

CHAPTER 11

POPULATION AND LABOUR FORCE

11.0 POPULATION, 1855-1965

DEFINITION OF THE SERIES

For all years except 1915-20 and 1940-50 the series given is the mid-year *home* population, i.e. all persons actually in the country. It thus excludes members of the Armed Forces and seamen serving abroad. For years during and immediately after the two World Wars the series most nearly comparable with this is the *total* population, which includes forces serving overseas while excluding Commonwealth and foreign forces in the United Kingdom. For 1915-20 and 1940-50 the estimate given is, therefore, for total population. The data relate to Great Britain and Ireland before 1920 (first estimate) and to Great Britain and Northern Ireland from 1920 (second estimate) onwards.

The series for Great Britain, Ireland and the United Kingdom for 1855 to 1965 are set out in Table 55, and are given separately for males and females. Table 56 gives estimates of the male and female population of the

United Kingdom in three age-groups: 0-14, 15-64 and 65 and over. The figures are given for census years from 1861 to 1891 and then annually from 1900 onwards.

SOURCES

All the estimates of home and total population were made by the Registrars General for England and Wales, Scotland and Ireland. For Great Britain and for Northern Ireland the principal sources from which the estimates were taken are the Census of Population [41], 1961, Great Britain, *Summary Tables*, p. 2, and *The Registrar General's Statistical Review of England and Wales for the Year 1968, Part II, Tables, Population* [37, p. 2]. For Ireland the estimates are taken from the *Abstract of British Historical Statistics* [213, p. 8]. For the estimates of age distribution see Prest [232, pp. 176-8], Stone and Rowe [249, 1, p. 414] and the *Annual Abstract of Statistics* [9].

11.1 WORKING POPULATION, EMPLOYMENT AND UNEMPLOYMENT, 1855-1965

DEFINITION OF THE SERIES

Working population

From 1948 to 1965 the working population consists of the total number of persons aged 15 and over who work for pay or gain or register themselves as available for such work. The estimate is the sum of the number of persons in employment and the number unemployed, each of which are defined separately below.

For 1939-47 the estimates are broadly in line with those for 1948 onwards but prior to the raising of the school-leaving age in 1947 include children aged 14.

For all years up to 1938 the basic source for the estimates is the Census of Population and the working population is accordingly defined by the Census concept of 'persons gainfully occupied', with adjustments for any persons not enumerated (e.g. soldiers and seamen abroad). In the 1931 Census - which provides the benchmark for the inter-war years - this concept was defined as follows: 'persons aged 14 years and over who follow some occupation or calling for payment or profit'.

Estimates defined on broadly the same basis can be obtained for each decennial census back to 1851, but for 1921 children aged 12 and 13 are also included (affecting the estimates for 1920-2), and for 1851 to 1911 the lower age-limit is 10.

The total obtained from the Census is adjusted to cover persons not enumerated and then divided between the employed and the unemployed. These two categories are further discussed below, but it may be noted now that the total, i.e. the working population, is broadly consistent in definition with the series for the post-war years.

Employment

For 1939-65 the estimate of total persons in employment is the sum of the numbers in the following categories:

- (a) Employees in employment
- (b) Employers and self-employed persons
- (c) Members of H.M. Forces.

For (a) the estimates are based on the Ministry of

Labour's count of the national insurance cards which are due for exchange in the last month of each quarter (the cards are distributed to employees in such a way as to ensure that a random sample of 25 % of all cards are due for exchange in each quarter).¹ To this are added the figures for civil servants and Post Office workers who are insured but do not hold cards. This gives a very wide definition of employment and will include persons not at work on account of holidays, sickness, injury and trade disputes, as well as such border-line cases as seasonal and irregular workers, married women with part-time jobs and students who take temporary jobs during vacations. It does not include unpaid family workers who assist in family businesses or farms. Part-time and casual workers are counted as full units, i.e. as equivalent to whole-time workers.

For employers and self-employed persons the national insurance cards cannot be used, and the estimate is based on the Census of Population data. The Census definition is completely self-operated; as the Ministry of Labour have observed: 'It is assumed that anyone who is self-employed knows what it means, and that no-one who is not self-employed would describe himself as if he were.'²

The final category are persons serving in H.M. Forces and Women's Services, including those who are stationed outside Great Britain and those on release leave pending discharge.

For years before 1939 the same three categories are covered but the Census-based coverage of employees in employment may be slightly narrower than in the post-war period. Students taking vacation jobs will be excluded and perhaps also some married women with part-time jobs. On the other hand members of the household who are 'chiefly occupied in giving unpaid help in a business carried on by the head of the household or other relative' would be included. The net difference in definition is unlikely to be significant.³

With respect to the inter-war period there is one further point of difference, though it is more apparent than real. In the series for 1939 onwards persons registered as 'unemployed, temporarily stopped' (i.e. working short-time or otherwise suspended from work on the understanding that they were shortly to return to their former employment) are included with employees in employment. Effectively this applies also to the series for 1855-1920. However, for 1921-38 the duration of temporary stoppages and the number of people involved is so much greater that a series *excluding* this category of unemployed persons would probably be more nearly comparable with the estimates for other periods, and the estimates are defined accordingly. An estimate for persons temporarily stopped is, however, shown separately

for 1926-38 so as to give an indication of the magnitudes involved; see Table 58, column (8).

Unemployment

For 1939-65 the series covers persons registered as wholly unemployed, i.e. those registered for employment at an employment exchange or youth employment office on the day of the monthly count who, on that day, are not in employment, but are available for work. Certain severely disabled persons are excluded and persons off work because of sickness, injury or trade disputes would not be included. Persons who have never been in employment (e.g. immigrants or school-leavers) or who have been outside the employment field for over twelve months (e.g. married women returning to paid employment) are included provided they have registered.

For the period before 1939 the estimates conform in principle to the above definition - except for the treatment of persons temporarily stopped in the period 1921-8 (see p. 216, above) - but a significant element of approximation is involved in the estimation procedures, and it would not be worthwhile to attempt to specify the definition too minutely. Some further information is, however, given in the discussion of the sources and methods of estimation below.

The main estimates are presented in Table 57, which contains annual series for 1855 to 1965 for total in civil employment, the Armed Forces, total in employment, unemployment and total working population; and for unemployment as a percentage of the civilian working population. Additional details regarding employees and unemployment are shown for 1920-38 in Table 58 and a classification of the total in employment by industry is given in Table 59 for 1920-38 and 1948-65. For 1861-1911 a classification by industry is given for Census years only in Table 60; and in Table 11.10 separate estimates of the number of employers and self-employed persons, wage-earners and salary-earners are given for selected years between 1911 and 1961.

SOURCES AND METHODS OF ESTIMATION

1948-1965

In 1966 the Ministry of Labour published new employment series for Great Britain, at quarterly dates from

¹ In practice it is found necessary to wait for six months from the due date in order to allow for the small proportion of cards which are not exchanged on the proper date. For further details see the *Ministry of Labour Gazette*, LXXIV, May 1966 [87], pp. 207-14.

² *Ibid.* p. 208.

³ See p. 227, below, for further discussion of this question.

June 1950 onwards.¹ The annual averages in Tables 57 and 59 are based on this new end-quarter series, with an addition to cover Northern Ireland.² For 1948-9 see the following paragraph.

Unfortunately the new estimates for 1950-64 are given only for the total in employment, and since the earlier estimates for the constituent industries were compiled by different methods, they are not consistent with the new totals. Furthermore, the original estimates for 1948-59 were classified on the basis of the 1948 Standard Industrial Classification and those for 1959-65 on the 1958 S.I.C. John Odling-Smee has made detailed adjustments to the published estimates so as to obtain series which conform both to the revised average of the four quarterly estimates given for total employment in the 1966 *Ministry of Labour Gazette*, and to the 1958 S.I.C. over the whole period 1950-65. It is these adjusted estimates which are shown in Table 59. The detailed adjustments made for this period were then adapted to obtain corresponding estimates for 1948-9. The estimates for 1948 are also given in Table 59 with a classification on the basis of the 1948 S.I.C. (but with no change in definition) for easier comparison with the estimates given for 1920-38 on the 1948 classification.

1939-1947

Estimates originally published by the Ministry of Labour for the years 1938-48 - referred to as 'total manpower (old series)'³ - relate to Great Britain in June of each year and differ in this and certain other respects from the later estimates. In particular, they exclude men aged 65 and over, women aged 60 and over, and indoor private domestic servants; part-time workers are counted as only half a unit; and there is also known to be considerable understatement of manpower within the industries and age-groups covered.⁴ A rough attempt to adjust for these differences was made as follows: proportionate adjustments to the old series for males and for females (other than private indoor domestic servants) were made on the basis of a comparison with the present estimates for 1938 and 1948 and a very uncertain addition was made for the domestic servants.⁵ Finally, the estimates were raised to cover Northern Ireland, using annual data on the number of insured employees and the estimates of employers and self-employed persons in 1938 and 1948. This gives the total in civil employment (column (1) of Table 57) and the *Annual Abstract of Statistics* provides the necessary series for the Armed Forces (including persons on release leave not yet in employment) and for unemployment [9, Table 127].

1920-1938

The basis for the present estimates is the series for man-years of employment compiled by Chapman [146], and since Chapman's estimates are in turn controlled by Census of Population data on the occupied population in 1931⁶ we set out in Table 11.1 the benchmark estimates for that year. This will indicate the relationship of the present estimates to Chapman's series for employees at work and to the Census of Population data on the gainfully occupied population. Chapman's estimates for 1931 for each industry were extrapolated to cover the other inter-war years by means of indices based on unemployment insurance statistics, Census of Production data and other relevant statistics for particular industries. The original source should be consulted for further details.

The first of the annual estimates we require for Table 57 is the total in civil employment, corresponding to rows 1 + 2 of Table 11.1. Row 1 is available annually in Chapman [146, p. 18] but it is necessary to estimate row 2, i.e. the amount deducted by Chapman to reduce her series to a full-time equivalent basis. We again take 1931 as a benchmark, calculating the figure as shown in Table 11.2. For agriculture, mining, railways, the Post Office, nurses, teachers, charwomen, outworkers in manufacturing and for time lost due to trade disputes in building, manufacturing and transport it is possible to reconstruct or closely approximate the annual estimates made by Chapman to reduce numbers employed to a man-year basis. In 1931 the estimates for these industries account for 428,000 of the total adjustment of 450,000, and the total for these industries was blown up in each year so as to cover the remaining adjustment. For the purposes of the classification by industry the residual was apportioned equally to manufacturing and national government.⁷ The required adjustment is set out in columns (2) and (3) of Table 58, showing separately the adjustment for trade disputes

¹ See *Ministry of Labour Gazette*, LXXIV, May 1966 [87], p. 210, and also LXXVII, April 1969, p. 317.

² Government of Northern Ireland, *Digest of Statistics* [82], e.g. No. 10, September 1958, Table 5. The estimates are for June of each year.

³ See *Annual Abstract of Statistics* [9], No. 88, 1952, Table 127.

⁴ See p. 222, n. 1, below.

⁵ This is the most uncertain element in the series - there does not appear to be any direct information on the timing of the exodus from domestic service during the war.

⁶ The basic sources are the Census of Population [41(a)] England and Wales 1931, *Industries*, Table 6; Scotland, 1931, *Occupations and Industries*, Table 17; and Northern Ireland, 1926.

⁷ See Chapman [146, Table 18].

TABLE 11.1 RECONCILIATION OF PRESENT ESTIMATES OF WORKING POPULATION IN 1931 WITH CHAPMAN'S ESTIMATES OF EMPLOYMENT AND CENSUS OF POPULATION ESTIMATES OF THE OCCUPIED POPULATION
(Thousands)

	Great Britain	United Kingdom
<i>A. Present estimates</i>		
1. Civil employees at work, full-time equivalent basis	15,401.6	15,778.4
2. <i>Add</i> Adjustment for part-time employment, disputes etc.	407.3	450.2
3. Armed Forces	325.2	325.2
4. Employers and self-employed	1,996.4	2,110.9
5. Total employment	18,130.6	18,664.7
6. Unemployed	3,176.5	3,251.6
7. Working population	21,307.1	21,916.3
<i>B. Census data, April 1931</i>		
8. Persons in work		
(a) Operatives	16,076.8	16,455.6
(b) Managerial employees	456.7	456.7
(c) Employers and self-employed	1,996.4	2,110.9
(d) Total	18,529.9	19,023.2
9. Out of work	2,524.7	2,602.0
10. Occupied population shown by Census	21,054.6	21,625.2
11. <i>Add</i> Persons not enumerated		
(a) Forces, seamen and fishermen abroad	195.5	195.5
(b) Part-time and casual workers in agriculture	69.0	107.6
12. <i>Less</i> Adjustment to average 1931 level of employment	-12.0	-12.0
13. Working population	21,307.1	21,916.3

SOURCE: (1) and (3): Chapman [146], p. 18.

(2): See Table 11.2.

(4): Census data, see row 8c.

(6): See Table 11.4.

(8) and (9): For Great Britain data from 1931 Census of Population, with the estimate for managers from Chapman [146, Table 18], including also 25.0 shore-fishermen, sick nurses and midwives transferred from 'own account'. For Northern Ireland the total occupied population and the number of employers and self-employed is assumed to be the same as in 1926 [41(d)], but the number out of work is taken from unemployment insurance records for April 1931, with

a corresponding adjustment to operatives at work.

(11): Chapman [146], pp. 37 and 51-4.

(12): Chapman [146, Table 18, column (4)] gives - without comment or source - an estimate of 164.2 for the reduction from the April 1931 to the average 1931 level of employment in Great Britain. Our estimate of average 1931 unemployment includes a corresponding adjustment of 152.2 (see row 6 of Table 11.4). The difference of 12.0 is assumed to represent a lower working population rather than higher unemployment.

TABLE 11.2 DEDUCTION FROM NUMBERS EMPLOYED IN 1931 FOR PART-TIME AND CASUAL WORK, SHORT-TIME WORKING, DISPUTES ETC.

(Thousands)

1. Net adjustment to Census data made by Chapman:	
(a) Great Britain	162.9
(b) Northern Ireland	4.2
2. <i>Less</i> Students not gainfully occupied but included in Scottish industry tables	-20.0
3. <i>Add</i> Persons not enumerated in the Census:	
(a) Forces, seamen and fishermen abroad	195.5
(b) Part-time and casual workers in agriculture	107.6
4. <i>Equals</i> Net reduction for part-time work etc.	450.2

SOURCE: 1 (a): Chapman [146, Table 18, column (5)].

(b): The 1926 Census [41(d)] figure for operatives, including out of work, (456.1) less the average 1931 recorded unemployment (75.1) gives an estimate for operatives at work in 1931 of 381.0. Chapman [146, Table 18, column (6)] gives the full-time equivalent as 376.8.

2: 22nd *Abstract of Labour Statistics* [1], p. 13, note (c). These students are also included in Chapman's Census figure for operatives at work [146, Table 18, column (1)].

3: See Table 11.1, row 11.

and for part-time work etc. For many purposes it is the estimate of man-years of employment (column (1) of Table 58) which is most appropriate - and should indeed be further adjusted to allow for changes in hours worked - but it is the adjusted estimate which is most nearly consistent with the pre-1920 and post-1938 series for employees in employment and is given as part of the long-run series in Table 57, column (1).

Annual estimates of persons serving in the Armed Forces (row 3 of Table 11.1) are available in Chapman [146, p. 18]. For row 4, employers and self-employed,

TABLE 11.3 COMPARISON OF CENSUS OF POPULATION AND UNEMPLOYMENT INSURANCE STATISTICS OF UNEMPLOYMENT IN GREAT BRITAIN, 26-27 APRIL 1931 (Thousands)

	Census of Population		Unemployment insurance ^a		Deficiency	
	All ages (1)	Aged 16-64 (2)	Wholly unemployed (3)	Total (4)	Census (4)-(2) (5)	U.I. (2)-(4) (6)
A. Industries with deficiency in Census data^b						
Coal mining	218.9	205.8	182.1	279.3	73.5	
Other mining and quarrying	18.6	17.1	17.4	22.4	5.3	
Manufacturing	1,098.6	1,032.0	966.7	1,381.4	349.4	—
Building and contracting	204.6	185.8	206.7	214.9	29.1	—
Shipping, docks, canals etc.	84.5	79.3	104.3 ^c	106.0 ^c	26.7	—
Distributive trades	217.2	202.0	194.3	203.7	1.7	—
Central Government and defence	10.5	9.9	10.9	11.4	1.5	—
Catering, hotels etc.	62.7	60.1	62.6	64.0	7.6 ^d	3.7 ^d
Laundries, dry cleaning etc.	11.7	10.9	11.8	13.4	2.9 ^d	0.4 ^d
B. Industries with deficiency in U.I. data^b						
Agriculture and forestry	64.6	51.7	—	—	—	51.7
Fishing	10.0	9.2	5.3	5.4	—	3.8
Gas, electricity and water supply	20.4	19.1	14.0	14.7	—	4.4
Railways, road transport, Post Office etc.	79.6	75.2	60.2	63.5	—	11.7
Insurance, banking and finance	18.2	17.0	11.8	12.0	—	5.0
Local government	86.1	79.6	39.9	41.5	—	38.1
Professions	30.1	28.5	6.7	6.9	—	21.6
Entertainment and sport	34.1	32.3	17.4	18.0	—	14.3
Private domestic service	116.7	105.9	—	—	—	105.9
Other miscellaneous services	13.7	13.0	43.8	46.0	—	71.9
Industry not stated	123.9	104.9				
Adjustment					1.9 ^e	1.9 ^e
Total	2,524.7	2,339.3	1,955.9 ^c	2,504.5 ^c	499.6	334.4

SOURCE: (1) and (2): Census of Population, England and Wales [41(a)], 1931 *Industries Volume*, Table 6; Scotland [41(b)], 1931 *Occupations and Industries Volume*, Table 17.

(3) and (4): *Ministry of Labour Gazette*, xxxix, May 1931 [87], pp. 186-7. Separate figures for wholly unemployed (including casual workers) and temporarily stopped are not given for Great Britain and in each industry the wholly unemployed are assumed to represent the same proportion of the total as in Great Britain and Northern Ireland.

Notes:

^a Persons aged 16-64 insured under U.I. Acts and recorded as unemployed.

^b The industrial classification is as nearly as possible the same as in Chapman [146], Table 18, p.37.

^c Excluding 11.0 dockers. The reduction is made to allow for the fact that prior to 1932 certain classes of dock workers were counted as unemployed if they were out of work on any of three consecutive days, rather than on one day only. See *Ministry of Labour Gazette*, xl, February 1932 [87], p. 63, and Chapman [146], p. 141.

^d The amount shown in column (6) and included in column (5) is an adjustment made by Chapman [146, pp. 209 and 213] to allow for the fact that certain workers in these industries were excluded from the unemployment insurance scheme.

^e Adjustment to reconcile present estimates with figure given by Chapman [146], Table 18, p. 37, column (3).

Census of Population data are available for Great Britain for 1921 and 1931 and for Northern Ireland for 1926; and Frankel [164, p. 404] gives an estimate of the number of self-employed persons in Great Britain in July 1939. From this data estimates were made for the United Kingdom for the three years 1921, 1931 and 1938; with a classification by industry (not shown separately but required for Table 59) available for the two census years. The remaining years were then filled in, either by linear interpolation and extrapolation or by reference to related series and information (e.g. for the number of farmers Bellerby [120, p. 342]). The number of employers and self-employed persons changed only very slowly over the period so that the possible errors involved in the construction of annual estimates are unlikely to be substantial.

The sum of the series so far described for 1920–38 gives the total number of persons in employment and this is set out in Table 57, column (3), with the classification of this total *by industry* given in Table 59. As with the corresponding income and output estimates for this period the classification is based on the 1948 *Standard Industrial Classification* [76].

Referring again to Table 11.1 we see that the final series required (row 6) is an estimate for the number of persons unemployed. For Great Britain the Census of Population showed 2,525,000 persons out of work at the end of April 1931 (row 9 of Table 11.1) but a comparison with the other information available at this date – the number of insured unemployed – indicates that this is too low by some 500,000 (see Table 11.3 and the discussion on pp. 220–1, below). A further addition must be made for Northern Ireland, and adjustment to the average 1931 level of unemployment brings the total for 1931 to some 3,250,000.

The next step is, therefore, to make corresponding annual estimates, and the data available as a basis for this for the period 1921–38 are derived from the unemployment insurance statistics. The difficulty which has to be faced in attempting to do this is that although the unemployment insurance data can be used to estimate the approximate deficiency in the census data for some industries, they are themselves seriously deficient with respect to certain other industries. To gauge the extent of this it is necessary to consider more closely the differences between the two estimates available as a measure of unemployment at the end of April 1931.¹ The Census gives, for all industries and all ages, the number of persons who were recorded as ‘out of work’ at the time of the census. The relevant instructions included a reference to the case ‘where a man has not been employed at his original occupation for a very long time’, and stated: ‘If he is still seeking a living at

his original occupation, he should enter that occupation adding “out of work” even if he has been for a long time unemployed at it.’ Although there are also references in the instructions to a person being ‘temporarily out of work’ and ‘out of work at the time’ the effect appears to have been that persons who were only temporarily suspended at the end of April 1931, but expected to return to work with the same employer, did not record themselves as out of work. The extent of this can be seen in the comparison of columns (2), (3) and (4) of Table 11.3.

The alternative source of information is derived from the unemployment insurance scheme.² For the end of April 1931 the statistics are confined to persons aged 16–64 and do not cover workers employed in agriculture and private domestic service; persons with permanent posts in national and local government, the railways and other public utilities; or non-manual workers earning more than £250 a year. Persons wholly unemployed (including casual workers) are distinguished from those temporarily stopped. The lower panel of Table 11.3 gives an approximate measure of the deficiency in the unemployment insurance records for April 1931 in industries which are not covered or which have a significant number of persons with annual remuneration exceeding £250.³ In Table 11.4 the benchmark for 1931 is reconstructed by starting from the unemployment insurance figure for the end of April, adding on persons under 16 or over 64 or otherwise not covered, adjusting to the average 1931 level, and including N. Ireland.

¹ See also the discussion in the *Report of the Unemployment Insurance Statutory Committee*, Cmd. 4786, 1935 [63], 48–57.

² There are effectively two series available from this source. One relates to the ‘number of insured persons recorded as unemployed’ (at one time referred to as ‘books lodged’); the other to the ‘number of unemployed persons on the registers of employment exchanges’. All references in the present study are to the former series. It covers only insured persons but includes a rough allowance for insured persons who are unemployed though not covered by the monthly count (the ‘two months file’). The series for the number on the register does not include this allowance but does include some uninsured persons. For further information about the two series see J. Hilton, ‘Statistics of Unemployment Derived from the Working of the Unemployment Insurance Acts’, *J. R. Statist. Soc.*, LXXXVI 1923 [177], pp. 154–73, and W. Galenson and A. Zellner, ‘International Comparison of Unemployment Rates’ in *The Measurement and Behaviour of Unemployment*, 1957 [166], pp. 566–80.

³ The corrections to the Census and to the unemployment insurance statistics derived from the comparison in Table 11.3 are both imperfect. For example, the deficiency in both the Census and the insurance records will be understated to the extent that non-manual workers with earnings in excess of £250 a year are included in

TABLE 11.4
UNEMPLOYMENT IN 1931 (Thousands)

Great Britain:	
1. Persons aged 16-64 insured under U.I. Acts recorded as unemployed 27 April 1931	2,515.5
2. <i>Less</i> Adjustment for over-counting of dockers	11.0
3. <i>Add</i> Persons aged 14 and 15	41.0
4. Persons aged 65 and over	144.4
5. Persons aged 16-64 not insured	334.4
6. Adjustment to average 1931 level:	
(a) insured persons	126.2
(b) others	26.0
7. <i>Equals</i> Great Britain, average 1931 level	3,176.5
Northern Ireland:	
8. Persons aged 16-64 insured under U.I. Acts recorded as unemployed in 1931	75.1
9. Total: United Kingdom, average 1931 level	3,251.6

SOURCE: 1. *Ministry of Labour Gazette*, xxxix, May 1931 [87].

2. See Table 11.3, note c.

3 and 4. Census of Population. (For the classification by industry see columns (1) and (2) of Table 12.3.)

5. See Table 11.3, column (6).

6. For insured persons aged 16-64 recorded unemployment in 1931 averaged 2,641.7, i.e. 5.0% above the April level; the same adjustment was applied to persons not insured.

8. Twenty-second *Abstract of Labour Statistics* [1], pp. 54-5.

The starting point for the annual estimates for 1921-38 (see column (5) of Table 58) are the annual averages of the monthly series for the number of insured persons aged 16-64 recorded as unemployed in Great Britain and Northern Ireland. Owing to a number of changes in the administration of the unemployment insurance scheme it is not possible to get a series which is completely uniform throughout,¹ but the series used for the present estimates is consistent with respect to the exclusion of persons aged 65 and over, who were included until the end of 1927; of persons under 16, who were brought into the scheme in September 1934; and of agricultural workers and certain types of domestic servant who were included from May 1936 and April 1938 respectively. It is also consistent with respect to the treatment of dockers (see note c of Table 11.3).² This estimate corresponds to the sum of rows 1, 2, 6 (a) and 8 of Table 11.4. For 1921-30 the unemployed persons omitted (corresponding to rows 3, 4, 5 and 6 (b) of Table 11.4) are assumed to account for the same pro-

portion of the total as in 1931 (16.8%). For 1932-8 it is possible to make separate estimates for unemployment among boys and girls aged 14-15 and for agricultural workers, by interpolating between the estimate for 1931 derived from the Census and the estimates which are available in the later part of the decade following the extension of the unemployment insurance scheme. With this wider coverage some 450,000 persons (13.8% of the total) are still not accounted for in 1931 by annual series, and the unemployment estimates for 1932-8 were raised to include a corresponding percentage of persons over 65, indoor domestic servants etc. The final total is set out in Table 58, column (7), and also appears in column (4) of Table 57.

For 1920 an estimate was obtained by using the adjusted trade union series discussed below for 1912-19.

A separate series for persons temporarily stopped is not required for the construction of the estimates but is shown in Table 58 for the reason given on p. 216, above. Official estimates are available only from 1926 onwards and the series used relates to the number of persons on the registers of employment exchanges, including uninsured persons.

It is possible to make three checks on the present estimates for the inter-war period, one at the beginning and two at the end. The first relates to the total working population in 1921, and is set out in Table 11.5. Detailed industry comparison is not possible because the Census does not show separately the occupied population at work and we have not made an industry classification of the unemployed. However at the level of the total working population the agreement between the two estimates is very good.³

The second comparison covers all persons in employment in 1938, classified by industry. The basis for the alternative estimate is the official 'Manpower (old series)' published in the *Annual Abstract of Statistics*

columns (1) and (2) for the industries in the top panel of the table; and both will be overstated to the extent that the unemployed who failed to state an occupation or industry in the Census return (see the last row of the lower panel) are included in, say, manufacturing or building in the insurance statistics.

¹ For details see Galenson and Zellner [166], pp. 570-1, and W. H. Beveridge, *Full Employment in a Free Society*, 1944 [123], pp. 333-4.

² For the series on this basis for Great Britain for 1924-38 see *Ministry of Labour Gazette*, XLVII, November 1939 [87], p. 384. Estimates for 1921-3 and for Northern Ireland were derived from the *Abstract of Labour Statistics*.

³ The discrepancy is slightly greater than is indicated by Table 11.5 since the present estimates include certain part-time and casual workers in agriculture who are probably not included in the Census; cf. Table 11.2, row 3 (b).

TABLE 11.5 COMPARISON WITH THE CENSUS-BASED ESTIMATE OF TOTAL WORKING POPULATION IN 1921
(Thousands)

1. Census of Population, Great Britain, June 1921 – occupied population including out of work	19,357
2. Add Armed Forces, seamen and fishermen abroad on the day of the Census and not enumerated	270
3. Northern Ireland, occupied population including out of work	570
4. Equals Total working population, June 1921	20,197
5. Present estimate, total working population, average 1921	20,120
6. 4 as percentage of 5	100.4

SOURCE: 1. *18th Abstract of Labour Statistics* [1], p. 3.
2. Chapman [146], Table 17, p. 36.
3. Based on the 1926 Census of Population [41(d)].

[9, No. 88, Table 127]. The old estimates for Great Britain for June 1938 and 1948 were first corrected for some of the major differences between the old and new series: e.g. the omission of private indoor domestic servants and the classification of certain employees of central and local government; and the 1938 estimates were then adjusted industry by industry in the proportions given by the ratio for 1948 of the new series [9, No. 92, Table 128] to the old series. The result is somewhat approximate since it involves the assumption that the addition made in this way for workers not covered by the old series: men over 64, women over 59, women working part-time and counted as only half units, and workers omitted due to the inaccuracies of the old series¹ is proportionately the same for 1938 as for

¹ For 1948 the 'old series' estimate of the working population is almost 3,000,000 below the revised estimate. Of this, roughly 950,000 can be accounted for by men over 64 and women over 59, about 500,000 by private indoor domestic servants and at least 400,000 by the difference in treatment of part-time women. See *Ministry of Labour Gazette*, LVII, February 1949 [87], p. 40. For 1938 the net addition made to the 'old series' by the procedure outlined above is 3,320,000, of which 1,360,000 is for private indoor domestic servants.

TABLE 11.6 COMPARISON WITH 'TOTAL MANPOWER' ESTIMATE OF PERSONS IN EMPLOYMENT IN 1938
(Thousands)

	Total in employment Great Britain ^a (1)	United Kingdom (2)	Present estimate (3)	(2) as percentage of (3) (4)
Agriculture, forestry and fishing	989	1,103	1,272	87
Mining and quarrying	887	888	904	98
Manufacturing	7,184	7,328	6,970	105
Building and contracting	1,317	1,335	1,266	105
Gas, electricity and water	280	283	291	97
Transport and communication	1,478	1,498	1,692	88
Distributive trades	3,040	3,120	3,090	101
Insurance, banking and finance	531	537	475	113
Public administration	727	755	801	94
Professional services	1,189	1,211	1,115	109
Miscellaneous services	3,075	3,134	3,110	101
Total in civil employment	20,697	21,192	20,986	101
Armed Forces	385	385	432	(a)
Total in employment	21,082	21,577	21,418	101

SOURCE: (1) Manpower (old series) estimates adjusted for coverage and classification. See text, pp. 222–3.
(2) Column (1) plus an estimate for Northern Ireland. See text, p. 223.
(3) Table 59.

^a The manpower (old series) figure related to June 1938. For civil employment the average for 1938 would be roughly 18,000 lower (based on the number unemployed); no adjustment has been made for this. For the Armed Forces the estimate in column (2) is for June but the present estimate for the Army is for 1 October.

TABLE 11.7 COMPARISON WITH FRANKEL'S ESTIMATE OF TOTAL OCCUPIED POPULATION IN 1938
(Thousands)

1. Great Britain, July 1939 – Frankel's estimate of total occupied population (including unemployed)	22,916
2. <i>Add</i> H.M. Forces stationed abroad	230
3. <i>Less</i> Adjustment for increase in working population between 1938 and July 1939	–300
4. <i>Add</i> Northern Ireland, working population, 1938	585
5. <i>Equals</i> United Kingdom, working population, 1938	23,431
6. Present estimate	23,582
7. 5 as percentage of 6	99.4

SOURCE: 1. Frankel [164], p. 418.

2. *Annual Abstract of Statistics* [9, No. 88, Table 127] gives the total in H.M. Forces in June 1939 as 480,000. Frankel allows 250,000 for officers and men in Great Britain in July 1939 [164, p. 403].
3. *Annual Abstract of Statistics* [9, No. 88, Table 127] shows an increase of 277,000 for total manpower (old series) between June 1938 and June 1939. The average for 1938 would be about 20,000 lower than the June figure, judging by the unemployment series.
4. For the employed population the estimate made for Table 11.6 (see p. 222) and for unemployment the average 1938 number of insured persons aged 14–64 recorded as unemployed (including agriculture).

1948. This is, in fact, likely to overstate the number employed in 1938 since the extent of part-time paid employment for women was significantly less than in 1948, and this is probably also true, though to a lesser extent, for persons over pensionable age. To complete the alternative estimate an addition was made for Northern Ireland, using the 1926 Census data [41(d)] and the change between 1926 and 1938 shown by the data on persons insured for unemployment and Chapman's series for agriculture [146, p. 56].

The resulting estimate is set out in Table 11.6, and in total agrees remarkably well with the present estimate. As given in Table 11.6 the present estimate is 1% (160,000 persons) lower than the alternative; but if allowance could be made for the probable overstatement in the correction for part-time women, referred to in the previous paragraph, then the present estimate might be 1 or 2% higher. Most of the individual industry figures also show reasonably satisfactory agree-

ment, but there are discrepancies exceeding 10% in agriculture (probably due to the inclusion of certain part-time and casual workers in the present estimate – see p. 217, above), transport and finance.

The final comparison covers the whole working population (including unemployed), but is not subdivided by industry. It is made with the almost entirely independent estimate of the total occupied population of Great Britain in July 1939 compiled by Frankel [164] on the basis of data relating to the number of persons insured under the National Health Insurance Scheme. For the purposes of comparison it is necessary to include Forces stationed abroad, adjust to the average 1938 level, and make an addition for Northern Ireland. The result is given in Table 11.7 and is lower by only 150,000 (less than 1%) than the present estimate. It thus confirms the previous indication that the present estimate for 1938 may be fractionally too high.

1855–1919

Estimates for this period are obtained first of all for the total working population. These are based on the decennial Census of Population data for 1851 to 1921 with annual estimates derived by logarithmic linear interpolation between the Census-based estimates. The resulting series is shown in column (5) of Table 57, and the decennial benchmarks are set out in Table 11.8.

For 1921 we use the estimate given in Table 11.5. For 1881 to 1911 the starting point is the estimate of the total occupied population of the United Kingdom (with separate figures for England and Wales, Scotland and Ireland) prepared on a comparable basis for the 1911 Census.¹ The only adjustments made to the published figures are (a) the exclusion of farmers' daughters and other female relatives returned as assisting in the work of the farm in England and Wales and Scotland in 1901 and 1911 but not in other years; (b) the exclusion, in 1891 only, of 'daughters and other female relatives who were returned by the head of the family as assisting in household duties' and were at that Census 'for the first and only time reckoned as in domestic service';² and (c) an addition for Armed Forces and seamen (but not fishermen) abroad and not enumerated, less foreign seamen in port in the United Kingdom at the time of the Census.

¹ Census of England and Wales [41(a)], 1911 *General Report with Appendices*, Cd. 8491, 1917, Appendix C, Table 9.

² Census of England and Wales [41(a)], 1911, vol. x, *Occupations and Industries*, Cd. 7018, 1914, p. xxv. The number returned was reduced by 100,000 to exclude these relatives.

TABLE 11.8

CENSUS-BASED ESTIMATES OF THE
TOTAL WORKING POPULATION, 1851-1911

(Thousands)

	Occupied population ^a		United Kingdom (3)	Less Retired ^b (4)	Adjustment for Armed Forces and merchant seamen ^c (5)	Working population (6)
	Great Britain (1)	Ireland (2)				
1851	9,390	2,800	12,190	240	100	12,050
1861	10,520	2,660	13,180	260	170	13,090
1871	11,720	2,480	14,200	280	130	14,050
1881	12,740	2,160	14,900	—	160	15,060
1891	14,400	2,050	16,450	—	210	16,660
1901	16,280	1,950	18,230	—	450	18,680
1911	18,290	1,800	20,090	—	300	20,390

^a Excludes all persons returned as property-owners etc., and all females returned as wives of farmers, shopkeepers, shoemakers etc., and as farmers' daughters or other female relatives. For 1891 and, for Ireland, in 1881 also excludes some female relatives returned as in domestic service, see p. 223. See also p. 224, n. 3

^b For 1851 to 1871 taken as 2 % of the occupied population — see p. 224.

^c Armed Forces abroad; and all merchant seamen (including foreigners and lascars) employed in United Kingdom registered sea-going vessels less all seamen at home or in port (including those on foreign-owned vessels) at the time of the Census.

SOURCE: Census of Population [41], 1851 to 1911, Booth [124] and *Statistical Abstract of United Kingdom* [35].

For 1851 to 1871 the estimates were compiled from the separate Census returns excluding all females returned as wives of farmers, shopkeepers, shoemakers etc. and also farmers' daughters or other female relatives, and also excluding persons classified as proprietors, property-owners etc.¹ For this period the estimates are also reduced by 2 % to exclude the small proportion of retired persons who were listed under their former occupations.² Finally an adjustment was made for Armed Forces and merchant seamen abroad.

The resulting estimates of the total working population (column (6) of Table 11.8) are broadly comparable over the whole period³ but it is not possible to obtain a completely uniform treatment, particularly for certain female occupations. Thus the 1911 Census for England and Wales [41 (a), vol. x, *Occupations and Industries*, p. 540] notes that a new instruction in the 1911 Schedule 'has had the effect of greatly increasing the returns of women regularly engaged in assisting relatives in trade or business' and this seriously affected many of the returns for dealers. There are a number of other examples of this sort and this must, I think, be accepted as an unavoidable limitation of the Census-based estimates.

Annual figures for the number of persons serving in the armed forces at home and abroad were then obtained from the *Statistical Abstracts* or other Parliamentary Papers and these numbers were deducted from the total to get the civilian working population. The resulting series is not shown in Table 57 but is needed in order to

apply to it the estimated percentage of the labour force out of work each year, and thus obtain estimates of

¹ The estimates compiled on this basis were discovered subsequently to agree with those given by Charles Booth if the category 'property owning and indefinite' are excluded from his estimates of the employed or independent population. See C. Booth, 'Occupations of the People of the United Kingdom', *J. R. Statist. Soc.*, XLIX, 1886 [124].

² This is the percentage correction suggested by the Registrar-General in his *General Report*. Census of England and Wales [41 (a)], 1881, pp. 28-9. It is often overlooked that in his reference to the treatment of retired persons in 1871 and earlier censuses, he observed that only 'a very inconsiderable proportion of persons who had retired from business made mention of their former occupation' [italics added] and so a 'large proportion' of the retired were, as in later years, omitted from the enumeration of occupied persons.

³ As a partial confirmation of this we may note that Booth's figure for 1881 (excluding property owning and indefinite) is 15,080,000 [124, pp. 415-23], while the 1911 Census gives 14,900,000 for 1881. Booth's figure includes 139,000 females in domestic service (indoor) in Ireland whereas the Census notes that these were 'in most cases wives or other near relatives returned as 'housekeepers' in their own families' and were, therefore, treated as unoccupied. (See Census of England and Wales [41 (a)], 1911. *General Report*, p. 270, note (f).) There appears to be no comparable group in Booth's figures for earlier censuses and the amended 1881 estimate is thus more nearly consistent with the estimates for other years. With this adjustment the two figures differ by only 40,000.

unemployment and of the number of persons in civil employment.

The only available information on unemployment for most of this period is the well-known series derived from trade union records by the Ministry of Labour. It covers those unions which paid benefits to their members, and gives the proportion of the membership who were unemployed. Workers who were sick, on strike or locked-out are not included (in the numerator), and neither are persons suspended for a few days because of short-time working. For those trade unionists who were covered by the series it thus provides a measure of the proportion wholly unemployed which is broadly comparable with the records of unemployment used for later periods. The trouble arises, however, when we try to assess how far the series is representative of the rate of unemployment in the labour force as a whole. The possible defects of the series from this point of view are formidable. Firstly, it is based on a pitifully small sample of the labour force: the total membership covered was about 100,000 in 1872, and only reached 300,000 in 1893, 500,000 in 1900 and 700,000 in 1910.¹ Second, the series is weighted on the basis of the trade union membership covered in the returns and not in proportion to the actual numbers of workers in the different industries. The most significant aspect of this procedure is the over-representation of the unions in the engineering, shipbuilding and metal trades: these accounted for about three-quarters of the total membership in the 1860s, about three-fifths in the 1870s and 1880s and roughly two-fifths in the 1890s; (a crude correction for this is considered below). Third, and most serious, the sample is by no means representative: it covers only a limited number of industries, within those industries it covers only trade unionists, and these were mainly skilled workers.

There have been a number of official and semi-official comments on the series,² but for most of the period it does not appear to be possible to make any statistical assessment of the possible under- or over-statement involved in the use of the trade union series as a measure of the *general* unemployment rate. In relation to such stable industries as the railways, domestic service and certain branches of agriculture it will undoubtedly be too high, in relation to unskilled and casual workers it would be too low; and the net effect – which would probably vary over different phases of the trade cycle – is uncertain.

In making the actual calculation of unemployment for Table 57 I have used the so-called 'corrected' trade union figures for the period 1855–80. This series was prepared by the Board of Trade to overcome the excessive weight of the engineering, shipbuilding and

TABLE 11.9 COMPARISON OF ORIGINAL AND ADJUSTED TRADE UNION PERCENTAGE UNEMPLOYED (Per cent)

	Original (1)	Adjusted (2)
1912	3.2	3.3
1913	2.1	2.1
1914	3.3	3.3
1915	1.1	1.1
1916	0.4	0.4
1917	0.7	0.6
1918	0.8	0.8
1919	2.4	2.1
1920	2.4	2.0
1921	14.8	13.5
1922	15.2	12.8

metal group, and was calculated as an unweighted average of the percentages for this group and for 'all other trades'.³ The correction serves to reduce somewhat the level of unemployment, particularly in years of depression. From 1881 the correction makes little difference and the uncorrected series is used for 1881–1911.⁴ For 1912–22 a revised series, prepared by Hilton [177, pp. 190–1] is available, in which the percentages for each of the reporting unions were combined with weights corresponding roughly with the estimated numbers in the relevant industries. The series compares with the unadjusted estimate as shown in Table 11.9.

The differences are relatively slight, and for 1912–18 and for 1920 I have used the adjusted percentage. For the whole period 1855–1918 and for 1920 the percentage actually used to calculate the numbers unemployed is shown in column (6) of Table 57. For 1919 the trade union series is known to be incomplete, particularly in the early part of the year and an alternative estimate of

¹ 19th Abstract of Labour Statistics [1], p. 78.

² See, in particular, the evidence given by H. Llewellyn Smith, head of the Labour Department of the Board of Trade, to the Select Committee on Distress from Want of Employment, *Minutes of Evidence*, H.C. 365, 1895 [90], Q. 4562–6 and 4925–6; the Board of Trade memorandum 'Fluctuations in Employment', published in *British and Foreign Trade and Industrial Conditions* (Second Series), Cd. 2337, 1904 [46], pp. 79–98; the Committee on Industry and Trade (Balfour Committee) *Survey of Industrial Relations*, 1926 [81], pp. 218–19 and 244–5. Also Hilton (Director of Statistics, Ministry of Labour) [177], pp. 178–89 and 200–2; and Beveridge [123], pp. 328–37.

³ See the Board of Trade memorandum [46], pp. 82–3.

⁴ 18th Abstract of Labour Statistics [1], p. 94.

the national number unemployed was made on the basis of the records of the out-of-work donation scheme.¹

The final estimates of unemployment are given in column (4) of Table 57, and the annual estimates of the numbers in total employment and in civil employment are given in columns (3) and (1). Any errors in the unemployment series will be small and of little significance in relation to the estimates of the numbers in employment.

It is not possible to give an annual classification *by industry* of the numbers in employment prior to 1920, in continuation of the series in Table 59; but in Table 60 a very approximate classification of the total working population is given for the six census years from 1861 to 1911. It cannot be too strongly emphasised that this attempt to make a classification by industry contains a fair number of very rough 'free hand' adjustments to the Census data. The essential problem is that prior to 1911 the Census classification was made partly on an industrial basis, partly on an occupational basis, with some groups such as commercial clerks or carmen, carriers etc. not classified by industry, and others, such as building workers, all classified to a single 'industry'. Other major difficulties arise because of changes in classification between censuses and because 'makers' were not properly separated from 'dealers' before 1901. For 1911 a detailed cross-classification by industry and occupation is available for England and Wales and a classification by industry is also given for Scotland.² For Ireland some guidance can be obtained from the censuses of 1926, which give both occupation and industry classifications.³

The details of the industrial classification followed in the compilation of Table 60 are set out in the notes to the table; the general aim was to produce estimates which were as nearly as possible comparable in classification with the inter-war series prepared by Chapman. Readers must be warned that the classification differs substantially from that adopted by Lewis [202, pp. 127–8]; and since his estimates provide the basis for several of the real output estimates for the services (see Chapter 10) it would be quite wrong to combine the present employment estimates with Lewis' real output series for the purpose of calculating output per head.⁴

The estimate for 1911 was built up from the sources listed above (see p. 226, n. 2) and is by far the most accurate of the figures given in Table 60. In addition to the specified occupations listed in the notes to Table 60 as having been assigned to a particular industry, there are eight general occupations for which a special classification by industry was made. They include clerks, carmen, messengers, caretakers, general labourers etc.⁵ Some basis for the allocation of all of these occupations,

except general labourers, is available in the 1911 Census returns, and this data was also used extensively in compiling the estimates – necessarily very rough – for earlier years. All general labourers in Ireland were allocated to agriculture⁶, and the remainder were allocated, mainly on a crude *pro rata* basis, to the other major industries. All the estimates have been rounded to the nearest ten thousand but they should not be regarded as accurate to this degree.

Employers and self-employed, wage earners and salary earners

In the estimates of personal income a distinction is made between income from employment and income from self-employment, and the former contains the separate categories of wages, salaries and forces' pay. A corresponding classification of the number of persons in each of these four categories can be made, and is shown in Table 11.10 for selected years from 1911 to 1961. The series for the number of employers and self-employed persons and for the Armed Forces are those already used for Table 57 and described above (pp. 216–20).⁷

The division of civilian employees in employment between salary and wage earners⁸ is rather more approximate. For 1911 the estimate compiled for Appendix 7.3 is used with a small deduction for unemployment. For 1921, 1931 and 1938 the starting point is the estimate by Chapman [146, p. 18] and this was adjusted (a) by

¹ Hilton [177], pp. 183–4, and *18th Abstract of Labour Statistics* [1], p. 49.

² Census of England and Wales [41(a)], 1911, vol. x, *Occupations and Industries*, Cd. 7018, 1914, Tables 28 and 29; and Census of Scotland [41(b)], vol. II, *Report*, Tables xxxvi and xxxvii. See also A. L. Bowley, *Numbers Occupied in the Industries of England and Wales 1911 and 1921*, London and Cambridge Economic Service, Special Memorandum No. 17A, 1926 [130].

³ Census of Population of Northern Ireland, 1926, [41(d)], and *Saorstát Éireann, Census of Population, 1926*, Dublin, 1928 [98], vols. II, Tables 1 and 2, VI, Table 15, and VII, Table 1. See also vol. x, Appendix A.

⁴ The sectors where output was estimated by Lewis on the basis of his employment data are finance, professions, public administration, catering, domestic service and miscellaneous services.

⁵ For the full list of such occupations see the notes to Table 60.

⁶ See Census of England and Wales, 1911, *General Report* [41(a)], Appendix C, p. 280: 'The majority of General Labourers in Ireland may be assumed to be Agricultural Labourers.'

⁷ This does not apply to the estimate of self-employment in 1911, for which the series prepared for Appendix 7.3 is used.

⁸ For details of the definitions used for the two categories see Chapter 2.1, p. 31.

TABLE 11.10 STATUS CLASSIFICATION OF THE WORKING POPULATION, SELECTED YEARS, 1911-61 (Thousands)

	Employers and self-employed (1)	Salary earners (2)	Wage earners (3)	Armed Forces (4)	Unemployed (5)	Total working population (6)
1911 ^a	2,390	1,980	15,020	400	600	20,390
1921	2,030	2,750	12,640	490	2,210	20,120
1931	2,110	3,130	13,100	330	3,250	21,920
1938	2,180	3,800	15,010	430	2,160	23,580
1951	1,800	4,950	16,000	840	250	23,840
1961	1,760	6,800	16,040	470	340	25,410

^a Including Southern Ireland. For Great Britain and Northern Ireland the working population in 1911 is 19,120,000.

the transfer of shop assistants and police from salary to wage earners and (b) by the allocation, largely to the wage earners – of the adjustments made above for part-time and short-time working, etc. For 1951 and 1961 the Census information for these two years is used, with adjustments required for the discrepancies between the Census-based and Ministry of Labour estimates. These discrepancies are shown in Table 11.11 and discussed below, and it seems likely that they relate mainly to wage earners.

CONSISTENCY AND RELIABILITY

To a large extent, the breaks in the consistency of the original sources have already been discussed in the course of the description in the previous section of the attempts made to eliminate such breaks in the final estimates. The one aspect to which further reference must still be made is the change from Census-based data, underlying all estimates up to 1938, to the Ministry of Labour series used for the post-war years. One useful indication of the possible effects of this change can be gained from the comparison of the Census-based and Ministry of Labour estimates of total employees (including unemployed) in Great Britain in 1951 and 1961. The main

SOURCE: See text, pp. 226-7.

features of the full comparison¹ are summarised in Table 11.11.

The principal reasons for the excess of the Ministry of Labour over the census-based estimates are the exclusion from the latter of three groups of persons: full-time students and school pupils over the age of 15 who work in their free time; seasonal and irregular workers who were not in work at the time of the census and not intending to get work in the immediate future; and married women with part-time jobs. It seems likely that both the first and third categories are larger than they would have been in the inter-war period, and the second category is partly covered in the adjustments for agricultural workers made in the present estimates for 1931. The break in continuity between the inter-war and post-war estimates is thus relatively slight and, in general, can probably be ignored.

The margin of error in the estimates of the total in employment or the total working population is probably fairly small (Grade B) but for unemployment and for the classification by industry it is larger, particularly for the pre-1914 period.

¹ See Census of England and Wales [41(a)], 1961, *Occupation Tables*, pp. xxiv-xxx, or *Ministry of Labour Gazette*, LXXIII, November 1965 [87], pp. 478-80.

TABLE 11.11 COMPARISON OF CENSUS-BASED AND MINISTRY OF LABOUR ESTIMATES OF TOTAL EMPLOYEES IN GREAT BRITAIN, 1951 AND 1961 (Thousands)

	Ministry of Labour ^a		Census-based ^b		Difference (Ministry minus census)	
	Persons (1)	of which Females (2)	Persons (3)	of which Females (4)	Persons (5)	of which Females (6)
1951	21,566	7,090	21,199	6,647	367	443
1961	23,042	7,993	22,353	7,417	689	576

^a Employees plus unemployed.

^b Census 'economically active' employees plus out of

employment (sick and other), adjusted for Armed Forces and seamen abroad.

TABLES 1-65