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CUMBERLAND AND WESTMORLAND

FACTS AND FIGURES

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September, 1965

PREFACE

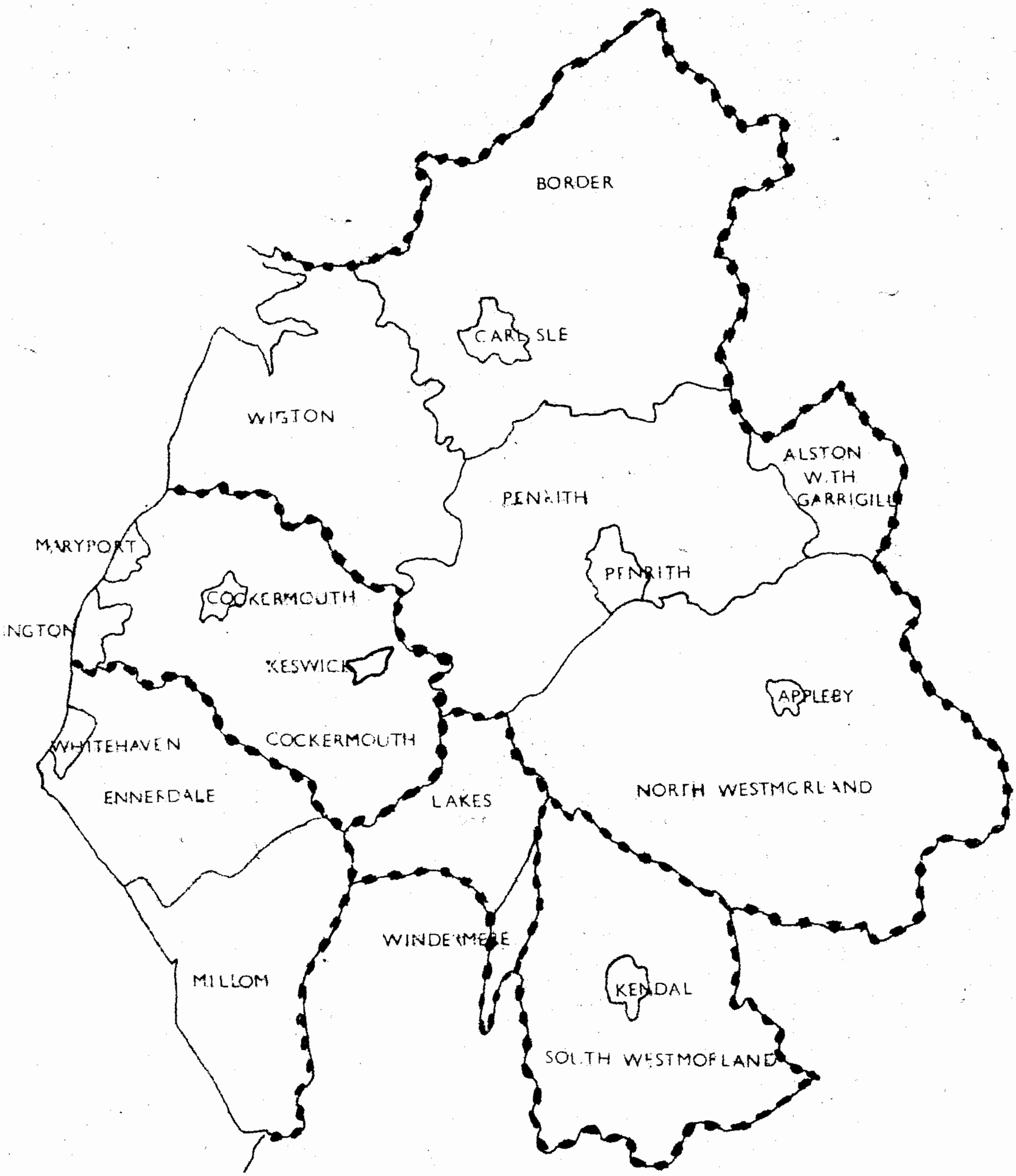
The Department of Economics of the University of Lancaster was commissioned by the Board of Trade to undertake an economic and social survey of that part of England north of the Ribble and west of the Pennines. Work on the project started in October 1964 with the intention of presenting a single report containing a description of the area together with an analysis of past and future trends and recommendations for action. The work was undertaken within the University, with the co-operation of appropriate central and local government bodies. Much of this co-operation was arranged by the North West Study Group with which the work has been closely associated. The study of the agriculture of the area was, however, sub-contracted to a team working under Professor J.Ashton at the University of Newcastle-upon-Tyne.

As a result of the change in Government policy, and in particular the establishment of regional bodies for the North Western and Northern regions, the pattern of the work had to be changed. The first priority became the presentation of the descriptive material which had been collected, split into two sections to correspond with the two regions into which the study area has been divided. The report which follows consists of only the descriptive part of the work relating to Cumberland and Westmorland. This will be followed at intervals over the next six months by analytical reports concerned with particular topics in which future trends and recommendations will be discussed. Only when all these reports on topics are available to be read alongside the present descriptive report will the full pattern of the research become apparent.

S.G.STURMEY

University of Lancaster.

September, 1965



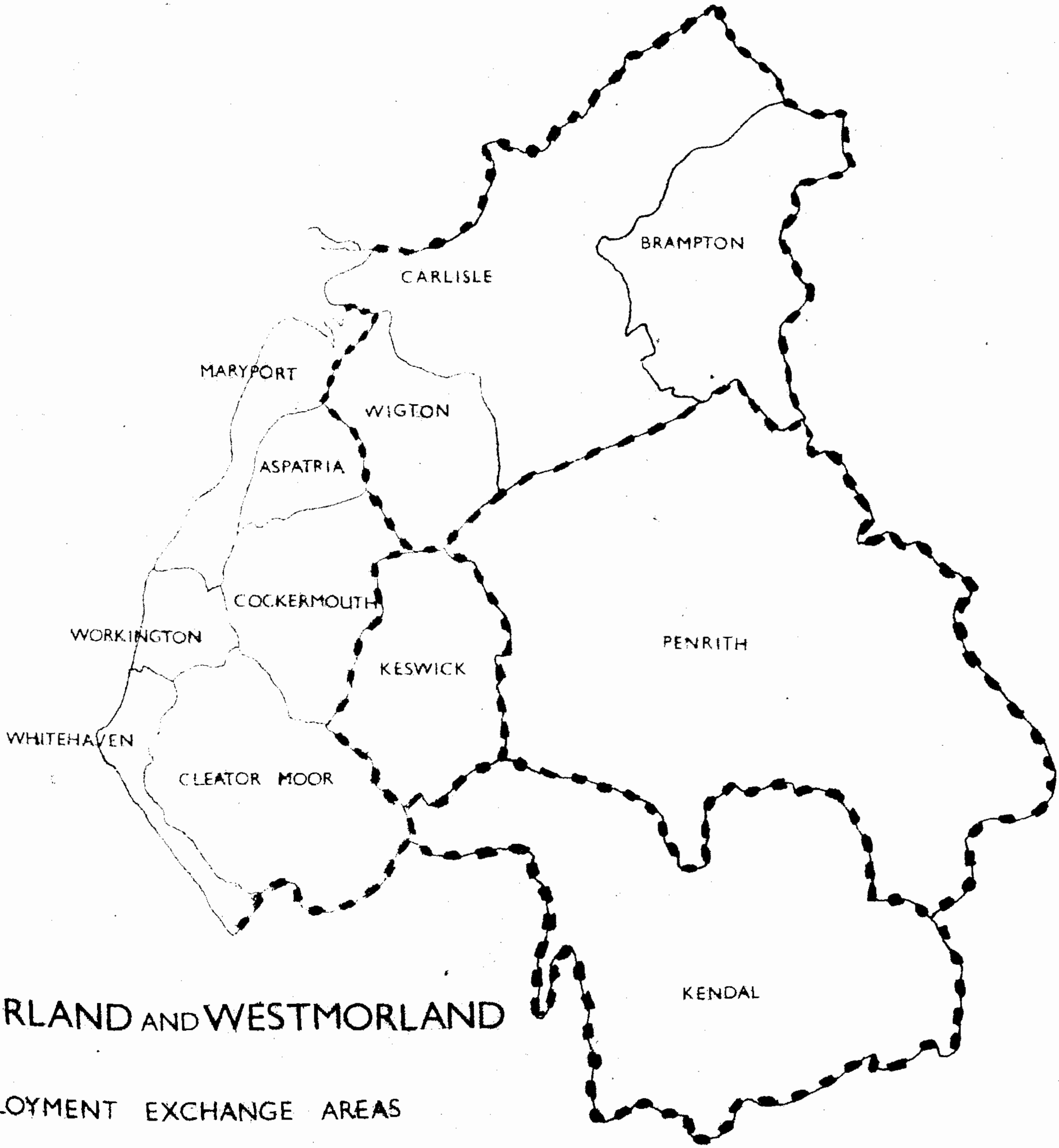
BERLAND AND WESTMORLAND

MINISTRATIVE AREAS

——— Administrative Area Boundary

•-•-• Sub-Regional Boundary

Scale About 10 miles to 1 inch



BERLAND AND WESTMORLAND

MPLOYMENT EXCHANGE AREAS

—— Employment Exchange Area Boundary

•-•-• Sub Regional Boundary

EMPLOYMENT

The Study Area

The rate of increase of employees in the study area (1952-63) was 7.9% compared with a 5.6% increase in the Northern region as a whole; both figures were below the average for the United Kingdom, which was 10.0%. Although the study area contained only 9.7% of the employees in the Northern region in 1952, it was responsible for 13.7% of the increase which occurred. The following table illuminates the above comparisons.

Table 1: Employees in the study area and the Northern region (1952 and 1963).

	Employees 1952	Employees 1963	Change 1952-63	%	% of total increase
Study area	120,137	129,604	9,467	7.9	13.7
Rest of Northern region	1,116,533	1,176,396	59,863	5.4	86.3
Northern region	1,236,670	1,306,000	69,330	5.6	100.0

The general pattern of employment in the study area changed quite considerably between 1952 and 1963. There was a very definite movement away from an over-dependence (compared with the United Kingdom) on primary industries towards an expansion of manufacturing industries: the primary sector declined from 13.8% to 9.5% of the total employees, and the manufacturing sector increased from 30.7% to 33.9%. Even so, the primary sector was still considerably larger than the United Kingdom average (9.5% compared to 5.5%) and the manufacturing industries remained relatively less important than the United Kingdom average (33.9% compared to 38.0%). The following table explains these sectoral comparisons between the study area and the United Kingdom in more detail.

Table 2: Sectoral changes in the study area and the U.K.(1952-63). *

	Study area 1952	Study area 1963	U.K. 1952	U.K. 1963
Primary	13.8	9.5	7.8	5.5
Secondary	30.7	33.9	39.9	38.0
Construction	7.3	7.7	6.4	7.1
Tertiary	48.2	49.0	45.9	49.2

(*See table 12 in appendix for a definition of each sector in terms of industries).

A comparison of the relative size of the tertiary sector in the study area compared with the United Kingdom indicates that there was little difference with regard to the number of employees. But it is important to realize that considerable difference existed within the study area due to the predominance of tourism in the Lakeland sub-regions, and the importance of the service sector in Carlisle. The West Cumberland sub-regions, for instance, had a service sector of 34.6% (1963) compared with 58.9% in Carlisle. More will be said of differences between the sub-regions in the next section.

The sub-regions.

The change in the relative importance of the individual sub-regions in relationship to each other did not alter very much between 1952 and 1963 except, perhaps, for the 2.0% decline of Carlisle. In contrast to this the difference in the rates of increase in employees was very large between the individual sub-regions. Kendal and West Cumberland grew the most rapidly with rates of increase of 14.2% and 11.3% respectively; these compared favourably with the 10.0% increase in the United Kingdom. The increases in Penrith, Keswick and Carlisle were considerably less than the United Kingdom, although only Carlisle fared worse than the Northern region as a whole.

For example:-

Table 3: Employees in the sub-regions and the Northern region (1952 and 1963)

	Employees 1952	%	1963	%	% change 1952-63
West Cumberland	46,832	39.0	52,143	40.2	11.3
Carlisle	42,954	35.8	43,837	33.8	2.1
Penrith	9,982	8.3	10,579	8.2	6.0
Keswick	2,650	2.2	2,805	2.2	5.8
Kendal	17,719	14.7	20,240	15.6	14.2
Northern	1,236,670		1,306,000		5.6

The sectoral changes in the sub-regions (1952-63) were most marked in the primary and secondary sectors. Only Keswick did not experience a marked change in the size of the primary sector, and only Penrith experienced a relatively minor change in the size of the secondary sector. Significant decreases in the size of the primary sector occurred in West Cumberland (19.8% to 12.9%), Penrith (25.4% to 17.5%) and Carlisle (7.0% to 4.7%). The most notable changes in the size of the secondary sector were a 5.9% increase in West Cumberland and an 8.8% decrease in Keswick. Other changes can be seen from the following tabl

Table 4. Sectoral analysis of the sub-regions and the U.K. (1952 and 1963).

	West Cumberland		Carlisle		Penrith	
	1952	1963	1952	1963	1952	1963
Primary	19.8	12.9	7.0	4.7	25.4	17.5
Secondary	39.2	45.1	26.9	28.4	13.5	14.1
Construction	7.6	7.4	7.1	8.2	7.2	8.4
Tertiary	33.4	34.6	58.8	58.9	54.0	59.9
	Keswick		Kendal		U.K.	
	1952	1963	1952	1963	1952	1963
Primary	10.2	10.9	8.6	6.6	7.8	5.6
Secondary	16.1	7.3	28.7	30.6	39.9	38.7
Construction	7.7	8.5	6.7	6.7	6.4	6.9
Tertiary	66.2	73.3	56.0	56.0	45.9	48.7

In every case except Carlisle, the primary sector was larger than it was in the U.K., (1952 and 1963) and it was substantially larger, although to a decreasing extent, in West Cumberland and Penrith (see table 5).

Keswick was the only sub-region which did not experience a fall in the size of the primary sector; in actual fact there was a slight increase from 10.2% to 10.9%.

Table 5. The difference between the size of individual sectors in the sub-regions and the U.K. (1952-63). *

1952	West Cumberland	Carlisle	Penrith	Keswick	Kendal
Primary	+12.0	-0.3	+17.6	+2.4	+0.8
Secondary	-0.7	-13.0	-26.4	-23.8	-11.2
Construction	+1.2	+0.7	+0.6	-1.3	+0.3
Tertiary	-12.5	+12.9	+8.1	+20.3	+10.1
1963	**West Cumberland**	**Carlisle**	**Penrith**	**Keswick**	**Kendal**
Primary	+7.3	-0.9	+11.9	+5.3	+1.0
Secondary	+6.4	-10.3	-24.6	-31.4	-8.1
Construction	+0.5	+1.3	+1.5	+1.6	-0.2
Tertiary	-14.1	+10.2	+11.2	+24.6	+7.3

(* This table shows the difference between the size of each sector in any one of the sub-regions and the size of the same sector in the U.K. For instance, the primary sector in West Cumberland was 12.9% (of employees) in 1963; in the U.K. the primary sector was 5.6%. Thus, the difference between the size of the primary sector in West Cumberland and the size of the primary sector in the U.K. was +7.3%).

With the exception of West Cumberland, the secondary sector was substantially smaller in the sub-regions than in the United Kingdom. The actual deficiencies can be seen in Table 5. Conversely (and again with the exception of West Cumberland), the tertiary sector was substantially larger in the sub-regions than the United Kingdom.

In both cases the most extreme differences occurred in Keswick which had a deficiency (compared with the U.K.) of -31.4% (1963) in manufacturing industrie and an excess of +24.6% (1963) in the tertiary sector. Carlisle was a less extreme example with a deficiency in manufacturing of -10.3% and an excess of 10.2% in tertiary industries.

The different economic functions of the sub-regions are very clearly reflected by the considerable variation in the size of the secondary and tertia sectors. In respect to the weighting of service industries, Carlisle, Penrith Keswick and Kendal can be considered as a group, because of the fact that the tertiary sector was predominant. West Cumberland, on the contrary, was depende to a much greater extent on manufacturing industries.

Apart from the foregoing observations, the most salient structural changes to note are the definite movement towards less balance between the sectors in Keswick (compared with the U.K.) as a result of an expanding service sector and a declining manufacturing sector: the relative decline of primary industries was absorbed by an expanding manufacturing sector in Kendal; and finally, the decline in an excessively large primary sector (compared with the U.K.) was complemented, in West Cumberland, by an increase in the size of the secondary sector - a movement which did not increase the sectoral balance.

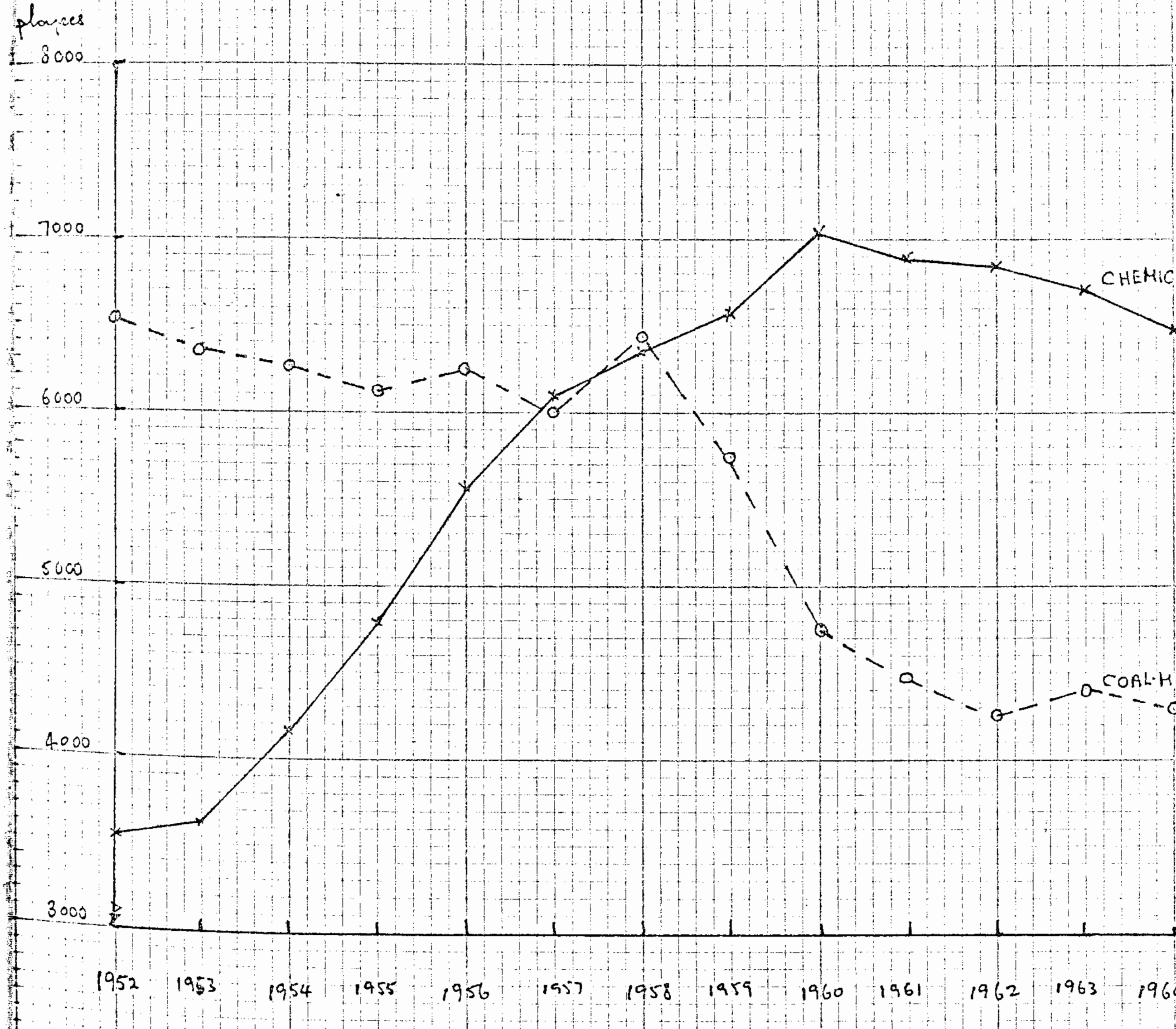
West Cumberland

The economic function of the area experienced a definite shift away from primary industries between 1952 and 1963, and towards the manufacturing sector which increased its labour force by 5,150 (see Table 6). By 1963, the primary sector had declined to less than three-quarters of its 1952 level.

Table 6: Changes in the number of employees in individual sectors in West Cumberland (1952-63).

	1952	1963	Change
Primary	9286	6730	-2556
Secondary	18390	23540	+5150
Construction	3570	3860	+290
Tertiary	15586	18013	+2427

Graph i: The number of employees in the chemical and coalmining industries in West Cumberland (1952-63).



The decline in the number of employees in coalmining was almost entirely responsible for the absolute decline of the primary sector. Fortunately for West Cumberland there was a simultaneous expansion of the chemical industry during the same period (see graph i). Other manufacturing industries which experienced substantial increases in the number of employees were the metal industry, footwear, engineering and printing (see Table 11 in appendix). Of the declining industries in the manufacturing sector "other metal industries" witnessed the most severe decline and was all but non-existent by 1963.

Apart from the rapid expansion of the chemical industry, the most significa absolüte increases in employees occurred in distribution and professional services, but the tertiary sector did not fully benefit from these two expansions because of the decline in the number of employees in miscellaneous services and public administration.

In comparing the West Cumberland sub-region with the United Kingdom four outstanding features have emerged (see Table 12 in appendix). Firstly, there was a high degree of specialization (in 1963) in the production of chemicals, clothing and two basic industries, coalmining and metal production. These four industries together accounted for 39.4% of total employees in West Cumberland compared with 10.3% in the United Kingdom. Secondly, even with the substantial increase of employees in the distribution industry, the area was well below the average with regard to distribution facilities; and conversely even with the substantial decline of employees in the coalmining industry, the area was still considerably over-represented in this particular activity. Thirdly, there was a disappointing decline in the relative importance of miscellaneous services which also witnessed an absolute decline of over 500 employees. Finally, the engineering and vehicle industries were noticeably deficient in comparison with their relative importance in the United Kingdom.

Carlisle

In broad terms, the economic function of the Carlisle sub-region changed very little between 1952 and 1963. The decline in the relative importance of the primary sector, which was due to a decline in agriculture and coalmining, was absorbed by an increase in the relative importance of the other sectors (see Table 7).

The predominant feature of the area was a lower than average (although increasing) percentage of employees in manufacturing industries in comparison with a large service sector.

Table 7: Changes in the number of employees in individual sectors in Carlisle (1952-63).

	1952	1963	Change
Primary	2991	2057	-934
Secondary	11635	12464	+829
Construction	3038	3580	+542
Tertiary	25290	25736	+446

Except for the rather substantial increase in the number of employees in professional services, which expanded from 3,044 to 4,713, there were no very definite movements within the Carlisle structure of industry during the period (see Table 13 in appendix). The large fall in the number of employees in public administration cannot be taken too seriously because of the employees working at government establishments in the area who are not registered as employees at the local employment exchange. In other words, it is not possible to see from employment returns exactly how many employees were in public administration in 1952 or 1963, because civil servants are not included. There does appear to have been, therefore, a fairly small degree of change in the industrial structure of Carlisle between 1952 and 1963. Apart from the apparent decline in public administration, the only other notable instances were in agriculture and coalmining, but these were offset to a large extent by an expansion of the vehicle industry and "other metals". The textile industry remained extremely static as far as change within the period is concerned.

Although there appears to have been very little change on the surface of the Carlisle industrial structure, certain movements were occurring which may have a substantial effect on future development. The change within the vehicle industry (alongside the growth in professional services) illustrates this point - see Table 8.

Table 8: Employees in the vehicle industry in Carlisle (1952 and 1963)

	1952	1963	Change
Motor vehicles and aircraft	94	865	+771
Railways workshops, etc.	512	206	-306
	606	1071	

In comparison with the other regions in the study area the industrial structure of Carlisle was reasonably well diversified in 1963. The outstanding specializations were public administration, transportation, and the food industry. In contrast, the engineering industry was considerably under-represented: its share of the Carlisle labour force was 2.6% compared with 9.3% in the U.K. All other departures from the United Kingdom norm were less significant (see Table 14 in appendix).

Penrith

The structure of the Penrith economy changed quite significantly between 1952 and 1963. There was a sharp fall in the relative importance of the primary sector accompanied by a substantial increase in the size of the tertiary sector (see Table 9). Both the manufacturing sector and the construction industry increased slightly (in terms of employees), but these movements were much less considerable than the decline of 676 employees in primary industries, and the increase of 936 employees in service industries.

Table 9: Changes in the number of employees in individual sectors in Penrith (1952-63)

	1952	1963	Change
Primary	2537	1861	-676
Secondary	1338	1506	+168
Construction	721	890	+169
Tertiary	5386	6322	+936

Of the decrease of 676 employees in primary industries nearly 60% of this can be attributed to a declining quarrying industry, and the rest to declining agriculture (see Table 15 in appendix). The only noteworthy change in manufacturing was an increase of 211 in the production of building materials and this probably compensated, to some extent, for the decline in the quarrying of building materials. In the tertiary sector, the expansions were limited to professional services, distribution and public administration - apart from a relatively minor increase in absolute terms in banking and finance.

As would be expected in a region with only a small number of employees, a comparison with the United Kingdom structure of industry illuminates a number of considerable differences in the size of individual sectors (see Table 16 in appendix). The agricultural sector, for instance, contained 15.8% of the employees in Penrith in 1963 (compared with 19.6% in 1952); the corresponding United Kingdom figure was 2.5%. Miscellaneous services and the production of building materials were over-represented to a lesser, yet still very noticeable extent. Apart from the timber industry and the production of building material all the manufacturing industries were under-represented - to varying degrees,

Keswick

It is obvious from Table 10 that the economy of Keswick has relied heavily upon the tourist industry, and this has become increasingly more so since 1952. Both the primary sector and the construction industry remained relatively stati (relative to total employees) during the period, but there was a definite shift away from manufacturing: this was due to the decreasing number of employed persons in the production of stationary goods.

Table 10: Changes in the number of employees in individual sectors in Kendal (1952-63)

	1952	1963	Change
Primary	270	306	+36
Secondary	423	206	-217
Construction	205	239	+34
Tertiary	1752	2054	+302

The miscellaneous services industry, and more particularly "catering and hotels", increased the most rapidly during the period. By 1963 just over 25% of the total employees in Keswick were employed in this industry; this was substantially higher than the proportion in this industry in the United Kingdor (see Tables 17 and 18 in appendix). Very little can be said about under or over representation of other industries in comparison with the United Kingdom, because of the very small absolute number of employees in Keswick.

Kendal

As was previously mentioned, the broad structural changes in Kendal (1952-(were not very noticeable except perhaps for the movement of employees from the primary to the secondary sector, which expanded at a rate faster than any of tl other sectors. But since the tertiary sector was of predominant importance during the period the absolute change in employees was greater than in the secondary sector - see the following table

Table 11: Changes in the number of employees in individual sectors in Kendal (1952-63)

	1952	1963	Change
Primary	1518	1343	-175
Secondary	5095	6185	+1090
Construction	1191	1351	+160
Tertiary	9915	11361	+1446

The decline in the relative importance of the primary sector was attributal to a decrease in the agricultural labour force, and the decline would have beer much more significant but for the expansion of quarrying. The manufacturing industries responsible for expansion were footwear, carpets, knitwear and printing. An increase in the number of employees was experienced by all the service industries except transportation, but miscellaneous services did not expand rapidly enough to maintain its relative position in the local economy (between 1952 and 1963).

Considering the relatively small size of the Kendal sub-region, the industrial structure was fairly wide; only the metal industry was completely unrepresented, although chemicals, vehicles, leather and the production of building materials were represented to only a small degree. In fact, only th engineering industry was considerbly under-represented compared with the United Kingdom (see Table 20). The clothing industry and miscellaneous services were the only two industries which were over-represented (compared with the United Kingdom) to any large extent.

APPENDIX

Table 12: <u>Definition of sectors in terms of industries</u>

Primary Sector	1.	Agriculture, forestry, fishing
	2.	Mining and quarrying.
Secondary Sector	3.	Food, drink and tobacco.
	4.	Chemicals and allied industries.
	5.	Metal manufacture.
	6.	Engineering and electrical goods.
	7.	Shipbuilding and marine engineering.
	8.	Vehicles.
	9.	Other metal industries.
	10.	Textiles.
	11.	Leather, fur.
	12.	Clothing and footwear.
	13.	Bricks, pottery, glass, etc.
	14.	Timber, furniture, etc.
	15.	Paper, printing and publishing.
	16.	Other manufacturing industries.
Construction	17.	Construction.
Tertiary	18.	Gas, electricity, water.
	19.	Transport, and communications.
	20.	Distribution.
	21.	Insurance, banking, finance.
	22.	Professional and scientific services.
	23.	Miscellaneous services.
	24.	Public administration.

Table 13: Structural changes in the West Cumberland sub-region (1952-63)

Ind.No.*	Employees 1952	Employees 1963	% 1952	% 1963	Change (1952-63) Absolute	Change (1952-63) %
1	1353	1276	2.9	2.4	-77	-0.5
2	7933	5454	16.9	10.5	-2479	-6.4
3	1571	1326	3.4	2.5	-245	-0.9
4	3629	6721	7.8	12.9	+3092	+5.1
5	4465	5421	9.5	10.4	+956	+0.9
6	2360	2775	5.0	5.3	+415	+0.3
7	4	21	-	-	+17	-
8	174	79	0.4	0.2	-95	-0.2
9	332	3	0.7	-	-329	-0.7
10	1501	1564	3.2	3.0	+63	-0.2
11	234	157	0.5	0.3	-77	-0.2
12	2260	2897	4.8	5.6	+637	+0.8
13	159	157	0.3	0.3	-2	-
14	330	360	0.7	0.7	+30	-
15	514	839	1.1	1.6	+325	+0.5
16	857	1220	1.8	2.3	+363	+0.5
17	3570	3860	7.6	7.4	+290	-0.2
18	649	522	1.4	1.0	-127	-0.4
19	2898	2569	6.2	4.9	-329	-1.3
20	3300	4596	7.1	8.8	+1296	+1.7
21	490	600	1.1	1.2	+110	+0.1
22	2352	5115	5.0	9.8	+2763	+4.8
23	3109	2602	6.6	5.6	-507	-1.6
24	2788	2009	6.0	3.9	-779	-2.1
Total	46832	52143	100	100	+5311	
					Sum of % Changes:	29.4

*KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 14: The structure of industry in West Cumberland and the U.K. (1963)

Ind.No.*	% Employees West Cumberland	% Employees U.K.	Difference
1.	2.4	2.5	-0.1
2.	10.5	3.0	+7.5
3.	2.5	3.6	-1.1
4.	12.9	2.2	+10.7
5.	10.4	2.6	+7.8
6.	5.3	9.3	-4.0
7.	-	1.0	-1.0
8.	0.2	3.8	-3.6
9.	-	2.4	-2.4
10.	3.0	3.6	-0.6
11.	0.3	0.3	0
12.	5.6	2.5	+3.1
13.	0.3	1.5	-1.2
14.	0.7	1.2	-0.5
15.	1.6	2.7	-1.1
16.	2.3	1.3	+1.0
17.	7.4	7.1	+0.3
18.	1.0	1.7	-0.7
19.	4.9	7.1	-2.2
20.	8.8	12.9	-4.1
21.	1.2	2.6	-1.4
22.	9.8	9.7	+0.1
23.	5.0	9.2	-4.2
24.	3.9	6.0	-2.1
	Specialization Coefficient :		+30.5
			- 30.3

*KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink, and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass, etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 15: Structural changes in the Carlisle sub-region (1952-63)

Ind.No.*	Employees 1952	Employees 1963	% 1952	% 1963	Change (1952-63) Absolute	Change (1952-63) %
1.	2354	1889	5.5	4.3	-465	-1.2
2.	637	168	1.5	0.4	-469	-1.1
3.	3391	3150	7.9	7.2	-241	-0.7
4.	60	48	0.1	0.1	-12	-
5.	1131	180	0.3	0.4	+49	+0.1
6.	1163	1129	2.7	2.6	-34	-0.1
7.	1	-	-	-	-1	-
8.	606	1071	1.4	2.4	+465	+1.0
9.	1250	1635	2.9	3.7	+385	+0.8
10.	2455	2467	5.7	5.6	+12	-0.1
11.	184	256	0.4	0.6	+72	+0.2
12.	571	555	1.3	1.3	-16	-
13.	445	528	1.0	1.2	+83	+0.2
14.	417	315	1.0	0.7	-102	-0.3
15.	869	319	2.0	0.7	-550	-1.3
16.	92	811	0.2	1.9	+719	+1.7
17.	3038	3580	7.1	8.2	+542	+1.1
18.	782	818	1.8	1.9	+36	+0.1
19.	5120	4983	11.9	11.4	-137	-0.5
20.	4335	4933	10.1	11.3	+598	+1.2
21.	568	831	1.3	1.9	+263	+0.6
22.	3044	4713	7.1	10.8	+1669	+3.7
23.	4729	4424	11.0	10.1	-305	-0.9
24.	6712	5034	15.6	11.5	-1678	-4.1
Total	42954	43837	100	100		
					Sum of % Changes:	21.0

* KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 16: The structure of industry in Carlisle and the U.K. (1963)

Ind.No.*	% Employees Carlisle	U.K.	Difference
1.	4.3	2.5	+1.8
2.	0.4	3.0	-2.6
3.	7.2	3.6	+3.6
4.	0.1	2.2	-2.1
5.	0.4	2.6	-2.2
6.	2.6	9.3	-6.7
7.	-	1.0	-1.0
8.	2.4	3.8	-1.4
9.	3.7	2.4	+1.3
10.	5.6	3.6	+2.0
11.	0.6	0.3	+0.3
12.	1.3	2.5	-1.2
13.	1.2	1.5	-0.3
14.	0.7	1.2	-0.5
15.	0.7	2.7	-2.0
16.	1.9	1.3	+0.6
17.	8.2	7.1	+1.1
18.	1.9	1.7	+0.2
19.	11.4	7.1	+4.3
20.	11.3	12.9	-1.6
21.	1.9	2.6	-0.7
22.	10.8	9.7	+1.1
23.	10.1	9.2	+0.9
24.	11.5	6.0	+5.5
Specialization Coefficient :			+22.7

*KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass, etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 17: Structural changes in the Penrith sub-region (1952-63)

Ind.No.*	Employees 1952	Employees 1963	% 1952	% 1963	Change (1952-63) Absolute	Change (1952-63) %
1.	1958	1676	19.6	15.8	-282	-3.8
2.	579	185	5.8	1.7	-394	-4.1
3.	256	162	2.6	1.5	-94	-1.1
4.	5	-	0.1	-	-5	-0.1
5.	23	-	0.2	-	-23	-0.2
6.	59	96	0.6	0.9	+37	+0.3
7.	-	-	-	-	-	-
8.	1	26	-	0.2	+25	+0.2
9.	10	-	0.1	-	-10	-0.1
10.	1	23	-	0.2	+22	+0.2
11.	-	-	-	-	-	-
12.	20	87	0.2	0.8	+67	+0.6
13.	658	869	6.6	8.2	+211	+1.6
14.	148	144	1.5	1.4	-4	-0.1
15.	99	99	1.0	0.9	-	-0.1
16.	58	-	0.6	-	-58	-0.6
17.	721	890	7.2	8.4	+169	+1.2
18.	223	233	2.2	2.2	-	-
19.	1165	1011	11.7	9.6	-154	-2.1
20.	1144	1476	11.5	14.0	+332	+5.5
21.	101	175	1.0	1.7	+74	+0.7
22.	596	1051	6.0	9.9	+455	+3.9
23.	1596	1508	16.0	14.3	-88	-1.7
24.	561	868	5.6	8.2	+307	+2.6
Total	9982	10579	100	100	Sum of % Changes: 30.8	

* KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 18: The structure of industry in Penrith and the U.K. (1963)

Ind.No.*	% Employees Penrith	U.K.	Difference
1.	15.8	2.5	+13.3
2.	1.7	3.0	-1.3
3.	1.5	3.6	-2.1
4.	-	2.2	-2.2
5.	-	2.6	-2.6
6.	0.9	9.3	-8.4
7.	-	1.0	-1.0
8.	0.2	3.8	-3.6
9.	-	2.4	-2.4
10.	0.2	3.6	-3.4
11.	-	0.3	-0.3
12.	0.8	2.5	-1.7
13.	8.2	1.5	+6.7
14.	1.4	1.2	+0.2
15.	0.9	2.7	-1.8
16.	-	1.3	-1.3
17.	8.4	7.1	+1.3
18.	2.2	1.7	+0.5
19.	9.6	7.1	+2.5
20.	14.0	12.9	+1.1
21.	1.7	2.6	-0.9
22.	9.9	9.7	+0.2
23.	14.3	9.2	+5.1
24.	8.2	6.0	+2.2
Specialization Coefficient: +33.1			

* KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass, etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 19: Structural changes in the Keswick sub-region (1952-63).

Ind.No. *	Employees 1952	Employees 1963	% 1952	% 1963	Change (1952-63) Absolute	Change (1952-63) %
1.	168	169	6.3	6.0	+1	-0.3
2.	102	137	3.9	4.9	+35	+1.0
3.	34	-	1.3	-	-34	-1.3
4.	-	-	-	-	-	-
5.	-	-	-	-	-	-
6.	94	12	3.6	0.4	-82	-3.2
7.	-	-	-	-	-	-
8.	-	-	-	-	-	-
9.	10	20	0.4	0.7	+10	+0.3
10.	-	-	-	-	-	-
11.	-	-	-	-	-	-
12.	-	-	-	-	-	-
13.	-	12	-	0.4	+12	+0.4
14.	68	10	2.6	0.4	-58	-2.2
15.	17	31	0.6	1.1	+14	+0.5
16.	200	121	7.6	4.3	-79	-3.3
17.	205	239	7.7	8.5	+34	+0.8
18.	83	83	3.1	3.0	-	-0.1
19.	175	93	6.6	3.3	-82	-3.3
20.	307	364	11.6	13.0	+57	+2.4
21.	44	56	1.7	2.0	+12	+0.3
22.	268	298	10.1	10.6	+30	+0.5
23.	733	972	27.7	34.7	+239	+7.0
24.	142	188	5.4	6.7	+46	+1.3
Total	2650	2805	100	100		
					Sum of % Changes:	28.2

*KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 20: The structure of industry in Keswick and the U.K. (1963)

Ind.No.*	% Employees Keswick	% Employees U.K.	Difference
1.	6.0	2.5	+3.5
2.	4.9	3.0	+1.9
3.	-	3.6	-3.6
4.	-	2.2	-2.2
5.	-	2.6	-2.6
6.	0.4	9.3	-8.9
7.	-	1.0	-1.0
8.	-	3.8	-3.8
9.	0.7	2.4	-1.7
10.	-	3.6	-3.6
11.	-	0.3	-0.3
12.	-	2,5	-2.5
13.	0.4	1.5	-1.1
14.	0.4	1.2	-0.8
15.	1.1	2.7	-1.6
16.	4.3	1.3	+3.0
17.	8.5	7.1	+1.4
18.	3.0	1.7	+1.3
19.	3.3	7.1	-3.8
20.	13.0	12.9	+0.1
21.	2.0	2.6	-0.6
22.	10.6	9,7	+0.9
23.	34.7	9.2	+25.5
24.	6.7	6.0	+0.7
Specialization Coefficient : +38.3			

* KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear
13. Bricks, pottery, glass, etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communications.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 21: Structural changes in the Kendal sub-region (1952-63)

Ind.No.*	Employees 1952	Employees 1963	% 1952	% 1963	Change (1952-63) Absolute	Change (1952-63) %
1.	1350	1030	7.6	5.1	-320	-2.5
2.	168	313	1.0	1.5	+145	+0.5
3.	654	644	3.7	3.2	-10	-0.5
4.	82	44	0.5	0.2	-38	-0.3
5.	-	4	-	-	+4	-
6.	761	714	4.3	3.5	-47	-0.8
7.	53	71	0.3	0.4	+18	+0.1
8.	20	31	0.1	0.2	+11	+0.1
9.	8	8	-	-	-	-
10.	515	1034	2.9	5.1	+519	+2.2
11.	19	13	0.1	0.1	-6	-
12.	1598	2141	9.0	10.6	+543	+1.6
13.	90	23	0.5	0.1	-67	-0.4
14.	314	328	1.8	1.6	+14	-0.2
15.	868	1056	4.9	5.2	+188	+0.3
16.	113	74	0.6	0.4	-39	-0.2
17.	1191	1351	6.7	6.7	+160	-
18.	607	649	3.4	3.2	+42	-0.2
19.	1241	1019	7.0	5.0	-222	-2.0
20.	1851	2175	10.5	10.7	+324	+0.2
21.	668	782	3.8	3.9	+114	+0.1
22.	1695	2175	9.6	10.7	+480	+1.1
23.	3016	3261	17.0	16.1	+245	-0.9
24.	837	1300	4.7	6.4	+463	+1.7
Total	17719	20240	100	100		
					Sum of % Changes:	15.7

*KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.

Table 22: The structure of industry in Kendal and the U.K. (1963)

Ind.No.*	% Employees Kendal	% Employees U.K.	Difference
1.	5.1	2.5	+2.6
2.	1.5	3.0	-1.5
3.	3.2	3.6	-0.4
4.	0.2	2.2	-2.0
5.	-	2.6	-2.6
6.	3.5	9.3	-5.8
7.	0.4	1.0	-0.6
8.	0.2	3.8	-3.6
9.	-	2.4	-2.4
10.	5.1	3.6	+1.5
11.	0.1	0.3	-0.2
12.	10.6	2.5	+8.1
13.	0.1	1.5	-1.4
14.	1.6	1.2	+0.4
15.	5.2	2.7	+2.5
16.	0.4	1.3	-0.9
17.	6.7	7.1	-0.4
18.	3.2	1.7	+1.5
19.	5.0	7.1	-2.1
20.	10.7	12.9	-2.2
21.	3.9	2.6	+1.3
22.	10.7	9.7	+1.0
23.	16.1	9.2	+6.9
24.	6.4	6.0	+0.4
Specialization Coefficient : +26.1			

*KEY TO INDUSTRIES

1. Agriculture, forestry, fishing.
2. Mining and quarrying.
3. Food, drink and tobacco.
4. Chemicals and allied industries.
5. Metal manufacture.
6. Engineering and electrical goods.
7. Shipbuilding and marine engineering.
8. Vehicles.
9. Other metal industries.
10. Textiles.
11. Leather, fur.
12. Clothing and footwear.
13. Bricks, pottery, glass, etc.
14. Timber, furniture, etc.
15. Paper, printing, publishing.
16. Other manufacturing industries.
17. Construction.
18. Gas, electricity, water.
19. Transport, communication.
20. Distribution.
21. Insurance, banking, finance.
22. Professional services.
23. Miscellaneous services.
24. Public administration.