

§ 11. International Comparisons : Retail Price Index-Numbers.

The tables giving index-numbers of retail prices for (i) cost of living, including articles other than food, and (ii) foodstuffs only, appearing in previous issues of this Report have been discontinued for the duration of the war, owing partly to the need for economy, and partly to the information for many countries being no longer available. The figures, which were taken chiefly from the League of Nations *Monthly Bulletin of Statistics*, and the International Labour Office *Year Book of Labour Statistics*, are of course still obtainable from the publications mentioned.

CHAPTER II.—WHOLESALE PRICES AND PRICE INDEXES.

§ 1. Melbourne Wholesale Price Index.

1. General.—The data on which this chapter is based relate almost entirely to wholesale prices in Melbourne. An index of Sydney wholesale prices is compiled by the Government Statistician of New South Wales, and published in the *Year Book* and the *Monthly Summary of Business Statistics* of that State.

The index of Melbourne wholesale prices was first computed in 1912, and has been continued on the same lines since that year. The items included in the (old) Melbourne wholesale price index comprise chiefly basic materials which in the form of raw material, food, or as a source of power, enter into production for home consumption. The purpose of the index, therefore, is to measure the changes in the prices of these particular materials rather than the changes in prices generally. As Australia does not, to any extent, manufacture from imported raw materials commodities for export, the local consumption appears to give the most appropriate weighting. Any lack of uniformity in the variations of the index-numbers for these wholesale prices and for retail prices would indicate broadly changes in the relation of manufacturing and distributing charges to the cost of basic materials.

The scope of this wholesale price index can best be understood by an examination of the list of commodities included which is given on page 34. This list is, to a large extent, comparable with that used in the compilation of the *Economist* and *Statist* index-numbers for Great Britain, but differs largely from that used for the wholesale price index-numbers of the United States (Bureau of Labour) or Canada (Department of Labour).

2. The Grouping of the Commodities.—The commodities are divided into eight groups, as set out on page 34. The descriptions of the groups are given in the following tables with the proportional cost of each group for the year 1940. These proportions may be used with fair accuracy as "weights" to combine any group index-numbers at the present time, but would give unsatisfactory results if used for a time when prices were relatively much different.

Groups of Commodities.

Group.	Description.	Percentage of Aggregate Cost (1910).
I.	"Metals and Coal"	15
II.	"Wool, Cotton", also jute, leather, &c. ..	14
III.	"Agricultural Produce"	25
IV.	"Dairy Produce"	9
V.	"Groceries"	16
VI.	"Meat"	11
VII.	"Building materials" (mostly timber) ..	9
VIII.	"Chemicals" (excluding fertilizers) ..	1
		100

It will be noticed that the group "Chemicals" is practically negligible.

The index relates chiefly to basic materials, but a certain proportion of Australian manufacturing costs enters into all groups. The amount is small in Meat (VI.), Agricultural Produce (III.), and Wool, Cotton (II.), and greater in others, but the difference is not sufficient to justify any inference as to different changes of the price-level for manufactured goods and farm products. The number and weight of manufactured commodities included are too small to warrant deductions of this nature from any possible grouping.

Many of the commodities included are affected by the tariff. Wool, Cotton (II.), Agricultural Produce (III.), and Meat (VI.), are little affected, and Dairy Produce (IV.) not greatly, but in the other groups the tariff is a dominating influence.

Melbourne Wholesale Price Index : Commodities included, Units of Measurement, and "Mass-Units".

Commodity.	Quality.	Unit.	Mass Unit.	Commodity.	Quality.	Unit.	Mass Unit.
GROUP I. (Metals and Coal).				GROUP II. (Wool, Cotton, also Jute, Leather, &c.)			
Iron—				Branbags	Doz.	120	
Fig ..	Mixed	Ton	6½	Cornsacks	"	250	
Rod and Bar	Nos.	"	3½	Woolpacks	Each	200	
Angle ..	Stafford	"	3½	Leather—			
Plate ..	"	"	3	Chrome Box	ft.	1,200	
Hoop ..	"	"	½	Hide			
Galvanized	26 gauge	"	5	Rough Tanned	lb.	600	
Fencing Wire	No. 8	Ton	6	—Split			
Tinned Plates	I.C. Coke	Box	60	Sole Leather—	"	600	
Zinc, sheet	"	Ton	1	Factory			
Lead, sheet	"	"	½	Sides			
" pipes	"	"	½	Cotton	Raw ..	"	24,000
Copper, sheet	"	lb.	2,000	Wool	Greasy ..	"	12,200
Quicksilver	"	"	12	Twine	Reaper ..	"	150
Coal ..	Newcastle, on wharf	Ton	600	Tallow	Reaper and Blender Mutton Prime	Ton	1½

Melbourne Wholesale Price Index: Commodities included, Units of Measurement, and "Mass-Units"—continued.

Commodity.	Quality.	Unit.	Mass Unit.	Commodity.	Quality.	Unit.	Mass Unit.
GROUP III. (Agricultural Produce).				GROUP V.—continued. (Groceries).			
Wheat ..	..	Bus.	500	Starch ..	Coleman's White	lb.	100
Flour ..	..	Ton	48	Blue ..	Keen's	..	50
Bran ..	..	..	14	Matches ..	Australian Safety	Gross	90
Pollard ..	..	..	14	Candles ..	Rangoon	lb.	1,600
Oats ..	Milling ..	Bus.	1,200	Tobacco ..	..	..	1,300
Oatmeal ..	Colonial	Ton	14	Kerosene ..	..	Gall.	1,700
Barley ..	English	Bus.	150				
..	Cape ..	..	100				
Maize ..	..	..	1,000				
Hay ..	Best Mngtr.	Ton	135				
Chaff ..	Prime ..	..	135				
Straw ..	Victorian	..	25				
Peas ..	..	Bus.	55				
Potatoes ..	..	Ton	40				
Malt ..	Victorian	Bus.	140				
Onions ..	..	Ton	3				
GROUP IV. (Dairy Produce).				GROUP VI. (Meat).			
Ham ..	..	lb.	800	Beef ..	Average quality	100 lb.	390
Bacon ..	..	..	3,200	Mutton ..	..	lb.	33,000
Cheese ..	..	..	1,500	Lamb ..	..	..	5,600
Butter ..	Best Fresh	..	9,500	Veal ..	..	..	2,000
Lard ..	Bulk ..	..	200	Pork ..	..	..	3,700
Eggs ..	Ordinary	Doz.	1,800				
Honey ..	..	lb.	600				
Beeswax ..	..	..	40				
Condensed Milk	Bacchus Marsh	Doz. lb.	160				
GROUP V. (Groceries).				GROUP VII. (Building Materials).			
Currants ..	..	lb.	1,400	Timber—	Flooring—	100 ft. lin.	30
Raisins ..	Sultanas	..	1,400		6 X 1 1/2	..	30
Herrings ..	1-lb. fresh	Doz. 1-lb. tins	50		6 X 2	..	30
Salmon ..	1-lb. tall Alaska	..	50		6 X 3	..	30
Sardines ..	Halves	Doz. halves	100		6 X 4	..	30
Tea ..	..	lb.	3,000		Weather-boards	..	100
Coffee ..	Plantation	..	200		Oregon	1,000 ft. sup.	30
Cocoa ..	McKenzie's	..	100		Shelving	..	10
Sugar ..	No. 1A	Ton	22	Cement ..	Portland	Cask	30
Macaroni ..	..	lb.	200	White Lead ..	..	Ton	1
Tapioca ..	..	cwt.	7	Slates ..	Welsh	1,000	1
Rice ..	..	Ton	2		20 X 10		
Salt ..	Australian fine	..	7				
Salt ..	Rock ..	..	1				
Mustard ..	Coleman's	Doz. 1-lb. tins	6				
				GROUP VIII. (Chemicals).			
				Cream of Tartar	In kegs	lb.	400
				Bi-Carbonate of Soda	..	Ton	1
				Saltpetre ..	Refined	..	1-20
				Sulphur ..	..	..	1
				Caustic Soda ..	..	cwt.	1
				Alum ..	Lump ..	Ton	1
				Potassium Cyanide	..	lb.	570

3. Index-Numbers.—Index-numbers for each group of commodities, as well as for all groups combined, are shown in the following table:—

Melbourne Wholesale Price Index-Numbers, 1861 to 1940.

(Base of each Group: Year 1911 = 1,000.)

Year.	I. Metals and Coal.	II. Wool, Cotton, Leather, &c.	III. Agricul- tural Pro- duce, &c.	IV. Dairy Produce.	V. Grocer- ies.	VI. Meat.	VII. Building Materials.	VIII. Chemical- s.	All Groups.
1861 ..	1,438	1,381	1,583	1,008	1,963	..	1,070	2,030	1,530
1871 ..	1,096	1,257	1,236	854	1,586	..	1,044	1,409	1,229
1881 ..	1,178	1,115	1,012	935	1,421	..	1,091	1,587	1,121
1891 ..	895	847	1,024	995	1,032	888	780	1,194	945
1901 ..	1,061	774	928	1,029	1,048	1,345	841	917	974
1902 ..	1,007	756	1,192	1,215	945	1,447	837	881	1,051
1903 ..	923	834	1,209	1,059	936	1,443	875	921	1,049
1904 ..	821	885	754	876	916	1,427	845	875	890
1905 ..	772	850	894	980	942	1,209	801	859	910
1906 ..	882	978	916	972	923	1,110	896	864	948
1907 ..	1,017	1,017	973	1,020	948	1,294	968	961	1,021
1908 ..	1,033	901	1,312	1,198	968	1,335	935	891	1,115
1909 ..	1,014	907	1,000	1,119	978	1,088	911	815	993
1910 ..	1,004	1,052	969	1,100	999	1,008	996	898	1,003
1911 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1912 ..	1,021	991	1,370	1,206	1,052	1,357	1,057	978	1,170
1913 ..	1,046	1,070	1,097	1,054	1,024	1,252	1,128	995	1,088
1914 ..	1,099	1,032	1,107	1,137	1,021	1,507	1,081	1,253	1,149
1915 ..	1,284	1,017	2,162	1,530	1,133	2,435	1,275	1,528	1,604
1916 ..	1,695	1,423	1,208	1,485	1,322	2,515	1,491	1,760	1,504
1917 ..	2,129	2,008	1,157	1,423	1,343	2,403	1,884	2,171	1,662
1918 ..	2,416	2,360	1,444	1,454	1,422	2,385	2,686	3,225	1,934
1919 ..	2,125	2,363	1,985	1,651	1,516	2,348	2,851	2,898	2,055
1920 ..	2,298	2,624	2,439	2,209	1,918	3,279	3,226	3,825	2,480
1921 ..	2,173	1,562	1,767	2,000	1,976	2,158	2,733	2,503	1,983
1922 ..	1,942	1,681	1,628	1,648	1,869	1,787	2,005	1,965	1,756
1923 ..	1,826	2,140	1,778	1,857	1,746	2,579	2,025	1,933	1,944
1924 ..	1,835	2,418	1,647	1,655	1,721	2,223	1,815	1,806	1,885
1925 ..	1,852	1,967	1,797	1,636	1,723	2,212	1,711	1,790	1,844
1926 ..	1,938	1,582	2,001	1,784	1,731	1,931	1,665	1,816	1,832
1927 ..	1,962	1,650	1,826	1,823	1,724	2,111	1,624	1,866	1,817
1928 ..	1,912	1,781	1,726	1,751	1,707	2,015	1,744	1,923	1,792
1929 ..	1,912	1,556	1,792	1,853	1,690	2,346	1,734	1,922	1,893
1930 ..	1,866	1,127	1,484	1,627	1,666	2,025	1,875	1,982	1,596
1931 ..	1,826	1,039	1,121	1,399	1,794	1,508	2,025	2,166	1,428
1932 ..	1,736	1,000	1,230	1,303	1,767	1,348	2,043	2,127	1,411
1933 ..	1,713	1,118	1,175	1,195	1,714	1,487	2,061	2,106	1,409
1934 ..	1,660	1,261	1,288	1,274	1,735	1,540	2,015	2,018	1,471
1935 ..	1,602	1,217	1,344	1,325	1,729	1,508	1,964	1,996	1,460
1936 ..	1,566	1,331	1,480	1,351	1,731	1,684	1,969	1,907	1,543
1937 ..	1,722	1,406	1,604	1,451	1,750	1,678	2,430	2,006	1,656
1938 ..	1,746	1,051	1,789	1,549	1,747	1,871	2,238	2,059	1,662
1939 ..	1,758	1,101	1,820	1,557	1,752	1,710	2,220	2,075	1,665
1940 ..	1,854	1,362	1,568	1,567	1,784	1,882	2,890	2,298	1,718

NOTE.—The figures given in this table are comparable in the vertical columns, but are not directly comparable horizontally.

4. Variations since 1914.—The variations in the index-numbers of the separate commodity groups for the years 1915 to 1940, are shown in the following table, taking July, 1914, as base (= 1,000) for each group:—

Melbourne Wholesale Price Index-Numbers.

(Base of each Group : July, 1914 = 1,000.)

Period.	I. Metals and Coal.	II. Wool, Cotton, Leather, &c.	III. Agricultural Produce, &c.	IV. Dairy Produce.	V. Groceries.	VI. Meat.	VII. Building Materials	VIII. Chemicals.	IX. All Groups
July, 1914 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Year 1915 ..	1,166	934	2,024	1,272	1,098	1,502	1,164	1,490	1,406
" 1916 ..	1,539	1,307	1,130	1,266	1,551	1,361	1,722	1,716	1,318
" 1917 ..	1,919	1,841	1,084	1,181	1,302	1,480	1,722	2,141	1,456
" 1918 ..	2,197	2,324	1,551	1,210	1,378	1,469	2,448	3,085	1,695
" 1919 ..	1,930	2,169	1,858	1,373	1,469	1,448	2,602	2,827	1,801
" 1920 ..	2,001	2,430	2,228	1,840	1,860	2,022	2,944	2,764	2,178
" 1921 ..	1,974	1,250	1,653	1,663	1,916	1,331	2,495	2,346	1,668
" 1922 ..	1,763	1,543	1,523	1,370	1,811	1,102	1,830	1,917	1,541
" 1923 ..	1,658	1,972	1,664	1,527	1,693	1,590	1,848	1,885	1,704
" 1924 ..	1,667	2,220	1,541	1,376	1,668	1,371	1,656	1,761	1,653
" 1925 ..	1,682	1,806	1,681	1,360	1,670	1,364	1,562	1,746	1,637
" 1926 ..	1,760	1,453	1,873	1,483	1,677	1,191	1,519	1,771	1,606
" 1927 ..	1,782	1,515	1,709	1,516	1,673	1,304	1,482	1,820	1,593
" 1928 ..	1,737	1,635	1,661	1,450	1,654	1,242	1,590	1,876	1,571
" 1929 ..	1,737	1,428	1,677	1,540	1,628	1,385	1,601	1,895	1,381
" 1930 ..	1,695	1,035	1,389	1,353	1,614	1,249	1,712	1,933	1,399
" 1931 ..	1,659	954	1,049	1,163	1,738	930	1,840	2,112	1,254
" 1932 ..	1,577	918	1,152	1,083	1,712	831	1,866	2,074	1,237
" 1933 ..	1,556	1,026	1,100	994	1,661	917	1,882	2,034	1,235
" 1934 ..	1,508	1,158	1,205	1,059	1,682	950	1,839	1,968	1,290
" 1935 ..	1,456	1,116	1,238	1,100	1,677	937	1,797	1,946	1,288
" 1936 ..	1,422	1,222	1,385	1,123	1,678	1,038	1,798	1,848	1,333
" 1937 ..	1,600	1,291	1,302	1,206	1,696	1,035	2,219	1,957	1,453
" 1938 ..	1,586	965	1,074	1,287	1,693	1,154	2,043	2,008	1,457
" 1939 ..	1,507	1,011	1,704	1,295	1,698	1,054	2,026	2,024	1,460
" 1940 ..	1,684	1,250	1,467	1,303	1,728	1,161	3,638	2,242	1,502

§ 2.—Basic Materials and Foodstuffs.

I. General.—As mentioned above, the Melbourne Wholesale Price Index was first computed in 1912. Neither the component items nor the weighting have been varied. Consequently the index is a measure of changes in wholesale price levels based on usages which have altered substantially since the period on which the weighting was determined. As such it is useful as an indication of long-term trends over the past 80 years which it covers, on the assumption that the relative importance of component items remained constant. But it no longer serves as a measure of price variations from month to month or from year to year of commodities weighted in accordance with present day consumption. Reference to the description of the index in § 1 above will indicate that animal fodders preponderate in the "Agricultural Produce" group, while "Building Materials" include little besides imported timber. In other groups, some principal items have increased in consumption while others have decreased. It was resolved, therefore, at the Conference of Statisticians at Brisbane in 1930 that the time had come to revise and extend the items included in

order to bring the index into line with changed conditions. An investigation to that end was commenced, and in the course of the past few years, many new price-series have been collected on a monthly basis back to January, 1928. Some of these have been incorporated in a new index of the prices of basic materials and foodstuffs, preliminary index-numbers of which are currently published in the *Monthly Review of Business Statistics*. Others are being incorporated in a number of "special-purpose" indexes, which it is hoped to publish in the future. Their construction has been delayed in order to make use, for weighting purposes, of the larger amount of information which is now becoming available as the result of the collection of more extensive statistics of factory production. The price quotations have in the main been obtained directly from manufacturers and dealers, and, with a few important exceptions, from Melbourne sources. Apart from home-produced building materials, coal and one or two minor commodities, however, the price movements may be taken as representative of fluctuations in wholesale prices of basic materials in most Australian markets. The weighting system adopted is based on average annual consumption during the years 1928-29 to 1934-35 inclusive. In the meantime, however, the original index has been continued on existing lines, as set out in § 1 of this chapter.

2. **Index-Numbers.**—Index-numbers for each group of commodities and for all groups combined for this new index of wholesale prices of basic materials and foodstuffs are given in the following table:—

Wholesale Price Index-Numbers—Basic Materials and Foodstuffs, 1928 to September, 1941.

(Base of each Group : Year 1928 = 1,000.)

Period.	Metals and Coal.	Oils, Fats and Waxes	Textiles	Chemicals.	Rubber and Hides.	Building Materials.	Foodstuffs and Tobacco.	Goods principally Imported.	Goods principally Home Produced.	All Groups
1928	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1929	1,000	1,019	831	977	769	980	1,070	1,011	1,033	1,028
1930	954	1,082	612	955	548	998	951	1,053	917	951
1931	890	1,116	575	979	581	1,012	812	1,119	791	873
1932	827	1,069	539	981	530	984	792	1,082	762	842
1933	818	882	621	949	564	995	778	1,009	746	812
1934	785	816	664	885	601	979	808	989	752	811
1935	740	877	620	817	593	971	849	1,025	761	827
1936	723	900	761	815	724	984	906	1,045	807	867
1937	791	952	872	817	580	1,102	929	1,126	843	914
1938	801	949	607	831	664	1,041	960	1,094	842	911
1939	814	972	650	835	779	1,047	958	1,112	858	920
1940	836	1,029	776	969	934	1,269	998	1,331	903	1,068
1939—										
January ..	810	944	577	833	713	1,022	950	1,103	843	906
February ..	794	947	587	834	705	1,022	971	1,077	863	915
March	813	947	577	835	711	1,022	1,032	1,075	910	950
April	813	948	574	835	697	1,016	1,005	1,075	800	935
May	813	949	578	835	702	1,016	993	1,079	845	942
June	813	950	597	835	710	1,007	993	1,078	846	941
July	814	949	613	835	690	1,007	993	1,075	841	933
August ..	815	947	610	835	727	1,007	893	1,076	833	923
September ..	815	951	728	835	797	1,091	912	1,121	851	935
October ..	815	996	786	835	886	1,092	934	1,158	862	961
November ..	828	1,042	791	835	977	1,127	941	1,200	859	981
December ..	828	1,090	779	839	1,011	1,133	947	1,236	855	948

Wholesale Price Index-Numbers—Basic Materials and Foodstuffs, 1928 to September, 1941—continued.

(Base of each Group : Year 1928 = 1,000.)

Period.	Metals and Coal	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides	Building Materials.	Foodstuffs and Tobacco.	Goods principally Imported.	Goods principally Home Produced.	All Groups
1940—										
January ..	828	1,099	782	922	939	1,132	959	1,232	869	958
February ..	829	1,100	755	923	953	1,193	965	1,247	874	966
March ..	832	1,143	771	923	945	1,194	977	1,263	886	979
April ..	848	1,155	780	924	923	1,196	1,001	1,272	905	995
May ..	834	1,278	780	924	941	1,194	1,013	1,326	914	1,015
June ..	834	1,283	775	923	922	1,279	1,000	1,349	905	1,014
July ..	834	1,284	773	1,006	913	1,279	1,001	1,358	904	1,015
August ..	834	1,279	793	1,014	911	1,351	1,014	1,370	920	1,030
September ..	834	1,276	775	1,011	912	1,351	1,021	1,365	925	1,033
October ..	840	1,286	786	1,012	919	1,353	1,023	1,395	921	1,037
November ..	840	1,286	784	1,019	965	1,351	992	1,389	904	1,023
December ..	840	1,290	788	1,019	960	1,351	1,011	1,406	912	1,033
1941—										
January ..	846	1,289	780	1,020	948	1,346	1,017	1,406	917	1,037
February ..	847	1,287	788	1,020	941	1,347	978	1,412	887	1,016
March ..	847	1,298	803	1,022	950	1,347	970	1,422	883	1,012
April ..	856	1,329	812	1,022	973	1,347	972	1,433	888	1,021
May ..	858	1,329	828	1,022	1,024	1,371	971	1,454	885	1,025
June ..	858	1,330	830	1,022	979	1,371	974	1,456	886	1,025
July ..	884	1,331	812	1,022	983	1,374	1,008	1,471	910	1,047
August ..	887	1,355	822	1,042	982	1,374	1,037	1,481	933	1,068
September ..	917	1,377	831	1,123	982	1,374	1,051	1,532	942	1,087

CHAPTER III.—WAGES.

§ 1. Operations Under Arbitration and Wages Board Acts and Industrial Legislation.

1. **General.**—Particulars regarding operations under the Commonwealth and State Laws for the regulation of wages and hours and conditions of labour were first compiled for the year 1913, and reviews to the end of each annual period appear in previous issues of the *Labour Report* and in the *Quarterly Summaries of Australian Statistics*.

2. **Laws Regulating Industrial Matters.**—The Laws in force regulating rates of wage, hours of labour, and working conditions generally in both Commonwealth and State jurisdictions are as follows :—

COMMONWEALTH.

- Commonwealth Conciliation and Arbitration Act 1904-1934.
- National Security Act 1939-1940 and certain Regulations made thereunder.
- Arbitration (Public Service) Act 1920-1934.
- Industrial Board Ordinance, 1936-1940 (Australian Capital Territory).

STATES.

- New South Wales .. Industrial Arbitration Act 1940 (Consolidated).
- Victoria .. Factories and Shops Act 1928-1939.
- Queensland .. Industrial Conciliation and Arbitration Act 1932-1938.
- South Australia .. The Industrial Code 1920-1937.
- Western Australia .. Industrial Arbitration Act 1912-1937.
- Tasmania .. Wages Board Act 1920-1938.