

CHAPTER II.—WHOLESALE PRICES AND PRICE INDEXES.

§ 1. General.

Two indexes of wholesale prices are compiled by the Bureau. These are—

- (i) The Melbourne Wholesale Price Index ;
- (ii) The Wholesale Price (Basic Materials and Foodstuffs) Index.

Particulars of the Melbourne Wholesale Price Index, which is now obsolescent, are given in § 3 commencing on page 27 below.

After reviewing the list of items and weighting of this index the 1930 Conference of Statisticians resolved that a new index of Wholesale Prices of Basic Materials and Foodstuffs should be compiled. This index extends back to the year 1928 and is compiled monthly. This Wholesale Price (Basic Materials and Foodstuffs) Index is one of a series of wholesale price indexes designed for special purposes.

§ 2. Wholesale Price (Basic Materials and Foodstuffs) Index.

1. **Price Quotations.**—The prices used in the index have in the main been obtained directly from manufacturers and merchants, and, with a few important exceptions, from Melbourne sources. Apart from locally produced building materials and one or two minor commodities, however, the price movements may be taken as representative of variations in wholesale prices of basic materials in most Australian markets.

Commodities in the index are priced in their primary or basic form wherever possible and in respect of imported materials as nearly as may be at the point where they first make effective impact on the local price structure. Thus the price of imported goods is not taken at the time of import, but rather on an ex-bond (or into factory) basis.

Broadly, where home-consumption prices exist for local products, they have been used in this index. During the year 1950-51 wool for local manufacture was subsidized. The home-consumption price for wool was used to calculate the index numbers shown in the table on page 27.

2. **Commodities and Grouping.**—For purposes of this index "basic" materials (as opposed to certain of the foodstuffs) are commodities in the primary or basic forms in which they first enter into productive processes carried out in Australia. The list of items comprises 80 commodities, divided into seven main groups. Each group is sub-divided into goods which are mainly imported, and goods which are mainly home-produced. A full list of these commodities is set out below, showing the quantity-multipliers (weights) for each commodity, and the percentage of the total aggregate value in 1950 contributed by each commodity and group.

3. **Method of Construction.**—The index is constructed on the simple aggregative fixed-weights formula. The weights (quantity-multipliers) are based on estimates of the average annual consumption of the commodities in Australia during the period 1928-29 to 1934-35 inclusive. Changes in usage, changes of category as between "imported" and "home-produced" for some commodities, and changes in the industrial structure have affected the validity of some of the weights in the index. These and other problems (e.g., dual prices for some commodities) are being examined with a view to revision of the list of items, its grouping and weighting, when conditions are more stable.

Wholesale Price (Basic Materials and Foodstuffs) Index.

List of Commodities, Units of Measurement, Quantity-multipliers, and Percentage of Total Aggregate in 1950.

Commodity.	Unit.	Quantity-multiplier. (Weight.)	Per-centage of Total Aggregate 1950.	Commodity.	Unit.	Quantity-multiplier. (Weight.)	Per-centage of Total Aggregate 1950.
Metals and Coal—				Rubber and Hides—			
Principally Imported—				Principally Imported—			
Aluminum ..	ton	985	0.05	Rubber, crude	lb.	24,214,400	1.17
Principally Home-produced—				Principally Home-produced—			
Iron and steel ..	ton	637,000	3.19	Calf skins ...	lb.	4,455,000	0.06
Briquettes ..	ton	243,000	0.14	Cattle hides ..	lb.	57,246,000	0.48
Copper, wire bars ..	ton	7,000	0.38	Tanning bark ..	ton	23,000	0.14
Coal ..	ton	9,300,000	11.21	Total ..			1.85
Lead, soft pig ..	ton	10,400	0.13				
Tin, ingots ..	ton	1,250	0.26	Building Materials—			
Zinc, ingots ..	ton	14,800	0.20	Principally Imported—			
Total ..			15.56	Timber, soft-woods ..	1,000 sup. ft.	346,300	5.00
Oils, Fats and Waxes—				Turpentine ..	gallon	458,000	0.07
Principally Imported—				Principally Home-produced—			
Cocunut oil ..	ton	6,500	0.22	Bricks ..	1,000	372,000	0.82
Fuel oil ..	ton	170,000	0.70	Cement ..	ton	479,000	0.80
Lined oil ..	gallon	2,250,000	0.68	Drain-pipes ..	foot	7,270,000	0.28
Lubricating oil ..	gallon	3,960,000	0.35	Glass, window ..	100 sq. ft.	82,370	0.06
Kerosene, power ..	gallon	21,000,000	0.50	Lime ..	ton	51,144	0.07
Petrol ..	gallon	218,000,000	8.45	Plaster ..	ton	53,000	0.18
Principally Home-produced—				Timber, hard-woods ..	100 sup. ft.	2,575,000	1.93
Beeswax ..	lb.	169,112	0.01	White lead ..	cwt.	60,000	0.09
Tallow ..	ton	26,000	0.23	Whiting ..	cwt.	274,000	0.08
Total ..			11.14	Total ..			9.38
Textiles—				Foodstuffs and Tobacco—			
Principally Imported—				Principally Imported—			
Hemp ..	ton	5,575	0.45	Tapioca ..	cwt.	719,000	0.59
Kapok ..	lb.	6,160,000	0.39	Cocoa, raw ..	cwt.	99,500	0.47
Jute fibre ..	ton	874	0.04	Coffee ..	lb.	3,469,000	0.23
Phormium tenax ..	ton	2,275	0.02	Tea ..	lb.	46,629,000	2.84
Silk, raw ..	lb.	453,900	0.20	Mustard ..	doz. lb.	47,000	0.02
Principally Home-produced—				Herrings ..	doz. lb.	276,000	0.08
Cotton, raw ..	lb.	15,900,000	0.61	Salmon ..	doz. lb.	1,048,000	0.71
Wool, greasy ..	lb.	50,200,000	4.50	Sild ..	doz.	807,300	0.16
Total ..			6.21	4-oz. tins ..	lb.	17,451,000	7.21
Chemicals—				Tobacco, leaf ..			
Principally Imported—				Principally Home-produced—			
Ammonium sulphate ..	ton	23,830	0.16	Barley ..	bushel	4,940,000	0.50
Potash, muriate ..	ton	4,053	0.04	Maize ..	bushel	315,000	0.05
Potash, sulphate ..	ton	2,025	0.02	Oats ..	bushel	14,970,000	1.43
Soda ash ..	ton	21,400	0.13	Rice ..	cwt.	323,200	0.19
Soda, nitrate ..	ton	1,100	0.01	Wheat ..	bushel	39,900,000	3.75
Soda, nitrate ..	ton	3,600	0.03	Onions ..	ton	41,000	0.23
Sulphur ..	ton	93,500	0.79	Peas ..	bushel	644,000	0.18
Principally Home-produced—				Potatoes ..	ton	348,000	2.28
Arsenic ..	ton	1,531	0.03	Sugar ..	ton	336,000	3.87
Blood and bone ..	ton	34,431	0.11	Beef ..	100 lb.	7,004,750	8.88
Methylated ..				Lamb ..	lb.	83,119,000	1.34
spirits ..	gallon	2,374,000	0.09	Mutton ..	lb.	436,414,000	4.65
Soda crystals ..	ton	4,986	0.02	Pork ..	lb.	47,562,000	1.24
Superphosphate ..	ton	704,144	1.65	Butter fat ..	lb.	194,500,000	5.28
Sulphuric acid ..	ton	226,450	0.87	Lard ..	lb.	1,427,000	0.02
Total ..			3.95	Milk ..	gallon	159,900,000	4.70
				Currants ..	lb.	9,000,000	0.14
				Sultanas ..	lb.	18,000,000	0.28
				Grapes ..	ton	94,000	0.37
				Total ..			51.91
				All Groups—			
				Principally Imported ..			51.78
				Principally Home-produced ..			68.22
				Total ..			100.00

4. **Index Numbers.**—Index numbers for each group of commodities and for all groups combined for the index of wholesale prices of basic materials and foodstuffs are given in the following table. Current index numbers, on the base: Average of three years ended June, 1939 = 100, are published in the *Monthly Review of Business Statistics*.

Wholesale Price (Basic Materials and Foodstuffs) Index Numbers.
(Base of each Group: Year 1928 = 100.)

Period.	Basic Materials.							Food-stuffs and Tobacco	Basic Materials and Foodstuffs.		
	Metals and Coal.	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides	Building Materials.	Total		Goods principally Imported (a)	Goods principally Home Produced	All Groups.
1928	100	100	100	100	100	100	100	100	100	100	100
1929	100	102	83	98	77	98	98	107	101	103	103
1930	95	108	61	95	55	100	93	95	105	92	95
1931	80	109	57	98	58	101	92	81	111	79	87
1932	83	107	54	98	53	98	88	79	108	76	84
1933	82	88	62	95	56	100	83	78	101	75	81
1934	79	82	66	89	60	98	80	81	99	75	81
1935	74	88	62	82	59	97	79	85	103	76	83
1936	72	91	76	82	72	99	82	91	105	81	87
1937	79	95	87	82	89	110	91	93	113	84	91
1938	80	95	61	83	66	104	88	96	109	85	91
1939	81	97	65	84	76	105	90	95	111	86	92
1940	84	123	78	97	93	127	104	100	134	90	101
1941	88	134	82	106	98	137	112	104	156	91	107
1942	97	151	93	116	104	154	125	119	180	101	120
1943	103	160	110	118	106	181	135	121	199	103	126
1944	103	160	108	118	106	183	135	122	200	104	127
1945	103	153	108	117	106	184	133	126	198	106	128
1946	102	142	119	116	104	187	131	128	194	107	128
1947	107	147	165	116	94	194	137	137	202	114	135
1948	129	159	234	127	100	204	157	156	217	133	153
1949	160	166	254	138	96	213	175	175	225	156	173
1950	179	179	382	179	155	258	208	202	263	183	203
1951	235	196	475	229	248	327	261	246	299	235	251
1952	299	216	408	277	193	432	304	275	325	273	286
1953	307	217	467	279	154	394	301	292	307	289	293
1954	305	204	387	260	154	380	290	290	296	284	287
1955	314	203	341	259	228	411	298	305	312	294	299
1955—											
January ..	310	203	360	259	179	383	291	289	306	281	287
February ..	311	203	363	259	194	391	293	297	309	287	292
March ..	312	202	364	259	200	399	295	302	309	292	296
April ..	312	202	356	259	205	406	296	298	310	289	294
May ..	312	202	357	259	222	408	297	302	311	292	297
June ..	311	202	349	259	231	417	298	307	314	295	300
July ..	312	202	349	259	232	417	299	314	308	302	304
August ..	312	203	325	259	244	418	298	312	309	301	303
September ..	319	203	317	259	251	418	300	312	318	299	302
October ..	319	203	317	259	254	418	301	309	317	297	303
November ..	318	203	314	261	262	427	302	314	319	301	305
December ..	318	204	321	261	259	427	303	310	319	298	303

(a) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in price of all imports.

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

§ 3. Melbourne Wholesale Price Index.

1. **General.**—An index of Melbourne wholesale prices was first computed in 1912. It relates chiefly to basic materials and foods weighted in accordance with consumption in the years immediately preceding that date. Neither the list of items nor the weighting has been varied. Consequently, the index is outmoded for current use and is a measure of variations in wholesale prices based on the weighting originally determined. It has some historic significance as a measure of changes in the prices of its component items combined in the proportions in which they were in common use

about the year 1910. It is now published only on an annual basis and is used mainly as an approximate indication of long-term trends since the year 1861, for which it was first compiled. A description of the index and a list of the commodities included in it were published in Labour Report No. 38, 1949, pages 43-45.

2. Index Numbers—1861 to 1953 (1911 base).—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.

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

Year.	Metals and Coal.	Wool, Cotton, Leather, &c.	Agricultural Produce, &c.	Dairy Produce.	Groceries.	Meat.	Building Materials.	Chemical.	All Groups
1861	1,458	1,581	1,583	1,008	1,963	..	1,070	2,030	1,538
1871	1,096	1,257	1,256	864	1,586	..	1,044	1,409	1,229
1881	1,178	1,115	1,011	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	641	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	883	754	876	916	1,427	845	875	890
1905	772	850	894	980	942	1,209	809	859	910
1906	882	978	916	972	923	1,110	896	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	1,116
1909	1,014	907	1,000	1,119	978	1,038	911	855	993
1910	1,004	1,052	959	1,100	999	1,008	906	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	993	1,188
1914	1,099	1,032	1,207	1,137	1,021	1,507	1,081	1,253	1,149
1915	1,284	1,017	1,162	1,230	1,133	2,435	1,275	1,523	1,804
1916	1,695	1,423	1,208	1,485	1,322	2,513	1,491	1,760	1,504
1917	2,129	2,008	1,157	1,423	1,543	2,403	1,884	2,171	1,662
1918	2,416	2,360	1,444	1,454	1,422	2,385	2,686	2,223	1,934
1919	2,121	2,363	1,987	1,651	1,514	2,342	2,852	2,806	2,055
1920	2,202	2,625	2,460	2,213	1,920	3,279	3,226	2,834	2,483
1921	2,173	1,561	1,767	2,000	1,977	2,158	2,733	2,503	1,903
1922	1,941	1,681	1,628	1,648	1,869	1,787	2,005	1,965	1,758
1923	1,826	1,448	1,778	1,840	1,746	2,579	2,024	1,911	1,844
1924	1,833	2,418	1,647	1,655	1,721	2,223	1,814	1,806	1,885
1925	1,851	1,966	1,796	1,636	1,728	2,212	1,711	1,799	1,844
1926	1,938	1,582	2,001	1,784	1,730	1,931	1,664	1,816	1,832
1927	1,962	1,650	1,826	1,823	1,724	2,111	1,623	1,866	1,817
1928	2,912	1,781	1,726	1,751	1,707	2,015	1,744	1,923	1,792
1929	1,912	1,555	1,793	1,854	1,680	2,245	1,755	1,943	1,803
1930	1,867	1,127	1,484	1,627	1,666	2,024	1,875	1,982	1,596
1931	1,826	1,040	1,121	1,398	1,794	1,512	2,025	2,166	1,429
1932	1,736	998	1,230	1,304	1,766	1,351	2,043	2,127	1,411
1933	1,723	1,118	1,175	1,194	1,724	1,485	2,061	1,105	1,409
1934	1,660	1,261	1,288	1,274	1,735	1,340	2,015	2,017	1,471
1935	1,602	1,217	1,344	1,323	1,729	1,508	1,964	1,996	1,469
1936	1,566	1,330	1,480	1,351	1,731	1,684	1,969	1,997	1,543
1937	1,772	1,406	1,604	1,451	1,750	1,678	2,430	2,006	1,856
1938	1,746	1,051	1,789	1,340	1,747	1,871	2,238	2,059	1,662
1939	1,758	1,191	1,820	1,557	1,752	1,710	2,720	2,075	1,665
1940	1,854	1,361	1,567	1,567	1,784	1,882	2,890	2,208	1,713
1941	1,960	1,402	1,721	1,554	1,883	1,776	3,138	2,527	1,798
1942	2,146	1,507	1,900	1,665	1,938	2,312	3,409	2,437	1,977
1943	2,272	1,945	1,961	1,716	1,939	2,366	3,764	2,442	2,117
1944	2,278	1,967	2,052	1,721	1,949	2,470	3,768	2,442	2,159
1945	2,270	1,960	2,259	1,726	1,967	2,560	3,770	2,327	2,229
1946	2,262	2,062	1,951	1,722	1,977	2,580	3,772	2,614	2,162
1947	2,390	2,600	2,019	1,763	2,174	2,748	3,800	2,843	2,360
1948	2,829	2,383	2,383	2,104	2,433	2,976	4,631	3,180	2,824
1949	3,502	3,966	2,876	2,300	2,558	3,356	4,611	3,221	3,191
1950	3,902	5,464	3,155	2,459	2,829	4,616	(a) 5,567	3,263	3,816
1951	5,080	7,943	4,512	2,930	2,850	6,438	(a) 7,074	3,294	5,098
1952	6,481	7,365	5,038	4,024	3,455	6,289	(a) 9,338	3,723	5,647
1953	6,615	6,950	4,958	4,533	3,767	6,303	(a) 8,519	4,691	(b) 5,631

(a) The list of items and weighting of the original Building Materials group of this Index are outmoded in respect of recent years. The movement shown here for this group between 1949 and 1953 has been calculated in accordance with the movement occurring in the Building Materials group of the Basic Materials and Foodstuffs Index. (b) The "All Groups" index number for the year 1954 was 5,364.

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

§ 4. International Comparisons: Wholesale Price Index Numbers.

The following table gives index numbers of wholesale prices during the period 1948 to December, 1955, for Australia and other countries. Except where otherwise noted, the average prices in each country for the year 1953 are taken as base (= 100). The figures, which have been taken from the *Monthly Bulletin of Statistics* published by the Statistical Office of the United Nations, show fluctuations in prices in each country, and do not measure relative price levels as between the various countries included.

Index Numbers of Wholesale Prices in Various Countries.

(Source: *Monthly Bulletin of Statistics* of the Statistical Office of the United Nations.)

(Base: 1953 = 100.)

Period.	AUSTRALIA.	BELGIUM.	BRAZIL.	CANADA.	DENMARK.	FRANCE.	GERMANY (Western).	INDIA.	INDONESIA (Djakarta) (a)	IRELAND (b)
1948	53	94	53	88	74	65	(c) 90	93	28	78
1950	70	93	66	96	86	(d) 78	85	102	72	82
1951	56	113	79	109	109	100	100	112	99	95
1952	97	107	87	102	107	105	103	98	94	100
1953	100	100	100	100	100	100	100	100	100	100
1954	98	99	130	98	100	98	98	98	109	(e) 106
1955	102	101	147	99	103	98	101	90	145	110
1955—										
March Qtr. ..	100	100	142	99	102	98	100	91	135	110
June	101	101	144	99	103	97	100	87	154	111
Sept.	103	101	149	100	103	98	101	90	152	108
Dec.	104	101	153	100	105	99	101	93	137	111

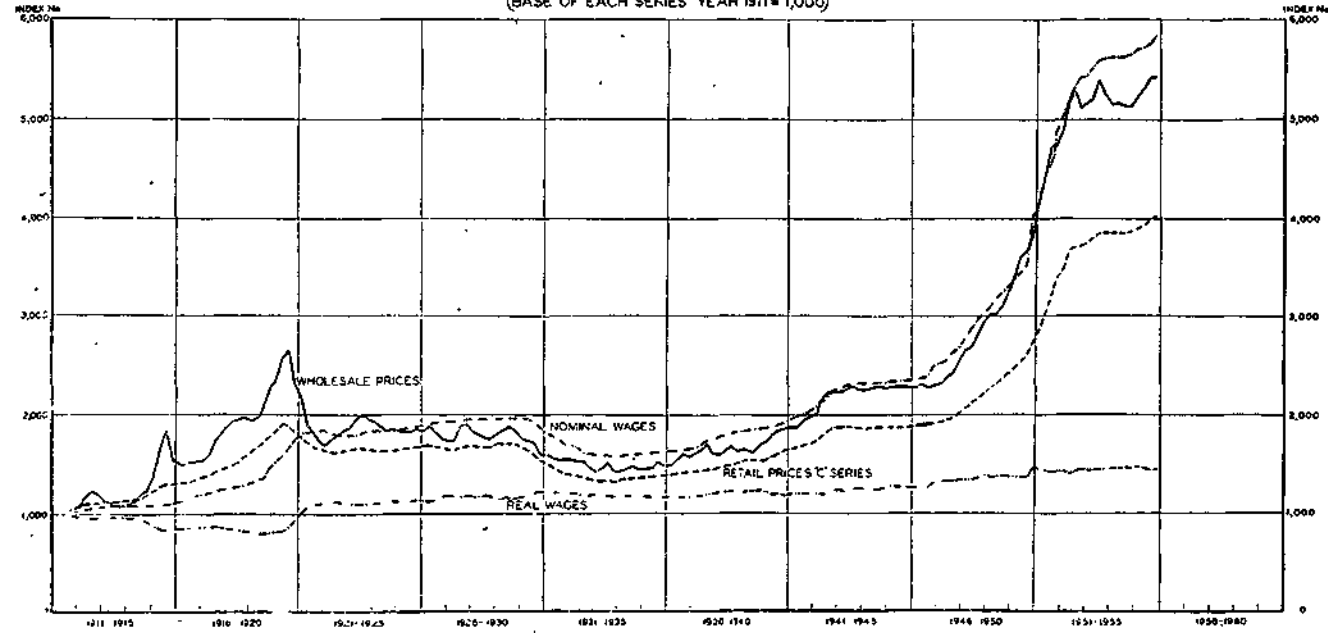
Period.	ITALY.	JAPAN (Tokyo).	NETHERLANDS.	NEW ZEALAND.	NORWAY.	PHILIPPINES (Manila).	SWEDEN.	UNION OF SOUTH AFRICA.	UNITED KINGDOM.	UNITED STATES OF AMERICA.
1948	104	36	75	72	66	140	72	67	67	95
1950	93	70	87	78	76	(d) 98	76	76	80	91
1951	106	97	107	91	94	110	100	86	97	104
1952	100	(d) 100	104	101	100	101	106	90	100	101
1953	100	100	100	100	100	100	100	100	100	100
1954	101	99	101	99	101	95	100	101	101	100
1955	101	98	102	100	102	93	104	104	104	100
1955—										
March Qtr ..	101	99	102	100	101	93	101	102	103	100
June	101	97	101	100	101	91	103	103	102	100
Sept.	100	97	101	100	103	92	105	104	104	101
Dec.	102	98	102	101	102	93	106	105	106	101

(a) Imported goods only. (b) Beginning 1954, base: January, 1954 = 100. (c) July-December
(d) New index linked to former index. (e) Beginning 1954, home-produced goods only

WHOLESALE AND RETAIL PRICES, NOMINAL, AND EFFECTIVE OR REAL WAGES—INDEX NUMBERS

AUSTRALIA, 1911 TO 1955

(BASE OF EACH SERIES YEAR 1911 = 1,000)



EXPLANATION.—The index numbers in the graph above are for the Six Capital Cities as a whole, with the exception of those for Wholesale Prices up to the fourth quarter of 1927, which are for Melbourne. The wholesale prices graph shows the trend of prices according to the "old" Melbourne Index up to the fourth quarter of 1927, but thereafter, this index having been "spliced" with the Basic Materials and Foodstuffs Index, the curve line moves in accordance with the variations of the latter. The price quotations for this index are, in the main, obtained from Melbourne sources, but their movements may be taken as representative of fluctuations in most Australian markets. For the period 1911-1914 the "C" Series index numbers are taken back from the true base (November, 1914 = 1,000) by means of the "A" Series Index (Food and Rent of All Houses). Real wages are computed on the basis of the "C" Series Retail Price Index.