

Dhananjayrao Gadgil Librar



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**REPORT ON
THE LOCATION OF INDUSTRY
IN GREAT BRITAIN**

PEP (Political and Economic Planning) is an independent non-party group, consisting of more than a hundred working members who are by vocation industrialists, distributors, officers of central and local government, town planners, architects, economists, doctors and so forth, and who give part of their spare time to the use of their special training in fact-finding and in suggesting principles and possible advances over a wide range of social and economic problems. By means of the fortnightly broadsheet 'Planning' (the subscription to which is £1 a year) PEP keeps in continuous touch with a large number of men and women interested in social and economic reconstruction from many different standpoints. The group has issued over a hundred and forty broadsheets on a wide range of subjects, and has also published full-scale reports on the coal-mining, cotton and iron and steel industries, housing, and building, electricity supply, international trade, the Press, the health services, the social services, retirement pensions, continued education from the age of fourteen, and agricultural research. Details of these are given inside the back cover, and notification of future reports will be sent on request to those interested, who are asked to complete the enclosed postcard.

This Report is the result of some four years' work by the Regional Development and Location of Industry Groups of PEP. It seeks to provide a comprehensive, balanced and up-to-date summary of the main factors affecting the choice of location of industry, and to supply a basis for a judgment upon the practicability and advisability of attempting conscious stimulation and guidance of industrial development in the national interest. The Report finds in favour of such a policy, but points out its difficulties and limitations, and shows where further examination is needed.

PEP welcomes constructive criticisms, inquiries and suggestions, which should be addressed to:

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P E P (POLITICAL AND ECONOMIC PLANNING)

REPORT
ON
THE LOCATION OF INDUSTRY

A survey of present trends in Great Britain affecting
industrial location and regional economic development,
with proposals for future policy

MARCH 1939

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Table I—REGIONAL DISTRIBUTION

(Calculated from the Industry Tables of the census of

Opposite each industry the plain figures represent the proportion of that industry in each region. The italic figures are the Location Factors, which are derived as follows: If *x* per cent of a given industry is in a particular region, the Location Factor for that region is *x* divided by the percentage of the population in that region. The regions are defined and mapped in Appendix IV. They apply to place of enumeration not to place of birth. The horizontal rows of percentages should in all cases total 100.00, but as the individual figures are corrected to the second place of decimals it

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
	All Industries	21,074,751	19.56	11.26	4.40	2.66	7.93	14.79	10.27
000	Sea Fishing and Oyster Beds	61,582	0.26 —	3.68 0.3	3.85 0.9	12.21 4.6	0.07 —	7.92 0.5	0.06 —
010, 012, 018	Farming (other than Poultry)	1,101,126	2.16 0.1	16.76 1.5	2.43 0.6	5.71 2.2	3.60 0.5	6.05 0.4	9.66 0.9
011	Poultry Farming	29,358	2.16 0.1	31.12 2.8	1.28 0.3	3.13 1.2	5.76 0.7	16.34 1.1	8.21 0.8
014	Other or Undefined Gardening	32,841	19.89 1.0	24.48 2.2	1.55 0.4	2.03 0.8	4.66 0.6	8.78 0.6	8.84 0.3
015-019	Forestry and other Agriculture	31,066	1.07 0.1	11.09 1.0	2.15 0.5	2.86 1.1	1.06 0.1	1.36 0.1	5.60 0.5
030	Coal Mines	1,162,889	0.12 —	0.60 0.05	19.17 4.4	1.11 0.4	16.91 2.1	3.47 0.6	8.43 0.8
039	Coal, Iron and Steel (undefined)	6,515	0.57 —	0.20 —	0.68 0.2	0.09 —	0.78 0.1	2.47 0.2	13.00 1.3
040	Iron Ore Mines and Quarries	12,993	0.22 —	1.32 0.1	0.18 —	63.49 23.9	0.32 —	4.75 0.3	0.45 —
041-2	Lead, Tin and Copper Mines	5,425	3.01 0.2	0.81 0.1	5.44 1.2	6.57 2.5	0.81 0.1	0.77 0.1	0.98 0.1
043	Stone Quarries, etc. (not owned by Local Authorities)	52,057	0.29 —	3.02 0.3	6.76 1.5	3.57 1.3	10.52 1.3	6.98 0.5	10.81 1.1
044	Slate Quarries	11,840	0.22 —	0.07 —	0.03 —	2.09 0.8	0.07 —	2.81 0.2	0.24 —
045	Clay, Sand, Gravel and Chalk Pits	17,315	7.01 0.4	22.18 2.0	2.59 0.6	1.63 0.6	4.87 0.6	2.40 0.2	9.13 0.9
046-9	Oil Shale, Salt, and Other Mines, etc.	12,038	3.88 0.2	3.63 0.3	10.31 2.3	2.39 0.9	0.93 0.1	35.52 2.4	8.89 0.9
050	Coke Ovens and By-Product Works	18,626	3.63 0.2	0.40 —	23.15 6.4	9.72 3.7	29.02 3.7	2.36 0.2	2.68 0.3
053, 055	Cement Manufacturing and Lime Kilns	21,978	6.13 0.3	44.56 4.0	2.64 0.6	6.31 2.4	2.22 0.3	4.84 0.3	7.31 0.7
051, 054, 056-9	Other Treatment of Non-Metalliferous Minerals	27,368	19.38 1.0	7.59 0.7	3.93 0.9	2.61 1.0	5.51 0.7	16.00 1.1	12.78 1.2
060	Bricks, Tiles and Fireclay Goods	87,188	2.74 0.1	17.80 1.6	4.13 0.9	1.41 0.5	9.51 1.2	9.70 0.7	22.95 2.2
063	Earthenware, China, Porcelain	90,394	2.07 0.1	0.76 0.1	1.17 0.3	0.05 —	0.97 0.1	2.33 0.2	79.10 7.7
064	Glass (other than Bottles)	31,425	17.47 0.9	2.60 0.2	6.69 1.5	0.24 0.1	9.87 1.2	33.07 2.2	21.68 2.1
065	Glass Bottles	18,154	27.00 1.4	3.66 0.3	2.23 0.5	0.72 0.3	28.12 3.5	26.90 1.8	2.33 0.2

OF INDUSTRY IN GREAT BRITAIN

England and Wales 1931, and the census of Scotland 1931)

region expressed as a percentage of the total number of persons employed in the industry.

region, and y per cent of all industry is in that region, then the location factor for that industry in that region is x divided by y .

workplace. The South-East region probably includes many people working in Greater London.

decimals only, there is sometimes an error in the last place of the total. This, of course, cannot be corrected without introducing a third the individual figures.

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
5.41	8.79	4.29	8.70	1.41	0.54	2.98	5.08	2.08	All Industries	70.80
0.02	24.90	6.89	2.02	4.54	1.01	4.24	0.86	27.55	Sea Fishing and Oyster Beds	97.00
—	6.6	1.6	0.5	3.2	1.9	1.4	0.2	13.6		
4.97	15.48	10.93	2.91	5.81	2.23	2.06	2.14	7.62	Farming (other than Poultry)	93.80
0.9	4.1	2.5	0.8	3.8	4.1	0.7	0.4	3.8		
5.88	10.70	7.63	1.07	1.58	0.59	2.01	1.75	1.29	Poultry Farming	84.20
1.0	2.8	1.8	0.3	1.1	1.1	0.7	0.3	0.6		
8.88	4.69	6.74	1.61	1.29	0.93	3.32	3.94	4.80	Other or Undefined Gardening	98.90
0.7	1.2	1.6	0.4	0.9	1.7	1.1	0.8	2.2		
2.48	6.25	8.79	2.08	3.25	9.59	6.25	5.52	30.60	Forestry and Other Agriculture	98.20
0.5	1.6	2.0	0.6	2.3	17.8	2.1	1.1	15.1		
11.65	0.07	0.44	20.12	1.40	0.18	5.37	5.87	0.04	Coal Mines	99.48
2.2	—	0.1	5.4	1.1	0.2	1.8	1.2	—		
85.73	0.21	0.08	25.60	0.12	0.12	4.22	16.15	0.08	Coal, Iron and Steel (undefined)	96.50
6.6	0.1	—	6.9	0.1	0.2	1.4	3.2	—		
15.98	9.81	0.41	2.84	0.06	0.02	0.02	0.08	0.06	Iron Ore Mines and Quarries	99.77
2.9	2.6	0.1	0.3	—	—	—	—	—		
8.77	0.13	58.80	1.59	5.35	3.58	0.20	3.10	0.13	Lead, Tin and Copper Mines	98.08
1.6	—	13.7	0.4	3.8	6.6	0.1	0.6	0.1		
14.88	1.13	15.21	4.88	10.96	1.59	3.41	3.90	2.64	Stone Quarries, etc. (not owned by Local Authorities)	99.21
2.7	0.3	3.5	1.3	7.3	2.9	1.2	0.8	1.3		
0.03	0.02	4.51	0.31	86.80	—	0.03	0.14	3.01	Slate Quarries	99.77
—	—	1.1	0.1	61.2	—	—	—	1.5		
4.60	4.25	87.75	0.49	1.22	—	0.53	1.21	0.01	Clay, Sand, Gravel and Chalk Pits	98.78
0.9	1.1	3.8	0.1	0.9	—	0.2	0.2	—		
5.72	0.22	0.97	0.37	0.65	0.02	25.28	0.98	0.30	Oil Shale, Salt, and Other Mines, etc.	86.62
1.1	0.1	0.2	0.1	0.5	—	8.6	0.2	0.1		
10.93	0.51	0.04	9.50	0.45	—	1.26	1.86	—	Coke Ovens and By-Product Works	99.28
2.0	0.1	—	2.6	0.3	—	0.4	0.3	—		
9.36	5.32	2.06	4.71	0.60	0.01	1.58	1.87	0.38	Cement Manufacturing and Lime Kilns	96.15
1.7	1.4	0.5	1.3	0.4	—	0.5	0.4	0.2		
11.71	1.70	2.81	10.56	2.19	0.20	0.74	2.28	0.10	Other Treatment of Non-Metalliferous Minerals	92.17
2.2	0.4	0.7	2.9	1.6	0.4	0.3	0.5	—		
8.26	4.95	4.47	2.44	2.60	0.08	3.07	5.48	0.23	Bricks, Tiles and Fireclay Goods	93.20
1.5	1.3	1.0	0.7	1.3	0.1	1.0	1.1	0.1		
6.38	0.07	1.98	0.09	0.40	—	0.44	4.14	0.02	Earthenware, China, Porcelain	49.27
1.2	—	0.5	—	0.3	—	0.2	0.8	—		
1.41	0.31	0.22	0.25	0.08	0.02	0.92	2.90	0.17	Glass (other than Bottles)	80.85
0.3	0.1	0.1	0.1	0.1	—	0.3	0.6	0.1		
0.09	0.02	0.02	0.08	0.02	0.01	3.87	3.45	1.38	Glass Bottles	88.00
—	—	—	—	—	—	1.3	0.7	0.7		

Table I—REGIONAL DISTRIBUTION OF

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
069	Miscellaneous Products of Clay and Sand	2,361	58.85 2.7	8.05 0.3	1.69 0.4	0.84 0.1	8.72 0.5	8.47 0.2	28.92 2.3
070, 078, 079	Alkalis, Heavy Acids, Drugs, Fine Chemicals	86,924	26.20 1.3	5.22 0.5	12.59 2.9	4.69 1.8	5.00 0.6	27.42 1.9	6.08 0.6
071	Tar and Wood Distillation	6,558	14.84 0.7	8.48 0.8	7.64 1.7	9.66 3.6	11.05 1.4	16.62 1.1	15.22 1.5
072	Dye Manufacturing	9,088	4.04 0.2	0.81 —	0.21 —	1.10 0.4	34.62 4.4	45.85 3.1	0.48 —
074	Fertilisers, Dips and Disinfectants	9,454	17.88 0.9	8.26 0.7	6.46 1.5	6.81 2.4	5.09 0.6	14.65 1.0	8.89 0.4
080-3	Explosives, etc.	12,999	22.85 1.2	7.81 0.7	1.82 0.3	1.98 0.7	5.51 0.7	8.26 0.2	15.70 1.5
090-1	White Lead, Paints and Varnishes	29,190	38.05 1.9	4.98 0.4	6.65 1.5	6.91 2.6	2.88 0.3	15.81 1.1	18.26 1.3
098	Vegetable Oils and Oil Cake	15,627	11.10 0.6	8.70 0.3	0.24 0.1	28.28 10.6	4.48 0.6	38.78 2.3	6.21 0.6
094, 099	Animal Fats, etc.	7,758	38.48 1.7	8.92 0.3	4.96 1.1	3.08 1.1	12.17 1.5	28.40 1.6	7.11 0.7
095	Glues, Gums and Gelatine	4,552	28.95 1.5	9.12 0.8	2.18 0.5	8.12 1.2	4.29 0.5	22.42 1.5	8.46 0.8
096	Soap, Candles and Glycerine	81,662	26.81 1.3	2.28 0.2	2.67 0.6	1.20 0.5	5.18 0.7	48.90 3.3	4.58 0.4
097	Mineral Oil Refining	9,688	9.72 0.5	24.59 2.2	0.81 0.1	0.87 0.1	0.97 0.1	7.55 0.5	0.85 0.1
100-2	Blue, Polishes and Ink	10,626	44.80 2.3	5.81 0.6	1.82 0.4	18.81 7.1	8.17 0.4	18.87 0.9	2.65 0.3
108	Matches	4,051	36.06 1.8	5.88 0.5	0.22 —	0.10 —	1.97 0.2	36.65 2.5	18.56 1.3
110	Blast Furnaces	13,042	0.29 —	0.84 —	2.78 0.6	17.92 6.8	8.25 1.0	8.88 0.2	8.56 0.8
112	Puddling Furnaces and Rolling Mills, etc.	185,876	0.29 —	0.12 —	6.22 1.4	13.51 5.1	28.60 3.6	7.44 0.5	9.88 1.0
114	Slag and Slag Wool Manufacturing	2,386	1.68 0.1	0.17 —	10.89 2.4	13.44 5.1	9.05 1.1	1.87 0.1	24.72 2.4
120	Copper Manufacturing	3,291	1.40 0.1	0.46 —	12.78 2.9	0.21 0.1	1.00 0.1	31.00 2.1	5.90 0.6
121-9	Extr. and Ref. of other Non-Ferrous Metals	15,722	17.58 0.9	8.80 0.3	6.75 1.5	0.80 0.1	2.84 0.3	14.84 1.0	20.88 2.0
180	Iron and Steel Foundries	90,042	4.67 0.2	8.85 0.3	4.19 1.0	5.66 2.1	7.52 0.9	9.81 0.6	24.19 2.4
182-8	Brass, etc., Foundries, and Cast Metal Finishing	42,076	11.85 0.6	1.89 0.1	2.18 0.5	1.46 0.6	14.87 1.9	7.81 0.5	49.90 4.9
185-6	Forging	44,488	5.07 0.3	8.61 0.8	7.09 1.6	3.27 1.2	7.24 0.9	7.64 0.5	26.40 2.6
187	Tinplate Manufacturing	82,717	0.48 —	0.09 —	0.16 —	0.05 —	0.05 —	0.27 —	8.86 0.3

INDUSTRY IN GREAT BRITAIN—continued

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
0.89 0.2	0.04 —	0.04 —	0.13 —	0.08 0.1	0.04 0.1	1.61 0.5	7.32 1.5	0.21 0.1	Miscellaneous Products of Clay and Sand	76.85
3.73 0.7	0.81 0.2	0.71 0.2	0.79 0.2	0.51 0.4	0.05 0.1	1.42 0.5	4.27 0.8	0.56 0.3	Alkalis, Heavy Acids, Drugs, Fine Chemicals	73.77
3.28 0.6	1.04 0.3	1.36 0.3	2.46 0.7	0.67 0.5	0.02 —	2.82 1.0	4.06 0.8	1.30 0.6	Tar and Wood Distillation	93.50
0.41 0.1	0.08 —	0.14 —	0.07 —	0.06 —	0.06 0.1	10.56 3.6	2.09 0.4	0.08 —	Dye Manufacturing	88.68
1.50 0.3	15.28 4.0	4.10 1.0	1.44 0.4	1.20 0.9	0.87 1.6	4.52 1.5	4.68 0.9	4.47 2.2	Fertilisers, Dips and Disinfectants	85.90
1.07 0.2	0.15 —	11.82 2.8	0.65 0.2	1.55 1.1	0.04 0.1	7.44 2.5	18.71 3.7	0.08 —	Explosives, etc.	66.40
2.40 0.4	0.98 0.3	1.17 0.3	0.76 0.2	0.22 0.2	0.01 —	0.89 0.3	5.27 1.0	0.45 0.2	White Lead, Paints and Varnishes	80.60
0.52 0.1	5.11 1.3	0.72 0.2	0.13 —	0.15 0.1	0.08 0.1	3.47 1.2	1.49 0.3	0.62 0.3	Vegetable Oils and Oil Cake	92.48
1.61 0.3	1.90 0.5	1.04 0.2	2.08 0.6	0.26 0.2	— —	0.80 0.3	3.91 0.8	0.37 0.2	Animal Fats, etc.	86.83
7.14 1.3	4.74 1.2	2.20 0.5	1.47 0.4	0.02 —	0.02 —	3.74 1.3	1.84 0.4	0.35 0.2	Glues, Gums and Gelatine	74.25
2.56 0.5	0.83 0.1	0.95 0.2	0.55 0.1	0.15 0.1	0.08 0.1	1.22 0.4	2.46 0.5	0.58 0.3	Soap, Candles and Glycerine	64.90
0.26 —	1.60 0.4	0.11 —	13.85 3.6	0.02 —	0.01 —	33.52 11.4	6.08 1.2	0.83 0.4	Mineral Oil Refining	95.20
4.59 0.8	0.70 0.2	1.21 0.3	0.91 0.2	0.07 —	0.01 —	1.37 0.5	0.75 0.1	0.48 0.2	Blue, Polishes and Ink	58.63
0.12 —	0.15 —	0.27 0.1	0.17 —	0.12 0.1	— —	0.49 0.2	4.67 0.9	0.05 —	Matches	43.20
30.88 5.7	1.84 0.5	0.18 —	8.85 2.3	1.67 1.2	0.02 —	0.24 0.1	15.84 3.0	0.04 —	Blast Furnaces	98.38
0.92 0.2	4.08 1.1	0.04 —	12.38 3.3	2.88 2.0	0.01 —	0.08 —	13.52 2.7	0.08 —	Puddling Furnaces and Rolling Mills, etc.	97.68
6.04 1.1	25.90 6.8	— —	2.06 0.6	1.64 1.3	— —	0.09 —	3.42 0.7	— —	Slag and Slag Wool Manufacturing	98.25
0.43 0.1	0.12 —	0.15 —	42.40 11.5	0.16 0.1	— —	0.12 —	3.80 0.8	0.09 —	Copper Manufacturing	96.60
0.40 0.1	1.11 0.3	1.54 0.4	17.71 4.8	0.78 0.6	0.01 —	2.55 0.9	3.22 0.6	6.12 3.0	Extr. and Ref. of Other Non-Ferrous Metals	91.87
14.17 2.6	1.54 0.4	0.60 0.1	2.52 0.7	0.29 0.2	0.15 0.3	10.24 3.5	10.74 2.1	0.64 0.3	Iron and Steel Foundries	94.72
1.86 0.3	0.18 —	0.49 0.1	0.84 0.1	0.05 —	— —	2.08 0.7	5.74 1.1	0.31 0.2	Brass, etc., Foundries, and Cast Metal Finishing	88.35
3.02 0.6	6.91 1.8	5.61 1.3	2.67 0.7	2.70 1.9	1.85 2.5	2.82 1.0	4.84 1.0	4.77 2.3	Forging	96.91
0.04 —	0.08 —	0.04 —	94.50 25.8	0.72 0.5	— —	0.02 —	0.08 —	0.25 0.1	Tinplate Manufacturing	89.38

Table I—REGIONAL DISTRIBUTION C

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
138	Galvanised Sheet Manufacturing .	11,588	1.29 0.1	0.18 —	8.77 0.9	5.08 1.9	0.18 —	88.67 2.3	12.73 1.2
139	Iron and Steel Tube Manufacturing	83,249	2.06 0.1	0.24 —	0.23 0.1	0.47 0.2	2.17 0.3	0.82 0.1	58.50 5.2
140	Non-Ferrous Tube and Pipe Manufacturing	19,254	6.26 0.3	0.66 0.1	1.07 0.2	0.12 —	7.92 1.0	6.00 0.4	78.00 7.1
141	Wire, Wire Netting and Wire Rope	26,711	6.23 0.3	0.60 0.1	6.03 1.4	2.32 0.9	23.49 3.0	81.48 2.1	13.37 1.3
151-2	Steam Locomotives and Railway Plant	76,083	5.33 0.3	7.73 0.7	11.04 2.5	0.30 0.1	6.83 0.9	28.62 1.9	4.82 0.5
153	Agricultural Engineering	16,126	2.21 0.1	18.38 1.6	1.84 0.4	2.76 1.0	9.81 1.2	6.00 0.4	11.02 1.1
154-5	Textile Machinery and Accessories	60,062	0.29 —	0.21 —	0.04 —	0.42 0.2	22.58 2.8	64.85 4.4	0.30 —
156	Heating and Ventilating Engineering	18,653	30.62 1.6	6.33 0.6	2.75 0.6	9.09 3.4	3.52 0.4	12.13 0.8	9.48 0.9
157	Machine Tool Manufacturing (Metal Working)	18,382	4.76 0.2	2.09 0.2	2.01 0.5	0.05 —	20.85 2.6	25.48 1.7	33.52 3.3
160	Mining Machinery Manufacturing	6,075	2.75 0.1	1.42 0.1	9.03 2.1	0.33 0.1	23.45 3.0	10.85 0.7	13.51 1.3
150, 153-9, 161-9	Other Engineering (not Marine or Electrical)	335,653	20.98 1.1	7.91 0.7	5.74 1.3	1.13 0.4	8.30 1.0	13.51 0.9	12.88 1.2
170	Electric Motors, Generators, Switch Gear, and Transformers	40,199	15.46 0.8	7.10 0.6	3.92 0.9	0.13 —	7.87 1.0	12.80 0.9	39.88 3.9
171-8	Other Electrical Manufactures	181,908	40.65 2.1	8.70 0.8	2.51 0.6	0.50 0.2	1.75 0.2	23.25 1.6	16.40 1.6
179	Electric Wiring and Contracting	56,496	29.13 1.5	12.12 1.1	3.23 0.7	2.26 0.9	6.24 0.8	13.69 0.9	8.21 0.8
180-3	Trams and Railway Rolling Stock	67,645	7.33 0.4	12.75 1.1	4.42 1.0	0.77 0.3	11.85 1.5	13.61 0.9	17.60 1.7
184-6	Self-Propelled Vehicles and Cycles	228,505	14.20 0.7	12.57 1.1	1.10 0.2	1.02 0.4	3.34 0.4	9.92 0.7	40.65 4.0
187-3	Carriage Bodies, Carts and Vans	50,031	24.53 1.3	20.15 1.8	1.71 0.4	1.24 0.5	4.18 0.5	10.73 0.7	15.67 1.5
189	Cycle and Motor Accessories	28,081	20.12 1.0	2.19 0.2	0.20 —	0.25 0.1	0.79 0.1	1.38 0.1	72.15 7.0
190-1	Aeroplanes, Airships and Balloons	21,877	29.02 1.5	25.85 2.3	0.32 0.1	3.34 1.4	2.22 0.3	5.79 0.4	24.62 2.4
199	Other Vehicles	5,641	23.01 1.4	8.89 0.8	1.54 0.4	0.16 0.1	12.69 1.6	5.82 0.4	31.37 3.0
200-9	Shipbuilding and Repairing	278,585	3.50 0.2	14.73 1.3	26.30 6.0	3.67 1.4	0.58 0.1	12.80 0.9	0.61 0.1
210	Cutlery	19,442	7.63 0.4	1.51 0.1	0.22 —	0.11 —	30.50 10.2	1.59 0.1	4.65 0.5
211-5	Small Tools, Needles and Pins	33,270	6.44 0.3	0.66 0.1	0.46 0.1	0.19 0.1	39.30 5.0	4.58 0.3	41.12 4.0

INDUSTRY IN GREAT BRITAIN—continued

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
0.08 —	0.08 —	0.26 0.1	32.18 8.7	5.14 3.7	0.01 —	0.56 0.2	4.99 1.0	0.08 —	Galvanised Sheet Manufacturing	98.07
2.21 0.4	0.08 —	0.08 —	8.51 2.3	0.08 —	0.02 —	0.23 0.1	29.32 5.8	0.08 —	Iron and Steel Tube Manufacturing	98.46
0.49 0.1	0.01 —	0.30 0.1	0.14 —	2.09 1.5	— —	0.11 —	1.72 0.3	0.07 —	Non-Ferrous Tube and Pipe Manufacturing	88.20
2.92 0.5	1.40 0.4	0.26 0.1	2.17 0.6	0.06 —	— —	4.25 1.5	5.18 1.0	0.18 0.1	Wire, Wire Netting and Wire Rope	84.70
6.59 1.2	0.37 0.1	14.08 3.3	2.13 0.6	0.04 —	0.01 —	0.14 —	11.66 2.3	0.31 0.2	Steam Locomotives and Railway Plant	98.06
6.14 1.1	29.90 7.9	5.86 1.4	0.33 0.1	0.25 0.2	0.63 1.2	1.01 0.3	2.27 0.5	1.57 0.8	Agricultural Engineering	94.68
5.95 1.1	0.06 —	0.04 —	0.01 —	0.02 —	0.16 0.3	2.29 0.8	1.18 0.2	1.52 0.7	Textile Machinery and Accessories	92.26
7.10 1.3	4.61 1.2	1.92 0.4	1.23 0.3	0.17 0.1	0.09 0.2	1.99 0.7	6.84 1.4	2.10 1.0	Heating and Ventilating Engineering	93.38
2.68 0.5	0.14 —	0.09 —	0.21 0.1	— —	— —	0.04 —	6.94 1.4	1.14 0.6	Machine Tool Manufacturing (Metal Working)	98.94
3.04 0.6	0.20 0.1	7.11 1.7	3.65 1.0	0.15 0.1	0.03 0.1	1.66 0.6	22.65 4.5	0.18 0.1	Mining Machinery Manufacturing	94.67
7.08 1.3	5.43 1.4	2.50 0.6	0.92 0.2	0.19 0.1	0.11 0.2	1.79 0.6	11.27 2.2	0.84 0.4	Other Engineering (not Marine or Electrical)	90.32
4.32 0.8	2.87 0.8	0.28 0.1	0.33 0.1	0.17 0.1	0.02 —	2.53 0.9	2.13 0.4	0.15 0.1	Electric Motors, Generators, Switchgear, and Transformers	77.70
3.03 0.6	1.06 0.3	0.71 0.2	0.58 0.2	0.12 0.1	0.01 —	0.16 0.5	0.54 0.1	0.03 —	Other Electrical Manufactures	68.00
3.92 0.7	2.24 0.6	3.36 0.3	2.19 0.6	0.90 0.6	0.32 0.6	3.91 1.3	7.08 1.4	1.29 0.6	Electric Wiring and Contracting	92.65
13.32 2.5	0.51 0.1	7.59 1.8	3.70 1.0	0.10 0.1	0.01 —	0.60 0.2	5.56 1.1	0.37 0.2	Trams and Railway Rolling Stock	96.86
4.97 0.9	3.07 0.8	2.63 0.6	0.85 0.2	0.45 0.3	0.43 0.9	1.27 0.4	2.52 0.5	0.93 0.5	Self-Propelled Vehicles and Cycles	90.47
4.18 0.3	5.08 1.3	4.07 0.9	1.59 0.4	0.99 0.7	0.14 0.3	1.61 0.5	3.22 0.6	0.93 0.5	Carriage Bodies, Carts and Vans	96.16
1.22 0.2	0.58 0.2	0.25 0.1	0.11 —	0.08 0.1	0.01 —	0.23 0.1	0.39 0.1	0.07 —	Cycle and Motor Accessories	56.22
0.18 —	3.34 0.9	4.41 1.0	0.21 0.1	0.08 0.1	0.01 —	0.04 —	0.06 —	— —	Aeroplanes, Airships and Balloons	90.45
6.19 1.1	0.76 0.2	0.62 0.1	1.76 0.5	0.04 —	— —	0.71 0.2	1.45 0.3	0.02 —	Other Vehicles	67.80
0.06 —	1.19 0.3	5.32 1.4	2.27 0.6	0.49 0.3	0.03 0.1	2.57 0.9	23.90 4.8	1.42 0.7	Shipbuilding and Repairing	98.37
2.39 0.4	0.52 0.1	0.32 0.1	0.11 —	0.04 —	0.01 —	0.11 —	0.24 —	0.03 —	Cutlery	62.80
3.14 0.6	0.14 —	0.17 —	0.17 —	0.04 —	0.05 0.1	0.91 0.3	2.08 0.4	0.17 0.1	Small Tools, Needles and Pins	73.80

Table I—REGIONAL DISTRIBUTION OF

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
222	Boilers and Tanks	30,551	18.57 0.7	2.51 0.2	4.08 0.9	1.87 0.7	18.86 2.4	12.78 0.9	10.80 1.1
223	Bolts, Nuts, Rivets and Screws . .	25,098	5.34 0.3	1.08 0.1	1.53 0.3	0.18 0.1	5.28 0.7	8.07 0.5	68.60 6.7
224-6	Brass and Yellow Metal Light Goods	14,886	11.61 0.6	0.46 —	0.42 0.1	0.18 0.1	8.56 1.1	3.16 0.2	78.56 7.2
227	Constructional Engineering	43,474	21.35 1.1	2.78 0.2	4.77 1.1	6.38 2.4	4.61 0.6	12.27 0.8	18.92 1.8
241	Tin Boxes, Canisters and Containers	20,052	34.46 1.8	4.45 0.4	3.18 0.7	14.18 5.3	3.62 0.5	15.79 1.1	7.76 0.8
242	Other Sheet Metal Work (not Brass)	44,926	19.84 1.0	4.18 0.4	1.44 0.3	1.16 0.4	6.15 0.8	11.29 0.8	46.30 4.5
243-4	Small Arms	4,929	42.00 2.1	3.97 0.4	0.47 0.1	0.51 0.2	1.24 0.2	1.62 0.1	44.60 4.3
220-1, 223-40, 245-9	Other Metal Industries	159,528	16.08 0.8	4.37 0.4	1.17 0.3	0.44 0.2	7.21 0.9	11.02 0.7	47.40 4.6
250-9	Precious Metals, Jewellery and Plate	53,671	21.78 1.1	4.89 0.4	0.91 0.2	0.83 0.3	20.65 2.6	5.21 0.4	36.92 3.6
260-1	Cotton, Carding and Spinning	285,846	0.16 —	0.06 —	0.08 —	0.05 —	6.29 0.8	83.81 5.7	0.52 0.1
262	Cotton Weaving	343,052	0.09 —	0.05 —	0.01 —	0.59 0.2	6.45 0.8	89.82 6.0	0.16 —
268	Velvet and Fustian Cutting	3,263	0.25 —	0.09 —	— —	— —	6.98 0.9	60.57 4.1	31.64 3.1
269	Other Cotton Manufacture	8,713	11.42 0.6	4.30 0.4	0.39 0.1	6.14 2.3	1.38 0.2	23.43 1.9	20.27 2.0
270-9	Wool, Worsted and Shoddy	248,468	0.53 —	0.68 0.1	0.28 0.1	0.42 0.2	80.55 10.2	3.63 0.2	1.56 0.2
280	Artificial Silk Spinning	21,062	4.18 0.2	0.76 0.1	0.08 —	0.09 —	3.67 0.5	31.73 2.1	36.10 3.5
281	Silk Throwing, Spinning and Weaving	51,251	2.67 0.1	4.09 0.4	0.05 —	0.15 0.1	17.10 2.2	20.52 1.4	18.15 1.8
290	Flax and Hemp Manufacturing	14,512	1.96 0.1	0.25 —	0.18 —	3.16 1.2	6.80 0.8	1.24 0.1	0.61 0.1
291	Jute Manufacturing	39,822	0.20 —	0.01 —	0.02 —	0.02 —	0.09 —	0.25 —	0.08 —
300	Asbestos Manufacturing	5,097	20.22 1.0	4.42 0.4	0.96 0.2	0.71 0.3	11.47 1.4	43.50 2.9	2.45 2.4
301-9	Other Fibres	5,813	18.34 0.9	4.41 0.4	1.07 0.2	4.68 1.3	11.40 1.4	18.22 1.2	4.18 0.4
310	Hosiery and other Knitted Goods . .	181,634	4.86 0.2	1.55 0.1	0.20 —	0.23 0.1	0.73 0.1	5.16 0.3	4.92 0.5
311	Lace Manufacturing	16,422	2.43 0.1	0.69 0.1	0.08 —	0.04 —	0.24 —	0.55 —	0.39 —
312	Carpets and Rugs	29,534	3.51 0.2	0.70 0.1	0.71 0.2	1.29 0.5	22.52 2.3	3.71 0.3	37.45 3.6

INDUSTRY IN GREAT BRITAIN—continued

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
8.90 0.7	8.60 0.9	1.01 0.2	0.78 0.2	0.10 0.1	1.49 2.8	1.06 0.4	23.32 4.6	0.27 0.1	Boilers and Tanks	94.81
0.52 0.1	—	0.08 —	0.49 0.1	0.04 —	0.01 —	0.05 —	8.78 1.7	0.02 —	Bolts, Nuts, Rivets and Screws	57.50
0.40 0.1	0.09 —	0.10 —	0.45 0.1	0.01 —	—	0.54 0.2	0.44 0.1	0.03 —	Brass and Yellow Metal Light Goods	58.60
8.66 0.7	2.49 0.7	0.84 0.2	8.17 0.9	0.27 0.2	0.08 0.1	1.64 0.6	16.67 3.3	0.21 0.1	Constructional Engineering	96.77
8.78 1.6	0.05 —	0.05 —	8.51 0.9	0.01 —	0.05 0.1	1.22 0.4	2.52 0.5	0.20 0.1	Tin Boxes, Canisters and Containers	80.86
2.39 0.4	1.25 0.3	0.98 0.2	0.76 0.2	0.20 0.1	0.11 0.2	0.72 0.2	8.26 0.6	0.44 0.2	Other Sheet Metal Work (not Brass)	73.21
0.77 0.1	1.06 0.3	0.98 0.2	0.26 0.1	0.16 0.1	0.04 0.1	1.02 0.3	0.59 0.1	0.75 0.4	Small Arms	90.55
1.71 0.3	0.42 0.1	0.96 0.2	1.77 0.5	0.20 0.1	0.08 0.1	4.42 1.5	2.02 0.4	0.18 0.1	Other Metal Industries	74.80
1.58 0.3	1.18 0.3	2.09 0.5	0.70 0.2	0.48 0.3	0.14 0.3	0.81 0.3	1.83 0.3	0.60 0.3	Precious Metals, Jewellery and	68.20
3.05 0.6	0.04 —	0.02 —	0.01 —	0.08 —	—	0.01 —	5.66 1.1	0.26 0.1	Cotton Carding and Spinning	41.65
1.64 0.3	0.01 —	0.08 —	0.01 —	0.01 —	—	0.08 —	1.49 0.3	0.06 —	Cotton Weaving	83.52
0.25 0.1	0.08 —	0.08 —	—	0.06 —	—	—	0.09 —	—	Velvet and Fustian Cutting	22.53
25.17 4.7	0.17 —	0.80 0.1	0.06 —	0.24 0.2	—	0.07 —	1.23 0.2	0.46 0.2	Other Cotton Manufacture	84.98
1.84 0.3	0.08 —	1.75 0.4	0.21 0.1	0.29 0.2	4.02 7.4	1.51 0.5	1.42 0.3	1.27 0.6	Wool, Worsted and Shoddy	48.65
0.78 0.1	8.06 0.8	0.08 —	0.12 —	18.90 13.4	0.08 0.1	0.21 0.1	0.21 —	0.02 —	Artificial Silk Spinning	54.55
27.19 5.0	5.01 1.3	1.40 0.3	0.05 —	0.10 0.1	0.88 1.6	0.55 0.2	2.10 0.4	0.01 —	Silk Throwing, Spinning and Weaving	41.85
0.19 —	0.01 —	2.48 0.6	0.01 —	0.02 —	0.08 0.1	41.50 14.2	12.58 2.5	29.58 14.6	Flax and Hemp Manufacturing	32.15
0.05 —	0.01 —	0.01 —	0.01 —	—	0.01 —	87.50 29.9	0.46 0.1	11.36 5.6	Jute Manufacturing	84.20
11.18 2.1	0.71 0.2	0.51 0.1	0.75 0.2	0.10 0.1	0.02 —	0.24 0.1	2.78 0.5	0.10 —	Asbestos Manufacturing	63.27
3.44 0.6	15.82 4.2	4.49 1.0	1.07 0.3	0.07 —	0.08 0.1	1.22 0.4	10.96 2.2	0.86 0.4	Other Fibres	60.80
68.70 11.8	0.86 0.2	0.87 0.2	0.17 —	0.09 0.1	3.84 7.1	2.87 0.8	8.48 1.7	1.86 0.9	Hosiery and Other Knitted Goods	24.75
71.16 13.2	0.18 —	8.76 2.0	0.08 —	0.08 —	0.01 —	0.08 —	15.82 3.0	0.04 —	Lace Manufacturing	44.58
0.17 —	0.40 0.1	0.78 0.2	0.15 —	0.05 —	0.07 0.1	5.07 1.7	22.92 4.6	0.49 0.2	Carpets and Rugs	41.55

Table I—REGIONAL DISTRIBUTION OF

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
818	Rope, Cord and Twine . . .	18,698	10.14 0.6	2.06 0.2	8.88 2.0	2.54 1.0	4.90 0.6	20.88 1.4	5.01 0.5
815	Canvas Goods, Tents, Tarpaulins .	10,701	26.18 1.3	5.76 0.5	2.06 0.5	2.08 0.8	2.80 0.4	20.65 1.4	7.11 0.7
814, 816-9	Other Textiles (not Dress) . . .	88,804	25.85 1.3	2.57 0.2	0.88 0.1	0.80 0.1	2.48 0.3	25.90 1.8	18.84 1.3
820-8	Textile Finishing	111,421	2.00 0.1	1.01 0.1	0.08 —	0.48 0.2	19.25 2.4	49.65 3.4	2.28 2.2
824	Textile Making-up and Export Packing	4,974	0.86 —	0.26 —	0.06 —	0.08 —	7.62 1.0	87.00 5.9	0.98 —
880-2	Tanning, Currying, Fellmongering	55,059	34.95 1.8	5.78 0.5	1.04 0.2	2.60 1.0	7.82 1.0	19.24 1.3	5.88 0.6
886-9	Saddlery, Harness and other Leather (except Apparel)	86,410	37.45 1.9	5.19 0.5	1.41 0.3	1.48 0.6	4.86 0.6	10.06 0.7	23.26 2.3
840-1	Tailoring	802,995	29.15 1.5	5.42 0.5	1.59 0.4	1.45 0.5	19.27 2.4	17.61 1.2	7.89 0.8
842-8	Dress, Blouse, Shirt, etc., Making	286,620	41.57 2.1	6.01 0.5	1.60 0.4	1.82 0.5	5.98 0.8	18.11 1.2	6.56 0.6
847	Millinery Manufacturing	80,176	53.80 2.7	6.08 0.5	1.75 0.4	1.24 0.5	5.58 0.7	14.52 1.0	6.55 0.6
848-51	Hat and Cap Manufacturing	40,497	15.95 0.8	37.07 3.3	0.88 0.1	0.48 0.2	1.86 0.2	36.20 2.5	5.81 0.5
852	Glove Manufacturing (not Knitted or Rubber)	18,285	7.18 0.4	9.48 0.8	0.57 0.1	0.97 0.4	0.79 0.1	5.54 0.4	20.47 2.0
858-4	Boots and Shoes (not Rubber)	216,238	12.84 0.6	4.97 0.4	1.87 0.3	1.54 0.6	4.42 0.6	10.44 0.7	8.71 0.8
856	Clothing Renovating and Repairing	2,288	53.87 2.7	11.40 1.0	0.52 0.1	1.48 0.6	2.88 0.4	12.40 0.8	8.40 0.3
844-6, 855, 859	Other Clothing (including Umbrellas, etc.)	87,685	36.15 1.8	16.17 1.4	0.76 0.2	0.40 0.2	2.92 0.4	12.82 0.9	8.84 0.8
860	Grain Milling	40,817	12.22 0.8	11.18 1.0	3.82 0.8	6.25 2.4	5.05 0.6	22.58 1.5	8.22 0.8
862	Cattle, and Poultry Foods (not Oil Cake)	6,248	36.67 1.9	7.89 0.7	1.89 0.3	3.71 1.4	1.68 0.2	22.72 1.5	6.52 0.6
864-5	Bread, Flour, Confectionery, Biscuits	258,117	17.70 0.9	12.00 1.1	3.21 0.7	2.87 1.1	5.44 0.7	17.52 1.2	8.49 0.8
866	Sugar Making and Refining	21,147	31.50 1.6	2.25 0.2	0.88 0.1	1.86 0.5	3.86 0.4	26.71 1.8	4.10 0.4
867, 869	Sugar Confectionery, Cocoa, Chocolate	86,151	26.65 1.4	3.74 0.3	3.50 0.8	3.21 1.2	15.48 2.0	11.76 0.9	20.19 2.0
861, 868, 870-9	Other Food Manufacturing	114,468	27.52 1.4	8.92 0.8	2.41 0.5	3.01 1.1	3.51 0.4	14.01 1.0	7.77 0.8
880-8	Malting, Brewing and Distilling	98,626	20.15 1.0	12.66 1.1	3.08 0.7	1.48 0.6	7.06 0.9	10.55 0.7	15.74 1.5
885	Mineral and Aerated Waters Manufacturing	21,789	22.07 1.1	9.53 0.8	4.02 0.9	2.52 0.9	7.75 1.0	16.81 1.1	9.42 0.9

INDUSTRY IN GREAT BRITAIN—continued

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
8.24 0.6	6.25 1.6	6.80 1.6	0.70 0.2	0.28 0.2	0.02 —	10.88 3.7	14.41 2.9	3.04 1.5	Rope, Cord and Twine	41.90
1.14 0.2	8.78 1.0	2.80 0.5	1.32 0.4	0.16 0.1	0.07 0.1	8.80 2.8	11.90 2.4	4.48 2.2	Canvas Goods, Tents, Tarpaulins	41.90
21.87 4.0	0.69 0.2	1.11 0.3	0.40 0.1	0.08 0.1	0.04 0.1	0.91 0.3	8.92 0.8	0.12 0.1	Other Textiles (not Dress)	25.05
18.45 2.5	0.04 —	0.08 —	0.02 —	0.08 —	0.35 0.6	1.98 0.7	8.86 1.7	1.07 0.5	Textile Finishing	77.00
2.08 0.4	0.08 —	0.06 —	0.08 —	— —	— —	0.68 0.2	0.76 0.2	0.18 0.1	Textiles, Making-up and Export Packing	67.90
8.92 1.6	2.28 0.6	3.59 0.8	0.27 0.1	0.85 0.6	0.50 0.9	1.58 0.5	4.51 0.9	0.28 0.1	Tanning, Currying, Fellmongering	75.92
3.24 0.6	3.11 0.8	2.78 0.6	1.07 0.3	0.52 0.4	0.23 0.4	1.15 0.4	3.87 0.7	0.84 0.4	Saddlery, Harness and other Leather (except Apparel)	57.44
4.53 0.8	2.80 0.6	2.76 0.6	1.86 0.4	0.49 0.3	0.20 0.4	1.08 0.4	3.92 0.8	0.78 0.4	Tailoring	42.63
5.15 1.0	1.71 0.5	3.61 0.8	1.82 0.5	0.81 0.6	0.19 0.4	0.86 0.3	3.99 0.8	0.73 0.4	Dress, Blouse, Shirt, etc., Making	7.23
2.89 0.5	1.17 0.3	1.61 0.4	1.27 0.3	0.68 0.4	0.18 0.3	0.96 0.3	1.49 0.3	0.51 0.3	Millinery Manufacturing	7.40
0.58 0.1	0.17 —	0.20 —	0.16 —	0.01 —	0.04 0.1	0.09 —	2.05 0.4	0.04 —	Hat and Cap Manufacturing	42.43
3.68 0.7	1.56 0.4	47.70 11.1	0.40 0.1	0.28 0.2	0.02 —	0.11 —	0.84 0.1	0.99 0.5	Glove Manufacturing (not Knitted or Rubber)	35.83
38.65 7.1	7.54 2.0	2.66 0.6	1.83 0.4	0.65 0.5	0.21 0.4	0.98 0.3	3.01 0.6	1.08 0.5	Boots and Shoes (not Rubber)	72.78
2.40 0.4	2.40 0.6	1.81 0.3	0.18 —	0.26 0.2	0.04 0.1	1.82 0.7	5.42 1.1	0.52 0.3	Clothing Renovating and Repairing	55.82
18.00 2.4	3.00 0.8	2.24 0.5	0.71 0.2	0.25 0.2	0.02 —	0.86 0.1	2.56 0.5	0.18 0.1	Other Clothing (including Umbrellas, etc.)	21.02
3.31 0.6	8.64 2.3	5.04 1.2	5.47 1.5	0.93 0.7	0.60 1.1	2.46 0.8	2.71 0.5	1.89 0.9	Grain Milling	89.94
1.87 0.3	6.87 1.8	1.78 0.4	0.77 0.2	0.69 0.5	0.06 0.1	2.94 1.0	1.57 0.3	3.33 1.7	Cattle and Poultry Foods (not Oil Cake)	80.70
3.57 0.7	3.49 0.9	4.31 1.0	3.09 0.8	1.21 0.9	0.38 0.7	4.68 1.6	8.97 1.8	2.80 1.4	Bread, Flour, Confectionery, Biscuits	64.40
4.97 0.9	16.23 4.3	0.18 —	0.19 0.1	0.05 —	0.02 —	1.89 0.6	6.71 1.3	0.11 0.1	Sugar Making and Refining	86.70
1.52 0.3	2.21 0.6	1.86 0.3	1.31 0.4	0.11 0.1	0.01 —	2.57 0.9	6.10 1.2	0.45 0.2	Sugar Confectionery, Cocoa, Chocolate	85.14
2.26 0.4	8.91 2.4	5.32 1.2	0.79 0.2	0.30 0.2	0.69 1.3	1.66 0.6	5.05 1.0	7.87 3.9	Other Food Manufacturing	54.80
4.57 0.8	5.59 1.5	3.97 0.9	2.41 0.7	0.42 0.3	0.04 0.1	6.38 2.2	4.07 0.8	1.92 0.9	Malting, Brewing and Distilling	85.27
4.14 0.8	3.80 0.9	2.69 0.6	3.94 1.1	1.09 0.8	0.61 1.1	4.19 1.4	6.23 1.2	2.21 1.1	Mineral and Aerated Waters Manufacturing	72.57

Table I—REGIONAL DISTRIBUTION OF

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
384, 386-9	Cider, Perry and Wine Bottling, etc.	8,814	31.26 1.6	3.17 0.3	2.77 0.6	1.23 0.5	5.20 0.7	17.00 1.2	15.20 1.5
390	Tobacco, etc., and Snuff . . .	52,918	32.87 1.7	3.94 0.3	1.52 0.3	0.48 0.2	1.15 0.1	16.88 1.1	21.05 2.1
400	Sawmills and Joinery Works . . .	50,261	22.88 1.2	12.08 1.1	4.68 1.1	4.60 1.7	8.24 1.0	10.86 0.7	7.74 0.8
402	Cooperages	5,747	18.12 0.9	2.35 0.2	1.81 0.4	3.88 1.5	5.19 0.7	17.90 1.2	12.26 1.2
408	Wooden Boxes and Packing Cases Manufacturing	12,428	34.58 1.3	1.75 0.2	0.44 0.1	4.56 1.7	6.31 0.8	16.51 1.1	11.19 1.1
401, 404-9	Other Wood Working (not Furniture)	73,605	11.31 0.6	9.76 0.9	1.75 0.4	4.14 1.6	5.65 0.7	8.40 0.6	8.70 0.8
410	Cabinets, Furniture and Upholstery	133,792	36.85 1.9	18.19 1.2	2.75 0.6	1.24 0.5	6.16 0.8	10.91 0.7	9.18 0.9
412	House and Shop Fitting	29,385	45.70 2.4	8.55 0.8	2.58 0.6	0.70 0.3	7.18 0.9	9.14 0.6	18.96 1.4
411, 418-9	Manufacturing of Bedding, Picture Frames, etc.	15,393	37.72 1.9	6.98 0.6	3.92 0.9	0.83 0.3	6.40 0.8	14.27 1.0	10.86 1.1
420	Paper and Board Manufacturing	61,267	10.05 0.5	28.32 2.5	2.69 0.6	1.20 0.5	2.98 0.4	16.50 1.1	5.76 0.6
430	Wallpaper Manufacturing	8,067	41.40 2.1	1.91 0.2	1.20 0.3	1.62 0.6	5.80 0.7	40.60 2.8	1.44 0.1
434-5	Pencils, Penholders, etc.	8,917	58.82 3.0	6.33 0.6	0.50 0.1	1.48 0.6	1.02 0.1	14.90 1.0	5.82 0.6
431-3, 439	Cardboard Boxes, Paper Bags, Stationery, etc.	73,011	37.38 1.9	10.28 0.9	0.90 0.2	0.57 0.2	3.89 0.5	16.64 1.1	11.21 1.1
440-59	Printing, Book-binding and Photography	345,325	38.05 1.9	10.45 0.9	2.45 0.6	1.69 0.6	6.22 0.8	12.11 0.8	8.46 0.8
460-9	Building and Decorating, etc.	1,122,794	24.58 1.3	16.62 1.5	3.11 0.7	2.33 0.9	5.63 0.7	11.45 0.8	9.82 1.0
470-1	Rubber Goods Manufacturing	64,117	20.87 1.1	3.26 0.3	0.47 0.1	0.19 0.1	0.85 0.1	27.28 1.9	21.50 2.1
480-9	Musical Instruments Manufacturing	33,664	69.85 3.6	3.31 0.7	1.07 0.2	0.34 0.3	3.43 0.4	4.34 0.3	4.63 0.5
490	Linoleum, Oilcloth, etc., Manufacturing	14,381	17.60 0.9	5.45 0.5	0.20 —	1.33 0.5	1.11 0.1	37.92 2.6	1.24 0.1
492	Celluloid and Similar Compositions	5,250	42.77 2.2	6.54 0.6	0.57 —	0.18 —	4.29 0.5	0.80 0.1	23.60 2.3
495	Brooms and Brushes	16,988	31.60 1.6	12.35 1.1	1.55 0.4	1.37 0.5	7.54 1.0	10.97 0.7	15.84 1.5
496	Photographic Plates, Films and Papers	5,018	68.30 3.5	21.04 1.9	0.36 0.1	0.16 0.1	0.33 —	3.67 0.2	4.85 0.5
497	Photographic and Cinematographic Apparatus	3,612	77.18 3.9	5.09 0.5	0.55 0.1	0.06 —	1.25 0.2	6.31 0.4	4.96 0.5
498	Other Scientific and Surgical Instruments (not Electrical)	32,992	52.68 2.7	6.70 0.6	1.49 0.3	0.72 0.3	7.66 1.0	7.91 0.5	7.12 0.7

INDUSTRY IN GREAT BRITAIN—continued

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
4.74 0.9	7.20 1.9	4.98 1.2	2.87 0.6	1.10 0.8	0.07 0.1	1.87 0.6	1.56 0.3	0.85 0.2	Cider, Perry, and Wine Bottling, etc.	68.12
12.41 2.3	0.96 0.3	3.14 0.7	1.18 0.3	0.12 0.1	0.02 —	1.01 0.3	8.21 0.6	0.11 0.1	Tobacco, etc., and Snuff	37.86
3.25 0.6	6.86 1.8	4.68 1.1	2.18 0.6	0.94 0.7	0.18 0.3	3.24 1.1	5.20 1.0	2.85 1.2	Saw Mills and Joinery Works	92.57
1.20 0.2	4.88 1.3	2.35 0.5	1.65 0.4	0.45 0.3	0.12 0.2	6.98 2.4	13.17 2.6	8.17 4.0	Cooperages	96.80
2.88 0.5	3.18 0.8	1.04 0.2	0.86 0.2	0.24 0.2	0.01 —	3.04 1.0	9.81 1.9	4.14 2.0	Wooden Boxes and Packing Cases Manufacturing	86.24
5.64 1.0	5.55 1.5	6.79 1.6	2.06 0.6	2.08 1.4	2.06 3.3	7.75 2.6	11.20 2.2	7.24 3.6	Other Wood Working (not Furniture)	92.97
4.88 0.8	2.18 0.6	2.55 0.6	1.27 0.3	0.48 0.3	0.17 0.3	2.14 0.7	5.59 1.1	1.07 0.5	Cabinets, Furniture and Upholstery	85.78
3.16 0.6	1.09 0.3	1.79 0.4	1.18 0.3	0.10 0.1	0.02 —	0.99 0.3	3.58 0.7	0.16 0.1	House and Shop Fitting	89.86
3.39 0.6	2.29 0.6	2.65 0.6	1.33 0.4	0.18 0.1	0.05 0.1	2.27 0.8	5.89 1.2	0.99 0.5	Manufacturing of Bedding, Picture Frames, etc.	68.27
2.42 0.4	1.90 0.5	3.95 0.9	0.91 0.2	0.65 0.5	0.42 0.8	11.93 4.1	5.75 1.1	4.57 2.3	Paper and Board Manufacturing	75.20
2.28 0.4	0.20 0.1	0.47 0.1	0.20 0.1	0.04 —	0.01 —	0.82 0.3	0.97 0.2	0.06 —	Wallpaper Manufacturing	72.10
4.97 0.9	0.18 —	0.85 0.1	0.40 0.1	0.08 —	—	2.65 0.9	2.41 0.5	0.12 0.1	Pencils, Penholders, etc.	45.55
7.57 1.4	1.57 0.4	1.10 0.3	0.85 0.1	0.08 —	0.04 0.1	3.51 1.2	3.69 0.7	1.34 0.7	Cardboard Boxes, Paper Bags, Stationery, etc.	32.00
4.22 0.8	2.49 0.7	2.82 0.7	1.41 0.4	0.50 0.4	0.17 0.3	3.45 1.2	4.60 0.9	0.87 0.4	Printing, Book-binding and Photography	70.60
4.57 0.8	3.61 1.0	5.62 1.3	2.27 0.6	1.41 1.0	0.43 0.8	2.47 0.8	4.27 0.8	1.90 0.9	Building and Decorating, etc.	98.72
3.60 0.7	0.28 0.1	4.08 1.0	0.86 0.1	0.07 —	0.02 —	9.79 3.3	6.28 1.2	0.16 0.1	Rubber Goods Manufacturing	64.58
1.94 0.4	1.36 0.4	1.33 0.3	0.90 0.2	0.21 0.1	0.02 —	0.41 0.1	0.96 0.2	0.22 0.1	Musical Instruments Manufacturing	80.14
0.15 —	0.07 —	0.10 —	0.08 —	0.01 —	0.03 0.1	33.82 11.5	0.69 0.1	0.24 0.1	Linoleum, Oilcloth, etc., Manufacturing	87.20
7.49 1.4	7.86 2.1	0.6 —	— —	0.02 —	—	0.46 0.2	0.17 —	5.28 2.6	Celluloid and Similar Compositions	62.98
2.80 0.5	6.35 1.7	3.54 0.8	1.16 0.3	0.14 0.1	0.04 0.1	1.44 0.5	2.91 0.6	0.41 0.2	Brooms and Brushes	61.23
0.24 —	0.14 —	0.10 —	0.08 —	— —	—	0.08 —	0.62 0.1	0.02 —	Photographic Plates, Films and Papers	55.25
1.69 0.3	0.08 —	0.33 0.1	0.39 0.1	0.17 0.1	—	0.06 —	1.88 0.4	0.03 —	Photographic and Cinematographic Apparatus	55.88
2.36 0.4	2.16 0.6	1.19 0.3	0.88 0.2	0.14 0.1	0.03 0.1	1.55 0.5	6.84 1.4	0.43 0.2	Other Scientific and Surgical Instruments (not Electrical)	72.72

Table I—REGIONAL DISTRIBUTION C

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
499	Toys, Games and Sports Requisites	20,181	44.70 2.3	6.07 0.5	2.10 0.5	0.26 0.1	5.39 0.7	11.04 0.7	20.88 2.0
491, 498-4, 500-9	Other Manufactures	39,859	47.40 2.4	4.99 0.4	2.70 0.6	0.66 0.2	5.25 0.7	10.48 0.7	14.76 1.4
510-6	Gas Works	126,186	32.12 1.6	12.66 1.1	4.15 0.9	2.06 0.3	6.07 0.8	12.14 0.8	9.85 1.0
518-21	Water Works and Hydraulic Power	32,479	20.05 1.0	15.00 1.3	6.42 1.5	3.71 1.4	11.48 1.4	14.13 1.0	9.61 0.9
528-9	Electricity Supply	86,795	23.66 1.2	11.70 1.0	4.56 1.0	2.03 0.8	8.92 1.1	15.71 1.1	10.34 1.0
580	Railways	556,426	18.52 0.9	9.36 0.8	3.91 0.9	3.53 1.3	3.01 1.0	13.63 0.9	9.45 0.9
540	Motor Garages, Livery Stables, etc.	98,814	20.52 1.5	15.12 1.3	2.62 0.6	2.46 0.9	4.31 0.5	9.28 0.6	8.97 0.9
541	Cartage and Haulage Contracting	185,741	26.90 1.3	11.12 1.0	3.90 0.9	2.33 0.9	6.62 0.8	14.57 1.0	9.81 1.0
542-4	Motor Coach and Omnibus Services	139,761	26.97 1.4	14.23 1.3	5.47 1.2	2.50 0.9	6.23 0.8	8.86 0.6	8.48 0.8
545-6	Tramway Services	84,448	22.00 1.1	4.89 0.4	3.73 0.8	1.83 0.7	12.95 1.6	23.39 1.6	9.14 0.9
549	Other Road Transport	4,563	18.32 0.9	24.80 2.2	2.57 0.6	2.57 1.0	3.93 0.5	6.30 0.4	10.40 1.0
550-1	Shipping Service	186,270	18.73 1.0	11.01 1.0	7.94 1.3	5.86 2.2	1.10 0.1	26.33 1.3	1.80 0.2
554	Tug, Barge, Lighter, Boat Service	21,141	31.13 1.6	17.20 1.5	4.80 1.1	3.13 3.1	4.07 0.5	11.17 0.8	3.77 0.9
560-4	Harbours, Docks, Piers, etc., Light-houses	78,106	18.60 1.0	10.05 0.9	6.16 1.4	5.63 2.1	1.38 0.2	28.33 2.0	3.33 0.3
566-8	Canal Authorities and Conservancy Boards	5,108	15.57 0.3	14.09 1.3	2.23 0.5	3.04 1.1	12.58 1.6	18.25 1.2	13.80 1.3
569	Loading and Discharging Vessels .	58,338	39.97 2.0	4.15 0.4	3.23 0.7	7.73 2.9	0.17 —	20.73 1.4	2.35 0.3
580	Aerodrome and Aviation Service .	1,612	59.50 3.0	15.75 1.4	0.99 0.2	4.23 1.6	0.37 0.1	5.39 0.4	3.35 0.4
586-7	Storage	13,911	37.25 1.9	4.33 0.4	1.99 0.5	1.32 0.7	1.93 0.2	27.93 1.9	4.93 0.5
590	Messenger Service and Portage .	4,725	35.32 1.3	3.60 0.3	1.29 0.3	1.33 0.7	3.55 0.4	19.30 1.3	5.16 0.5
591	Telegraphs and Telephones (not Government)	9,202	62.32 3.2	3.43 0.7	2.55 0.6	1.32 0.7	1.41 0.2	3.66 0.6	1.39 0.2
600-70	Distributive Trades	2,915,096	24.32 1.2	11.45 1.0	4.10 0.9	2.61 1.0	6.70 0.3	14.77 1.0	3.53 0.3
680-99	Commerce, Banking, Insurance, Finance	419,776	33.32 2.0	11.42 1.0	2.94 0.7	1.79 0.7	5.06 0.6	12.30 0.9	7.09 0.7
700	Defence	251,044	14.94 0.3	47.35 4.2	0.90 0.2	4.03 1.5	1.01 0.1	1.97 0.1	2.44 0.2

INDUSTRY IN GREAT BRITAIN—continued

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
1.24 0.2	0.74 0.2	0.69 0.2	0.12 —	0.02 —	0.86 0.7	3.78 1.3	2.09 0.4	0.95 0.5	Toys, Games and Sports Requisites	54.84
2.56 0.5	1.92 0.5	0.95 0.2	0.73 0.2	0.18 0.1	0.11 0.2	1.02 0.3	5.97 1.2	0.86 0.2	Other Manufactures	50.75
4.48 0.8	2.44 0.6	4.46 1.0	2.10 0.6	0.09 0.5	0.22 0.4	2.08 0.7	8.58 0.7	0.87 0.4	Gas Works	96.84
4.23 0.8	2.25 0.6	3.08 0.7	2.96 0.8	1.19 0.8	0.18 0.3	2.05 0.7	2.92 0.6	0.72 0.4	Water Works and Hydraulic Power	97.98
4.64 0.9	3.08 0.8	3.78 0.9	2.58 0.7	0.87 0.6	0.21 0.4	2.12 0.7	5.19 1.0	0.75 0.4	Electricity Supply	96.80
7.14 1.3	4.86 1.1	4.17 1.0	5.53 1.5	1.52 1.1	0.56 1.0	3.08 1.1	5.31 1.1	1.87 0.9	Railways	97.05
3.37 0.6	3.04 0.8	7.05 1.6	2.73 0.7	2.10 1.5	0.61 1.1	2.80 0.8	3.85 0.8	2.70 1.3	Motor Garages, Livery Stables, etc.	95.64
3.99 0.7	3.56 0.9	4.28 1.0	2.50 0.7	1.05 0.7	0.39 0.7	2.36 0.8	4.50 0.9	2.06 1.0	Cartage and Haulage Contracting	97.95
5.10 0.9	2.65 0.7	3.38 0.8	3.70 1.0	1.37 1.0	0.38 0.7	3.26 1.1	6.12 1.2	1.23 0.6	Motor Coach and Omnibus Services	94.08
3.63 0.7	1.12 0.3	1.72 0.4	2.66 0.7	0.14 0.1	0.01 —	3.55 1.2	3.48 1.7	0.87 0.4	Tramway Services	96.85
4.61 0.9	7.00 1.3	9.67 2.3	3.25 0.9	2.39 1.7	0.53 1.0	1.40 0.5	1.62 0.3	0.72 0.4	Other Road Transport	87.07
0.14 —	1.58 0.4	2.64 0.6	6.86 1.9	1.47 1.0	0.11 0.2	3.09 1.1	3.24 1.6	2.47 1.2	Shipping Service	95.51
2.15 0.4	3.72 1.0	3.47 0.8	2.02 0.5	0.67 0.5	0.02 —	0.72 0.2	1.00 0.2	0.88 0.4	Tug, Barge, Lighter, Boat Service	97.58
0.08 —	5.31 1.4	2.49 0.6	9.44 2.6	1.06 0.8	0.04 0.1	2.17 0.7	3.92 0.8	1.55 0.8	Harbours, Docks, Piers, etc., Light-houses	98.20
4.95 0.9	2.88 0.8	1.72 0.4	3.31 0.9	0.65 0.5	— —	0.65 0.2	1.33 0.3	— —	Canal Authorities and Conservancy Boards	97.55
0.03 —	2.20 0.6	0.85 0.2	5.95 1.6	0.06 —	0.01 —	4.70 1.6	6.25 1.2	0.99 0.6	Loading and Discharging Vessels	98.84
2.36 0.4	2.17 0.6	1.99 0.5	0.62 0.2	0.62 0.4	0.12 0.2	— —	0.81 0.2	0.19 0.1	Aerodrome and Aviation Service	89.20
1.26 0.2	1.08 0.3	1.27 0.3	1.75 0.5	0.08 0.1	0.04 0.1	2.34 0.8	11.35 2.3	0.54 0.3	Storage	83.50
2.56 0.5	1.80 0.6	3.26 0.8	0.85 0.2	1.59 1.1	0.23 0.4	3.53 1.2	3.39 0.7	7.15 3.5	Messenger Service and Portage	99.02
0.31 0.1	0.79 0.2	4.62 1.1	1.57 0.4	0.90 0.6	0.09 0.2	1.22 0.4	2.46 0.5	0.52 0.3	Telegraphs and Telephones (not Government)	90.90
4.17 0.3	3.62 1.0	4.11 1.0	3.16 0.9	1.15 0.8	0.46 0.9	3.12 1.1	5.68 1.1	2.02 1.0	Distributive Trades	68.25
3.10 0.6	2.33 0.6	2.92 0.7	2.56 0.7	0.93 0.7	0.27 0.5	2.40 0.8	4.14 0.8	1.37 0.7	Commerce, Banking, Insurance, Finance	77.25
1.03 0.2	3.79 1.0	16.17 3.8	0.58 0.2	0.93 0.7	0.05 0.1	2.31 0.8	0.90 0.2	0.97 0.5	Defence	97.38

Table I—REGIONAL DISTRIBUTION OF

Code Numbers in the Census	Description of Industry	Total No. of persons employed in the Industry	Greater London	South-East (excluding Greater London)	North I	North II	North III	North IV	Midland I
710-9	Central Civil Government . . .	359,049	37.19 1.9	12.55 1.1	2.75 0.6	1.97 0.7	4.52 0.6	9.40 0.6	7.56 0.7
720-9	Local Government	1,019,868	18.80 0.9	11.22 1.0	4.94 1.1	2.94 1.1	8.20 1.0	14.81 1.0	9.77 0.9
730-49	Professions	666,152	26.86 1.4	16.10 1.4	2.85 0.6	2.20 0.8	5.11 0.6	10.62 0.7	7.96 0.8
750-9	Entertainment and Sport . . .	197,463	30.65 1.6	12.01 1.1	3.88 0.9	2.28 0.9	6.41 0.8	14.75 1.0	7.54 0.7
760	Domestic Service	1,625,930	18.80 1.0	21.17 1.9	3.62 0.8	3.28 1.2	4.94 0.6	8.76 0.6	9.00 0.9
771-8	Hotels, etc.	666,679	31.45 1.6	14.00 1.2	3.25 0.7	2.88 1.1	5.24 0.7	12.49 0.8	7.13 0.7
779	Laundries, Job Dyeing, etc. . .	179,681	34.20 1.7	16.12 1.4	2.50 0.6	1.77 0.7	4.82 0.6	11.78 0.8	7.42 0.7
780-9	Other Personal Service	174,087	27.92 1.4	11.92 1.1	3.50 0.8	2.87 0.9	6.95 0.9	15.37 1.0	9.05 0.9
001, 109, 118, 134, 149, 292, 556, 790, 809,	Other Industries and Industry not stated	189,954	22.80 1.1	10.52 0.9	3.70 0.8	2.74 1.0	5.17 0.7	11.95 0.8	8.55 0.8

INDUSTRY IN GREAT BRITAIN—continued

Midland II	East	South-West	Wales I	Wales II	Scotland I	Scotland II	Scotland III	Scotland IV	Description of Industry	Male workers in the Industry as a percentage of the Total
3.05 0.6	3.14 0.8	4.35 1.0	2.92 0.8	1.89 1.0	0.51 0.9	3.05 1.0	3.36 0.7	2.81 1.1	Central Civil Government	75.18
4.82 0.9	4.23 1.1	4.83 1.0	4.19 1.1	1.61 1.1	0.54 1.0	2.59 0.9	5.28 1.0	2.24 1.1	Local Government	69.07
3.49 0.6	3.69 1.0	5.17 1.2	2.73 0.7	1.58 1.1	0.53 1.0	4.10 1.4	4.75 0.9	2.81 1.1	Professions	51.40
3.38 0.6	3.31 0.9	3.32 0.8	2.88 0.8	0.93 0.7	0.24 0.4	2.72 0.9	4.48 0.9	1.28 0.6	Entertainment and Sport	68.22
4.06 0.8	5.31 1.4	7.35 1.7	2.85 0.8	2.00 1.4	0.81 1.5	2.88 0.8	3.05 0.6	2.49 1.2	Domestic Service	18.49
3.15 0.6	3.42 0.9	5.35 1.2	2.89 0.6	1.86 1.3	0.84 0.6	2.10 0.7	3.32 0.7	1.65 0.8	Hotels, etc.	48.07
2.94 0.5	2.43 0.6	3.90 0.9	1.45 0.4	0.77 0.5	0.47 0.9	2.48 0.8	4.59 0.9	2.32 1.1	Laundries, Job Dyeing, etc.	22.23
4.43 0.8	3.06 0.8	3.72 0.9	2.79 0.8	0.90 0.6	0.27 0.5	2.40 0.8	4.08 0.8	1.21 0.6	Other Personal Service	64.57
3.03 0.6	3.47 0.9	4.32 1.0	3.31 0.9	1.79 1.3	0.74 1.4	6.40 2.2	7.31 1.5	4.63 2.3	Other Industries and Industry not stated	76.00

ERRATA

APPENDIX I—TABLE I

Code No.	Industry	Region	Should be
014	Gardening	Scotland IV	2.1
060	Bricks, Tiles, etc.	Scotland III	5.60
064	Glass	South-East	2.63
064	Glass	Midlands I	23.68
			2.3
090-1	White Lead, Paint, etc.	South-East	4.77
171-8	Other Electrical Manufactures	Scotland II	0.1
211-5	Small tools, etc.	South-East	0.96
241	Tin boxes, etc.	Greater London	34.60
324	Textile Making-up, etc.	North IV	86.87
340-1	Tailoring	Greater London	29.35
360	Grain Milling	Midland II	3.51
			0.7
364-5	Bread, etc.	Scotland I	0.58
			1.1
367, 369	Sugar Confectionery, etc.	North IV	0.9
402	Cooperages	East	4.40
			1.2
470-1	Rubber Goods	North IV	1.8
492	Celluloid, etc.	North I	0.1
		South-West	0.06
541	Cartage and Haulage Contracting	Greater London	1.3
700	Defence	North III	1.61
			0.2

TABLE 2—COMPARISON OF THE REGIONAL DISTRIBUTION OF

The regions are defined and

The net value of the output of each industry in each region is expressed as a percentage of the Owing to the restriction as to publication of information concerning individual firms, regional figures

The 1935 census figures are from the preliminary results

Description of Trade	Greater London			Lancs., etc.			West Riding			Northumber-land, etc.			Warwicks, etc.		
	1924	1930	1935	1924	1930	1935	1924	1930	1935	1924	1930	1935	1924	1930	1935
I.—Textile Trades:															
Cotton Spinning . . . . .	...	...	...	83.9	82.6	80.5	5.0	5.8	7.0	...	...	...	...	...	...
Cotton Weaving . . . . .	...	...	...	88.0	89.0	84.2	7.5	4.5	...	...	...	...	...	...	...
Woolen and Worsted . . . . .	...	...	...	4.1	5.4	4.9	75.5	72.8	72.8	...	...	...	8.7	4.7	5.1
Silk and Rayon . . . . .	...	...	...	15.0	17.4	29.2	7.7	5.6	11.4	...	...	...	35.5	24.8	27.1
Jute . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hosiery	3.2	2.9	...	4.2	5.7	7.6	0.4	0.3	...	...	...	...	2.0	4.2	...
Textile Finishing . . . . .	...	...	...	55.6	58.8	52.0	20.3	18.7	20.3	...	...	...	...	...	...
Lace . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
II.—Leather Trades:															
Tanning and Dressing	19.0	16.0	...	29.3	32.0	30.1	11.1	9.1	...	...	...	...	6.2	4.9	...
III.—Clothing Trades:															
Tailoring and Dressmaking	41.2	41.4	43.8	16.9	16.7	15.6	13.2	15.7	14.8	1.0	1.0	...	3.7	3.6	3.7
Boot and Shoe	9.8	9.6	11.4	7.6	8.3	8.7	2.8	2.3	...	...	...	...	5.3	3.9	...
Hat and Cap	20.8	14.8	...	37.2	36.0	40.0	...	...	...	...	...	...	4.5	5.2	...
IV.—Paper, Printing and Stationery Trades:															
Paper Manufacturing	15.8	19.5	27.5	21.9	18.0	17.3	3.9	2.5	...	1.0	1.6	...	2.8	3.4	...
Printing, Bookbinding, etc.	46.9	45.2	46.5	10.7	10.0	9.0	5.8	5.4	6.2	1.5	1.4	...	5.9	6.1	6.2
Newspapers and Periodicals	55.0	53.6	55.0	18.8	16.5	14.9	4.9	5.1	...	2.7	2.4	...	3.0	3.3	...
Stationery	49.0	51.7	59.0	11.7	10.8	...	3.3	3.0	...	...	...	...	6.1	6.3	...
Cardboard Box	31.0	35.5	36.9	13.0	13.8	...	4.2	3.3	...	...	...	...	5.1	5.7	...
V.—Food, Drink and Tobacco Trades:															
Grain Milling	18.2	21.9	...	24.8	26.6	...	6.6	3.8	...	3.2	3.3	...	2.8	2.2	...
Bread and Cake . . . . .	...	30.0	31.1	...	13.8	13.8	...	2.3	...	2.1	2.2	...	...	8.8	...
Biscuit . . . . .	...	34.0	...	13.6	...	...	2.6	...	...	...	...	...	...	...	...
Cocoa and Sugar Confectionery	22.1	24.1	23.0	7.7	6.8	...	13.0	13.5	19.0	2.7	3.3	...	22.3	23.6	...
Preserved Foods	43.6	41.4	46.1	10.2	10.0	...	...	...	...	3.0	4.1	...	11.4	11.1	...
Brewing and Malting	23.8	23.8	24.1	13.7	12.0	...	3.7	9.1	...	1.9	1.8	...	21.1	14.1	21.3
VI.—Chemical and Allied Trades:															
Chemicals, Dyestuffs and Drugs	25.1	24.3	23.4	37.0	34.7	31.1	3.9	5.7	...	6.3	11.5	9.7	4.4	3.6	...
Soap, Perfumery and Candles	25.1	31.8	39.5	54.9	49.6	43.3	4.0	3.3	...	...	...	...	1.3	1.0	...
Paint, Colour and Varnish	40.6	39.3	41.7	12.2	13.0	...	2.5	2.4	...	3.2	3.4	...	11.7	12.4	...
VII.—Timber Trades:															
Timber (Sawmilling)	26.9	31.1	33.7	9.5	8.6	...	6.1	4.6	...	4.7	4.4	...	6.4	6.3	...
Furniture and Upholstery	49.4	48.1	56.7	10.5	10.6	...	5.5	5.2	...	2.3	2.3	...	7.7	7.2	...
VIII.—Clay and Building Materials															
Brick and Fireclay	3.7	4.3	...	10.2	9.5	11.2	10.9	9.6	10.6	6.8	4.2	5.1	16.4	13.8	17.3
China and Earthenware	5.1	4.3	...	3.6	2.6	...	0.7	1.4	...	...	...	...	74.0	76.9	80.9
Glass	19.4	27.9	32.4	44.7	37.2	23.8	11.3	10.4	16.2	5.7	4.6	...	10.2	12.1	...

INDUSTRIES IN 1924, 1930 AND 1935 (Census of Production)

mapped in Appendix IV

net value of the total production of the industry, in each of the three years 1924, 1930, and 1935, are not always given by the Census of Production. The Table is, therefore, necessarily incomplete, published in the Board of Trade Journal, December 23, 1937.

Rest of England			South Wales and Mon.			Rest of Wales			Scotland West-Central			Rest of Scotland			Description of Trade
1924	1930	1935	1924	1930	1935	1924	1930	1935	1924	1930	1935	1924	1930	1935	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	I.—Textile Trades:
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Cotton Spinning
6.1	5.1	5.6	...	...	...	...	...	...	3.2	3.0	3.7	7.0	8.0	6.7	Cotton Weaving
14.5	37.5	22.8	...	...	...	...	...	...	...	...	...	...	...	...	Woolen and Worsted
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Silk and Rayon
...	...	...	...	...	...	...	...	...	...	...	...	100.0	100.0	100.0	Jute
75.0	74.0	71.0	...	...	...	...	...	...	5.5	3.5	4.6	9.6	9.2	7.0	Hosiery
9.1	8.8	9.3	...	...	...	...	...	...	8.3	6.9	6.6	3.2	3.2	...	Textile Finishing
76.6	70.4	76.2	...	...	...	...	...	...	...	...	...	...	...	...	Lace
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	II.—Leather Trades:
26.4	30.0	32.8	...	...	...	...	...	...	...	...	...	...	...	...	Tanning and Dressing
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	III.—Clothing Trades:
15.9	15.7	18.6	0.6	0.4	...	0.1	0.1	...	4.9	3.9	3.5	2.1	1.4	...	Tailoring and Dressmaking
70.6	72.5	74.8	...	...	...	...	...	...	1.5	1.4	...	1.8	1.6	...	Boot and Shoe
36.4	42.0	37.9	...	...	...	...	...	...	...	...	...	...	...	...	Hat and Cap
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	IV.—Paper, Printing and Stationery Trades:
36.1	33.2	28.1	...	...	...	...	...	...	3.0	5.3	...	18.4	15.7	14.9	Paper Manufacturing
18.3	21.6	19.8	0.7	0.6	...	0.2	0.1	...	4.9	4.9	4.9	5.3	4.9	4.3	Printing, Bookbinding, etc.
10.0	9.1	8.3	1.7	1.2	...	0.2	0.1	...	4.4	5.0	...	4.4	3.6	...	Newspapers and Periodicals
21.1	21.4	...	...	...	...	...	...	...	2.6	1.4	...	5.7	5.2	...	Stationery
42.4	37.2	31.0	...	...	...	...	...	...	2.6	2.1	...	1.4	2.2	...	Cardboard Box
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	V.—Food, Drink & Tobacco Trades:
30.9	30.2	32.5	...	...	...	...	...	...	2.7	1.5	...	4.4	3.7	...	Grain Milling
...	17.0	15.5	...	...	...	...	...	...	...	7.8	8.5	...	14.7	9.2	Bread and Cake
17.1	...	...	1.5	1.2	...	0.2	0.2	...	10.6	...	...	11.0	...	...	Biscuit
17.2	24.4	...	...	...	...	...	...	...	5.1	8.5	...	...	8.5	...	Cocoa and Sugar Confectionery
20.3	16.9	15.5	...	...	...	...	...	...	5.1	3.7	...	3.6	2.2	...	Preserved Foods
...	22.9	20.5	...	...	...	...	...	...	8.0	7.1	...	1.0	1.7	...	Brewing and Malting
21.1	28.3	25.3	2.4	1.5	...	0.3	0.4	...	(a)	(a)	...	(a)	(a)	...	Brewing and Malting
...	...	...	...	...	...	...	...	...	3.5	2.2	...	3.5	2.2	...	Brewing and Malting
10.4	14.0	13.3	...	...	...	...	...	...	3.2	2.3	...	2.4	2.9	...	VI.—Chemical and Allied Trades:
10.9	9.3	...	...	...	...	...	...	...	1.2	0.6	...	1.4	2.0	...	Chemicals, Dyestuffs and Drugs
17.2	19.4	...	...	...	...	...	...	...	4.4	3.2	...	2.1	1.7	...	Soap, Perfumery and Candles
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Paint, Colour and Varnish
81.2	82.0	25.5	2.5	2.0	...	0.6	0.5	...	3.7	3.4	...	3.5	7.1	...	VII.—Timber Trades:
14.8	18.6	11.7	...	...	...	...	...	...	5.8	4.5	...	3.4	2.1	...	Timber (Sawmilling)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Furniture and Upholstery
36.4	42.3	36.1	3.7	1.8	...	2.9	2.3	...	3.7	2.2	...	5.3	4.6	...	VIII.—Clay and Building Materials:
11.5	9.9	...	...	...	...	...	...	...	2.5	3.3	...	1.3	1.5	...	Brick and Fireclay
...	...	...	...	...	...	...	...	...	2.7	2.0	...	3.8	2.7	...	China and Earthenware
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Glass

TABLE 2—COMPARISON OF THE REGIONAL DISTRIBUTION OF

Description of Trade	Greater London			Lancs., etc.			West Riding			Northumber-land, etc.			Warwicks, etc.		
	1924	1980	1985	1924	1980	1985	1924	1980	1985	1924	1980	1985	1924	1980	1985
IX.—Miscellaneous Trades:															
Rubber	14.8	15.6	19.1	26.8	24.5	31.8	...	...	...	...	...	...	...	38.6	29.0
Scientific Instruments	68.1	67.0	71.7	7.4	5.1	...	5.8	8.9	...	...	...	...	7.6	6.2	...
Plastics and Fancy Articles	68.0	61.6	58.9	...	...	...	6.8	7.4	...	...	...	...	9.8	15.9	...
X.—Mines and Quarries:															
Coal Mines	—	—	—	12.6	7.2	8.0	16.8	18.2	18.6	18.1	18.8	17.8	7.8	7.9	9.0
XI.—Iron and Steel Trades:															
Iron Smelting and Rolling	—	—	—	8.8	9.4	9.0	25.8	31.9	30.4	11.1	16.6	12.8	12.0	9.9	10.2
Iron and Steel Foundries	4.0	8.9	...	10.1	18.1	10.4	8.4	6.9	7.7	8.1	5.8	5.0	19.4	28.5	26.8
Tinplate . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hardware, Hollow Ware, etc.	25.6	29.5	31.0	9.0	8.2	...	4.8	4.9	...	1.2	2.6	...	48.7	40.6	41.1
Chain, Nail, Needle, Pin, etc.	4.8	5.2	...	9.0	8.9	...	7.4	8.2	...	0.8	1.4	...	68.1	64.4	64.8
Wrought Iron and Steel Tubes . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	58.9	51.9	64.0
Tool, Implement and Cutlery	2.7	8.0	...	8.4	2.5	...	61.2	60.8	51.8	...	...	...	21.2	17.6	...
XII.—Engineering, Shipbuilding and Vehicle Trades:															
Mechanical Engineering	11.9	14.9	18.6	28.2	20.8	18.0	14.4	10.2	10.9	6.9	6.2	5.7	8.1	10.7	11.4
Electrical "	44.0	41.4	47.9	25.9	24.8	19.8	1.5	1.9	...	1.8	2.7	2.8	17.0	17.2	18.4
Shipbuilding	11.2	8.4	...	11.7	12.0	18.4	0.4	0.7	...	26.8	27.1	17.7	0.1	0.1	...
Motor and Cycle Manufacturing and Repair	20.8	21.5	26.2	11.4	9.8	4.8	1.9	2.5	...	0.4	0.8	...	47.8	45.8	44.8
Aircraft	47.2	47.6	34.8	...	...	...	...	...	...	...	...	...	...	...	...
XIII.—Non-Ferrous Metal Trades:															
Copper and Brass Smelting and Rolling	7.4	17.2	...	7.4	7.8	...	8.8	1.9	...	2.1	2.6	...	65.6	62.0	62.8
Finished Brass	7.0	10.6	...	8.9	4.9	...	9.7	8.9	...	1.5	2.8	...	70.7	65.6	66.8
Plate and Jewellery	15.0	17.5	...	1.0	1.0	...	28.2	25.8	...	...	...	...	59.6	54.7	54.2
All Industries, Factory and non-Factory	17.1	21.2	24.8	20.8	17.8	15.5	12.6	10.6	10.1	5.9	5.8	4.8	11.6	12.2	12.8

(a) Estimated figures. The combined figures for the whole of Scotland in 1924 and 1980 were 7.0 per cent and 4.4 per cent respectively.

INDUSTRIES IN 1924, 1930 AND 1935—continued

Rest of England			South Wales and Mon.			Rest of Wales			Scotland West-Central			Rest of Scotland			Description of Trade
1924	1930	1935	1924	1930	1935	1924	1930	1935	1924	1930	1935	1924	1930	1935	
...	8.6	6.6	...	8.7	5.4	...	IX.—Miscellaneous Trades: Rubber Scientific Instruments Plastics and Fancy Articles
11.7	11.7	...	...	...	...	...	...	...	6.0	5.1	...	0.5	0.4	...
18.2	11.6	...	...	...	...	...	...	...	...	...	...	...	...	...
11.0	15.4	15.5	19.9	20.2	17.0	1.6	1.4	...	4.9	4.0	5.0	7.6	7.1	7.4	X.—Mines and Quarries: Coal Mines
...	(b) 24.1	18.7	15.8	...	8.1	2.4	(c) 12.6	11.7	11.7	XI.—Iron and Steel Trades: Iron Smelting and Rolling Iron and Steel Foundries Tinplate Hardware, Hollow Ware, etc. Chain, Nail, Needle, Pin, etc. Wrought Iron and Steel Tubes Tool, Implement and Cutlery
28.4	21.0	20.8	...	...	...	...	...	...	8.9	8.7	6.4	14.6	14.4	11.8
...	...	...	86.0	90.8	90.0	...	...	...	...	...	...	...	...	...
6.2	9.2	9.0	1.9	2.4	...	...	...	...	2.1	1.6	...	1.0	0.9	...
6.8	5.4	...	...	...	...	...	...	...	5.8	4.0	...	0.5	0.9	...
...	
...	
18.8	20.6	20.0	0.7	0.6	...	0.1	0.1	...	18.4	18.8	10.6	8.1	2.9	2.5	XII.—Engineering, Shipbuilding and Vehicles Trades: Mechanical Engineering Electrical Shipbuilding Motor and Cycle Manufacturing and Repair Aircraft
8.5	10.9	8.1	...	...	...	...	...	...	0.7	0.4	...	1.0	0.6	...
14.2	18.8	15.1	5.8	8.8	...	0.4	0.8	...	26.7	29.5	28.0	4.6	4.6	...	
15.1	17.7	19.6	0.2	0.8	...	0.0	0.1	...	1.7	1.6	...	1.0	0.9	...	
28.4	40.4	51.9	...	...	...	...	...	...	...	...	...	...	...	...
3.4	3.1	...	7.1	8.6	2.4	2.1	...	0.5	0.4	...	XIII.—Non-Ferrous Metal Trades: Copper and Brass Smelting and Rolling
(d) 4.2	3.8	...	...	...	...	...	...	...	1.7	1.8	...	1.4	1.9	...
...	Finished Brass, Plate and Jewellery
15.9	19.0	20.2	5.8	8.8	8.2	0.6	0.6	0.7	5.0	4.9	4.5	5.2	4.6	4.4	All Industries, Factory and non- Factory

(b) Combined figure for whole of Wales. (c) Combined figure for whole of Scotland. (d) Includes South Wales and Monmouthshire.

Table 3—CHANGES BETWEEN JUNE 1923 AND JUNE 1938 IN THE NUMBERS OF INSURED WORKPEOPLE (AGED 16-64) IN EMPLOYMENT IN CERTAIN INDUSTRIES IN THE UNITED KINGDOM

Industry	Index Numbers at June of each year (1923=100)											Estimated Numbers June 1938
	1927	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	
Coal Mining	79.7	74.0	69.2	56.8	52.7	54.8	53.0	54.8	52.9	59.4	59.5	701,713
Iron Ore and Ironstone Mining	85.7	92.5	84.2	47.9	45.8	39.3	58.8	51.9	60.7	68.1	64.3	9,326
Lead, Tin and Copper Mining	135.8	118.4	98.4	45.3	38.8	37.3	86.0	88.6	85.5	102.9	94.5	3,583
Stone Quarrying and Mining	132.8	134.2	131.3	136.1	122.2	121.7	128.0	130.2	141.9	151.2	153.2	45,181
Slate Quarrying and Mining	142.0	125.2	106.8	113.9	96.2	118.6	123.9	124.1	124.7	124.0	121.8	9,110
Other Quarrying and Mining	69.4	66.1	63.6	55.7	47.5	45.4	44.6	41.8	42.7	41.5	40.8	9,604
Sand, Clay, Gravel and Chalk Pits.	124.5	132.9	133.4	122.1	105.8	116.7	128.7	136.0	142.8	156.1	143.8	16,389
Coke Ovens and By-Product Works	76.4	79.9	71.6	58.1	56.3	64.4	78.8	89.4	91.1	97.4	91.8	12,310
Artificial Stone and Concrete	167.7	174.4	167.0	174.6	187.5	198.8	209.9	231.2	255.6	297.7	307.4	26,984
Cement, Lime Kilns and Whitening	121.1	123.8	117.7	101.8	87.5	86.6	91.8	95.3	100.3	111.4	118.2	16,985
Brick, Tile, Pipe, etc., Making	147.3	140.7	139.9	138.4	129.6	143.0	160.2	169.6	176.4	185.5	184.3	98,400
Pottery, Earthenware, etc.	97.1	102.9	93.5	80.7	77.8	86.9	93.1	94.1	95.8	104.8	97.4	61,047
Glass (excl. Bottles and Scientific Glass)	99.4	111.3	107.2	91.8	92.5	102.1	109.6	108.7	117.0	126.9	120.2	27,379
Glass Bottles	126.7	122.8	115.5	117.8	120.0	126.6	135.8	130.4	137.2	143.6	137.9	16,652
Chemicals	97.3	111.5	102.5	90.0	92.9	97.5	105.5	103.0	107.5	115.1	116.8	104,291
Explosives	108.1	111.9	108.6	88.6	89.7	91.0	95.5	98.6	110.4	137.1	134.2	29,082
Paint, Varnish, Red Lead, etc.	139.0	144.8	143.7	147.4	144.0	155.2	169.2	178.9	184.6	184.6	183.3	22,979
Oil, Glue, Soap, Ink, Matches, etc.	104.4	102.2	101.3	100.2	103.9	105.7	94.1	95.0	96.3	102.6	103.8	70,655
Pig Iron (Blast Furnaces)	88.5	80.7	72.6	49.3	42.6	39.2	51.0	51.6	56.4	64.4	58.6	14,379
Iron and Steel Smelting and Rolling	97.1	89.6	78.8	54.5	54.0	62.7	79.2	77.0	89.4	101.6	85.9	138,586
Brass, Copper, Zinc, Tin, Lead, etc.	104.3	110.2	100.5	80.7	81.9	98.7	99.3	104.9	120.0	142.5	136.1	45,745
Tinplate	83.8	87.6	82.8	67.8	57.8	79.2	72.5	65.6	69.9	90.6	44.4	12,211
Iron and Steel Tubes	117.9	130.0	116.8	84.7	80.2	93.4	118.6	126.5	130.9	146.2	127.7	26,192
Wire, Wire Netting and Wire Rope	88.6	97.2	88.3	76.5	77.8	84.5	93.3	89.0	102.0	114.4	103.3	12,619
General Engineering	103.2	105.8	98.7	81.6	77.3	78.4	87.7	91.0	101.8	115.8	116.8	591,480
Electrical Engineering	132.8	144.4	143.8	141.8	141.4	137.5	150.2	156.0	174.7	199.6	199.3	111,422
Marine Engineering, etc.	94.3	105.9	101.1	57.4	42.2	46.2	65.2	66.1	86.5	97.7	104.6	52,815
Constructional Engineering	124.3	127.5	117.5	111.7	96.0	96.4	126.6	133.1	160.8	184.0	212.2	42,367
Motor Vehicles, Cycles and Aircraft	126.8	134.4	125.2	115.5	114.4	127.9	143.2	149.9	172.1	196.4	209.4	360,836
Carriages, Carts, etc.	79.4	74.0	72.3	64.2	61.9	60.4	52.2	52.9	48.2	51.3	49.0	11,568
Railway Carriages, and Wagons, etc.	109.8	105.5	104.3	84.9	78.0	74.9	88.1	92.5	101.6	104.7	119.4	55,926

Table 3—CHANGES BETWEEN JUNE 1923 AND JUNE 1938 IN THE NUMBERS OF INSURED WORKPEOPLE (AGED 16-64) IN EMPLOYMENT IN CERTAIN INDUSTRIES IN THE UNITED KINGDOM—*continued*

Industry	Index numbers at June of each year (1923=100)											Estimated Numbers June 1938
	1927	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	
Shipbuilding and Repairing	109.1	108.9	97.5	58.8	46.4	45.8	55.5	61.5	78.7	91.6	95.2	139,968
Stove, Grate, Pipe and General Iron Founding	116.2	120.8	114.9	104.4	99.2	108.2	122.4	122.6	135.2	148.4	130.2	86,678
Electrical Wiring and Contracting	139.5	160.8	173.8	199.6	210.6	236.2	298.0	318.2	350.9	389.0	396.8	88,169
Electric Cable, Apparatus, Lamps, etc.	120.0	139.3	146.6	144.4	158.5	168.0	189.3	203.1	220.3	265.4*	254.2*	163,698
Hand Tools, Cutlery, Saws, Files	115.8	118.3	104.0	84.4	88.3	93.0	106.7	106.6	114.6	128.6	107.8	26,496
Bolts, Nuts, Screws, Rivets, Nails, etc.	95.2	95.5	90.2	75.7	75.8	83.3	90.2	96.3	102.8	110.8	104.5	25,216
Brass and Allied Metal Wares	108.4	108.4	94.8	82.6	84.2	83.7	95.9	110.8	106.8	116.6	101.2	25,368
Heating and Ventilating Apparatus	136.2	165.1	166.1	152.0	149.3	160.2	207.1	231.7	273.4	353.9	360.0	18,254
Watches, Clocks, Plate, Jewellery, etc.	95.5	92.6	88.9	77.9	77.0	85.4	86.9	82.8	87.5	88.8	87.0	36,415
Other Metal Industries	117.3	123.2	118.6	111.4	112.6	123.2	136.6	148.7	161.8	175.6	165.7	238,314
Cotton Spinning and Weaving	118.9	109.0	75.1	74.4	79.8	85.2	81.9	78.4	80.0	83.4	56.8	251,184
Woollens and Worsted	89.8	85.2	75.3	66.4	70.7	82.2	74.9	78.2	82.3	84.5	67.7	164,731
Silk and Rayon	148.5	199.6	179.4	151.2	167.1	173.8	186.4	207.7	215.7	222.1	187.0	63,546
Linen	113.5	102.1	87.3	81.3	76.8	85.0	93.8	85.5	83.7	94.4	69.4	46,591
Jute	99.4	98.2	74.2	56.8	56.3	68.3	58.6	64.8	61.9	67.7	51.4	17,992
Hemp, Rope, Cord, Twine, etc.	105.5	102.3	88.8	85.1	83.3	87.2	90.3	95.4	99.1	105.6	93.6	15,414
Hosiery	113.2	121.2	110.7	109.1	118.9	121.3	126.1	124.2	132.7	136.2	124.4	103,094
Lace	102.9	98.4	90.9	84.9	89.6	86.9	88.1	92.5	87.7	89.2	72.2	11,355
Carpets	94.5	98.9	92.9	86.8	102.2	104.3	118.4	115.5	119.6	125.0	106.8	25,884
Other Textiles	109.7	115.1	104.9	101.7	104.2	113.1	123.3	120.3	130.3	146.7	140.0	51,029
Textile Bleaching, Printing, Dyeing, etc.	105.2	102.8	83.2	76.0	84.5	87.9	87.7	86.3	86.3	89.0	66.7	65,986
Leather Tanning, Currying and Dressing	106.0	103.2	98.7	93.2	96.1	107.0	111.2	110.7	118.0	122.0	105.4	38,411
Leather Goods	95.8	96.0	86.5	76.1	82.9	87.6	93.7	92.1	96.3	101.8	94.5	23,312
Tailoring	110.8	109.9	107.9	109.5	107.5	110.9	107.0	107.5	109.3	113.6	108.5	190,776
Dressmaking and Millinery	93.0	91.7	89.0	88.5	87.7	84.3	89.2	88.5	86.9	89.7	89.3	98,233
Hats and Caps	101.8	107.8	103.6	98.7	100.2	101.0	100.5	91.3	92.3	88.7	76.9	24,206
Shirts, Collars, Underclothing, etc.	118.0	126.1	124.4	125.9	126.6	133.2	147.6	147.4	155.0	154.7	155.2	95,761
Other Dress Industries	89.4	91.6	89.3	84.1	88.8	90.4	92.3	90.4	99.8	99.0	92.0	26,311
Boots, Shoes, Slippers and Clogs	102.5	93.1	89.9	87.7	85.6	93.1	89.4	90.6	93.8	96.8	83.1	111,792
Bread, Biscuits, Cakes, etc.	96.6	96.2	97.5	97.4	100.3	104.5	106.7	108.4	108.9	115.6	115.7	163,446
Grain Milling	106.7	107.0	101.4	97.5	105.6	117.0	120.5	115.9	124.0	121.2	119.0	30,699

* Basis of classification slightly changed.

Table 3—CHANGES BETWEEN JUNE 1923 AND JUNE 1938 IN THE NUMBERS OF INSURED WORKPEOPLE (AGED 16-64) IN EMPLOYMENT IN CERTAIN INDUSTRIES IN THE UNITED KINGDOM—*continued*

Industry	Index Numbers at June of each year (1923=100)											Estimated Number June 1938
	1927	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	
Cocoa, Chocolate and Sugar Confectionery	109.6	104.6	102.0	92.7	95.4	99.5	95.7	101.0	102.9	111.1	118.5	71,4
Other Food Industries	119.7	122.0	120.7	119.8	120.0	130.2	131.2	131.8	137.9	142.6	141.2	119,8
Drink Industries	113.0	111.7	109.8	107.7	101.7	106.8	108.8	108.4	112.8	116.9	119.8	108,8
Tobacco and Snuff	99.5	108.2	107.8	102.5	106.1	104.8	103.1	95.2	97.2	99.3	98.8	40,4
Sawmilling and Machined Woodwork	109.0	110.7	104.5	97.4	98.4	99.0	109.5	110.1	115.8	118.6	117.2	56,7
Wood Boxes and Packing Cases	112.2	111.2	103.4	98.7	92.0	90.1	92.7	83.7	91.4	100.9	94.7	9,7
Furniture Making, Upholstery, etc.	125.8	135.2	134.2	130.8	126.9	130.6	140.9	145.1	155.5	163.5	157.3	132,4
Other Woodworking	94.1	92.1	88.6	83.0	80.2	83.9	86.3	83.5	92.0	92.2	93.2	21,9
Paper and Paper Board	99.5	106.7	102.7	98.4	105.0	112.4	113.5	115.5	119.2	127.2	116.7	58,0
Cardboard Boxes, Paper Bags and Stationery	105.8	110.2	105.9	107.1	109.5	113.9	120.4	122.7	127.4	137.2	134.3	63,1
Wall Paper Manufacturing	115.6	133.9	132.0	129.8	122.0	130.3	158.5	152.9	153.0	163.8	162.5	6,9
Stationery and Typewriting Requisites (not Paper)	123.4	136.5	134.0	126.1	130.7	152.4	131.5	133.2	135.5	198.3	232.9	10,2
Printing, Publishing and Bookbinding	114.0	119.7	122.2	120.1	122.1	123.0	122.5	121.9	124.1	127.6	127.6	268,5
Rubber	110.4	122.8	118.1	109.4	106.9	116.1	111.5	110.4	103.8	122.1	113.3	56,2
Oilcloth, Linoleum, etc.	118.9	118.8	111.8	99.6	97.0	114.8	105.1	105.6	117.5	109.8	100.6	11,1
Brushes and Brooms	123.8	116.7	122.6	113.1	120.4	142.2	136.2	140.6	127.7	133.1	134.6	10,4
Scientific and Photographic Apparatus	142.2	159.2	152.7	142.3	139.4	161.2	174.0	184.7	203.7	224.7	241.3	33,9
Toys, Games and Sports Requisites	104.0	115.4	123.0	115.5	113.6	121.0	144.9	150.2	151.8	160.9	157.8	16,3
Other Industries	126.4	133.5	125.9	120.9	122.2	123.8	144.3	145.4	150.8	153.5	145.5	140,2
Total Mining and Quarrying	81.8	76.5	71.7	59.5	54.9	56.5	55.9	57.1	56.2	62.8	62.7	795,4
Total Building and Contracting	123.5	123.0	125.3	131.5	117.8	124.6	135.6	144.0	156.4	160.9	163.2	1,141,2
Total Transport and Distribution	119.2	125.9	127.2	130.4	133.0	134.6	133.5	139.2	144.6	143.4	147.6	2,690,6
Total Manufacturing Industries	108.9	110.4	102.1	93.3	93.5	99.1	104.3	106.0	112.8	121.7	114.9	5,636,5
Gas, Water and Electricity Supply	101.8	100.8	101.1	104.4	101.8	107.6	116.5	118.1	126.5	132.3	134.2	205,1
Total Miscellaneous Services	121.0	130.2	131.0	137.2	133.8	146.4	152.6	159.2	166.1	173.6	177.3	856,3
Commerce, Banking, Insurance and Finance	100.5	103.4	104.2	104.2	107.4	109.5	114.2	115.8	116.8	120.8	121.9	263,1
National and Local Government	96.8	100.3	105.1	110.5	107.2	107.4	107.8	110.5	116.0	122.6	126.2	460,1
*TOTAL, All Industries and Services	103.6	110.5	106.1	101.7	100.7	105.0	109.5	111.7	117.6	124.6	121.5	12,075,2

* Includes Fishing.

APPENDIX II

The Location Factor.

Some basis of reference is necessary for measuring the location of industry. While it is easy to make a general statement that Lancashire is the seat of the cotton industry, or to refer to the North Staffordshire Potteries, such statements are liable to be misleading. There are, for example, other centres of the cotton industry at Paisley, and of earthenware and pottery manufacture in London, in Devonshire and near Bristol. Thus, the larger and better-known concentrations may overshadow those which, though smaller, are equally important to their own districts.

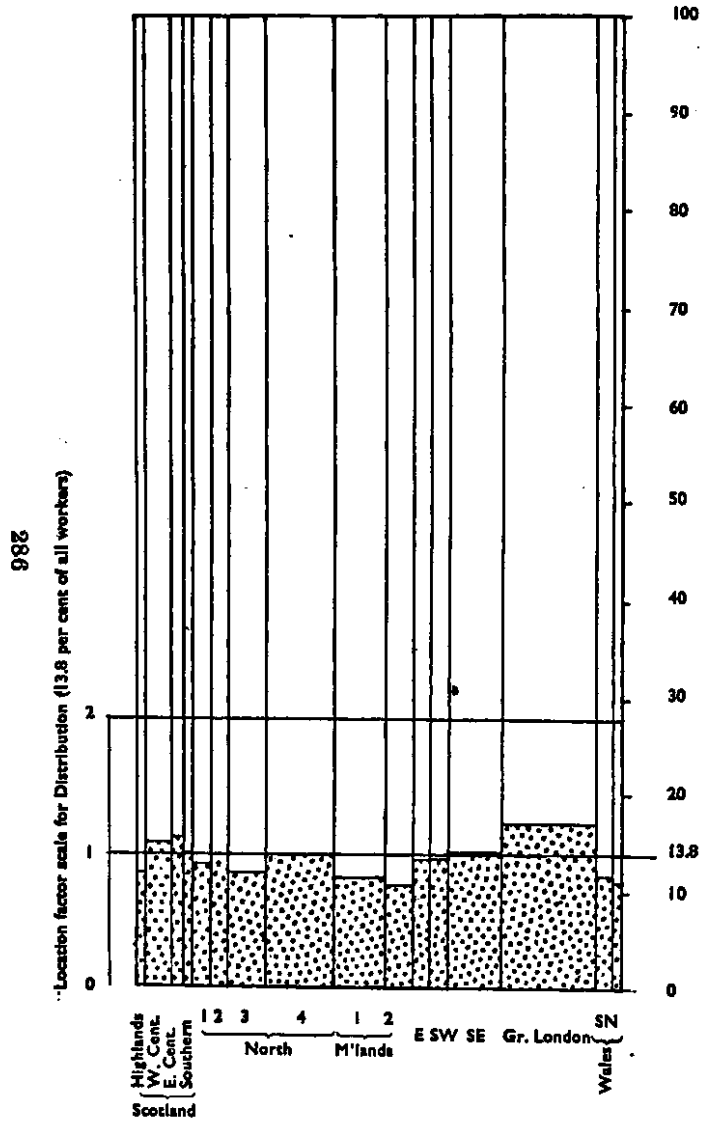
In any attempt at greater precision, however, certain difficulties are usually encountered, and of these the chief is the definition of the boundaries of the areas where industry is situated. This may offer no great difficulty in particular cases, but when one system of regions is required to serve for all industries, a considerable amount of compromise is generally found to be necessary. It might, for example, be quite easy to draw lines on a map enclosing the areas where hosiery manufacture was carried on. It would probably be found, however, that these lines cut across corresponding areas for other industries. If the regions are further required to conform to some existing administrative system, the problem becomes incapable of exact solution, and compromise becomes essential.

Two such compromises have been made by the Census of Population and the Census of Production, both of which supply statistical information as to the regional distribution of industries.

The industry tables of the former give the numbers of persons recorded in 1931 as occupied in various industries in each of the sixteen regions into which Great Britain has been divided. The Census of Production gives the gross and net values of the outputs of various industries, but before 1935 it distinguished only ten regions. The 1935 Census of Production, however, has sub-divided the former "Rest of England" region into six and the "Rest of Scotland" into three, so that it now distinguishes seventeen areas altogether.

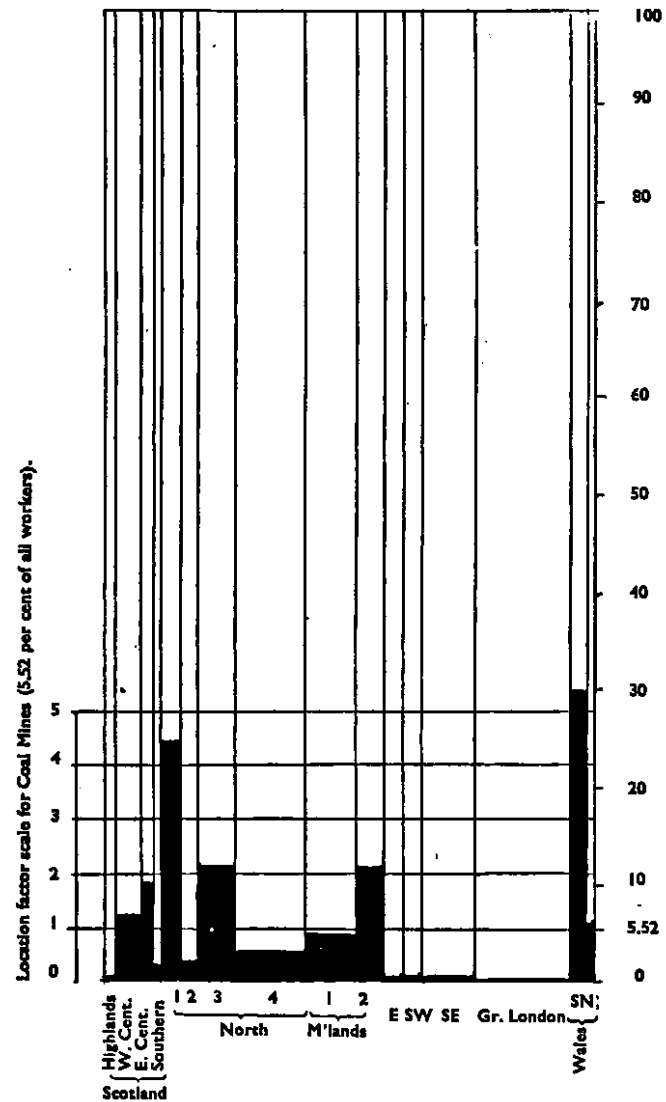
Although the most recent Census of Population is that of 1931, as against 1935 for the Census of Production, the former possesses certain advantages for the present purpose as it is more complete. The Census of Production figures exclude any output from firms employing ten persons or less, and, moreover, the complete regional figures for certain industries are not given, owing to the risk of disclosing information relating to the businesses of individual firms. It may be argued that in most of the major industries the error resulting from the exclusion of firms employing less than eleven persons will be inconsiderable, but in certain other cases—for example, bread-baking—quite a substantial proportion of the industry is carried on by

Figure 15—REGIONAL DISTRIBUTION OF WORKERS IN DISTRIBUTIVE TRADES, 1931



Note: The shaded area is slightly less than the area with the corresponding shade in figure 5 (page 39) since the latter includes workers in commerce and finance.

Figure 16—REGIONAL DISTRIBUTION OF COAL MINERS, 1931



Note: The black area is slightly less than the black area in figure 5 (page 39) since the latter includes miners other than coal miners.

small firms in that range of size, and the Census of Production figures in such cases bear correspondingly less relation to the actual total production.

In the Industries Tables of the Census of Population the working population of Great Britain is broken up into 22 main industrial groups, with 437 sub-heads, for every county and large town. The counties are grouped into 16 regions.

The first column of figures in Table I gives the numbers employed in the 437 industrial sub-orders, grouped under 167 heads. The upper figures in the 16 successive columns show the percentage distribution of these totals among the 16 regions. It will be seen, for example, that 28 per cent of all glass bottle workers were enumerated in North III (the West Riding), 27 per cent in North IV (Lancashire and Cheshire) and 27 per cent in Greater London, while no other region had as many as 4 per cent. It is clear, however, that it would not be true to say that glass bottle makers were equally concentrated in these three regions, for Greater London contains nearly 20 per cent of the total working population, and the West Riding only 8 per cent. Thus, the concentration of glass bottle manufacture in London is hardly greater than that of any representative industry, while in the West Riding it is $3\frac{1}{2}$ times as great. This suggests that a measure of concentration of an industry in a region can be found by dividing the percentage for that industry by the percentage for all industries in the region. Thus, the percentages of glass bottle workers in North III, North IV and Greater London are 28.12, 26.90 and 27.00 respectively. These regions contain respectively 7.93, 14.79 and 19.56 per cent of the national total of all workers, as may be seen from the first line of Table I. The measures of concentration of glass bottle workers in the three regions are therefore:

$$\text{North III } \frac{28.12}{7.93} = 3.5 \qquad \text{North IV } \frac{26.90}{14.79} = 1.8 \qquad \text{Gr. London } \frac{27.00}{19.56} = 1.4$$

This measure, which is known as the Location Factor,* has been worked out for the 167 industrial groups given in Table I, for the 16 census regions. The figures are printed in italics in the table.

A fuller appreciation of the significance of the Location Factor may, perhaps, be reached by a graphical approach. In fig. 5 on page 39 the total working population is divided up by regions and industries. The width (and, therefore, the area) of each column is proportional to the total working population in the region. The columns are divided horizontally according to industries. Thus, the height of each division represents the percentage of workers in a given industry to all workers in the region, and the area of a division represents the actual number of workers.

Fig. 15 opposite is exactly similar to fig. 5, except that the working population is simply divided into those engaged in distribution (shaded) and others (white). This industrial group (600-670 in the table) makes up 13.8 per cent of the occupied population of the country. Thus, if these workers were evenly distributed over all

* Proposed in 'Statistical Methods in Economics and Political Science,' (pp 827-8) by P. Sargent Florence, and developed in an article by the same author in the *Economic Journal*, December 1937.

regions the shaded area would be a rectangle on the base line, reaching to a height of 13.8 on the vertical percentage scale. In a region where exactly 13.8 per cent of the workers were engaged in distribution the location factor for the industry would be 1. Where there are less than 13.8 per cent it is less than 1. If there were as many as 27.6 per cent (13.8×2) the factor would be 2. Thus it is possible to construct a scale to measure the location factor, in which each unit is equal to 13.8 units on the percentage scale.

In fig. 16 the distribution of coal-miners is shown in the same way. Since coal-miners make up 5.5 per cent of all workers in Great Britain the unit on the location factor scale is equal to 5.5 units on the percentage scale. It will be seen that coal-miners in South Wales reach to a height of nearly $5\frac{1}{2}$ on the location factor scale; and in the same way the factor for each region (shown in Table I) can be read off on the scale.

We have seen how the location factor is arrived at. The total of the shaded area in each of these figures represents the total number of workers in the industry, and is equal to the rectangle bounded by the base, and line 1 on the location factor scale. If we wish to compare the factors for the two industries the values must be read off each on its own scale. Comparison between industries would be easier if the location factor scale were uniform throughout. This would mean that the total shaded area was the same for each industry, and the total number of workers was represented by the same area. The diagrams would show the regional distribution of an industry, but give no indication of its size.

The diagrams in fig. 6 on pages 40-41, show the regional distribution of workers in a large number of industries. The height of a column on the vertical scale gives the location factor, and the area of the column gives the percentage of the national total of workers who are located in that region. The total black area is the same for each industry, and represents the total number of workers in the industry.

These figures bring out the limitations as well as the advantages of this method of measurement. The chief drawback is that the regions for which the data are presented in a convenient form vary greatly in size. It can readily be seen from the figures that if Scotland were represented by one broad column instead of four narrow ones, high concentrations in some localities would be masked, and it may well be inferred that some of the broader columns do mask high concentrations within the region. Moreover, if an industry is highly concentrated in a locality which is divided amongst two regions the concentration may well be totally lost to the picture.

It will be seen that most artificial silk spinners were to be found in Midlands I and North IV, where the location factors were 3.5 and 2.1 respectively. Only one-fifth of the workers were in Wales II, but the factor there was as high as 13.4, because the region contained very few other gainfully occupied persons. More than four-fifths of all cotton spinners were in North IV, but the location factor was only 5.7 because there were many other industries and occupations in the region. u. 5

One-fifth of all the occupied population was living in the Greater London region, thus its average share of any industry was one-fifth of the total, and it could not have more than five times its share. It can be seen from the figures that if all the workers in one industry were concentrated in Greater London they would only reach just above 5 on the location factor scale. On the other hand if they were all concentrated in Wales II they would reach 71. (In the case of slate quarrying they do actually reach 61 in that region.) Thus, the location factor alone may sometimes be misleading, just as the percentage distribution among regions alone may be, but each provides a useful check on the other, and for this reason they are presented together in Table I. Fig. 6 also has the effect of combining the two. Owing to the varying size of regions there is, in fact, little significance in the numerical value of factors greater than 8; but all factors as great as 8 can be rightly regarded as significant phenomena.

All these considerations do not detract from the value of the location factor as a method of measurement: they only show that the broad regions distinguished in the census are not entirely suitable material. Measurements based on these regions do, however, give a useful approximation, and if a closer measure is desired the material is available.

While fig. 6 gives a picture of the regional distribution of various industries, the same basic material will provide a picture of the industrial composition of a region.

It is common knowledge that some regions such as South Wales and Tyneside are highly specialised, while in others such as the Midlands a large diversity of industries are represented. By means of the location factor we can go a step beyond common knowledge, and make an approximate measure of the extent to which a region is specialised or diversified.

In the diagrams in fig. 17, each of the 167 industrial groups distinguished in Table I is represented by a dot. The position of the dot on the horizontal scale depends on its location factor. Thus the figure shows the distribution of location factors of the industries in the region. All factors of 8 and over have been grouped together for the reasons explained above. A large number of dots on the zero point on the horizontal scale shows that many industries are absent or practically absent from the region, while dots at 8 and over indicate that the region tends to be highly specialised, and a large number of dots about 1 shows that the region is diversified and typical of the country as a whole. It will be seen that the West Midlands is well diversified, but also highly specialised in a few industries, while South Wales has very few dots between 1 and 8.

These figures do not in themselves give any indication of the general prosperity of a region, but they give a measure of its vulnerability to external forces. A region which has its employment concentrated in a few industries may be very prosperous at any given moment, but if these industries suffer from adverse external conditions, alternative occupation is lacking.

Figure 17—DISTRIBUTION OF THE LOCATION FACTORS OF THE 167 INDUSTRY GROUPS

CENSUS REGIONS 1931

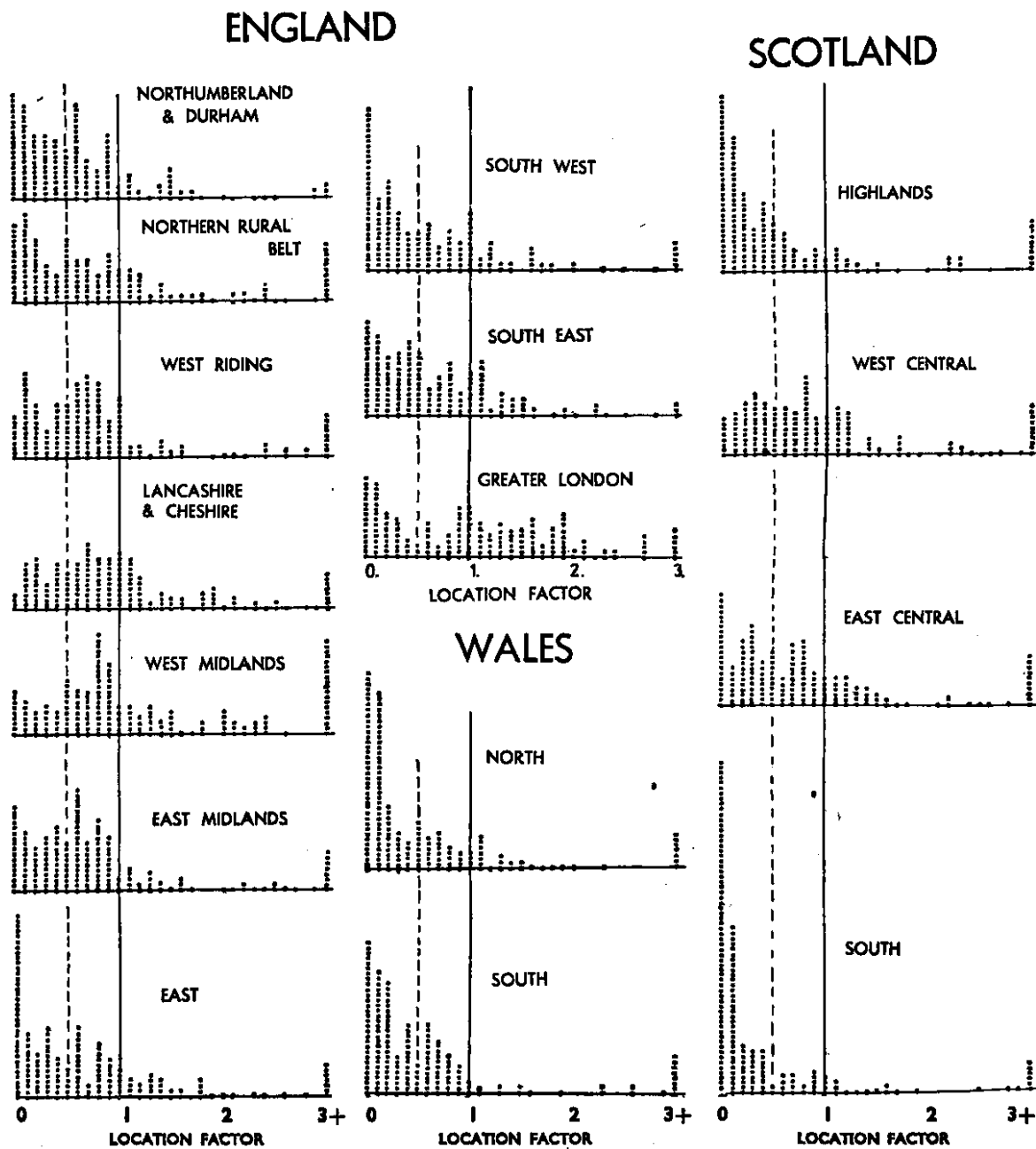


Fig. 17 is an elaboration of the table on page 48. Like this table it is subject to the qualification that each industry is counted as one unit, whether it is as large as agriculture, with over a million employed, or as small as aerodrome and aviation service, with 1,612.

The Coefficient of Localisation

The diagrams in fig. 6 (pages 40-41) give a general picture of the degree of localisation of each industry; but if we wish to determine whether industry A is more localised than industry B it is necessary to devise a unit of measurement. If an industry is evenly distributed over the whole country, its location factors will be close to 1 in each region, whereas if it is highly localised they will be large in some regions, and zero in others. An obvious measure of comparison, therefore, is the sum of the differences from 1. If they are small it is widespread, if they are large it is localised. But this measure would take no account of the varying size of regions. To overcome this a weighted average is taken. The difference from 1 (whether negative or positive) is multiplied by the total number of workers in the region, and the sum of these products is divided by the total workers in the country. This method produces a coefficient which varies from 0 to 2, but since it is easier to appreciate the significance of coefficients varying from 0 to 1, the final figure is reduced by half;* or since the sum of the positive products is equal to the sum of the negative products, the result can be obtained by taking the positive products only, divided by total workers. The same figure can be more simply arrived at by subtracting the regional percentage of all workers (top figures in Table I) from the regional percentage of the workers in the industry in question (higher row of figures against the industry in the table), in all the regions where the latter is the greater, i.e. where the location factor is greater than 1. The sum of these differences (divided by 100) is the coefficient of localisation.†

The significance of the coefficient of localisation may also be more readily appreciated by a graphical approach. Taking the graphs in fig. 6 (pages 40-41) it is desired to measure how nearly the black area coincides with the rectangle included between the base line and the line representing location factor 1. We have seen that the black is in each case equal in area to this rectangle. In other words, the black would always just fit under line 1. That is to say, the black area above the line must be just equal to the white area below it, and either quantity can be used as a measure of the deviation. If we make a rectangle on the base line, equal to the

*This standard has now been agreed upon, but in the writings cited above the coefficient varies from 0 to 2.

† EXAMPLES: (1) The regional percentage shown in Table I for Coal Mining is greater than that for all industries in North I and III, Midlands II, Wales I and II, and Scotland II and III. The sum of the differences is $14.77 + 8.98 + 6.24 + 16.42 + 0.08 + 2.44 + 0.84 = 49.77$.

The coefficient of localisation of Coal Mining is .4977.

(2) The regional percentage for Distributive Trades (code number 600-670) is greater than that for all industries in Greater London and the South-East, and Scotland II and III. In all the other regions it is just lower. Subtracting the percentage for all industries from that for Distributive Trades in the above regions, we have $4.76 + 0.19 + 0.19 + 0.65 = 5.79$.

The coefficient is .058.

black area above line 1 (i.e. take the black area above line 1 and spread it out on the base line) the height to which it reaches on the location factor scale is the *coefficient of localisation*.

For an industry such as distribution, where the location factor is nearly 1 in each region, there is very little black area above the line, and thus the coefficient is very low. If the industry were perfectly evenly spread it would be 0. At the other extreme, it would not be possible for the whole of the black to be above line 1, since each column starts at the base line. But if the whole of an industry were located in one small region, it would be represented by a long thin column, of which all but the base was above the line, and since the whole column would make a rectangle which just reached to 1 on the scale, the rectangle made from the part of the column above the line would very nearly reach to 1. The nearest actual case is tin-plate manufacture, where 94½ per cent of the workers are in South Wales, and the coefficient is .91. Other industries which, on the basis of the census regions, have high coefficients are lace .81, cotton weaving .75, and cotton carding and spinning, hosiery, cutlery and pottery, all over .72. At the other extreme are mineral waters .06, bread and flour .07, and beer brewing .11. Personal services naturally have for the most part even lower coefficients.

It will be seen that even this coefficient depends on the arbitrary boundaries of regions. For instance, the location factor for ship-building in North IV is nearly 1, but if Merseyside were taken as a separate region the factor there would be much higher. North IV would then be represented not by a single block not quite reaching the line 1, but by two blocks; one tall and thin, reaching to say 5 or 6, the other flat and short of line 1. This would, of course, raise the coefficient. Conversely, if in the case of slate quarrying the whole of Wales were taken as one region, the workers would be distributed over a broader base, the white gap below the line in South Wales would be filled up, and the area above the line correspondingly reduced. Thus the coefficient would be lowered.

The material is available for surmounting this difficulty by calculating the coefficients on the basis of very small localities. They have been worked out on the basis of separate counties, for a sample of industries by Mr. A. J. Wensley, who is doing further research on this subject with Professor P. Sargant Florence at Birmingham University. He found that the differences between coefficients based on counties and on the census regions were in most cases not great.

The Coefficient of Linkage

A similar technique to that of the coefficient of localisation can be used to measure the linkage of industries: that is, the extent to which two industries tend to be located in the same regions (owing to related technical processes, or mutual dependence on the same factor). This is done by taking the weighted average of the difference between the location factors in each region. The calculation for any two industries A and B may be made more shortly by subtracting the regional percentage of workers in industry A (top row of figures against the industry in Table I)

from that for industry B in each region where the latter is the greater, and summing the results. The final figure is divided by 100, giving a coefficient which varies from 0-1.*

Expressed graphically: if the diagram in fig. 6 (pages 40-41) for industry A is laid on top of that for industry B, and all the black area in B which is not covered by the black area in A is spread out on the base line, the height to which it reaches on the location factor scale is the *linkage coefficient*. If the location of the two industries is identical there will be no black area in B not covered by A, and the coefficient will be 0. If industry B is entirely located in regions where industry A is entirely absent then the whole of the black area in B will be uncovered. We have seen that the whole of the black area for an industry, when it is spread out on the base line, just reaches to 1 on the location factor scale. Thus the coefficient will be 1. The coefficient varies from 0 to 1, a low figure representing a close linkage. This measure is, of course, also affected to some extent by the arbitrary boundaries of regions.

* **EXAMPLES:** (1) Subtracting the percentages given in Table 1 for Cotton Carding and Spinning (code number 260-261) from those for Cotton Weaving (code number 262), in each region where the latter is the greater, we have

$$0.54 \text{ (North II)} + 0.16 \text{ (North III)} + 5.51 \text{ (North IV)} + 0.01 \text{ (South-West)} + 0.07 \text{ (Scotland II)} = 6.29.$$

The coefficient is .0629; that is to say, the linkage is very close.

It will be seen that the result would be the same if the process were reversed, and Weaving were subtracted from Carding and Spinning, thus:

$$0.07 + 0.01 + 0.02 + 0.36 + 1.41 + 0.08 + 0.02 + 4.17 + 0.20 = 6.29.$$

(2) Subtracting Textile Machinery (code 154-155) from Cotton Carding and Spinning, we have:

$$18.96 \text{ (North IV)} + 0.22 \text{ (Midlands I)} + 0.01 \text{ (Wales II)} + 4.48 \text{ (Scotland III)} = 23.67.$$

The coefficient is .24; that is to say, there is a fairly close linkage, but not so close as that between Cotton Carding and Spinning and Cotton Weaving.

APPENDIX III

(See pages 171 to 173)

(a) Districts whose Resident Population rose by 30 per cent or more, 1921-31

	Resident Popula- tion 1921	Per Cent Rise*	Acres	Persons per Acre	
				1921 Resident	1931 Enumerated
LONDON'S OUTER RING					
<i>Middlesex</i>					
Kingsbury	1,852	818.5	1,829	1.0	9.1
Wembley	16,110	205.5	4,564	3.5	10.6
Hendon R.D.	15,942	174.7	9,230	1.7	4.7
Hayes and Harlington	9,797	144.9	5,518	1.8	4.3
Hendon	56,998	106.0	10,471	5.4	11.0
Wealdstone	18,520	99.9	1,061	12.7	25.5
South Mimms R.D.	8,211	80.6	6,129	0.5	0.9
Ruislip and Northwood	9,000	80.8	6,585	1.4	2.4
Heston and Isleworth	47,290	61.6	6,851	6.9	11.0
Uxbridge	20,759	52.3	10,298	2.0	8.1
Harrow-on-the-Hill	19,628	48.3	2,129	9.2	12.4
Southgate	38,900	43.2	3,596	10.8	15.5
Yiewsley and Drayton	9,258	41.8	5,277	1.8	2.5
Feltham	11,664	40.7	5,089	2.3	3.2
Sunbury	9,858	34.1	5,468	1.8	2.4
Friern Barnet	17,510	31.5	1,304	13.4	17.7
Ealing	90,633	31.8	9,133	9.9	12.9
<i>Herts</i>					
Welwyn Garden City	745	1,059.1	2,460	0.3	3.5
Welwyn R.D.	2,445	52.2	5,430	0.5	0.7
Bushey	8,020	43.6	3,081	2.7	3.6
Barnet R.D.	4,500	42.8	9,215	0.5	0.7
Chorleywood	2,331	40.7	1,989	1.2	1.7
East Barnet Valley	13,490	39.2	2,644	5.1	7.0
Rickmansworth	7,982	34.7	4,727	1.7	2.3
Hatfield R.D.	8,374	34.7	22,091	0.4	0.5
St. Albans R.D.	14,580	34.1	37,070	0.4	0.5
<i>Bucks</i>					
Beaconsfield	3,512	33.7	4,504	0.8	1.1
Amersham R.D.	21,980	32.6	45,700	0.5	0.6
<i>Essex</i>					
Dagenham	9,096	885.7	6,554	1.4	13.6
Hornchurch	10,854	166.6	6,783	1.6	4.2
Chingford	9,430	137.5	2,310	3.4	7.8
Romford	19,490	36.4	5,627	3.5	6.4
Ilford	85,500	55.1	8,493	10.1	15.4
Barking Town	36,250	44.6	3,809	9.5	13.5
Loughton	5,630	31.8	3,962	1.4	1.9

(a) Districts whose Resident Population rose by 30 per cent or more, 1921-31

	Resident Popula- tion 1921	Per Cent Rise*	Acres	Persons per Acre	
				1921 Resident	1931 Enumera- ted
<i>Essex Coast</i>					
Benfleet	5,990	101.5	6,856	0.9	1.9
Canvey Island	1,752	92.8	4,851	0.4	0.8
Rayleigh	3,588	76.2	5,644	0.6	1.1
Tilbury	9,750	71.5	1,859	5.8	9.1
Billericay R.D.	23,900	67.2	49,898	0.5	0.8
Romford R.D.	9,500	60.8	16,876	0.6	0.9
Rochford R.D.	10,995	58.2	38,465	0.8	0.4
Orsett R.D.	14,895	88.8	29,158	0.5	0.7
Southend-on-Sea C.B.	90,500	81.5	7,055	12.8	17.0
<i>Kent</i>					
Bexley	21,510	56.8	4,942	4.4	6.7
Bromley R.D.	25,540	56.5	28,889	0.9	1.4
Sidcup	8,920	45.4	2,048	4.4	6.0
Beckenham	82,970	85.0	8,889	8.5	11.8
Crayford	12,050	82.4	2,455	4.9	6.5
Bromley	84,810	81.8	4,697	7.4	9.7
<i>Surrey</i>					
Merton and Morden	17,520	140.9	8,287	5.4	12.7
Carshalton	14,000	108.8	2,924	4.8	9.8
Coulsdon and Purley	21,080	80.5	8,681	2.4	4.4
Maldens and Coombe	14,480	65.0	3,261	4.4	7.8
Beddington and Wallington	16,110	68.4	3,042	5.8	8.6
Sutton and Cheam	28,651	61.9	3,744	7.6	12.4
Epsom R.D.	25,909	61.4	30,671	0.9	1.8
Mitcham	85,550	60.5	2,935	12.1	19.4
Surbiton	19,830	54.7	3,049	6.8	9.6
Ham	1,509	58.5	1,869	0.8	1.2
Epsom	18,820	45.4	4,423	4.8	6.1
LONDON REGION					
Slough	20,140	65.8	6,145	8.5	5.5
Letchworth	10,210	41.8	8,652	2.8	4.0
OTHER CENTRES					
<i>West Riding</i>					
Worksop R.D. (Notts.)	5,060	186.0	28,515	0.2	0.5
Thorne R.D.	11,100	188.2	38,419	0.8	0.8
Thurnscoe	5,060	110.8	1,254	4.0	8.3
Doncaster R.D.	26,423	85.9	77,865	0.8	0.6
Ardwick le Street	12,020	69.8	8,605	8.8	5.6
Norton R.D. (Derby)	4,553	46.5	7,298	0.6	0.9
Pontefract R.D.	18,030	33.2	33,970	0.5	0.6
Maltby	7,715	81.7	4,792	1.6	2.1
Thurstonland and Farnley	2,971	82.4	8,891	0.8	1.0

(a) Districts whose Resident Population rose by 30 per cent or more, 1921-31

	Resident Popula- tion 1921	Per Cent Rise*	Acres	Persons per Acre	
				1921 Resident	1931 Enumer- ated
<i>York</i>					
Flaxton R.D.	9,760	47.6	36,790	0.8	0.4
Bishopthorpe R.D.	2,091	40.8	6,411	0.8	0.5
<i>Liverpool</i>					
Wirral R.D. (Cheshire)	18,074	59.8	32,717	0.6	0.9
Ellesmere Port and Whitby (Ches.)	13,850	42.1	3,449	3.9	5.5
Bebington and Bromboro' (Ches.)	19,873	38.5	3,446	5.6	7.8
Great Crosby (Lancs.)	18,560	38.4	1,867	7.3	9.8
<i>Manchester</i>					
Barton-upon-Irwell R.D. (Lancs.)	10,184	55.1	6,762	1.5	2.3
Irlam (Lancs.)	9,600	34.3	4,717	2.0	2.7
Whitfield (Lancs.)	7,080	31.7	1,408	5.0	6.5
Cheadle and Galtry (Cheshire) .	11,070	67.8	5,032	2.2	3.6
Hazel Grove and Bromhall (Ches.)	10,160	31.0	5,447	1.9	2.4
<i>Other Lancashire</i>					
Warrington R.D.	12,260	32.1	18,955	0.7	0.9
Clitheroe R.D.	6,710	34.1	32,170	0.2	0.3
<i>Newcastle</i>					
Seghill	1,981	31.1	1,425	1.4	1.8
<i>Middlesborough</i>					
Billingham	8,089	121.7	3,089	2.7	5.9
Redcar	15,450	31.7	4,102	3.3	5.9
<i>Mansfield</i>					
Southwell R.D.	19,970	60.9	118,371	0.2	0.3
Warsop	7,880	45.1	6,183	1.2	1.7
Skegby R.D.	9,090	44.7	12,406	0.7	1.1
<i>Nottingham</i>					
West Bridgford	13,260	35.0	1,122	11.8	15.9
<i>Derby</i>					
Alvaston and Boulton	1,587	115.5	1,321	1.1	2.5
<i>Leicester</i>					
Blaby R.D.	16,728	96.5	29,221	0.6	1.1
Thurmaston	2,240	67.2	1,762	1.3	2.1
Billesdon R.D.	7,230	49.7	52,482	0.1	0.2
Oadby	3,253	43.8	2,164	1.5	2.2
<i>Peterborough</i>					
Old Fletton	5,700	30.8	3,029	1.9	2.5

(a) Districts whose Resident Population rose by 30 per cent or more, 1921-31

	Resident Popula- tion 1921	Per Cent Rise*	Acres	Persons per Acre	
				1921 Resident	1931 Enumer- ated
<i>Birmingham</i>					
Solihull R.D.	20,521	50.2	41,606	0.5	0.7
<i>Nuneaton</i>					
Foleshill R.D.	10,844	69.8	15,098	0.7	1.2
Nuneaton R.D.	3,298	64.6	11,206	0.8	0.5
<i>Northampton</i>					
Northampton R.D.	7,860	52.7	16,228	0.5	0.7
<i>Norwich</i>					
St. Faith's R.D.	10,980	80.1	48,988	0.2	0.8
<i>Oxford</i>					
Wheatley	919	87.1	990	0.9	1.8
Headington R.D.	4,976	86.9	22,639	0.2	0.8
<i>Newport</i>					
St. Mellons R.D.	11,540	62.9	25,786	0.5	0.7
<i>Portsmouth-Southampton</i>					
Catherington R.D.	3,721	88.6	18,144	0.3	0.5
Havant R.D.	6,560	75.0	10,885	0.6	1.1
Hursley R.D.	4,491	41.2	16,756	0.3	0.4
MILITARY					
Farnborough (Hants.)	12,590	88.0	2,881	5.4	7.0
<i>Richmond</i>					
Richmond M.B.	3,779	80.1	2,520	1.5	1.9
Richmond R.D.	9,230	97.8	78,597	0.1	0.2
RESORTS					
<i>Scarborough</i>					
Scalby	1,890	94.4	3,856	0.4	0.8
<i>Skegness</i>	5,128	57.0	3,862	1.3	2.4
<i>Herne Bay</i>					
Blean R.D.	8,280	81.2	26,882	0.3	0.4
<i>Deal</i>					
Eastry R.D.	13,340	87.0	48,688	0.3	0.4
<i>Hastings</i>					
Hastings R.D.	1,829	89.2	9,614	0.2	0.8
<i>Brighton</i>					
Newhaven R.D.	2,688	101.8	19,565	0.1	0.8

(a) Districts whose Resident Population rose 30 per cent or more, 1921-31

	Resident Popula- tion 1921	Per Cent Rise*	Acres	Persons per Acre	
				1921 Resident	1931 Enumer- ated
<i>Worthing</i>					
East Preston R.D.	5,857	48.7	28,487	0.2	0.4
Worthing M.B.	38,278	84.6	7,227	4.6	6.4
<i>Bournemouth</i>					
Milton	8,019	69.6	4,780	0.6	1.1
Christchurch	6,916	82.1	2,852	2.9	8.9
Bournemouth C.B.	85,127	80.6	11,218	7.6	10.4
<i>Poole</i>					
Poole R.D.	4,085	87.2	14,789	0.27	0.84
Poole M.B.	42,900	82.5	7,964	5.4	7.2
<i>Paignton</i>	12,480	44.2	5,188	2.4	8.5
<i>Prestatyn</i>	8,259	86.6	1,640	2.0	2.8
<i>Blackpool</i>					
Thornton Cleveleys	5,846	87.0	8,001	1.8	8.4
Blackpool C.B.	78,800	84.9	5,189	14.2	19.6
<i>Morecambe and Heysham</i>					
<i>Matlock</i>					
North Darley	8,219	84.8	5,142	0.6	0.8

* The per cent rise is calculated on the 1931 estimated resident population. It sometimes differs from the rise in persons per acre, since the latter is based on enumerated population in 1931. The Census was taken in April.

(b) Districts whose Resident Population lost 20 per cent or more, by migration, 1921-31

	Resident Population 1921	Net per cent Loss by Migration*	Acres	Persons per Acre	
				1921 Resident	1931 Enumerated
SOUTH WALES					
<i>Monmouthshire</i>					
Abertillery	89,660	29.7	6,481	6.1	4.9
Nantyglo and Blaina	16,860	29.3	3,860	4.4	3.4
Chepstow	5,190	26.0	1,350	3.8	3.2
Rhymney	11,940	22.2	2,689	4.5	4.0
Ebbw Vale	36,150	22.0	6,869	5.3	4.6
Tredegar	25,650	20.7	8,148	3.1	2.8
Bedwelty	81,700	20.5	7,274	4.4	4.1
<i>Glamorgan</i>					
Maesteg	29,570	24.0	6,706	4.4	3.8
Rhondda	166,600	23.4	23,886	7.0	5.9
Ogmore and Garw	80,850	23.1	17,924	1.7	1.5
Mountain Ash	44,240	22.7	10,504	4.2	3.7
Glyncorwg	11,000	22.1	13,925	0.7	0.7
Pontypridd	48,180	20.7	8,141	5.9	5.2
<i>Pembroke</i>					
Pembroke M.B.	15,580	25.2	4,679	3.3	2.6
Neyland	2,739	22.7	484	5.7	4.5
DURHAM					
Auckland R.D.	62,400	24.3	57,332	1.1	0.9
Spennymoor	18,530	22.7	3,388	5.5	4.8
Tow Law	4,108	22.3	477	8.6	7.5
Bishop Auckland	14,390	21.2	691	20.8	17.8
Tanfield	10,570	22.0	4,779	2.2	1.9
Jarrow	36,200	21.2	784	46.2	40.8
WEST CUMBERLAND					
Cleator Moor	8,460	27.2	2,947	2.4	2.2
Arlesdon and Frizington	5,230	23.6	5,554	0.9	0.8
MIDDLESBOROUGH					
Loftus	9,120	24.0	6,397	1.4	1.2
Skelton and Brotton	15,860	21.3	15,557	1.0	0.9
DALTON-IN-FURNESS					
	12,470	20.9	7,994	1.6	1.3
NEW HUNSTANTON					
	3,724	21.0	1,064	3.5	2.9

* The per cent fall is calculated on the 1931 estimated resident population. It sometimes differs from the fall in persons per acre, since the latter is based on enumerated population in 1931. The Census was taken in April.

APPENDIX IV

Regions used by the Registrar General for Population Statistics

<i>Short Title of Region</i>	<i>Comprising</i>
South-East	Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, Kent, London, Middlesex, Oxfordshire, Hampshire, Surrey, Sussex, Isle of Wight.
Greater London	City of London and Metropolitan Police district (about 15 miles radius from Charing Cross). (N.B.—In the Census the figures for Greater London are also included in the South-East region, but have been subtracted here.)
North I	Northumberland and Durham.
North II	Cumberland, Westmorland, and the North and East Ridings of Yorkshire.
North III	The West Riding of Yorkshire and the City of York.
North IV	Cheshire and Lancashire.
Midland I	Gloucestershire, Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire.
Midland II	Derbyshire, Leicestershire, Northamptonshire, Nottinghamshire, Soke of Peterborough.
East	Cambridgeshire (including Isle of Ely), Huntingdonshire, Lincolnshire, Norfolk, Rutlandshire, Suffolk.
South-West	Cornwall, Devonshire, Dorsetshire, Somersetshire, Wiltshire.
Wales I	Brecknockshire, Carmarthenshire, Glamorganshire, Monmouthshire.
Wales II	Anglesey, Caernarvonshire, Cardiganshire, Denbighshire, Flintshire, Merionethshire, Montgomeryshire, Pembrokeshire, Radnorshire.
Scotland I	Berwickshire, Dumfriesshire, Kirkcudbright, Peebles, Roxburgh, Selkirk, Wigtownshire.

<i>Short Title of Region</i>	<i>Comprising</i>
Scotland II	Clackmannanshire, City of Dundee, East Lothian, City of Edinburgh, Fife, Mid-Lothian, Stirlingshire, West Lothian.
Scotland III	Ayrshire, Dumbartonshire, Lanarkshire, Renfrewshire.
Scotland IV	The Rest of Scotland.

Regions used in the Board of Trade Census of Production :

1. Greater London London, Surrey, Middlesex, North-West Kent (including Gravesend), Hertfordshire (South of Stevenage), Buckinghamshire (southern half).
2. Lancashire, Cheshire and the Glossop and New Mills District of Derbyshire Lancashire, Cheshire, Derbyshire (Glossop and New Mills District), Saddleworth District of Yorkshire.
3. West Riding of Yorkshire Yorkshire, except Snaith, Goole, Stamford Bridge, Hunmanby and the area to the east thereof, and portions included in areas 2 and 4.
4. Northumberland and Durham and the North Riding of Yorkshire Northumberland, Durham, North Riding of Yorkshire, except south of a line joining Masham, Northallerton and Loftus.
5. Warwickshire, Worcestershire and Staffordshire Warwickshire, Worcestershire and Staffordshire.
6. Rest of England.
7. South Wales and Monmouthshire Monmouthshire, Glamorganshire Breconshire, Radnorshire, Carmarthenshire Pembrokeshire, Bryn-Amman, Llanelly, Kidwel
8. Rest of Wales.
9. West Central Scotland Lanark, Renfrew, Dumbarton (excluding detached portion), Argyll, Bute, Ayr (north-west of Kilmarnock).
10. Rest of Scotland.

Of the above, areas 6 and 10 have been further subdivided for the 1935 Census, as follows :

<i>New Area Numbers</i>	<i>Districts Covered</i>
6. East Midlands	Derbyshire (excluding portion in Area 2), Leicestershire, Rutland, Nottinghamshire, Northamptonshire (excluding Peterborough), Northern Buckinghamshire.
7. West Midlands	Shropshire, Herefordshire, Gloucestershire.

<i>New Area Numbers</i>	<i>Districts Covered</i>
8. South-East (excluding Greater London)	Kent (excluding north-east portion), Bedfordshire, Oxfordshire, Berkshire, Hampshire, Sussex.
9. South-West	Wiltshire, Dorsetshire, Somersetshire, Devonshire, Cornwall.
10. East	Yorkshire (east of and including Snaith, Goole, Stamford Bridge and Humamby), Lincolnshire, Huntingdonshire, Peterborough, Cambridgeshire, Norfolk, Suffolk, North-East Essex, Hertfordshire (north of and including Stevenage).
14. Scotland—West Central (formerly Area 9)	Lanark, Renfrew, Dumbarton (excluding detached portion), Argyll, Bute, Ayr (north-west of Kilmarnock).
15. East Central	Lothians, Stirling, Clackmannan, Kinross, Fife, City of Dundee, detached part of Dumbarton.
16. Southern Scotland	Ayr (excluding portion in Area 14), Dumfries, Kirkcudbright, Peebles, Selkirk, Roxburgh, Wigtown, Berwick.
17. Northern Scotland	Rest of Scotland (i.e. Perth, Aberdeen, Angus, Kincardine, Banff, Moray, Nairn, Inverness, Ross and Cromarty, Sutherland, Caithness, Shetland and Orkney).

The figures for these new regions cannot be compared with any former figures, while they are not themselves sufficiently complete to form the basis of an analysis of industry by regions. They have not, therefore, been used in this report. The new regions are, however, shown in the accompanying map.

A few minor changes were also made between 1930 and 1935 in the boundaries of regions 1-5. Where any comparison has been made between 1935 and previous years, the figures have been adjusted accordingly.

Divisions Into which Great Britain is divided, for the purpose of the administration of the Unemployment Insurance Acts.

<i>Division</i>	<i>Area of Division</i>
London Division	Administrative County and City of London, the County of Middlesex, and the areas in Essex, Hertford, Kent and Surrey covered by Employment Exchanges, etc., at: Barking, Barnet, Bexley Heath, Bromley (Kent), Buckhurst Hill, Canning Town, Croydon, Caterham Valley, Dagenham, Dartford, East Ham, Epping, Epsom, Erith, Grays, Ilford, Kingston-on-Thames, Leyton and Walthamstow, Orpington, Penge, Redhill, Richmond, Romford, Sidcup, Stanford-le-Hope, Stratford, Sutton, The Dittons, Tilbury and Wimbledon. (The Division covers the City of London and, approximately, the Metropolitan Police District.)

<i>Division</i>	<i>Area of Division</i>
South-Eastern Division	. The areas in Essex, Hertford, Kent and Surrey (except Camberley) which are outside the London Division: and the counties of Bedford, Berks (except the Abingdon and Faringdon districts), Buckingham, Cambridge (including the Isle of Ely), Huntingdon, Norfolk, Suffolk and Sussex and the Soke of Peterborough.
South-Western Division	. The Counties of Cornwall, Devon, Dorset, Gloucester, Hants, Oxford, Somerset and Wilts, and the Abingdon and Faringdon districts of Berks, and the Camberley district of Surrey.
Midlands Division	. The Counties of Derby (except the Buxton, Chapel-en-le-Frith, Glossop, Hadfield and New Mills districts), Hereford, Leicester, Northampton (excluding the Soke of Peterborough), Nottingham, Rutland, Salop, Stafford, Warwick and Worcester.
North-Eastern Division	. The Counties of Lincoln and Yorkshire (except the Barnoldswick, Bentham, Saddleworth and Cleveland districts).
North-Western Division	. The Counties of Cheshire and Lancashire, and the Buxton, Chapel-en-le-Frith, Hadfield, New Mills and Glossop districts of Derbyshire, and the Barnoldswick, Bentham and Saddleworth districts of Yorkshire.
Northern Division	. The Counties of Northumberland (excluding the Berwick district), Durham, Cumberland and Westmorland, and the Cleveland district of Yorkshire (the Middlesbrough, South Bank, Guisborough, Loftus, Redcar, Saltburn and Stokesley areas).
Scotland	. . . . Scotland, and the Berwick district of Northumberland.
Wales	. . . . Wales and Monmouthshire.

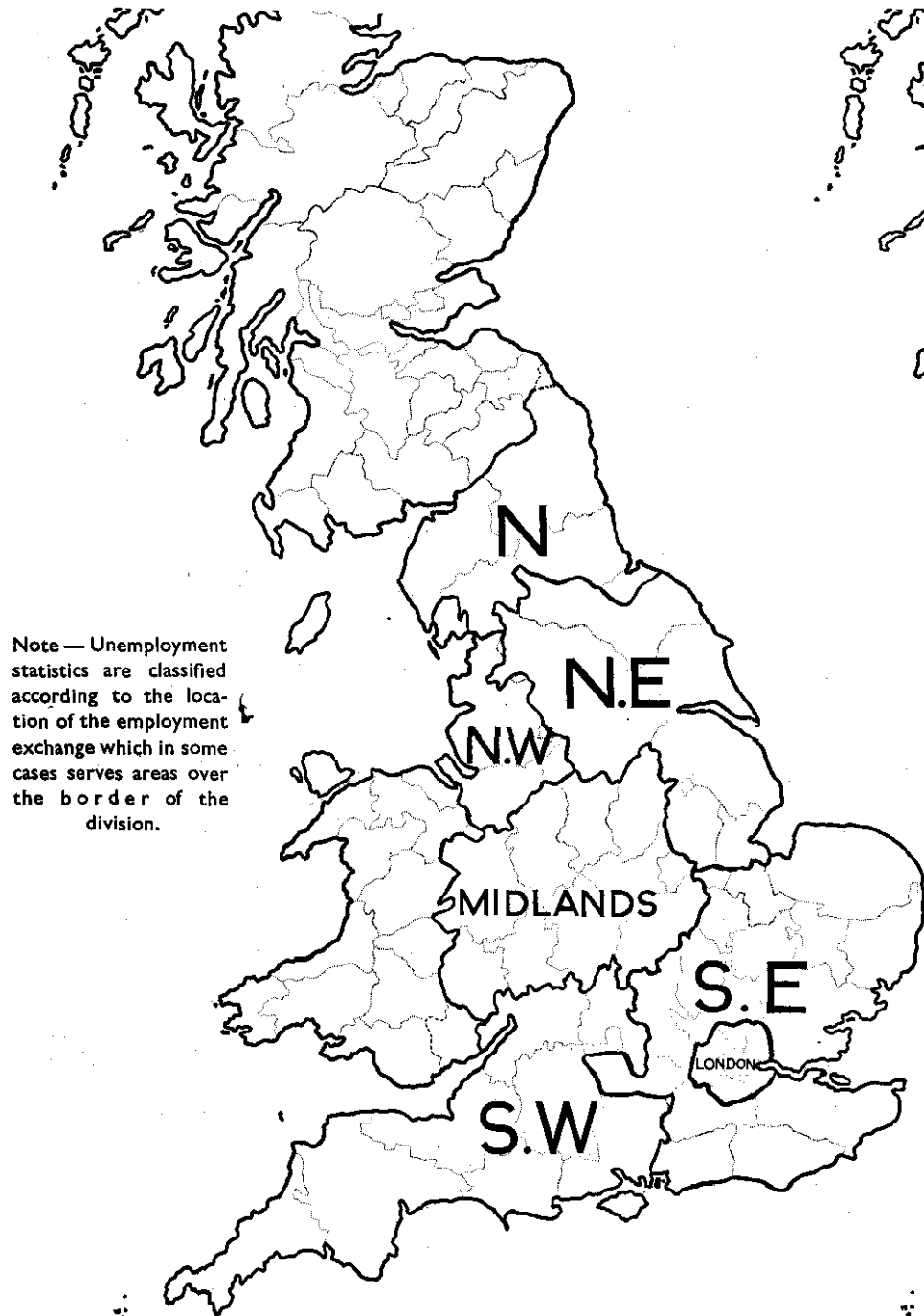
Unemployment statistics are classified according to the location of the employment exchange which may in some cases serve areas over the border of the division.

February 1939.

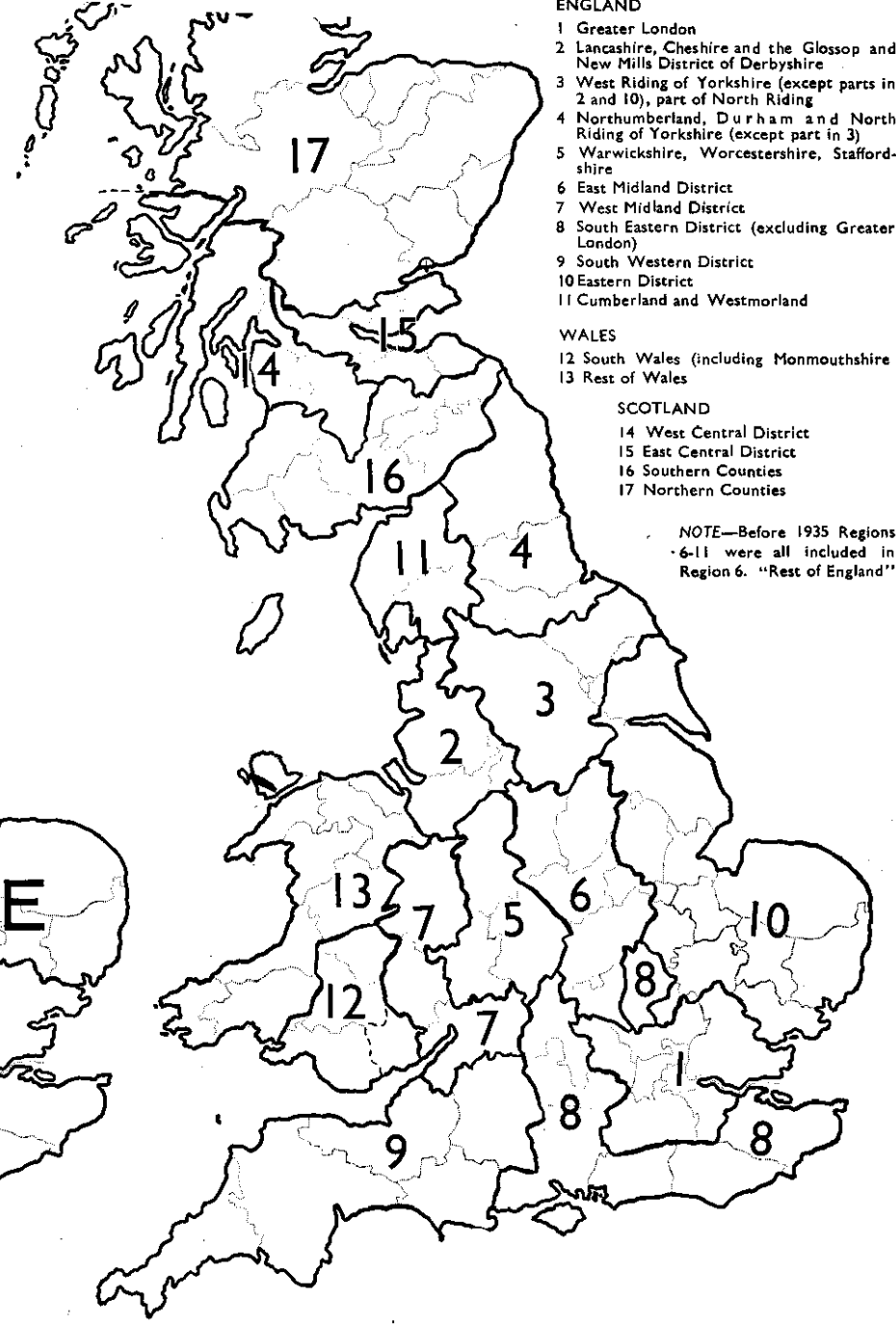
MINISTRY OF LABOUR DIVISIONS

POPULATION CENSUS REGIONS (USED BY THE REGISTRAR GENERAL)

CENSUS OF PRODUCTION AREAS, 1935



Note—Unemployment statistics are classified according to the location of the employment exchange which in some cases serves areas over the border of the division.



- ENGLAND**
- 1 Greater London
 - 2 Lancashire, Cheshire and the Glossop and New Mills District of Derbyshire
 - 3 West Riding of Yorkshire (except parts in 2 and 10), part of North Riding
 - 4 Northumberland, Durham and North Riding of Yorkshire (except part in 3)
 - 5 Warwickshire, Worcestershire, Staffordshire
 - 6 East Midland District
 - 7 West Midland District
 - 8 South Eastern District (excluding Greater London)
 - 9 South Western District
 - 10 Eastern District
 - 11 Cumberland and Westmorland
- WALES**
- 12 South Wales (including Monmouthshire)
 - 13 Rest of Wales
- SCOTLAND**
- 14 West Central District
 - 15 East Central District
 - 16 Southern Counties
 - 17 Northern Counties

NOTE—Before 1935 Regions 6-11 were all included in Region 6. "Rest of England"

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