

The table hereunder shows the value of production as affected by the factors previously indicated.

Estimated Relative Productive Activity in Australia for the years specified, 1871 to 1923.

Year.	I. Estimated Value of Production.		II.	III.	IV.
	(a) Total. (000 omitted.)	(b) Per head of Popula- tion.	Relative Value of Production per head Year 1911 =1,000.	Price- Index- Numbers Year 1911 =1,000. *	Estimate Relative Productive Activity per head Year 1911 =1,000.
	£	£			
1871	46,700	27.46	667	1,229	543
1881	71,116	30.83	748	1,121	667
1891	96,087	29.65	720	945	762
1901	114,585	29.96	727	974	746
1906	147,043	35.94	873	948	921
1907	166,042	39.90	969	1,021	949
1908	164,934	38.97	946	1,004	942
1909	174,195	40.29	978	976	1,002
1910	187,741	42.43	1,030	963	1,070
1911	188,404	41.19	1,000	1,000	1,000
1912	206,578	43.52	1,057	1,074	984
1913	217,887	44.52	1,081	1,054	1,026
1914	210,097	42.25	1,026	1,256	817
1915	253,531	51.01	1,238	1,292	958
1916	257,248	52.30	1,270	1,398	908
1917	273,607	54.91	1,333	1,486	897
1918	287,528	56.58	1,374	1,583	868
1919-20	339,266	63.96	1,553	1,375	828
1920-21	393,334	72.77	1,767	1,911	925
1921-22	346,662	62.91	1,527	1,579	967
1922-23	392,208	67.85	1,647	1,753	940

* The index-numbers for years prior to 1908 are wholesale prices index-numbers; from 1908 onward production price index-numbers (the basis being indicated in Production Bulletin No. 17).

CHAPTER X.—NOMINAL AND EFFECTIVE WAGES—AUSTRALIA AND ENGLAND.

1. **General.**—In an endeavour to secure comparable information with regard to rates of wage in various countries, copies of a statement showing the rates payable in a number of occupations in Australia have, since 1922, been forwarded twice yearly to the most important countries of the world. At the same time a request has been made that similar information as to rates payable in those countries should be forwarded to this Bureau. The response has not been sufficiently complete to enable comparisons to be made for all the countries, the reason given for inability to comply with the request being generally that such statistics are not readily available.

In this connexion mention may be made of the International Conference of Labour Statisticians held at Geneva in October, 1923, for the purpose of discussing methods of facilitating the exchange between countries of data relating to labour conditions. Particular attention was given to the question of wage statistics, and resolutions were passed to provide for greater uniformity and more frequent collection.

In the previous issue of the Labour Report (p. 89), a comparison was given of wages in Australia (Sydney), New Zealand (Auckland), and Canada (Montreal). Through the courtesy of the Minister of Labour (Intelligence

and Statistics Department), London, particulars have now been received of rates of wage and hours of labour in London and Leeds, and it is possible to compare these rates with those in Australia. For the purposes of the investigation, the rates of wage for Sydney and London have been utilized. It is realized that the study of wages in different countries presents many difficulties, and that the results obtained must be accepted with reservations. The following statistics reflect, it is believed, the general trend of wages and prices in the two countries concerned. The Sydney rates are minimum rates prescribed by industrial awards and agreements, while those for London have been obtained from the following sources (a) agreements between employers and workpeople, (b) minimum rates recognized by the trades unions concerned, (c) rates quoted by employers' associations, and (d) minimum rates fixed under the Trade Boards Acts.

2. **Average Nominal Wages, 1914 to 1923.**—Comparable information is available in respect of 43 occupations. Wage data for a much larger number of occupations are available for London from 1921 onward, but the inclusion of July, 1914, reduces considerably the number for which information at each of the dates indicated is available. In the following table the rates for the 43 occupations have been distributed over ten industrial groups, and the average weight in each group computed. The table shows therefore the average rate of wage in each class in the two countries, at July, 1914, 31st December, 1921, and half-yearly to 30th June, 1923. To arrive at the weighted average for all groups combined the weights mentioned in paragraph 1, Chapter IX. of this Report, have been applied. There is, no doubt, some variation in the distribution of the workers over the various industrial classes in the two countries, but it is unlikely that this difference is sufficient to alter materially the results. In Appendix IV. the rates are given from which these and other averages have been computed, as well as the hours of labour constituting a full ordinary week's work.

Nominal Wages—Relative Weekly Rates for Adult Males, Australia and England, 1914 to 1923.

Country.	Date	I. Wood, Furniture, etc.		II. Engineering, Metal Works, etc.		III. Food, etc.		IV. Clothing, Shoes, etc.		V. Books, Printing, etc.		VI. Other Manufacturing.		VII. Building.		IX. Railways and Tramways.		X. Other Land Transport.		XIV. Miscellaneous.		All Groups.*	
		s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.		
Australia (Sydney)	July, 1914 ..	80	0	85	8	60	0	60	0	70	0	58	0	69	7	53	2	50	0	54	5	58	8
	31st Dec., 1921	101	9	112	2	103	10	95	9	106	0	98	10	106	6	89	0	87	0	94	11	99	1
	30th June, 1922	101	9	103	0	103	10	95	9	103	1	92	6	107	8	89	0	87	0	91	11	98	7
	31st Dec., 1922	98	1	101	2	99	10	95	9	90	2	87	6	101	10	85	0	83	6	91	11	94	4
	30th June, 1923	99	0	101	11	100	10	95	9	99	10	87	6	102	3	86	0	84	6	91	11	94	9
England (London)	July, 1914 ..	51	0	41	0	33	4	30	0	39	8	31	11	40	11	34	4	26	0	30	9	34	11
	31st Dec., 1921	91	7	82	1	67	4	68	0	95	10	73	9	85	3	72	4	62	0	73	0	76	1
	30th June, 1922	83	9	77	10	63	7	60	0	95	10	62	7	66	10	67	4	59	0	62	3	67	1
	31st Dec., 1922	81	9	62	4	63	7	60	0	89	2	60	2	66	10	63	3	58	0	60	7	64	1
	30th June, 1923	81	9	61	9	62	4	56	0	89	2	57	9	65	0	62	4	58	0	60	7	63	4

* Weighted average.

Wages in London in July, 1914, were 40 per cent. lower than in Sydney, but from this date to December, 1921, the increase was 118 per cent. for London as compared with 69 per cent. for Sydney. Although the increase in London was greater during the period, wages at the close of 1921 were still 23 per cent. lower than in Sydney. There was a decrease in wages in each centre during 1922. This decline was more pronounced in London, where, at the end of that year, wages were 32 per cent. lower than in Sydney. During the first six months of 1923 there was a further decrease in wages in London, whereas wages in Sydney increased, so that at the 30th June, 1923, the difference between the respective averages increased, London rates being 33 per cent. below those of Sydney.

The distribution of such a small number of occupations (43) over ten industrial groups affords a less satisfactory comparison so far as individual groups are concerned, and is necessarily not so accurate as that for the weighted average of all groups combined.

3. **Nominal and Effective Wage Index-Numbers, 1914 to 1923.**—The previous paragraph dealt with variation in "nominal wages," i.e., wages in terms of money. Figures regarding wage fluctuations during recent years are of little use unless the "real" value of wages in terms of commodities is determined. To show the effective or real wage variations the retail price index-numbers in the following table have been applied as follows:—

$$\text{Effective Wage Index-No.} = \frac{\text{Nominal Wage Index No.} \times 1,000}{\text{Retail Prices Index No.}}$$

The retail prices index-numbers used relate to food items only (in Sydney five other items of groceries are included) as these index-numbers appear to be the most satisfactory for the purpose required. They are not exactly comparable, as the commodities are not identical, but in each series the principal articles of food are included. They show, of course, only the variation in prices in the two countries, and are not relative. The index-number applied to the London wage is that relating to "large towns (populations over 50,000)" prepared by the Ministry of Labour.

No account has been taken in this investigation of the number of hours worked, but, as shown in Appendix IV., generally speaking, over the whole period shorter hours of labour obtained in Sydney, although at the 30th June, 1923, there appears to be little difference. Another factor, unemployment, has been neglected, but, in this respect also, the comparison is favourable to Australia.

Nominal Wage, Retail Prices and Effective Wage Index-Numbers—Sydney and London, 1914 (= 1,000) as Base.

Country.	Date.	Nominal Wage Index-number.	Retail Prices Index-number.	Effective Wage Index-number.
Australia (Sydney)	July, 1914 ..	1,000	1,000	1,000
	31st December, 1921 ..	1,689	1,439	1,174
	30th June, 1922 ..	1,647	1,455	1,132
	31st December, 1922 ..	1,608	1,505	1,068
	30th June, 1923 ..	1,615	1,628	992
England (London)	July, 1914 ..	1,000	1,000	1,000
	31st December, 1921 ..	2,177	1,860	1,170
	30th June, 1922 ..	1,919	1,820	1,054
	31st December, 1922 ..	1,833	1,760	1,041
	30th June, 1923 ..	1,812	1,630	1,112

The index-numbers are not comparable as between the two countries, that is to say, they cannot be used to compare either the wages paid or the cost of living. They show merely the increase in nominal or money wages, in prices, and in real or effective wages in each country separately at the dates specified, compared with July, 1914.

The table shows a greater increase per cent. in nominal wages in London than in Sydney, i.e., 81 per cent. as against 62 per cent. The increase in prices of food over the whole period has been practically the same, i.e., 63.0 per cent. in the large towns of England as compared with 62.8 per cent. in Sydney. As the result of the greater increase per cent. in nominal wages in England, and much the same increase per cent. in prices, effective wages have increased in London by 11.2 per cent. since July, 1914, while in Sydney there has been a decrease of 0.8 per cent. In both cases the comparison refers to changes which have occurred since 1914 in each country separately.

CHAPTER XI.—OPERATIONS UNDER ARBITRATION AND WAGES BOARD ACTS.

1. **General.**—Particulars regarding operations under the Commonwealth Arbitration Acts and the various State Acts for the regulation of wages and hours and conditions of labour, showing the number of boards authorized and constituted, also those which had and which had not made any award or determination in each State, the number and territorial scope of awards or determinations, and the number of industrial agreements in force, were first compiled to the 31st December, 1913.*

These particulars have from time to time been revised, and reviews to the end of approximately quarterly periods have been published in the periodical Labour Bulletins and Quarterly Summaries to the 31st December, 1923.

2. **Awards and Determinations Made and Industrial Agreements Filed.**—The following table shows the number of awards and determinations made and industrial agreements filed, excluding variations, in each State and under the Commonwealth Statutes during each quarter of the years 1922 and 1923. †

* Information as to the main provisions of the various Acts in force may be found in the Official Year Book No. 16, pages 568 to 571.

† Corresponding figures for the years 1914 to 1921 were published in Labour Reports, Nos. 0, p. 108, and 12, p. 112.