

SECTION III.—FLUCTUATIONS IN EMPLOYMENT AND UNEMPLOYMENT.

1. **General.**—In Section IX. of this Report, the method of index-numbers is applied to trace variations in rates of wages in the Commonwealth since 1891, while in Sections IV., V., VI. and VII. variations in retail prices and purchasing-power of money, and in wholesale and import and export prices are shewn by a similar method. In order to elucidate further the progress of events, it is desirable to supplement that information, so far as practicable, by furnishing index-numbers which disclose the fluctuations in employment and unemployment.

Employment index-numbers serve not only to throw light upon the figures showing the course of wages, prices, and purchasing-power of money, inasmuch as they indicate the relative loss of time through lack of employment, but also to furnish a useful measure of the fluctuations of industrial activity regarded as a whole. In this connection, it may be said that while export statistics relate only to the margin of national production which is sent overseas, statistics of employment measure, on the other hand, the relative activity or depression of the whole of the industries to which they relate, including, that is, production for the home market as well as for export.

The particulars shewn in the following tables are based upon information furnished by the secretaries of trade unions in the several States of the Commonwealth. The best thanks of the Bureau are tendered to the officials who are regularly furnishing the desired particulars. It will be seen from the tables that the membership of unions regularly reporting has exceeded 300,000 since 1918. Unemployment particulars are not collected from those unions whose members have permanency of employment, such as railway and tramway employees, and public servants, or from unions whose members are casually employed (wharf labourers, etc.). Very few of the unions pay unemployment benefit, but the majority of the larger organisations have permanent secretaries and organisers who are closely in touch with the members and with the state of trade within their particular industries. In many cases unemployment registers are kept, and provision is also made in the rules for members out of work to pay reduced subscriptions. Taking these facts, and also the large membership of the numerous unions from which regular quarterly returns are being received, into consideration, it will be realized that percentage unemployment results based on trade union information may be taken to shew the general trend of unemployment existing in the several States. The tables do not furnish a complete register of unemployment, but for the purpose of making comparisons and shewing tendencies over a period of years, the percentages returned as unemployed, though not exact, are the most satisfactory available.

2. Number Unemployed in Various Industries, Commonwealth, 1891 to 1920.—The following table shews for the end of each year, 1891 to 1912, and for each quarterly period of the years 1913 to 1920, the particulars specified hereunder:—

- (a) The number of unions for which returns as to unemployment are available.
- (b) The number of members of such unions.
- (c) The number of members unemployed, and
- (d) The percentage of the number of members unemployed (c) on the total membership (b).

Unemployment.—Commonwealth.—Number of Unions and Members Reporting, and Number and Percentage Unemployed, 1891 to 1920 (4th Quarter).

PARTICULARS.	Unions	Membership.	UNEMPLOYED.	
			Number.	Percentage.
1891	25	6,445	599	9.3
1896	25	4,227	457	10.8
1901	39	8,710	574	6.6
1906	47	11,299	753	6.7
1907	51	13,179	757	5.7
1908	68	18,685	1,117	6.0
1909	84	21,122	1,223	5.8
1910	109	32,995	1,857	5.6
1911	160	67,961	3,171	4.7
1912	464	224,023	12,441	5.6
1913, 1st Quarter*	451	237,216	15,234	6.4
2nd " " "	458	243,523	17,854	7.3
3rd " " "	472	252,325	17,698	7.0
4th " " "	465	251,207	13,430	5.3
1914, 1st " " "	462	262,133	15,541	5.9
2nd " " "	467	279,318	15,856	5.7
3rd " " "	466	283,584	30,367	10.7
4th " " "	439	250,716	27,610	11.0
1915, 1st " " "	476	279,388	33,465	12.0
2nd " " "	456	273,190	26,015	9.5
3rd " " "	484	279,133	24,682	8.8
4th " " "	465	273,149	18,489	6.8
1916, 1st " " "	475	291,525	17,178	5.9
2nd " " "	476	298,675	15,741	5.3
3rd " " "	472	278,047	14,649	5.3
4th " " "	470	292,051	19,562	6.7
1917, 1st " " "	455	290,849	21,892	7.5
2nd " " "	453	303,507	19,257	6.3
3rd " " "	432	255,949	18,197	7.1
4th " " "	459	296,937	21,989	7.4
1918, 1st " " "	466	290,048	16,089	5.5
2nd " " "	478	294,725	18,385	6.2
3rd " " "	494	305,550	18,752	6.1
4th " " "	475	308,850	16,919	5.5
1919, 1st " " "	477	311,410	20,359	6.5
2nd " " "	462	303,468	25,768	8.5
3rd " " "	457	308,287	19,262	6.2
4th " " "	459	317,413	16,637	5.2
1920 1st " " "	461	329,127	18,396	5.6
2nd " " "	449	343,144	21,186	6.2
3rd " " "	426	344,582	21,375	6.2
4th " " "	450	351,013	27,463	7.8

* For years prior to 1913 the figures refer to the end of the year only, and not to separate quarters. The quarterly figures shew the number of persons who were out of work for three days or more during a specified week in each quarter: they do not include persons out of work through strikes or lock-outs.

3. Employment Index-Numbers, Commonwealth, 1891 to 1920.—

For greater convenience of examination and comparison with other statistical data, the percentages of unemployed has been subtracted from 100, so as to shew the percentage of members *not returned as unemployed*, and the results computed in the form of index-numbers with the year 1911 as base (= 1000).

Percentage of Members of Trade Unions not Returned as Unemployed, and Employment Index-Numbers for the years specified from 1891 to 1920.

Particulars.	1891.	1901.	1908.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
Percentage <i>not</i> returned as Unemployed	90.7	93.4	94.0	95.3	94.4	94.7	89.0	93.2	93.3	92.6	94.5	94.8	92.2
Employment Index-No., 1911 = 1000	952	980	986	1,000	991	994	931	978	979	972	992	995	967

As the year 1913 was the first for which returns were collected each quarter, no comparisons can be made with previous years as to average unemployment or seasonal variations from year to year. The percentages for years prior to 1913 refer to the end of the year only, so that any comparisons made for the period, 1913 to 1920, with years prior to 1913, must necessarily be between the percentages for the last quarters of the years, 1913 to 1920, and not the average percentage for these years.

The figures given in the first line of the above table indicate the percentage of full time worked on the average in each year, on the assumption that the unemployment returns for the end of the year are representative of the state of unemployment throughout the year. The figures in the second line shew (on the same assumption) the relative state of employment in each year, compared with the year 1911, the state of employment being measured, of course, by the percentage of full time worked.

4. Unemployment in Different Industries, Commonwealth, 1919 and 1920.—The results of the quarterly investigations as to unemployment in the years 1913 to 1920 have been published in Labour Bulletins Nos. 1 to 18, and in the Quarterly Summary of Statistics, Nos. 70 to 83. The following table shews for various industrial groups the percentages of members of trade unions returned as unemployed during each of the four quarters of 1919 and 1920. The percentage of unemployed at the end of 1912 is also given. The figures do not include persons out of work through strikes or lockouts.

Percentage of Unemployment* in Different Industries in the Commonwealth at the end of 1912 and Quarterly for 1919 and 1920.†

INDUSTRIAL GROUP.	1912. End of Year	1919.				1920.			
		1st quar. (Jan. to Mar.)	2nd quar. (April to June.)	3rd quar. (July to Sept.)	4th quar. (Oct. to Dec.)	1st quar. (Jan. to Mar.)	2nd quar. (April to June.)	3rd quar. (July to Sept.)	4th quar. (Oct. to Dec.)
		I. Wood Furniture, etc.	3.7	4.4	4.3	5.0	6.1	3.5	3.2
II. Engineering, Metal Works, etc.	7.4	6.5	7.6	5.4	3.6	5.3	3.7	3.6	4.3
III. Food, Drink, Tobacco, etc. . .	7.3	6.7	13.1	6.0	10.8	8.5	11.2	17.0	20.2
IV. Clothing, Hats, Boots, etc. . .	6.3	7.5	6.9	4.1	1.7	0.7	2.0	4.8	7.3
V. Books, Printing, etc.	2.3	4.0	5.9	2.7	1.3	1.6	1.6	2.0	2.8
VI. Other Manufacturing	6.9	5.0	8.5	8.0	3.8	3.1	4.7	6.4	10.0
VII. Building	5.5	3.5	3.8	4.1	2.8	4.7	2.8	2.6	2.1
VIII. Mining, Quarries, etc. . . .	5.6	6.0	9.6	10.2	6.3	8.0	5.3	3.5	6.0
IX. Other Land Transport	1.1	2.2	3.0	3.3	2.6	3.0	2.8	3.3	3.6
X. XI, XII, XIII, and XIV. Other and Miscellaneous	5.4	9.3	10.9	7.3	5.0	7.5	9.4	7.5	8.6
TOTAL	5.6	6.5	8.5	6.2	5.2	5.6	6.2	6.2	7.8

* Not including persons out of work through strikes or lockouts.

† Figures for 1918 were given in Labour Report No. 10.

5. **Unemployment in each State, 1919 and 1920.**—The following table shews for each State the percentage of members of trade unions returned as unemployed during each quarter of 1919 and 1920. The percentage unemployed at the end of 1912 is also given. In making any deductions from or drawing any comparisons between the results shewn in the following table, it must be borne in mind that the classes of industry in the several States for which data are obtained are not quite identical.

Percentage of Unemployment* in each State at the end of Year 1912 and Quarterly for 1919 and 1920.†

STATE.	1912. end of Year.	1919.				1920.			
		1st quar. (Jan. to Mar.)	2nd quar. (April to June.)	3rd quar. (July to Sept.)	4th quar. (Oct. to Dec.)	1st quar. (Jan. to Mar.)	2nd quar. (April to June.)	3rd quar. (July to Sept.)	4th quar. (Oct. to Dec.)
		New South Wales	5.0	5.6	8.4	5.6	5.0	5.5	5.5
Victoria	6.7	6.0	7.2	5.2	4.3	4.5	5.6	5.3	7.3
Queensland	4.6	12.4	14.3	9.3	8.5	10.5	13.0	13.4	16.3
South Australia	5.1	3.5	6.4	6.7	4.2	4.4	4.1	5.9	5.1
Western Australia	5.8	5.7	5.4	6.8	6.5	3.7	3.4	3.2	4.8
Tasmania	3.4	4.0	3.3	9.0	3.6	3.8	2.4	3.1	3.0
COMMONWEALTH	5.6	6.5	8.5	6.2	5.2	5.6	6.2	6.2	7.8

* Not including persons out of work through strikes or lockouts.

† Figures for 1918, were given in Labour Report No. 10.

6. **Causes of Unemployment, Commonwealth, 1917, 1918, 1919, and 1920.**—The following table gives, for the Commonwealth, the membership of the unions reporting, and the number and percentage of those unemployed under three main heads for the four quarters of 1917, 1918, 1919 and 1920:—

**Unemployment in the Commonwealth according to Causes, in each Quarter of
1917, 1918, 1919 and 1920.***

Particulars.	No. of Members of Unions report- ing.	Number and Percentage Unemployed through—							
		Lack of Work.		Sickness and Accident.		Other Causes.		Total.	
		No.	%	No.	%	No.	%	No.	%
1917.									
1st quarter (Jan. to March)	286,594	19,378	6.8	1,805	0.6	471	0.2	21,654	7.6
2nd quarter (April to June)	297,295	15,786	5.3	2,312	0.8	626	0.2	18,724	6.3
3rd quarter (July to September)	284,830	14,443	6.1	1,665	0.7	420	0.2	16,537	7.0
4th quarter (Oct. to December)	283,790	17,791	6.3	2,214	0.8	822	0.3	20,827	7.4
1918.									
1st quarter (Jan. to March)	272,594	11,372	4.2	1,999	0.7	597	0.2	13,968	5.1
2nd quarter (April to June)	272,962	11,839	4.3	2,148	0.8	587	0.2	14,569	5.3
3rd quarter (July to September)	261,942	14,559	5.0	2,901	1.0	747	0.3	18,207	6.2
4th quarter (Oct. to December)	303,528	12,871	4.2	2,889	1.0	886	0.3	16,646	5.5
1919.									
1st quarter (Jan. to March)	302,727	14,167	4.7	4,771	1.6	839	0.2	19,777	6.5
2nd quarter (April to June)	302,290	15,917	5.3	7,702	2.5	2,039	0.7	25,658	8.5
3rd quarter (July to September)	284,317	11,777	4.1	4,154	1.5	850	0.3	16,781	5.9
4th quarter (Oct. to December)	292,420	11,423	3.9	2,535	0.9	966	0.3	14,924	5.1
1920.									
1st quarter (Jan. to March)	317,549	14,394	4.5	2,430	0.8	656	0.2	17,480	5.5
2nd quarter (April to June)	323,974	15,169	4.7	2,383	0.7	618	0.2	18,170	5.6
3rd quarter (July to September)	313,693	14,135	4.5	2,430	0.8	400	0.1	16,965	5.4
4th quarter (Oct. to December)	333,027	23,147	7.0	2,341	0.7	790	0.2	26,278	7.9

* For the corresponding figures for 1916, see Report No. 10, p. 22.

It will be observed from the above table that during the first, second and third quarters of the year 1919, the number of persons reported as unemployed owing to sickness was very high in comparison with previous quarters. The heavy loss of employment during these periods on account of sickness was due to the influenza epidemic.