

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; and (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 the Melbourne Wholesale Price Index, the 1930 Conference of Statisticians resolved that a new index of wholesale prices of basic materials and foodstuffs should be compiled. This index—the Wholesale Price (Basic Materials and Foodstuffs) Index—which extends back to the year 1928 and is compiled monthly, is a special purpose index and 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 and 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 is divided into seven main groups, each of which 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. The percentage of the total aggregate value in 1958 contributed by each group is also shown.

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.

During 1956, supplies and prices of potatoes and onions fluctuated violently upwards and downwards between abnormally wide limits. These fluctuations were so great as to dominate the movement of the sections of the index in which these items were included, namely, “Foodstuffs and Tobacco”, “Goods Principally Home Produced” and “Total All Groups”. In the circumstances of the case, neither seasonal adjustment nor conversion of the index to a

"changing weights" formula could be applied to eliminate these transient fluctuations. Accordingly, in order to provide a representative measure of general trend in wholesale prices, the index was reconstructed as from July, 1936 by omitting potatoes and onions.

Consideration is being given to the enlargement of the index to cover additional groups and to revision of the weighting pattern of the index.

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX.

LIST OF COMMODITIES, UNITS OF MEASUREMENT AND QUANTITY-MULTIPLIERS.

Commodity	Unit.	Quantity-multiplier. (Weight.)	Commodity.	Unit.	Quantity-multiplier. (Weight.)
Metals and Coal—			Rubber and Hides—		
Principally Imported—			Principally Imported—		
Aluminium ..	ton	985	Rubber, crude ..	lb.	24,214,400
Principally Home-produced—			Principally Home-produced—		
Iron and steel ..	ton	637,000	Calf skins ..	lb.	4,455,000
Briquettes ..	ton	243,000	Cattle hides ..	lb.	57,246,000
Copper, wire bars ..	ton	7,000	Tanning bark ..	ton	23,000
Coal ..	ton	9,300,000			
Lead, soft pig ..	ton	10,400	Building Materials—		
Tin, ingots ..	ton	1,250	Principally Imported—		
Zinc, ingots ..	ton	14,800	Timber, softwoods	1,000 sup. ft.	346,500
			Turpentine ..	gallon	458,000
Oils, Fats and Waxes—			Principally Home-produced—		
Principally Imported—			Bricks ..	1,000	372,000
Coconut oil ..	ton	6,500	Cement ..	ton	479,000
Fuel oil ..	ton	170,000	Drain-pipes ..	foot	7,270,000
Linseed oil ..	gallon	2,250,000	Glass, window ..	100 sq. ft.	82,370
Lubricating oil ..	gallon	3,960,000	Lime ..	ton	51,144
Kerosene, power ..	gallon	21,000,000	Plaster ..	ton	53,000
Petrol ..	gallon	218,000,000	Timber, hardwoods	100 sup. ft.	2,575,000
Principally Home-produced—			White lead ..	cwt.	60,000
Beeswax ..	lb.	169,112	Whiting ..	cwt.	274,000
Tallow ..	ton	26,000			
			Foodstuffs and Tobacco(a)—		
Textiles—			Principally Imported—		
Principally Imported—			Tapioca ..	cwt.	754,860
Hemp ..	ton	5,575	Cocoa, raw ..	cwt.	104,460
Kapok ..	lb.	6,160,000	Coffee ..	lb.	3,642,000
Jute fibre ..	ton	874	Tea ..	lb.	48,954,520
Phormium tenax ..	ton	2,275	Mustard ..	doz. lb.	49,340
Silk, raw ..	lb.	455,900	Herrings ..	doz. lb.	289,760
Principally Home-produced—			Sild ..	4-oz. tins	847,560
Cotton, raw ..	lb.	15,900,000	Tobacco, leaf ..	lb.	18,321,340
Wool, greasy ..	lb.	50,200,000	Principally Home-produced—		
			Barley ..	bushel	5,185,260
Chemicals—			Maize ..	bushel	330,640
Principally Imported—			Oats ..	bushel	15,713,240
Ammonium sulphate ..	ton	23,830	Rice ..	cwt.	339,246
Potash, muriate ..	ton	4,035	Wheat ..	bushel	41,880,980
Potash, sulphate ..	ton	2,025	Peas ..	bushel	675,980
Soda ash ..	ton	21,400	Sugar ..	ton	352,682
Soda, nitrate ..	ton	1,100	Beef ..	100 lb.	7,352,520
Soda, nitrate—			Lamb ..	lb.	87,245,740
Chilean ..	ton	3,600	Mutton ..	lb.	458,081,320
Sulphur ..	ton	95,500	Pork ..	lb.	49,923,380
Principally Home-produced—			Butter fat ..	lb.	204,156,640
Arsenic ..	ton	1,531	Lard ..	lb.	1,497,840
Blood and bone ..	ton	34,431	Milk ..	gallon	167,836,800
Methylated spirits ..	gallon	2,374,000	Currants ..	lb.	10,391,520
Soda crystals ..	ton	4,986	Sultanas ..	lb.	18,893,700
Superphosphate ..	ton	704,144	Grapes ..	ton	98,668
Sulphuric acid ..	ton	226,450			

(a) Includes weights transferred from deleted articles.

The percentage of the total aggregate value in 1958 contributed by each group was as follows:—Metals and coal, 18.03 per cent.; oils, fats and waxes, 9.14; textiles, 2.95; chemicals, 4.08; rubber and hides, 1.57; building materials, 11.09; foodstuffs and tobacco, 53.14. Goods principally imported comprised 25.61 per cent. of the total aggregate in 1958 and goods principally home-produced, 74.39 per cent.

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 monthly in the mimeographed statistical bulletin *Wholesale Price (Basic Materials and Foodstuffs) Index* and 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.							Basic Materials and Foodstuffs.			
	Metals and Coal.	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides.	Building Materials.	Total.	Foodstuffs and Tobacco. (a)	Goods principally imported. (b)	Goods principally home-produced. (a)	All Groups. (a)
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 ..	89	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	90	105	81	86
1937 ..	79	95	87	82	89	110	91	95	113	86	92
1938 ..	80	95	61	83	66	104	88	96	109	85	91
1939 ..	81	97	65	84	76	105	90	92	111	83	90
1940 ..	84	123	78	97	93	127	104	99	134	90	100
1941 ..	88	134	82	106	98	137	112	105	156	91	107
1942 ..	97	151	93	116	104	154	125	116	180	99	119
1943 ..	103	160	110	118	106	181	135	121	199	102	126
1944 ..	103	160	108	118	106	183	135	123	200	104	127
1945 ..	103	153	108	117	106	184	133	127	198	106	129
1946 ..	102	142	119	116	104	187	131	129	194	108	129
1947 ..	107	142	165	116	94	194	137	137	202	114	136
1948 ..	129	159	234	127	100	204	157	156	217	135	155
1949 ..	160	166	254	138	96	213	175	172	225	154	172
1950 ..	179	179	382	179	155	258	208	200	263	182	202
1951 ..	235	196	475	229	248	327	261	242	299	232	248
1952 ..	299	216	408	277	193	432	304	272	325	272	285
1953 ..	307	217	467	279	154	394	301	286	307	285	291
1954 ..	305	204	387	260	154	380	290	293	296	286	288
1955 ..	314	203	341	259	228	411	298	304	312	294	298
1956 ..	322	219	346	272	240	466	316	309	332	302	309
1957 ..	317	227	363	286	221	486	322	308	339	302	311
1958 ..	311	220	272	278	197	457	304	311	318	300	304
1958—											
January ..	315	223	305	286	210	481	314	302	331	296	304
February ..	313	223	312	286	206	481	313	303	330	297	305
March ..	313	223	290	286	210	481	312	306	330	298	306
April ..	311	222	279	285	209	481	310	305	330	296	304
May ..	309	222	276	285	199	441	303	313	318	301	305
June ..	310	223	278	285	192	441	303	315	318	302	306
July ..	310	218	278	270	189	441	300	315	313	302	305
August ..	310	218	257	270	185	441	298	321	313	305	307
September ..	310	218	257	270	185	453	300	319	310	306	307
October ..	310	218	245	270	184	454	299	313	309	302	304
November ..	310	219	247	270	192	446	299	309	310	299	301
December ..	307	218	242	270	202	440	297	305	309	295	298

(a) During 1956 these indexes were reconstructed from July, 1936 by excluding potatoes and onions. See para. 3 on page 25. (b) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in prices 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 on an annual basis for "All Groups" only 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.**—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, etc.	Agricultural Produce, etc.	Dairy Produce.	Groceries.	Meat.	Building Materials.	Chemicals.	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
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	1,188
1914 ..	1,099	1,032	1,207	1,137	1,021	1,507	1,081	1,253	1,149
1915 ..	1,284	1,017	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 ..	2,121	2,363	1,987	1,651	1,514	2,342	2,852	2,896	2,055
1920 ..	2,302	2,625	2,460	2,213	1,920	3,279	3,226	2,834	2,483
1921 ..	2,173	1,361	1,767	2,000	1,977	2,158	2,733	2,303	1,903
1922 ..	1,941	1,681	1,628	1,648	1,869	1,787	2,005	1,965	1,758
1923 ..	1,826	2,148	1,778	1,840	1,746	2,579	2,024	1,933	1,944
1924 ..	1,835	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	1,723	2,212	1,711	1,790	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 ..	1,912	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	1,689	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 ..	1,713	1,118	1,175	1,194	1,485	2,061	2,061	2,105	1,409
1934 ..	1,660	1,261	1,288	1,274	1,735	1,540	2,015	2,017	1,471
1935 ..	1,602	1,217	1,344	1,325	1,729	1,508	1,964	1,996	1,469
1936 ..	1,566	1,330	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	1,656
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	1,361	1,567	1,567	1,784	1,882	2,890	2,298	1,713
1941 ..	1,960	1,402	1,721	1,554	1,883	1,776	3,138	2,527	1,796
1942 ..	2,146	1,507	1,900	1,665	1,938	2,312	3,409	2,437	1,977
1943 ..	2,272	1,945	1,964	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	2,527	2,228
1946 ..	2,262	2,062	1,951	1,722	1,977	2,589	3,772	2,614	2,162
1947 ..	2,390	2,690	2,019	1,763	2,174	2,748	3,800	2,843	2,360
1948 ..	2,829	3,619	2,383	2,104	2,435	2,976	4,631	3,180	2,824
1949 ..	3,302	3,966	2,876	2,309	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 numbers for the years 1954, 1955, 1956, 1957 and 1958 were 5,384, 5,548, 5,916, 5,814 and 5,575 respectively.

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 1950 to December, 1958 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 (a)	INDONESIA (Djakarta) (b)	IRELAND.
1950	69	93	66	96	86	78	85	101	72	82
1951	85	113	79	109	109	100	100	110	99	95
1952	98	107	87	102	107	105	103	97	94	100
1953	100	100	100	100	100	100	100	-100-	100	(c) 100
1954	99	99	130	98	100	98	98	94	109	98
1955	102	101	147	99	-103-	98	101	87	145	101
1956	106	104	176	102	106	102	103	97	135	101
1957	107	106	197	103	106	108	105	103	160	108
1958	105	102	(e)	103	105	121	106	105	(e)	113
1958—										
March Qtr. ..	105	104	203	103	105	120	106	100	205	111
June	105	102	210	103	104	122	106	103	226	113
Sept.	106	100	223	103	105	120	106	110	(e)	113
Dec.	103	100	(e)	104	105	120	106	108	(e)	112

Period.	ITALY.	JAPAN (Tokyo).	NETHERLANDS.	NEW ZEALAND.	NORWAY.	PHILIPPINES (Manila).	SWEDEN.	UNION OF SOUTH AFRICA.	UNITED KINGDOM (d)	UNITED STATES OF AMERICA.
1950	93	70	87	78	76	98	76	76	..	94
1951	106	97	107	91	94	110	100	86	..	104
1952	100	100	104	101	-101-	101	106	99	..	101
1953	-100-	100	100	100	100	100	100	100	..	100
1954	99	99	101	99	102	95	99	101	100	100
1955	100	98	102	100	104	92	103	104	103	101
1956	102	102	104	104	109	95	108	105	107	104
1957	103	105	107	105	113	99	110	107	107	107
1958	101	98	105	108	111	103	107	107	101	108
1958—										
March Qtr. ..	102	100	106	105	111	103	108	107	100	108
June	102	99	105	106	111	103	107	107	101	108
Sept.	100	97	102	111	111	103	107	107	101	108
Dec.	99	97	106	112	112	102	107	108	101	108

(a) Base: April-December, 1953 = 100. (b) Imported goods. (c) Home-produced goods only.
(d) Basic materials and fuel—Base: 1954 = 100. (e) Not available.

NOTE.—The symbol — on each side of an index number (e.g., -95-) indicates that two series have been linked at that period. The symbol — between two index numbers indicates that it is not possible to link two series (because of change in scope, etc.) and therefore the index numbers are not comparable with each other even though they are shown on the same base period.