

## 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 10 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 10.

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 1959 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 the 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-multiplicr. (Weight.)	Commodity.	Unit.	Quantity-multiplicr. (Weight.)
<b>Metals and Coal—</b>			<b>Rubber and Hides—</b>		
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	<b>Building Materials—</b>		
Lead, soft pig ..	ton	10,400	Principally Imported—		
Tin, ingots ..	ton	1,250	Timber, softwoods	1,000 sup. ft.	346,500
Zinc, ingots ..	ton	14,800	Turpentine ..	gallon	458,000
<b>Oils, Fats and Waxes—</b>			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	82,370
Lubricating oil ..	gallon	3,960,000	Lime ..	sq. ft.	51,144
Kerosene, power ..	gallon	21,000,000	Plaster ..	ton	53,000
Petrol ..	gallon	218,000,000	Timber, hardwoods	100	2,575,000
Principally Home-produced—			White lead ..	sup. ft.	60,000
Beeswax ..	lb.	169,112	Whiting ..	cwt.	274,000
Tallow ..	ton	26,000	<b>Foodstuffs and Tobacco(a)—</b>		
<b>Textiles—</b>			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 ..	doz.	847,560
Cotton, raw ..	lb.	15,900,000	Tobacco, leaf ..	4-oz. tins	18,321,340
Wool, greasy ..	lb.	50,200,000	Principally Home-produced—		
<b>Chemicals—</b>			Barley ..	bushel	5,185,260
Principally Imported—			Maize ..	bushel	330,640
Ammonium sulphate	ton	23,830	Oats ..	bushel	15,713,240
Potash, munare ..	ton	4,055	Rice ..	cwt.	339,246
Potash, sulphate ..	ton	2,025	Wheat ..	bushel	41,880,980
Soda ash ..	ton	21,400	Peas ..	bushel	675,980
Soda, nitrate ..	ton	1,100	Sugar ..	ton	352,682
Soda, nitrate—			Beef ..	100 lb.	7,352,520
Chilean ..	ton	3,600	Lamb ..	lb.	87,245,740
Sulphur ..	ton	95,500	Mutton ..	lb.	458,081,320
Principally Home-produced—			Pork ..	lb.	49,923,380
Arsenic ..	ton	1,531	Butterfat ..	lb.	204,156,640
Blood and bone ..	ton	34,431	Lard ..	lb.	1,497,840
Methylated spirits ..	gallon	2,374,000	Milk ..	gallon	167,838,800
Soda crystals ..	ton	4,986	Currants ..	lb.	10,391,520
Superphosphate ..	ton	704,144	Sultanas ..	lb.	18,893,700
Sulphuric acid ..	ton	226,450	Grapes ..	ton	98,680

(a) Includes weights transferred from deleted articles.

The percentage of the total aggregate value in 1959 contributed by each group was as follows:—Metals and coal, 17.53 per cent.; oils, fats and waxes, 8.83; textiles, 2.98; chemicals, 3.93; rubber and hides, 2.15; building materials, 10.66; foodstuffs and tobacco, 53.92. Goods principally imported comprised 24.46 per cent. of the total aggregate in 1959 and goods principally home-produced 75.54 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. (c)	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
1959 .. .. .	306	216	279	271	273	445	303	319	308	308	308
1959—											
January .. .	308	218	239	270	199	443	297	303	307	294	298
February ..	308	218	249	270	215	443	299	311	308	300	302
March .. .	307	218	253	270	246	443	300	323	309	309	309
April .. .	307	219	286	270	310	443	306	322	309	312	312
May .. .	305	218	289	270	280	443	304	319	311	308	309
June .. .	305	219	282	270	273	443	303	320	311	308	309
July .. .	303	218	282	272	298	443	303	322	309	311	310
August .. .	305	217	299	272	311	443	306	325	308	315	313
September ..	305	211	291	272	313	446	304	321	303	313	310
October .. .	305	210	290	271	284	446	303	322	304	311	310
November ..	306	210	287	271	272	446	302	317	306	307	307
December ..	306	210	295	271	272	454	304	321	307	310	310

(a) During 1956 these indexes were reconstructed from July, 1936 by excluding potatoes and onions. See para. 3 on page 8. (b) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in prices of all imports.

### § 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 historical

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	2,053
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	1,654	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	1,714	1,485	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	1,663
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	3,502	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, 1958 and 1959 were 5,384, 5,348, 5,916, 5,314, 5,575 and 5,394 respectively.

## § 4. International Comparisons: Wholesale Price Index Numbers.

The following table gives index numbers of wholesale prices during the period 1950 to December, 1959 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.
1950 .. .. .	69	93	66	96	86	78	85		72	82
1951 .. .. .	85	113	79	109	109	100	100	110	98	95
1952 .. .. .	98	107	87	102	107	105	103	97	95	100
1953 .. .. .	100	100	100	100	100	100	100	-100-	100	(b)100
1954 .. .. .	99	99	130	98	100	98	98	96	110	98
1955 .. .. .	103	101	147	99	-103-	98	101	88	144	101
1956 .. .. .	106	104	176	102	106	102	103	99	136	101
1957 .. .. .	107	106	197	103	106	108	105	104	158	108
1958 .. .. .	105	102	221	103	105	121	106	107	247	113
1959 .. .. .	106	101	305	104	105	126	105	111	(d)	113
1959—										
March Qtr. .. .. .	104	100	276	104	105	126	105	108	(d)	114
June .. .. .	106	101	291	105	106	125	105	109	(d)	114
Sept. .. .. .	107	102	314	105	106	126	105	112	(d)	112
Dec. .. .. .	107	102	340	104	106	129	106	114	(d)	112

Period.	ITALY.	JAPAN (Tokyo).	NETHERLANDS.	NEW ZEALAND.	NORWAY.	PHILIPPINES (Manila)	SWEDEN.	UNION OF SOUTH AFRICA.	UNITED KINGDOM (c)	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	101	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
1959 .. .. .	98	99	106	109	111	104	108	107	102	108
1959—										
March Qtr. .. .. .	98	98	106	109	111	103	106	106	101	109
June .. .. .	97	98	105	109	111	103	107	107	101	109
Sept. .. .. .	97	99	105	111	112	104	107	107	102	108
Dec. .. .. .	99	101	108	109	112	106	110	108	103	108

(a) Imported goods. (b) Home-produced goods only. (c) Basic materials and fuel—  
Base: 1954 = 100. (d) 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 where they are shown on the same base period.