

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 41. 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 41. The descriptions of the groups are given in the following tables with the proportional cost of each group for the year 1939. 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 (1939).
I.	"Metals and Coal"	15
II.	"Wool, Cotton", also jute, leather, &c. ..	11
III.	"Agricultural Produce"	31
IV.	"Dairy Produce"	9
V.	"Groceries"	16
VI.	"Meat"	10
VII.	"Building materials" (mostly timber) ..	7
VIII.	"Chemicals" (excluding fertilizers) ..	1

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—				Branbaga	Doz.	110	
Pig ..	Mixed Nos.	Ton	6½	Cornsacks	"	250	
Rod and Bar	Stafford	"	3½	Woolpacks	Each	300	
Angle ..	"	"	3½	Leather—			
Plate ..	"	"	3	Chrome Box ..	ft.	1,200	
Hoop ..	"	"	½	Hide	lb.	600	
Galvanized ..	26 gauge	"	5	Rough Tanned	"	600	
Fencing Wire ..	No. 8	Ton	6	—Split	"	600	
Tinned Plates ..	I.C. Coke	Box	60	Sole Leather—			
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 and	150	
Coal	Newcastle, on wharf	Ton	600	Blinder			
				Mutton Prime	Ton	14	

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	1,538
1871 ..	1,096	1,257	1,236	864	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	1,200	1,059	930	1,443	875	921	1,049
1904 ..	821	885	754	876	916	1,427	845	875	890
1905 ..	772	850	864	980	942	1,209	801	859	910
1906 ..	882	978	916	972	923	1,110	866	864	948
1907 ..	1,037	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	1,207	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	2,086	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	2,825	2,480
1921 ..	2,173	1,362	1,767	2,000	1,976	2,158	2,733	2,303	1,983
1922 ..	1,942	1,681	1,628	1,648	1,869	1,787	2,005	1,965	1,756
1923 ..	1,826	2,148	1,778	1,837	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 ..	1,911	1,556	1,792	1,853	1,690	2,246	1,754	1,942	1,803
1930 ..	1,866	1,127	1,484	1,627	1,666	2,025	1,875	1,982	1,586
1931 ..	1,826	1,039	1,231	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	1,469
1936 ..	1,566	1,331	1,480	1,351	1,731	1,684	1,969	1,907	1,543
1937 ..	1,772	1,406	1,601	1,451	1,750	1,678	2,430	2,006	1,856
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	1,386	1,568	1,567	1,784	1,882	2,890	2,298	1,717

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.	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	1,233	1,266	1,551	1,361	1,716	1,318
" 1917 ..	1,919	1,841	1,084	1,181	1,302	1,480	1,722	2,143	1,456
" 1918 ..	2,197	2,324	1,351	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	2,704	2,178
" 1921 ..	1,974	1,250	1,653	1,663	1,916	1,331	2,495	2,246	1,668
" 1922 ..	1,763	1,543	1,523	1,370	1,811	1,102	1,830	1,017	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	1,617
" 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	1,671	1,302	1,482	1,820	1,593
" 1928 ..	1,737	1,635	1,661	1,456	1,654	1,242	1,590	1,876	1,571
" 1929 ..	1,737	1,428	1,677	1,540	1,638	1,385	1,601	1,895	1,581
" 1930 ..	1,693	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	1,257
" 1932 ..	1,577	918	1,152	1,083	1,712	831	1,865	2,074	1,237
" 1933 ..	1,556	1,026	1,100	994	1,661	917	1,882	2,054	1,235
" 1934 ..	1,508	1,158	1,205	1,069	1,682	950	1,839	1,968	1,290
" 1935 ..	1,456	1,116	1,258	1,100	1,677	931	1,797	1,946	1,288
" 1936 ..	1,422	1,222	1,385	1,123	1,678	1,038	1,708	1,948	1,353
" 1937 ..	1,609	1,291	1,502	1,206	1,666	1,035	1,279	1,957	1,452
" 1938 ..	1,586	968	1,674	1,287	1,663	1,134	2,043	2,008	1,457
" 1939 ..	1,597	1,011	1,704	1,295	1,698	1,054	2,026	2,024	1,460
" 1940 ..	1,684	1,273	1,467	1,303	1,728	1,161	3,638	2,242	1,505

§ 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 December, 1940.

(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	875
1932 ..	817	1,069	530	981	530	984	792	1,082	762	812
1933 ..	818	882	621	949	504	995	778	1,099	746	812
1934 ..	785	816	664	885	601	979	808	989	752	811
1935 ..	710	877	620	817	593	971	849	1,025	761	827
1936 ..	725	909	761	815	724	984	906	1,045	807	867
1937 ..	791	952	872	817	889	1,102	929	1,126	843	914
1938 ..	801	949	607	831	664	1,041	960	1,094	852	911
1939 ..	814	972	650	835	779	1,047	948	1,112	852	916
1940 ..	836	1,229	776	969	934	1,269	984	1,331	894	1,001
1938—										
January ..	803	955	665	822	708	1,078	895	1,108	812	885
February ..	799	954	644	831	646	1,071	904	1,102	816	886
March ..	800	952	625	831	637	1,065	921	1,098	827	893
April ..	800	950	612	831	620	1,065	941	1,097	840	903
May ..	798	949	613	831	600	1,053	960	1,090	853	911
June ..	796	947	587	831	594	1,055	995	1,092	874	928
July ..	800	948	606	831	651	1,013	1,021	1,084	894	941
August ..	801	947	599	831	670	1,017	1,046	1,105	906	955
September ..	802	946	577	831	670	1,010	1,095	1,094	880	932
October ..	805	946	587	832	735	1,022	977	1,085	868	921
November ..	805	946	595	832	729	1,022	930	1,082	836	896
December ..	802	945	574	832	702	1,022	919	1,085	825	889
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	803	915
March ..	813	947	577	835	711	1,022	1,032	1,075	910	950
April ..	813	948	574	835	697	1,010	1,005	1,075	890	935
May ..	813	949	578	835	702	1,016	929	1,079	817	896
June ..	813	950	597	835	710	1,007	928	1,078	837	896
July ..	814	949	613	835	699	1,007	918	1,075	831	891
August ..	815	947	610	835	727	1,007	907	1,076	824	880
September ..	815	951	728	835	797	1,031	921	1,121	836	906
October ..	815	956	786	835	886	1,092	948	1,158	855	930
November ..	828	1,042	791	835	977	1,127	938	1,200	852	937
December ..	828	1,090	779	839	1,011	1,133	934	1,236	847	943

Wholesale Price Index-Numbers—Basic Materials and Foodstuffs, 1928 to December, 1940—continued.

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

Period.	Metals and Coal	Oils, Fats and Waxes.	Tex-tiles.	Chemicals.	Rubber and Hides	Build-ing Materials.	Food-stuffs and Tobacco.	Goods principally Imported.	Goods principally Home Produced.	All Groups
1940—										
January ..	828	1,009	781	922	939	1,132	941	1,232	857	949
February ..	829	1,100	755	923	953	1,193	949	1,247	864	958
March ..	832	1,143	771	923	945	1,194	965	1,263	878	972
April ..	846	1,155	780	924	923	1,196	986	1,272	895	988
May ..	834	1,278	780	924	941	1,194	1,002	1,326	966	1,009
June ..	834	1,283	775	924	922	1,279	989	1,349	898	1,009
July ..	834	1,284	773	1,006	913	1,279	985	1,358	897	1,010
August ..	834	1,279	703	1,014	911	1,351	1,001	1,370	911	1,023
September ..	834	1,279	773	1,014	912	1,351	1,008	1,365	916	1,026
October ..	840	1,286	786	1,012	919	1,351	1,009	1,395	911	1,030
November ..	840	1,286	784	1,019	965	1,351	976	1,389	893	1,014
December ..	840	1,390	788	1,019	960	1,351	992	1,406	899	1,023

§ 3. International Comparisons : Wholesale Price Index-Numbers.

The following table gives index-numbers of wholesale prices in the years 1933 to 1940 for Australia and other countries, the prices in each country for the year 1929 being taken as base (= 100). The figures, which have been taken chiefly from the *Monthly Bulletin of Statistics* published by the League of Nations, show merely the fluctuations in prices in each country, and are obviously not comparable horizontally.

Wholesale Price Index-Numbers : Principal Countries.

(Base : Year 1929 = 100.)

Period	UNITED KINGDOM.			BELGIUM.	BRITISH INDIA (CALCUTTA).	CHINA (SHANGHAI).	DENMARK.	DUTCH EAST INDIES.	EGYPT (CAIRO).	FINLAND.	FRANCE.	GERMANY.
	Board of Trade.	"Statistic."	"Economist."	Official.	Official.	National Tariff Commission.	Official.	Official.	Official.	Official.	Official.	Official.
1933 ..	75	70	68	59	62	99	83	49	61	91	64	68
1934 ..	77	72	71	56	63	93	90	46	75	92	60	72
1935 ..	78	74	74	53	65	92	92	45	82	93	54	74
1936 ..	83	78	79	69	65	104	98	46	73	96	66	76
1937 ..	95	90	89	80	72	124	110	61	76	113	93	77
1938 ..	89	80	78	74	68	146	104	57	79	105	104	77
1939 ..	80	84	80	76	76	232	109	59	76	..	..	78
1939 VI. ..	86	79	76	70	72	191	102	56	72	107	109	78
VII. ..	86	78	75	70	71	196	103	56	72	107	108	78
VIII. ..	86	79	76	70	71	252	103	56	72	108	107	78
IX. ..	92	87	83	83	81	304	118	57	76	..	..	78
X. ..	97	93	90	86	84	318	122	62	78	..	..	78
XI. ..	104	98	94	90	93	320	128	66	78	..	..	78
XII. ..	107	105	99	93	97	355	132	70	84	..	..	78
1940 I. ..	110	109	99	97	92	375	143	71	84	..	..	79
II. ..	113	109	99	99	89	432	150	70	83	..	..	79
III. ..	113	108	101	99	86	417	154	..	82	..	..	80

Wholesale Price Index-Numbers: Principal Countries—continued.

(Base: Year 1929 = 100.)

Period.	ITALY.	JAPAN.	NETHER- LANDS.	NORWAY.	POLAND.	SWEDEN.	SWITZER- LAND.	UNITED STATES.	AUSTRALIA.	CANADA.	NEW ZEALAND.	UNION OF SOUTH AFRICA.
	National Index.	Bank of Japan.	Official.	Official.	Official.	Official.	Official.	Bureau of Labour Statistics.	Official. (b)	Official.	Official.	Official.
1933 ..	67	82	63	82	61	..	65	69	79	70	91	80
1934 ..	65	81	63	83	58	..	64	79	79	71	92	88
1935 ..	71	84	62	85	55	100	64	84	80	75	95	82
1936 ..	80	90	64	90	56	..	68	85	84	78	96	85
1937 ..	93	108	76	105	62	114	79	91	89	88	103	87
1938 ..	100	114	72	103	58	111	76	82	89	82	105	90
1939 ..	..	126	74	105	..	115	79	81	89	79	108	89
1939 VI. ..	103	123	70	101	59	109	75	79	87	77	107	..
VII. ..	101	123	70	101	53	110	75	79	87	76	108	86
VIII. ..	..	124	71	101	..	111	76	79	86	76	110	..
IX. ..	..	131	76	103	..	118	83	83	88	82	100	..
X. ..	..	133	81	112	..	124	85	83	91	83	110	90
XI. ..	..	136	84	118	..	128	87	83	91	84	112	91
XII. ..	..	143	85	120	..	132	89	83	92	85	113	93
1940 I. ..	..	146	86	122	..	136	90	83	92	86	113	94
II. ..	..	144	88	128	..	138	92	82	93	87	115	95
III. ..	..	142	88	134	..	140	94	82	95	87	117	96

(a) Base: Year 1935 = 100.

(b) Basic Materials and Foodstuffs Index.

CHAPTER III.—WAGES.

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

1. **General.**—Particulars regarding operations under the Commonwealth and State Acts 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. **Acts Regulating Industrial Matters.**—The Acts 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 (Industrial Peace) Regulations—Statutory Rules
1940, No. 290.
Arbitration (Public Service) Act 1920-1934.
Industrial Board Ordinance, 1936-1940 (Australian Capital Territory).

STATES.

New South Wales .. Industrial Arbitration Act 1940.
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.