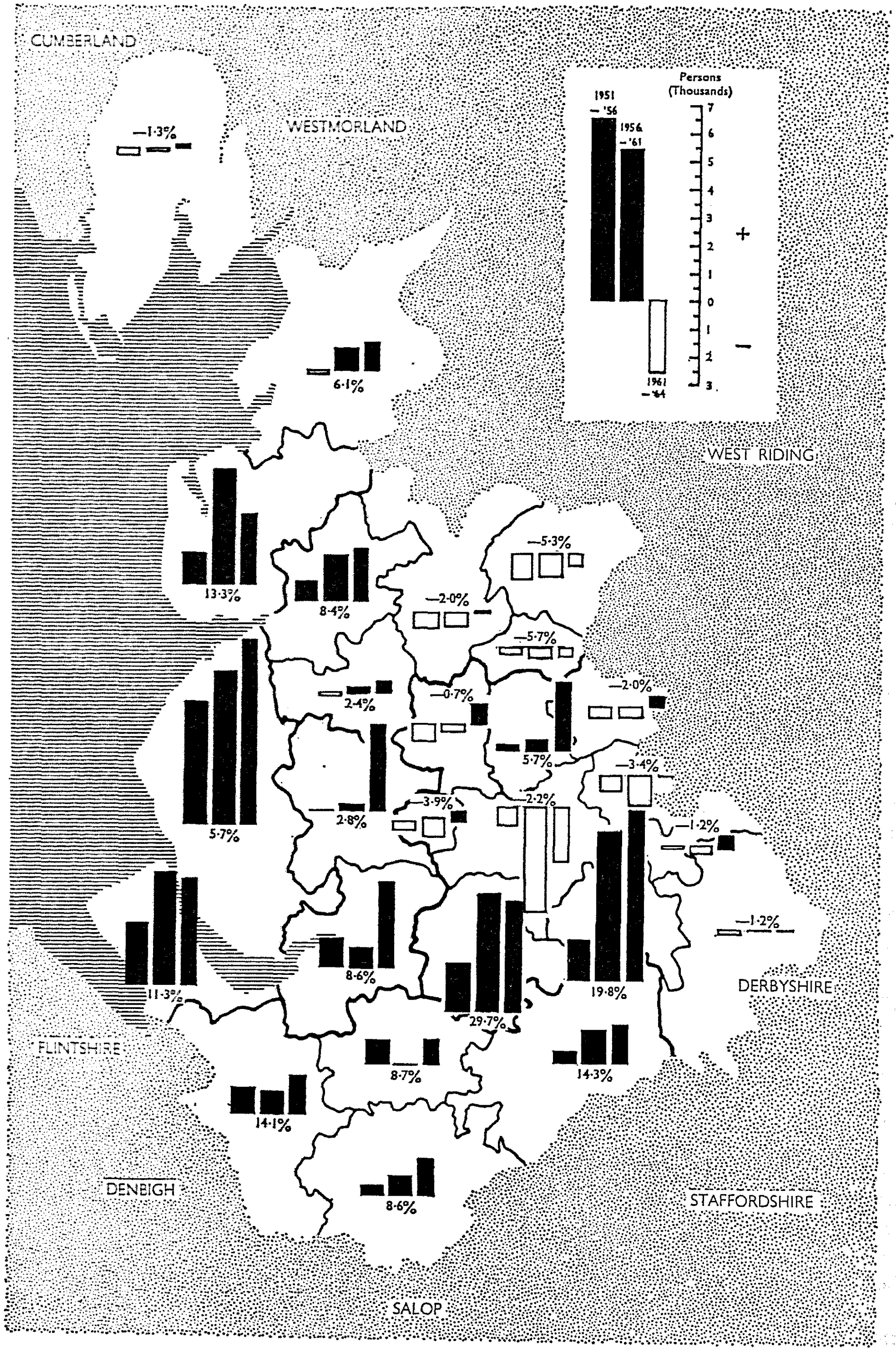

Fig. 9. Civilian population: total change: 1951-56, 1956-61 and 1961-64

The heights and widths of the columns are proportional to the mean annual total change and to the length of the period respectively. Thus, volume of change is represented by the area of the columns. Percentage growth over the period 1951-64 as a whole is given in figures. The total increase 1951-64 in the North West was 282,000 or 4.4 per cent (see Appendix, Tables 11-14) in 1951-62 for the North West was 13·7 per thousand—even further from the national average. The main causes of death for which standardized death rates are particularly high in the North West (bronchitis, certain types of cancer, influenza, and heart diseases) are also causes for which death rates are high in conurbations and large cities generally. This suggests that the main reason for the region's high death rates is simply that a high proportion of its population lives in urban areas; but poor housing conditions, serious atmospheric pollution and the cold and wet climate of some of the hilly areas probably also play a part.

15. There is no sign of this regional differential in death rates becoming less marked over time; if anything it appeared to be growing larger in the later years of this period.

16. In the North West, as in England and Wales there has been a sharp rise in birth rates since the mid-1950's. In 1951-56, the crude birth rate for the region averaged 15·8 per thousand population; for 1957-62 the average was 17·6. Together with the fall in the rate of outward migration from the North West which occurred in the later 'fifties, this rise in birth rates has resulted in a substantially faster rate of population growth in the region than in any recent period. Between 1951 and 1956 the population of the North West increased by 0·8 per cent, between 1956 and 1961 by 1·7 per cent, and between 1961 and 1964 by 1·7 per cent, a rate which, if maintained, would amount to 3·0 per cent over a five-year period. But the rate of population growth in the North West is still slower than in England and Wales generally.[1]

AGE STRUCTURE

17. In recent years in Great Britain the population of working age has been growing more slowly than the total population. In the North West, however, natural increase and migration trends actually led to a fall between 1951 and 1961 in the total population of working age, (i.e. those between 15 and retiring age), and this section now represents a lower than average proportion of the population. Correspondingly, children under school-leaving age and old people above retirement age account for a slightly higher proportion of the region's population than they do nationally. The implications of this for the region's economy are discussed in Chapter 5.

SUB-REGIONAL VARIATIONS IN GROWTH AND DECLINE

18. Considerable shifts have been going on during the post-war period in the distribution of population within the region. These are illustrated in Figures 9, 10 and 11. In broad terms, population growth has been most rapid in the southern suburban areas of the South East Lancashire and Merseyside conurbations, in other urban areas such as Preston, Warrington and Wigan which lie on the route of the M6, and in the Fylde. Population decline has occurred in East and North East Lancashire, in the centre of the Manchester conurbation and in Furness.

19. The Altrincham, Stockport and Macclesfield sub-regions have shown the most marked increases in population, principally as a result of movements out of the Manchester conurbation. Between 1951 and 1964, the Stockport area gained 40,000 in population as a result of inward migration, Altrincham over 32,000 and Macclesfield 9,500. These areas' rates of natural increase were relatively low, but have more recently shown signs of increasing sharply since it is predominantly young married couples who have moved to them.

20. Similarly the Wirral and Chester areas have gained population as a result of migration, mainly from North Merseyside, but in their case substantial natural increase has also contributed to their rapid rate of growth. The North Merseyside sub-region itself showed substantial population growth, despite considerable losses from net migration, as a result of its extremely high rate of natural increase.[2] In the Warrington, Wigan and Chorley areas there was also moderate population growth as a result of natural increase outweighing migration losses.

21. The Fylde, Lancaster and Preston subregions all gained population as a result of

[1] Between 1951 and 1956 the population of England and Wales increased by 1·9 per cent, between 1956 and 1961 by 3·6 per cent, and between 1961 and 1964 by 2·6 per cent.

[2] In 1960, 1961 and 1962 the standardized birth rate in the Merseyside conurbation was respectively 14, 15 and 11 per cent above the comparable figure for England and Wales as a whole.

Fig. 10. Civilian population: natural change: 1951-56, 1956-61 and 1961-64

The heights and widths of the columns are proportional to the mean annual natural change and to the length of the period respectively. Thus, volume of natural change is represented by the area of the columns. Percentage change over the period 1951-64 as a whole is given in figures. The total natural increase 1951-64 in the North West was 349,000 or 5.5 per cent (see Appendix, Tables 11-14)

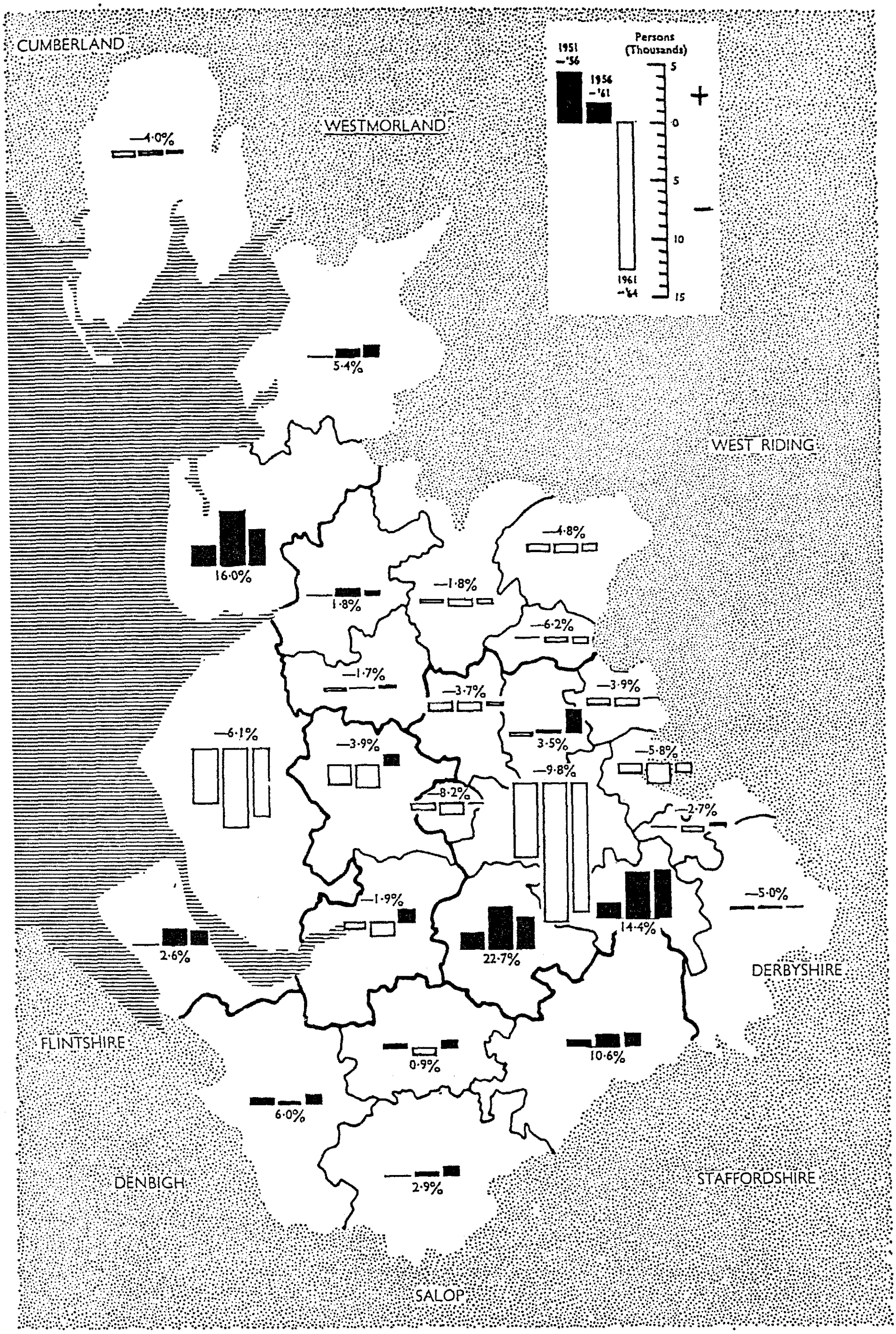

Fig. 11. Civilian population: estimated net migration: 1951-56, 1956-61 and 1961-64

The heights and widths of the columns are proportional to the mean annual net gain or loss by migration and to the length of the period respectively. Thus, volume of net migration is represented by the area of the columns. Percentage change over the period 1951-64 as a whole is given in figures. The total net migration 1951-64 for the North West produced a loss of 120,000 or 1.9 per cent (see Appendix, Tables 11-14) migration and Preston also had a substantial rate of natural increase. However, the Fylde and, to a lesser extent, the Lancaster sub-region are favoured areas for retirement and have a very high proportion of old people in their populations; as a result they experienced natural *decrease* in the period 1951-64 (i.e. deaths exceeded births). Nevertheless, inward migration was sufficient to result in a rate of population growth well above the regional average.

22. Outward migration was the principal cause of the population losses which occurred in East and North East Lancashire. However, past migration losses have had such an effect on the age structure of the population in these areas that rates of natural increase were also very low. Indeed, in the Blackburn, Burnley and Rossendale sub-regions deaths exceeded births in this period, so that natural decrease reinforced the effects of migration loss.

3 The Region's future population

1. As a first step in estimating future population trends in the North West, it is useful to make projections based on certain assumptions about fertility and mortality rates and migration. However, projections of this kind cannot in themselves provide a considered forecast of the region's future population. Such a forecast can only be made in the light of likely social and economic trends both regionally and nationally, and of possible policy changes. Some of the relevant factors are reviewed in the succeeding chapters of this report.

HOW THE PROJECTIONS HAVE BEEN MADE

2. Projections of population change in the North West up to 1981 have been made on two alternative bases. The first set consists solely of projections of the natural increase of the existing population and takes no account of planned overspill movement or voluntary migration; in other words, they assume no net movement of population. The second set has been arrived at by adjusting the first to allow for planned overspill and voluntary migration. In calculating the extent of migration it has been assumed that trends and rates of movement experienced in the North West between 1956 and 1964 will also apply in the future. The adjustments for both planned and voluntary movement make allowance only for the population which will actually move, and not for any subsequent gains by natural increase in the population moving or reductions in natural increase in the areas losing population. While any final estimates of future population will certainly have to make allowance for the effect of migration on natural increase, such a refinement would be of little value at this stage.

3. The two sets of projections can be regarded as a pair of brackets which isolate a broad range of possibilities. For the region as a whole and for its divisions and sub-divisions they provide hypothetical upper and lower estimates of population growth. But because of their hypothetical character, it must not be assumed that they do in fact cover the full range of possibilities. It cannot for instance be taken for granted that past outward migratory trends from the North West will not intensify, or alternatively be completely reversed.

4. The projections must therefore be treated with caution. It would be misleading to try to break them down below sub-divisional level, except for some of the more populous sub-regions, or to attempt to draw up any detailed balance sheet of maximum and minimum estimates of growth. Nor would it be appropriate at this stage to make projections going beyond 1981.

ASSESSMENT OF NATURAL INCREASE

5. The starting point for the local population and household projections used in the main body of this report is the projection of the population of England and Wales as a whole which was made by the Government Actuary in 1962. This suggested an increase of 5,576,000 in the national population between 1962 and 1981. Local projections were derived from the national figures on the assumption that the differentials in mortality and fertility prevailing at the time of the 1951 census would be maintained. At the same time, allowance was made for all migration occurring before 1954 and for heavy migration[1] occurring between 1954 and 1961.

[1] Greater than $\pm 0{\cdot}5$ per cent per annum.

6. The resulting projection of natural increase for the North West as a whole for the period 1962-1981 was 992,000. This has been adjusted to a figure of about 930,000 for the period 1964-1981 (or an increase of roughly 14 per cent of the region's population in 1964).

7. Since the main survey material was prepared for this report, however, fresh local population projections have been made which are based on the age and sex structure of population as revealed by the 1961 census and are derived from the Government Actuary's 1963 projection for the country as a whole. But these local projections do not show any significant general change from the earlier ones, and no related projections of household formation have been made. While, therefore, some use has been made of the more recent local projections in the appendix to this report which deals with the special problems of Merseyside, the earlier projections have been retained generally, since it is to them that the latest available household projections are related.

8. An additional reason for not making general use of the later set of local population projections is that the 1963 national projection, from which they are derived, has now in turn been superseded by the Government Actuary's 1964 projection which forecasts a substantially greater increase in the national population. The size of the increase forecast by 1981 is in fact some 20 per cent higher than that forecast by the Government Actuary in 1962. Although, therefore, no local projections have yet been derived from this latest national projection, any projections eventually based on it will be likely to show increases of as high as 20 per cent over the local projections used in this report. In the period up to 1981 these increases would of course be confined to the 0-17 age groups.

9. Broadly speaking, therefore, the local projections of natural increase used in this report must be regarded as subject to two important limitations. Firstly, they are related to the age and sex structure of population as revealed by the 1951 census and secondly, they are derived from a national population projection which has now been superseded by one which suggests that a much larger increase in the national population is likely to occur before 1981.

10. They may well therefore prove to be underestimates. However, it must not be assumed from this that the corresponding household projections used in Chapter 9 for the purpose of estimating housing needs may similarly prove to be on the low side. Increases in the future average size of households could reduce the effects of an increased rate of population growth on the numbers of households requiring separate accommodation.

EFFECTS OF MIGRATION

11. In modifying these local projections of natural increase to create a second set of projections which allow for migration, account has been taken of both planned overspill and voluntary movement. Projections of planned overspill movement are based on schemes in progress or agreed by the end of 1964. In addition, account has been taken of the new town proposed for the Leyland/Chorley area and the proposal for the expansion of Warrington to take Manchester overspill. It is assumed that by 1981 a total of 98,000 people will have been accommodated in these areas, 52,500 in the Leyland/Chorley area and 45,500 in the Warrington area.[1]

12. Voluntary migration has been assessed on the basis of a continuation of average rates of net inward and outward migration between 1956 and 1964. 1956 has been chosen as a base year because of the general increase since that time in the birth rate, the net immigration experienced since then by the country as a whole, and the fact that by 1956 increases in private enterprise house building rates had created a significantly greater freedom of movement than existed in the earlier post war years.

13. On the basis of these assumptions about migration, a net population increase by 1981 of some 794,000 has been calculated for the region as a whole (equivalent to a roughly 12 per cent increase over 1964). This would make the North West's total population in 1981 some 7,456,000.

THE BROAD PATTERN OF CHANGE WITHIN THE REGION

14. The distribution of future population increase within the region is likely to be very much in-

[1] Table 42 of the Statistical Appendix explains the basis of these assumptions in terms of dwellings.

Table 4 **Estimated Home Population Changes 1964-1981**

Area	*Mid-Year Population* 1964	*Natural Change* 1964-1981		*Mid-Year Population Projection Nat. Inc. only* 1981	*Planned Overspill* 1964-1981 *(agreed schemes)*[1]		*Voluntary Migration* 1964-1981 *Projection of Past Trends*		*Estimated Resultant Population* 1981[2]	*Total Change* 1964-1981	
		Nos.	%		*Nos.*	%	*Nos.*	%		*Nos.*	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
NORTH WEST REGION . . .	6,661,880	929,180	13·9	7,591,060	Nil	—	−135,100	− 2·0	7,455,960	+794,080	+11·9
NORTH LANCS. DIVISION . .	1,279,010	88,910	7·0	1,367,920	+52,500	+ 4·1	+ 60,180	+ 4·7	1,480,600	+201,590	+15·8
Furness Sub-Division . .	104,660	11,500	11·0	116,160	Nil	—	− 4,080	− 3·9	112,080	+ 7,420	+ 7·1
Lancaster-Fylde Sub-Division .	409,910	19,230	4·7	429,140	Nil	—	+ 81,770	+20·0	510,910	+101,000	+24·6
Ribble Sub-Division . .	764,440	58,180	7·6	822,620	+ 52,500	+ 6·9	− 17,510	− 2·3	857,610	+ 93,170	+12·2
MERSEY DIVISION	4,981,490	788,900	15·8	5,770,390	− 71,050	− 1·4	−219,760	− 4·4	5,479,580	+498,090	+10·0
Merseyside Sub-Division .	1,696,820	389,480	23·0	2,086,300	−102,240	− 6·0	− 91,310	− 5·4	1,892,750	+195,930	+11·6
Warrington-Wigan Sub-Division	624,360	111,820	17·9	736,180	+189,040	+30·3	− 22,680	− 3·6	902,540	+278,180	+44·6
South East Lancs. Sub-Division	2,660,310	287,600	10·8	2,947,910	−157,850	− 5·9	−105,770	− 4·0	2,684,290	+ 23,980	+ 0·9
SOUTH CHESHIRE DIVISION . .	401,380	51,370	12·8	452,750	+ 18,550	+ 4·6	+ 24,480	+ 6·1	495,780	+ 94,400	+23·5

[1] The figures in this table, which cannot be regarded as correct below thousands, are presented in their unrounded form for convenience.

[2] No allowance has been made for subsequent natural change in the population which has moved: see Chapter 3, paragraph 2.

fluenced by overspill and migrationary movements. This is illustrated by Table 4

15. The projections based on natural increase alone show a very high rate of growth in the population of the Mersey division and in that of the Merseyside sub-division in particular. The increase on Merseyside is concentrated in the main in the North Merseyside sub-region, where the percentage increase is over 25 per cent, in contrast to 16 per cent in the South Merseyside sub-region, and 10.8 per cent in the South East Lancashire sub-division as a whole. Much smaller increases are shown for the Lancaster/ Fylde and Ribble sub-divisions. The basic reason for the small increase in the former is the high proportion of retired people living there. The small increase in the Ribble sub-division is the result of the top heavy age structure of the population in North East Lancashire, where there has been persistent net outward migration of younger people. In general, it can be said that the broad effect of natural increase by itself would be to aggravate greatly the state of imbalance between the highly populated areas of the Mersey belt and the more sparsely populated areas to the North and South.

16. When, however, these projections are adjusted to take account of planned overspill and voluntary migration, the position is substantially altered. Although migration from the region as a whole is not very large, the broad effect of internal movements is to spread population growth more evenly between divisions and more evenly within the Mersey division itself. Particularly noteworthy is the 44·6 per cent net increase in the Wigan/Warrington sub-division. The only areas to suffer substantial net loss of population are the Rossendale, Burnley and Manchester sub-regions; the net loss in the last case is in the main the result of planned overspill movement.

CONCLUSIONS

17. The two basic sets of projections made—those ignoring migration and those taking account of it—provide a broad framework within which the economic and physical planning problems of the region can be considered. The value of such a framework is particularly obvious when considering the employment and overspill problems of the two main conurbations. The two sets of projections illustrate the varying scale of these problems depending on the assumptions made regarding net voluntary migration from the region.

18. In addition it is possible to draw some broad conclusions from the calculations made. The most important one is that even if net outward migration from the region as a whole continues unchecked, there is nevertheless likely to be a very substantial net growth of population by 1981, mainly within the Mersey division, and that the main impact of this growth in terms of employment and planning needs will be felt in the 1980's and 1990's.

19. Another important conclusion is that planned overspill schemes are likely to play a substantial part in re-distributing that growth, not only because of the large numbers of people likely to move, but also because overspill families tend to come from the younger and more fertile element in the population. Their movement has therefore the effect of boosting the rate of natural increase in the "importing" area and correspondingly depressing the rate within the "exporting" area.

20. Finally, the point must be emphasised that the projections of natural increase in the North West made in this Chapter must now be regarded as on the low side in the light of the Government Actuary's latest projection for England and Wales as a whole. Any upward revision of the natural increase projections would, of course, be reflected in a similar revision of the projections which make allowance for continuing migration.

Part Three

The economy of the Region

Fig. 12. Ministry of Labour regions (as constituted in 1961)
Employment statistics are not generally available for economic planning regions in England. Ministry of Labour regions, as constituted in 1961, are broadly equivalent to regions as used for the 1961 census

4 Employment trends

RECENT EMPLOYMENT TRENDS

In the recent past, the North West's population has been growing a good deal more slowly than that of Great Britain generally, while the region's population of working age has actually been declining. At the same time, employment growth in the North West has also been at a rate well below the national average. (See Figure 13.) Between 1953 and 1963, the number of employees at work in the region increased by only 51,000—or 1·8 per cent, compared with 9·1 per cent in Great Britain as a whole. This was the lowest percentage increase for any of the regions, apart from Scotland, and, as a result, the North West's share in the national total fell from 14 per cent in 1953 to 13 per cent in 1963.

2. The fact that this very slow increase in employment has occurred at a time when there has been a slight fall in the size of its population of working age has meant that the North West as a Whole has not suffered from the persistent high unemployment and heavy outward migration which might otherwise have been expected. Nevertheless the rate of unemployment has remained fairly consistently above the national average rate (see Figure 14) and there has been a small, but continuing, net loss of employees as a result of migration[1]. And on Merseyside, where population growth by natural increase has been well above not only the regional, but also the national, level, high unemployment rates and heavy outward migration have in fact occurred.

3. At least so far as the provision of jobs is concerned, therefore, the region's economy has shown a lack of vigour and dynamism. The North West has had a good deal more in common with the other older industrial regions of the country than with the buoyant Midlands and South East. Part of the explanation lies in the sharp contraction which has occurred in recent years in the labour forces of some of the North West's traditional industries—for example coal mining, shipbuilding, port operations and above all textiles. Indeed, the loss of jobs in these industries has been on such a scale that at first sight it appears remarkable that the region has passed through the period of their contraction with so little difficulty. Moreover, a closer examination of the structure of the region's economy shows that these obvious weaknesses have not been by any means its only handicaps.

THE STRUCTURE OF MANUFACTURING

4. The North West is a major industrial region and has a much higher proportion of its labour force in manufacturing than is the case in Britain generally. (See Figure 15.) However, this dominance is becoming less marked. In 1953 manufacturing provided nearly half the North West's total employment, as compared with only 40 per cent in the country as a whole. But while manufacturing's share of the national total dropped only slightly between 1953 and 1963 (to 38 per cent), in the North West there was a more noticeable fall (to just under 46 per cent). Nationally, the number of jobs in manufacturing increased by more than 7½ per cent over the decade, but in the North West by contrast there was a decline of 4 per cent.

5. Table 5 summarises the resulting structure of manufacturing industry in the region and nationally, by showing total employment in mid-1963 in the various industrial Orders of the Standard Industrial Classification. These Orders are broad groupings and some of them cover very

[1] See Tables 35 and 36 of the Statistical Appendix.

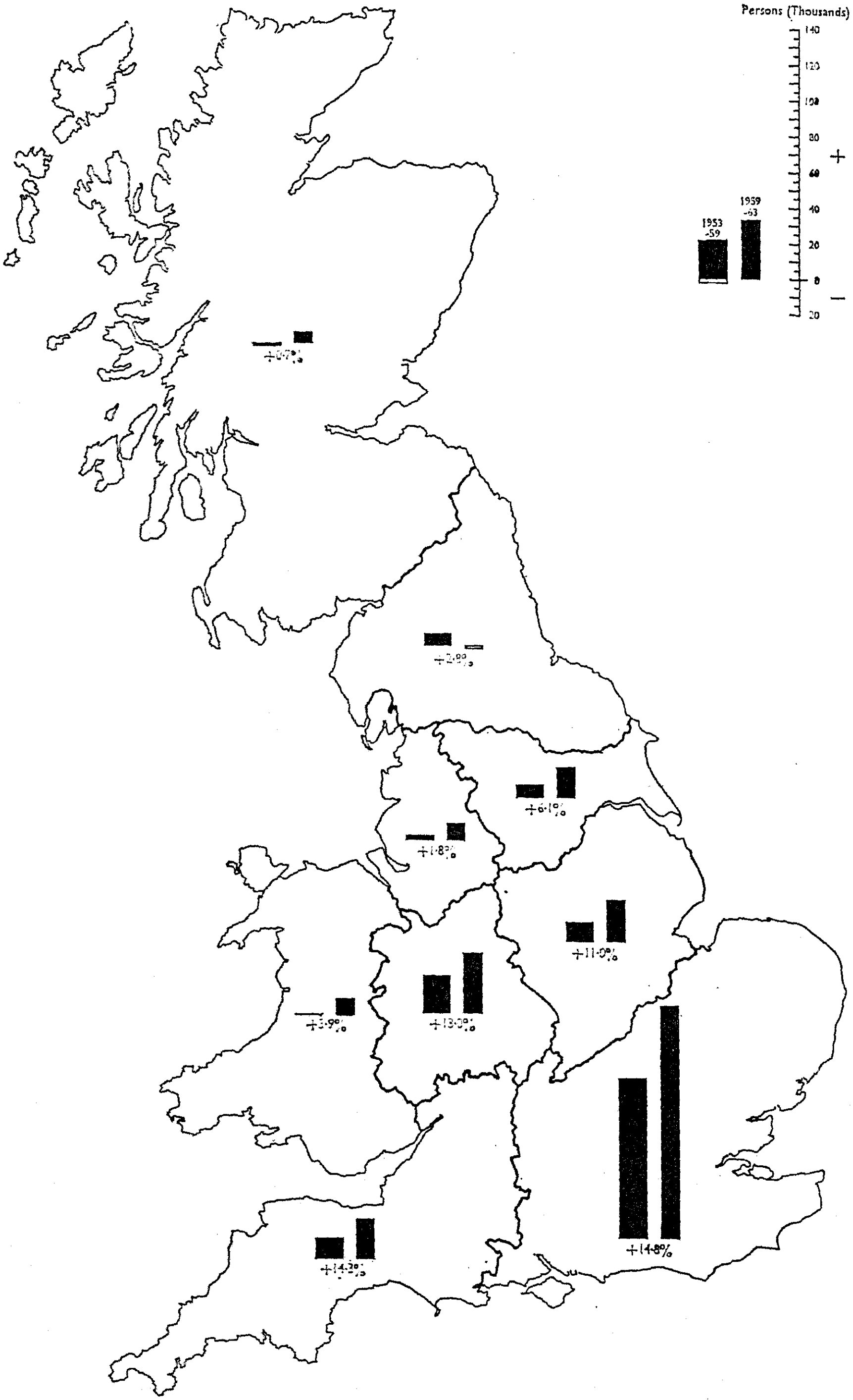

Fig. 13. Employment: total change by Ministry of Labour regions; 1953-59 and 1959-63

The heights and widths of the columns are proportional to the mean annual changes in estimated numbers of employees employed at mid-year and to the length of the period respectively. Thus, volume of total change is represented by the area of the columns. Percentage growth over the period 1953-63 as a whole is given in figures. The total increase 1953-63 in numbers employed in Great Britain was about 1,883,000 or 9.1 per cent (see Appendix, Table 18)

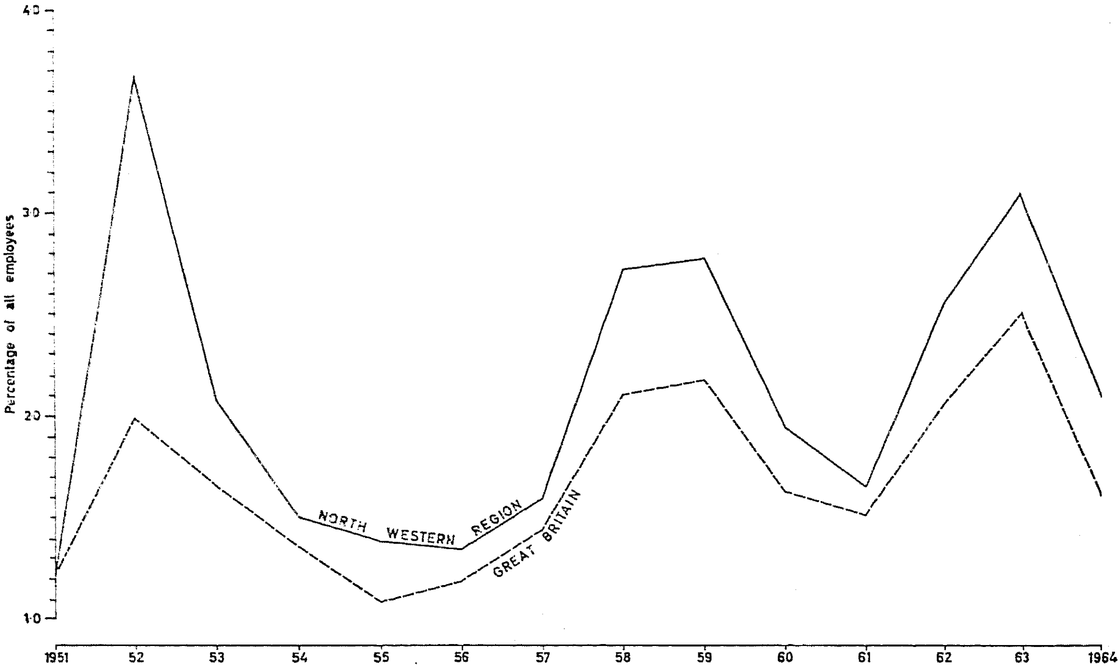

Fig. 14. Great Britain and the North Western Region: unemployment rates, 1951-64
The annual average of the monthly figures of total registered unemployed (including temporarily stopped) expressed as a percentage of the estimated number of employees (employed and unemployed) at mid-year is plotted for the years 1951-64 for Great Britain and for the North Western Region of the Ministry of Labour (see Appendix, Table 34)

diverse forms of industrial activity (for example "vehicles" includes the production of aircraft and railway locomotives and rolling stock, as well as of cars and commercial vehicles). Comparisons at Order level can therefore give no more than a very general impression of the extent to which the pattern of manufacturing in the North West corresponds to the national pattern. Nevertheless Table 5 shows clearly that the range of manufacturing in the region is very wide. While the textile industry remains of considerably more importance to the North West's economy than to that of Great Britain, it now provides less than a fifth of the region's manufacturing employment and has a much smaller labour force than the engineering industry. The clothing and footwear industry is also relatively larger in the North West than nationally and so too are the chemical and food industries. The only Order which is substantially less important in the region is metal manufacture.

6. The **textile industry** in the North West has of course traditionally been based to a very large extent on cotton. In the early days of the Industrial Revolution the western slopes of the Pennines provided the water power and humid weather conditions which were then thought essential to the cotton manufacturing processes, and throughout the nineteenth century the tremendous expansion of the industry was the basis for the region's very rapid growth. Specialisation within the industry became highly developed, to the extent that towns immediately to the north of Manchester (like Bolton, Rochdale and Oldham) were almost exclusively concerned with spinning, while those further north (like Burnley, Blackburn and Preston) concentrated on weaving. The general organisation of the

Table 5 **Estimated numbers of employees in employment in manufacturing industry in the North West and Great Britain, mid-1963**

	North West		Great Britain	
	Numbers employed 000s	*% of total employment*	*Numbers employed 000s*	*% of total employment*
Food, Drink and Tobacco	126	4·3	805	3·6
Chemicals and Allied Industries	122	4·2	511	2·3
Metal Manufacture	38	1·3	591	2·6
Engineering, Electrical Goods and Metal Goods	344	11·8	2,671	11·9
Shipbuilding and Marine Engineering	31	1·0	211	0·9
Vehicles	115	3·9	866	3·9
Textiles	235	8·0	776	3·5
Leather, Leather Goods and Fur	10	0·3	62	0·3
Clothing and Footwear	99	3·4	543	2·4
Bricks, Pottery, Glass, Cement, etc.	46	1·6	337	1·5
Timber, Furniture, etc.	30	1·0	281	1·2
Paper, Printing and Publishing	88	3·0	621	2·8
Other Manufacturing	58	2·0	307	1·4
Total Manufacturing Industries	1,342	45·8	8,582	38·1

NOTES:

1. These estimates are derived from samples of national insurance card exchanges in June, July and August, and so are subject to sampling and estimation errors which can be substantial in the case of small groups.

2. The regional estimates do not take full account of cases where a person is employed in another region from that in which his card is exchanged.

3. The estimates also include some persons not in employment at mid-year who were not registered as unemployed in June, but who exchanged their insurance cards during the June to August quarter.

4. Part-time and occasional workers as well as school pupils and students with jobs are reckoned as whole units.

industry was in small to medium-sized units, which mainly confined themselves to one stage in the production process.

7. In terms of output and exports, the Lancashire cotton industry reached its peak in the years immediately before the First World War. But there had already for some time been signs that its dominant position in the world was being eroded. After 1918, it became very clear that the halcyon days were over and the past half century has been a prolonged, and often painful, period of adjustment for the industry. It grew up to supply cloth to markets all over the world, but has had gradually to accustom itself to a situation where it has been excluded from many markets in favour of local production and has had to re-adjust towards supplying markets in industrial countries (including the domestic market) where the emphasis is increasingly on production of branded advertised fashion goods.

8. The Government has assisted the industry in recent years by encouraging rationalisation and modernisation and by taking special steps to restrain the growth of imports. The industry's traditional character is being radically altered. Large national companies (particularly I.C.I. and Courtaulds) have acquired a substantial stake in it and are breaking down the old horizontal form of organisation by developing integrated production from the raw material stage right through to marketing. Knitting processes are replacing weaving in some sectors of production. And it is no longer strictly accurate even to talk of the "cotton" industry, since man-made fibres are accounting for an increasing proportion of the materials used.

9. There now appears to be a much better prospect that the industry will achieve greater stability in the future, at least in its output. But further substantial increases in productivity will be essential and the demand for labour is therefore likely to go on shrinking. However, a considerable contraction in the industry's labour force is likely to occur naturally, since a high proportion of its workers are now aged over 55. Indeed recruitment of sufficient labour, above all for shift-work, may become one of its major problems, especially if employment generally in the region expands more rapidly in future.

10. Some of the other sections of manufacturing in the North West have traditionally been closely associated with the cotton industry. This was once particularly true of the **clothing industry,** but it now uses a wide range of fabrics and materials. Well over one sixth of the industry's total employment nationally is in the North West. Manchester is the national centre of the rainwear trade and also produces a great deal of light clothing; Stockport is a major hatting centre; and slippers and other footwear are produced in Rossendale and in Furness and the Fylde. Most of the industry is made up of small firms, but Montague Burton Ltd. employ several thousand people in tailoring.

11. Much of the North West's **engineering industry** can also trace its origins back to a close relationship with textiles, though as a supplier rather than a customer. But although the region still contains many of the leading textile machinery manufacturers, it also produces a vast variety of other engineering goods and the link with the cotton industry has become much less significant. About one third of the country's insulated cable and wire industry is concentrated in the North West, and other forms of electrical engineering which are carried on in the region include virtually everything from the production of heavy generating plant, turbines, switchgear and transformers down to the manufacture of radio valves, cathode ray tubes, record players, telephones and domestic appliances. Several firms specialising in computers and advanced electronic equipment are well established and the production of components for the motor industry is of growing importance. In mechanical engineering the range of products is just as wide—including chemical plant and diesel engines, earth-moving equipment and paper machinery, atomic power plant and food machinery, printing presses, chains and some machine tools.

12. Well over a dozen engineering firms—most of them major national companies—each provide more than 5,000 jobs in the North West. They include English Electric, A.E.I. Ltd., British Insulated Callender's Cables, Ferranti, the Plessey Group, Joseph Lucas Ltd., Philips Electronic and Associated Industries Ltd., the Stone-Platt group and Vickers Ltd.

13. The **vehicle industry** has taken on a new importance in the North West with the establishment of the Ford, Vauxhall and Standard Triumph plants on Merseyside. Previously, the region was a centre for the production of commercial vehicles, particularly by Leyland Motors.

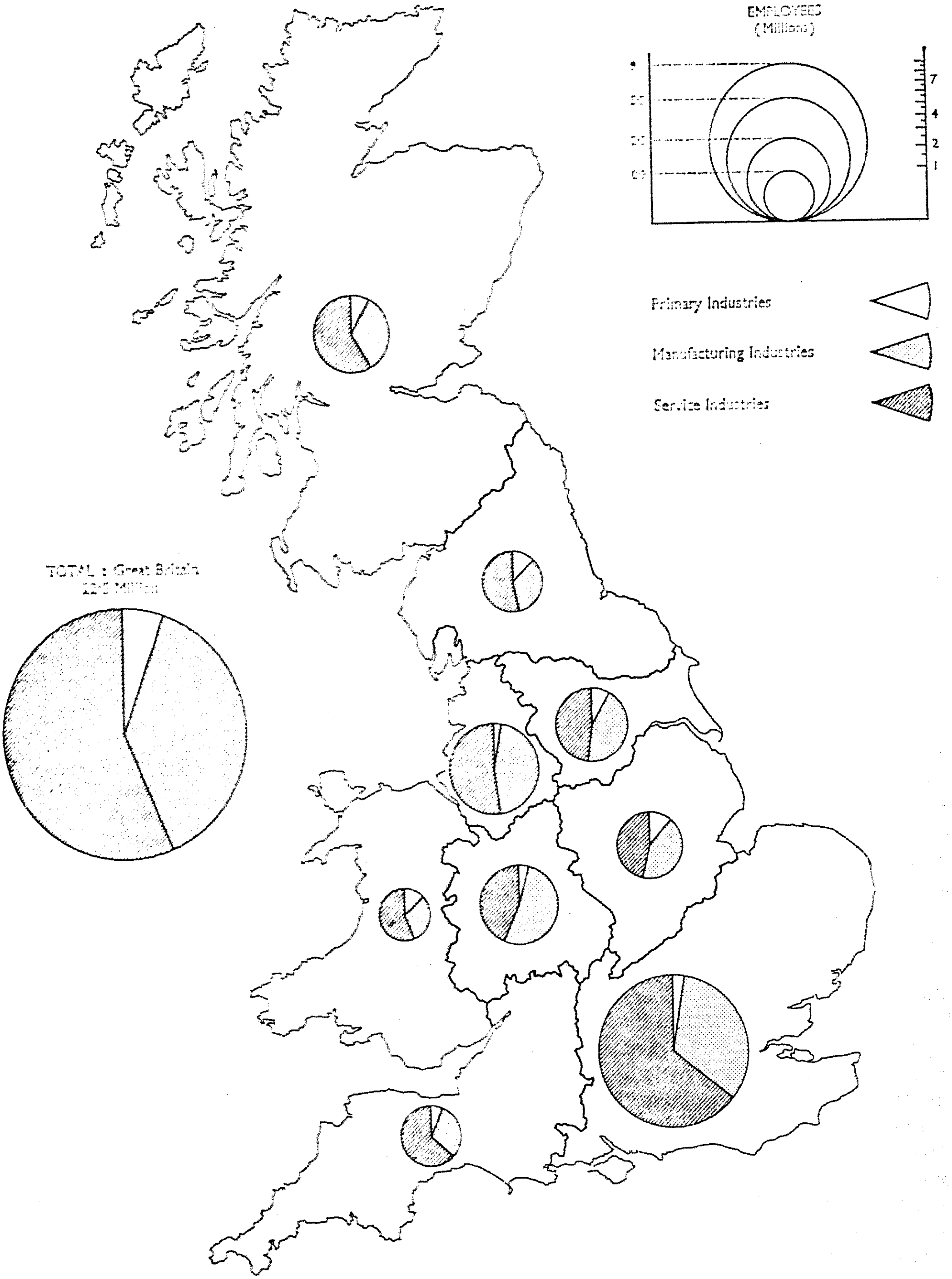

Fig. 15. Employment structure by Ministry of Labour regions, 1963
The area of the circles represents the total number of employees employed in each Ministry of Labour region: the sectors show the distribution between these broad industrial categories (see Appendix. Table 22)

It also has important railway workshops and several factories producing locomotives. The aircraft industry in the region (which is included in the vehicles group) has been very dependent on military orders and has recently been affected by the cancellation of the T.S.R.2.

14. There are only two large **shipbuilding** firms in the North West—Vickers at Barrow-in-Furness and Cammell Laird at Birkenhead. Both specialise in the building of submarines, but also carry out other kinds of work. In addition, a number of smaller firms on Merseyside are engaged in ship repairing.

15. The North West has long been a major centre of the **chemical industry** which originally developed in the region to exploit the mid-Cheshire salt deposits and to provide dyes for the cotton industry. The region now has nearly one quarter of the industry's total employment nationally and this is quite well distributed between different types of production. Bulk basic chemicals and dyestuffs remain of most importance: Manchester is the centre for dyestuffs production; chlorine, caustic soda and acids are manufactured at Widnes and Runcorn, and to a lesser extent at Fleetwood; and the production of salt and soda-based chemicals is concentrated in the Northwich area. I.C.I. Ltd. is the major employer in this section of the industry. Petro-chemical production has developed in the post-war period, mainly at Carrington based on the Shell refinery at Ellesmere Port, and further development in this field seems probable. The processing of vegetable oils and fats is dominated by Unilever Ltd., who have major plants on Merseyside and at Warrington. There is also some production of pharmaceuticals and paints in the region—particularly on Merseyside, at St. Helens and at Ulverston in Furness.

16. Quite apart from its importance as a centre of production for the chemical industry, the North West also contains a high proportion of the industry's research facilities. Shell, I.C.I., Unilever and other firms all have major research laboratories in the region and close contacts have developed with related departments in the universities.

17. The processing of goods imported through the port of Liverpool played an important part in the development of the **food industry** in the North West. Indeed, Merseyside remains the largest flour milling centre in Europe. Unilever are one of the region's leading employers in this industry also, which is related to their fat and vegetable oil processing interests so far as the production of margarine, edible oils and animal feeding stuffs is concerned; however, they are also involved through subsidiaries in the preparation and packing of frozen foods and of meat products. About one quarter of national employment in biscuit production is in the North West and again Merseyside is the main centre. Among other major units in this industry are Heinz's canning plants in the Wigan area; Kellogg's factory in Manchester for the production of breakfast cereals; Tate and Lyle's sugar refinery in Liverpool; and several tobacco factories on Merseyside, and in Ashton-under-Lyme, Hyde, and Middleton.

18. Of the remaining sections of manufacturing in the North West, the paper, glass, rubber, and metal processing industries are the most significant. The region's **paper industry** covers a variety of activities, including nearly one fifth of the country's paper and board production, several major wallpaper factories and (in Manchester) the printing and publishing of national newspapers. The **glass industry** is concentrated in St. Helens where the best known company is Pilkington Brothers Ltd. About one quarter of the **rubber industry's** total national employment is in the North West; Dunlops are the largest firm and have factories producing tyres, footwear and general goods in both Manchester and Liverpool, while Michelin's have an important tyre factory in Burnley. The region has only one large **metal processing** concern — the Lancashire Steel Company, in the Warrington area, much of whose production is used by the local wire industry; but Barrow-in-Furness has a small steel works and there are several plants processing non-ferrous metals in Manchester, Merseyside, Warrington and St. Helens.

RECENT EMPLOYMENT TRENDS IN MANUFACTURING

19. Table 6 shows percentage changes in manufacturing employment regionally and nationally between 1953 and 1963. Employment in the textile industry declined by well over one-third in the North West over this decade. Whereas in 1953 it provided rather more than one job in eight in the region, by 1963 it was providing less

than one in twelve. In absolute terms, the loss of jobs in textiles amounted to 137,000 and this far exceeded the total decline in manufacturing employment, which was only 56,000. In other words, employment in other manufacturing industries increased by about 81,000 between 1953 and 1963. Growth was fastest in the paper and food industries, in the bricks, pottery and glass group and in engineering and vehicles.

20. But quite apart from textiles, employment in eight of the remaining twelve manufacturing Orders either grew more slowly or declined more rapidly in the North West than in Britain generally between 1953 and 1963. Even in engineering, the North West's growth of just under 16½ per cent was well below the national level of over 23 per cent. And of the four Orders where growth was faster in the region than nationally, two (the food industry and the bricks, pottery and glass group) showed a rapid increase in employment in the early 1950's but fell well behind the national rate after 1959; another (vehicles) was given a substantial boost by Government intervention which encouraged the motor industry to establish several new plants on Merseyside; while the fourth (the paper industry) still provided only 3 per cent of the region's employment in 1963, despite an increase of more than a quarter in its labour force over the decade. Thus it might appear as if manufacturing industry generally had been less dynamic in the North West than nationally.

21. However, it is possible (at least in theory) to distinguish between two alternative hypothetical explanations for the North West's poor performance. Firstly, it might have been the case that a majority of the individual firms in the region increased their demand for labour less rapidly than firms engaged in comparable types of production in other parts of the country. Since there is no evidence of a particularly rapid rise in labour productivity generally in the North West, it would follow on this hypothesis that firms in the region were tending to be less successful than their competitors elsewhere, and it would appear that the region must suffer from some peculiar handicap which adversely affected most forms of industrial activity there. Alternatively, the North West's main disadvantage may have been in the structure of its manufacturing employment.

Table 6 **Estimate of percentage changes in employees in employment in manufacturing industry 1953-1963**

	1953-1959		1959-1963		1953-1963	
	North West	*Great Britain*	*North West*	*Great Britain*	*North West*	*Great Britain*
Food, Drink and Tobacco	+13·4	+ 6·5	+ 1·4	+ 3·1	+15·0	+ 9·8
Chemicals and Allied Industries	+10·8	+10·7	− 5·3	− 0·8	+ 4·9	+ 9·8
Metal Manufacture	+ 1·8	+ 1·1	− 9·4	+ 3·2	− 7·7	+ 4·4
Engineering, Electrical Goods and Metal Goods	+ 6·6	+11·3	+ 9·3	+10·8	+16·4	+23·3
Shipbuilding and Marine Engineering	− 3·8	− 6·0	−23·3	−20·7	−26·2	−25·5
Vehicles	+ 4·4	+10·4	+12·7	+ 0·7	+17·7	+11·2
Textiles	−19·7	−12·8	−21·4	− 7·5	−36·9	−19·4
Leather, Leather Goods and Fur	−20·6	−11·6	− 8·5	− 1·9	−27·3	−13·3
Clothing and Footwear	−11·5	− 7·7	− 0·3	− 0·6	−11·8	− 8·3
Bricks, Pottery, Glass, Cement, etc.	+ 7·0	− 2·7	+ 2·9	+ 4·3	+10·1	+ 1·5
Timber, Furniture, etc.	−12·6	− 1·1	+ 3·1	+ 0·5	− 9·9	− 0·6
Paper, Printing and Publishing	+13·5	+15·0	+10·7	+ 9·1	+25·7	+25·5
Other Manufacturing Industries	+ 3·6	+12·7	+ 4·7	+10·4	+ 8·5	+24·5
Total Manufacturing Industries	− 1·9	+ 4·2	− 2·1	+ 3·3	− 4·0	+ 7·6

NOTE:
These percentage changes are calculated from estimates derived from samples which are subject to the limitations set out in the footnotes to Table 5. They can only indicate the order of magnitude of the changes in a very broad way. They are given to one decimal place for the purposes of uniform presentation, but where numbers employed in an industry are small, the percentage changes should be interpreted with great caution.

In other words, individual firms in the North West may have been growing just as rapidly as firms producing the same sort of goods elsewhere, but they may have tended to specialise in types of production which have nationally given rise to slower employment growth. Slow growing and declining sections of manufacturing may have made up a larger part of the North West's particular "mix" of industries than they have nationally. An explanation along these lines would suggest that the slow growth in manufacturing employment in the North West in recent years was to a large extent a result of its past industrial history, and that an improvement in the growth rate in future will depend on the pace at which the region's industry proves able to diversify into more rapidly expanding types of production.

22. Much more detailed regional figures of employment in individual industries than are at present available would be required before it would be possible to make a final assessment of the weight which should be given to each of these two alternative hypotheses. But such evidence as is available suggests that weaknesses in the structure of the North West's manufacturing industry have been by far the more important cause of the region's slow employment growth.

23. The case of the textile industry is a particularly good example of the way in which employment in the North West has tended to be concentrated in the slower growing (or declining) sections of manufacturing. In 1953, this industry accounted for only 4·7 per cent of total employment nationally, as compared with 12·9 per cent in the North West. While the North West lost 137,000 jobs in textiles between 1953 and 1963, the rest of Great Britain lost fewer than 50,000. If the industry had had the same relative importance in the North West as in the rest of the country and had declined at the same rate, the region would have lost only 8,000 jobs over the decade. But, in fact, not only was the textile industry of much greater relative importance to the North West, but also a high proportion of the region's textile employment was in the cotton section of the industry and it was this section which declined by far the most rapidly nationally between 1953 and 1963.

24. Similar factors seem to have affected the performance of other industrial Orders in the North West. Thus in the vehicles group the region had not, until the last few years, shared in the rapid growth of the motor car industry, but had instead suffered from the decline in demand for locomotives and the gradual contraction of the aircraft industry. Within the engineering group, the region has had a bias towards the heavier end of the capital goods industries and several of the lighter, rapidly-growing, sections (for example scientific equipment, office machinery, domestic electric appliances and engineers' small tools) have accounted for a relatively small proportion of total employment. Similarly, the chemical industry in the North West has tended to specialise in the production of bulk basic chemicals and soaps, fats, greases and paints, rather than fine chemicals, pharmaceuticals, synthetic resins and plastics, where employment has been growing most rapidly. A final example is the clothing industry, where the tailoring section, in which employment has been declining, is of greater importance in the North West than nationally.

25. Substantial changes occurred during the 1950s in the structure of manufacturing in the North West. New firms which settled in the region between 1953 and 1963 are currently providing about 50,000 jobs. Of these, the motor industry projects on Merseyside are perhaps the most significant, and there is some evidence that they have begun to stimulate the development of industries supplying components. Ford's plant at Halewood, for example, purchases components from nearly 30 other firms in the North West, ten of which have recently carried out new projects in the region. There have also been sizeable developments in such industries as oil refining and petrochemicals, pharmaceuticals, light engineering, electronics and automation equipment. Moreover the process of change in the North West's indigenous industries has diminished the influence of those sections which are in decline. In particular the very rapid contraction of the cotton industry has considerably reduced its importance to the region's economy. As has been suggested, this industry may achieve greater stability in future, but even if it continues to contract at much the same rate as in the past, the effect on employment in the North West as a whole will be much less marked. In 1953 nearly 41 per cent of manufacturing employment in the North West was in industrial Orders which declined nationally over the next decade, com-

pared with just under 25 per cent in the rest of Great Britain. By 1963, these Orders accounted for only a little over 30 per cent of the region's manufacturing employment, compared with just over 20 per cent in the rest of the country.

26. However, although the North West's manufacturing base now seems to be a good deal stronger than it was at the beginning of the 'fifties, by no means all its structural disadvantages have yet disappeared. It would probably be wisest to assume that left to itself employment growth in manufacturing in the region will continue for some time to come to be at a rate some way below the national average. The possibility that further absolute declines may still occur cannot be completely ruled out.

PRIMARY INDUSTRIES

27. As Table 7 shows, the primary industries are no longer of great significance in the employment structure of the North West. Between them, mining and quarrying, and agriculture, forestry and fishing employ under 2½ per cent of the region's labour force, as compared with 5½ per cent in Great Britain.

28. **Coal mining** was, of course, one of the great traditional industries of the North West, but most of the easily worked reserves have been exhausted and mining has become a highly mechanised operation concentrated on a reduced number of modern or modernised pits. It is now an industry of major local significance only in the Wigan/St. Helens area and in North East Lancashire. Employment fell by a third between 1953 and 1963 and is likely to go on declining; but the effect of this on the region as a whole will be no more than marginal.

29. The share of the North West's labour force which is engaged in **agriculture** is underestimated by Table 7 since a large number of self-employed occupiers work on their farms, in addition to their employees. Altogether there are just over 25,000 separate agricultural and horticultural holdings in the region, with about 50,000 occupiers and full-time workers, supplemented by about 6,000 part-time and seasonal workers. And it is estimated that the processing, marketing and packing of the region's produce, and the provision and maintenance of agricultural machinery provide jobs for another 80,000 to 90,000 people in the region's manufacturing and service industries. Broadly speaking, the land north of the Mersey carries the bulk of the potatoes, vegetables and glasshouse crops which supply the region's vast urban market while the land to the south provides milk and dairy produce.

30. With improving techniques and increasing mechanisation, the region's rising agricultural output is being achieved with a declining labour force. The number of full-time workers has fallen by over a quarter in the last ten years and it would not be surprising if contraction continued in future. Since about 60 per cent of the holdings in the region are of less than 50 acres, there is also considerable scope for further amalgamation and a substantial reduction in the number of occupiers. But a continuing fall in the numbers engaged in agriculture is unlikely to cause any real difficulty, particularly as none of the region's farming areas is remote from towns where alternative employment should be available.

Table 7 **Employees in Employment in Primary Industries in the North West and Great Britain 1953-1963**[1]

	North West			*Great Britain*		
	Numbers employed 1963 (000*s*)	*% of total employment*	*% decline* 1953-63	*Numbers employed* 1963 (000*s*)	*% of total employment*	*% decline* 1953-63
Agriculture, Forestry and Fishing	24	0·8	30·0	554	2·5	24·7
Mining and Quarrying	45	1·5	33·1	682	3·0	22·4
Total Extractive Industries	69	2·3	32·1	1,236	5·5	23·5

[1] The estimates given in this table are subject to the same qualifications as those mentioned in the notes to Tables 5 and 6.

31. The **fishing** industry directly provides jobs for just under 2,000 fishermen, but a further 2,500 or so workers are employed ashore in the industry and ancillary trades. Fleetwood is the third largest fishing port in England and Wales and the only distant-water port on the west coast, the main fishing grounds being off Iceland and the West of Scotland and in the Irish Sea. In 1964 the value of landings was over £4½ million, and some 70 per cent of the fish was processed before dispatch to inland markets.

THE STRUCTURE OF SERVICE EMPLOYMENT

32. In contrast to manufacturing, where the number of jobs in the North West declined by 4 per cent between 1953 and 1963, and the primary industries, where they decreased by nearly a third, there was considerable employment growth in the service sector in the region. Construction and the service industries as a group employed nearly 140,000 more people in 1963 than ten years earlier. Whereas in 1953 they provided 47 per cent of the North West's total employment (or a slightly smaller proportion than manufacturing), by 1963 their share of the total had risen to over half—nearly 52 per cent. Nevertheless the service sector was still of greater relative importance nationally in 1963, accounting for 56 per cent of total employment.

33. Table 8 shows the broad division of employment in services in mid-1963 both regionally and nationally, between the various Orders of the Standard Industrial Classification. Only the **transport and communications** group is of greater relative importance in the North West than in Great Britain as a whole—for the region contains two of the country's leading ports (Liverpool and Manchester) and several big rail and road haulage centres. The **distributive trades,** which are the largest source of service employment, provide as big a share of the region's total jobs as they do nationally, partly because the North West appears to have relatively more small shops than any other part of the country[2], but also because mail order firms, the Co-operative Wholesale Society and merchanting organisations are major employers, especially in Manchester and Liverpool.

34. But the remaining six service groups are all relatively smaller in the North West than nationally. Given the massive need for slum clearance and general urban renewal, it is perhaps remarkable that the **construction industry** provides only 6 per cent of the region's jobs, whereas the national figure is nearly 7 per cent. **Miscellaneous services** are also a good deal less significant in the region than nationally, even though Liverpool is a major centre of the football pool firms and Blackpool, Morecambe, Southport and other coastal towns are major holiday resorts[3].

Table 8 **Estimated numbers of employees in employment in construction and the service industries in the North West and Great Britain, mid-1963**[1]

	North West		Great Britain	
	Numbers employed 000*s*	*% of total employment*	*Numbers employed* 000*s*	*% of total employment*
Construction	175	6·0	1,540	6·9
Gas, Electricity and Water	49	1·7	397	1·8
Transport and Communications	229	7·8	1,606	7·1
Distributive Trades	379	12·9	2,904	12·9
Insurance, Banking and Finance	62	2·1	603	2·7
Professional and Scientific Services	262	8·9	2,214	9·8
Miscellaneous Services	220	7·5	2,064	9·2
Public Administration	144	4·9	1,339	6·0
Total Service Industries	1,519	51·9	12,667	56·4

[1] These estimates are subject to the same qualifications as those mentioned in the notes to Table 5.

[2] The evidence for this, which is drawn from the Censuses of Distribution, is discussed below in Chapter 5, paragraph 5.

[3] However, many landladies and others who work in the holiday trades are self-employed and will not therefore be included in these figures of employees.

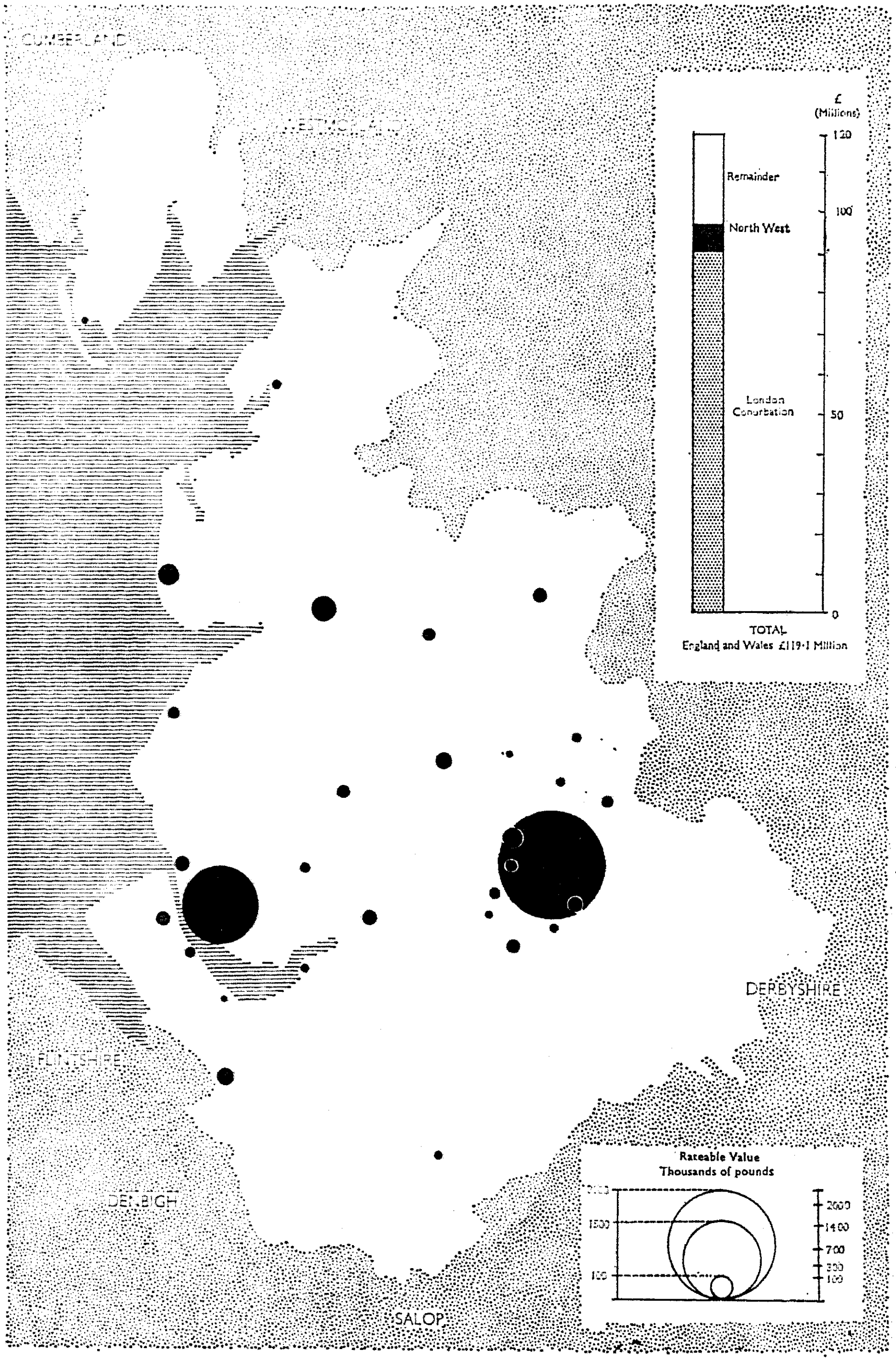

Fig. 16. Rateable value of commercial offices, 1964

The rateable value of commercial offices at April, 1964, for local authority areas with more than £15,000 office rateable value is represented by the area of the circles. In the case of Manchester, Liverpool and Birkenhead, contiguous areas, each having more than £15,000 office rateable value, have been grouped together

35. Rateable values provide one measure of the commercial importance of offices in the North West's economy. (See Figure 16.) The North West has 5·4 per cent of the total office rateable value in England and Wales and no other region outside London and the South East has so large a share of the national total. Manchester and Liverpool rank as first and third in importance among the main provincial office centres outside London, and almost entirely because of their position the Mersey division accounts for over four fifths of the total rateable value of offices in the region. However, the county towns of Preston and Chester also have above average concentrations of offices and have both increased in importance as office centres in recent years. In addition, offices are prominent in the local economy in Warrington, Wigan and Runcorn. Nevertheless, **professional and scientific services, public administration,** and **insurance, banking and finance** together account for only just under 16 per cent of the North West's total employment, compared with nearly 18½ per cent in Great Britain.

GROWTH IN SERVICE EMPLOYMENT

36. Even in construction and the service industries, employment grew more slowly between 1953 and 1963 in the North West than in Britain generally—by just over 10 per cent as against 15 per cent. Only in Scotland was employment growth in the service sector slower. One important explanation of this slower growth was the greater relative importance of the transport and communications group in the region, since this was the only service Order where the size of the labour force was contracting during the decade in the country as a whole. But as Table 9 shows, none of the expanding service industries increased their employment as rapidly in the North West as in the country generally; and both in the gas, electricity and water group and in miscellaneous services the number of jobs in the region actually fell, while there was considerable growth nationally.

37. However, there have been some signs of an improvement in the North West's relative position in recent years. Between 1959 and 1963 professional and scientific services—the most rapidly expanding group in the country as a whole—grew even faster in the North West than nationally. The growth of employment in public administration was also at a rate above the national average in this period. And in construction, the region's employment increased much faster after 1959 and was indeed growing as rapidly as in Britain generally.

38. But not all the evidence points in the same direction. In the distributive trades, for example, the rate of employment growth in the North West fell well behind the national average after 1959, although it had been slightly above the national level earlier; while in transport and communications the number of jobs fell more sharply in the region than nationally after 1959,

Table 9 **Estimate of percentage changes in employees in employment in construction and the service industries 1953-1963**[1]

	1953-1959		1959-1963		1953-1963	
	North West	*Great Britain*	*North West*	*Great Britain*	*North West*	*Great Britain*
Construction	+ 1·2	+ 4·5	+11·8	+11·7	+13·2	+16·8
Gas, Electricity and Water	− 2·2	+ 0·4	+ 1·3	+ 6·1	− 0·9	+ 6·5
Transport and Communications	− 2·6	− 3·3	− 5·8	− 1·2	− 8·2	− 4·5
Distributive Trades	+14·6	+14·5	+ 3·5	+ 7·8	+18·6	+23·4
Insurance, Banking and Finance	+15·4	+18·9	+12·2	+14·2	+29·5	+35·9
Professional and Scientific Services	+15·7	+19·6	+19·2	+15·5	+37·9	+38·2
Miscellaneous Services	− 3·9	− 0·2	+ 1·0	+ 5·6	− 2·9	+ 5·4
Public Administration	− 4·6	− 1·3	+ 9·2	+ 7·9	+ 5·0	+ 6·6
Total Construction and the Service Industries	+ 4·3	+ 6·4	+ 5·6	+ 8·1	+10·2	+15·0

[1] These estimates are subject to the same qualifications as those mentioned in the note to Table 6.

in contrast to the period 1953-59 when the rate of decline was more moderate in the North West than in the country as a whole. Moreover, rateable value figures show that the North West did not attract its proportionate share of the new office development which took place in Great Britain between 1958 and 1963, largely because there was little new development in Liverpool. Whilst Manchester, which had 3·1 per cent of national office rateable value in 1958, acquired 3·8 per cent of the increase which took place in the next five years, Liverpool, with 2·5 per cent of the national total in 1958, was responsible for only 0·9 per cent of the increase. Manchester has therefore significantly strengthened its position as an office centre and now has about 9 million square feet of office floor space (compared with Liverpool's 7·2 million).

39. Further research could usefully be undertaken into the reasons for past variations in the rate of employment growth in service industries in the North West and into the prospects for future growth. But it seems reasonable to assume that the number of people working in these industries in the region will continue to increase steadily.

EMPLOYMENT TRENDS WITHIN THE REGION

40. Different parts of the North West make very varied contributions towards the economic life of the region generally. Some areas rely very heavily on certain sections of manufacturing for their employment, while in others the service industries predominate. The fortunes of some have traditionally been bound up very closely with the prosperity of the cotton industry; whereas others have for long had a well-diversified economy. Any account of the North West's employment structure must therefore go beyond aggregate figures for the region as a whole, if it is not to give a misleading impression of uniformity.

41. Variations in the experience of different sub-regions have been particularly noticeable in the past decade. For the purpose of analysing employment trends, the North West has been divided into twelve sub-regions which very broadly form separate labour catchment areas (though in a densely populated region like the North West, boundaries of this kind are, of course, bound to be somewhat arbitrary). Figure 17 shows these sub-regions and Figure 18 illustrates the changes in total employment which occurred between 1953 and 1963.

42. Employment growth in recent years has been fastest in the areas to the west of the region, along the coast. The rate of growth has been highest in the Fylde (where it exceeded the average for Great Britain as a whole) and in the Lancaster/Morecambe and Southport/Ormskirk areas. But the labour forces in these three sub-regions remain comparatively small. In absolute terms the largest increase in the number of jobs has occurred on Merseyside which has nearly a quarter of the region's working population and which also has had a rate of growth well over three times the regional average.

43. By contrast, in three sub-regions which cover a large part of the region, lying mainly to the north and east of Manchester, but stretching also as far westwards as Preston and Chorley, employment declined between 1953 and 1963. North East Lancashire was the area most seriously affected and lost rather more than one job in every ten over the decade. The experience of the High Peak sub-region, to the east and south-east of Manchester, was only slightly better, and its employment was virtually static. These four sub-regions contain all the traditional "cotton" towns and have been significantly affected by the industry's decline.

44. In the other main sector of the North West, taking up the southern and central part of the region, and including the southern half of the Manchester conurbation, Wigan, Warrington and St. Helens as well as much of Cheshire, there was moderate employment growth between 1953 and 1963. These three sub-regions together include not far short of 40 per cent of the total number of employees in the North West. Their rate of increase of employment was well below the national level, but was above the average for the region as a whole.

45. As might be expected, this general pattern of employment growth and decline broadly corresponds with the pattern of population growth and decline within the region. Population has increased most rapidly on Merseyside and in other coastal areas, in the southern fringes of the Manchester conurbation and in Cheshire; and it is in these areas that employment growth has been most marked. Similarly, population has declined in the northern part of the Manchester