

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 obsolete, are given in § 3 commencing on page 46 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 47.

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 1960 contributed by each item and 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, QUANTITY-MULTIPLIERS, AND PERCENTAGE OF TOTAL AGGREGATE IN 1960.

Commodity.	Unit.	Quantity-multiplier. (Weight.)	Percentage of Total Aggregate 1960.	Commodity.	Unit.	Quantity-multiplier. (Weight.)	Percentage of Total Aggregate 1960.
Metals and Coal—				Rubber and Hides—			
Principally Imported—				Principally Imported—			
Aluminium	ton	985	0.04	Rubber, crude	lb.	24,214,400	0.76
Principally Home-produced—				Principally Home-produced—			
Iron and steel	ton	637,000	4.82	Calf skins	lb.	4,455,000	0.12
Briquettes	ton	243,000	0.21	Cattle hides	lb.	57,246,000	1.09
Copper, wire bars	ton	7,000	0.40	Tanning bark	ton	23,000	0.09
Coal	ton	9,300,000	10.90	Total			2.06
Lead, soft pig	ton	10,400	0.19	Building Materials—			
Tin, ingots	ton	1,250	0.23	Principally Imported—			
Zinc, ingots	ton	14,800	0.31	Timber, softwoods	1,000 sup. ft.	346,500	4.19
Total			17.10	Turpentine	gallon	458,000	0.06
Oils, Fats and Waxes—				Principally Home-produced—			
Principally Imported—				Bricks	1,000	372,000	1.21
Coconut oil	ton	6,500	0.26	Cement	ton	479,000	0.87
Fuel oil	ton	170,000	0.66	Drain-pipes	foot	7,270,000	0.31
Linseed oil	gallon	2,250,000	0.45	Glass, window	100	82,370	0.07
Lubricating oil	gallon	3,960,000	0.26	Lime	sq. ft.	51,144	0.08
Kerosene, power	gallon	21,000,000	0.41	Plaster	ton	53,000	0.21
Petrol	gallon	218,000,000	5.79	Timber, hardwoods	100	2,575,000	3.20
Principally Home-produced—				White lead	sup. ft.	60,000	0.12
Beeswax	lb.	169,112	0.01	Whiting	cwt.	274,000	0.07
Tallow	ton	26,000	0.32	Total			10.39
Total			8.16	Foodstuffs and Tobacco(a)—			
Textiles—				Principally Imported—			
Principally Imported—				Tapioca	cwt.	754,860	0.54
Hemp	ton	5,575	0.16	Cocoa, raw	cwt.	104,460	0.26
Kapok	lb.	6,160,000	0.14	Coffee	lb.	3,642,000	0.25
Jute fibre	ton	874	0.02	Tea	lb.	48,954,520	2.15
Phormium tenax	ton	2,275	0.04	Mustard	doz. lb.	49,340	0.02
Silk, raw	lb.	455,900	0.15	Herrings	doz. lb.	289,760	0.08
Principally Home-produced—				Sild	doz.	847,560	0.13
Cotton, raw	lb.	15,900,000	0.40	Tobacco, leaf	4-oz. tins	18,321,340	5.36
Wool, greasy	lb.	50,200,000	1.90	Principally Home-produced—			
Total			2.81	Barley	bushel	5,185,260	0.67
Chemicals—				Maize	bushel	330,640	0.05
Principally Imported—				Oats	bushel	15,713,240	1.04
Ammonium sulphate	ton	23,830	0.12	Rice	cwt.	339,246	0.26
Potash, muriate	ton	4,055	0.02	Wheat	bushel	41,880,980	5.44
Potash, sulphate	ton	2,025	0.01	Peas	bushel	675,980	0.16
Soda ash	ton	21,400	0.13	Sugar	ton	352,682	5.29
Soda, nitrate	ton	1,100	0.01	Beef	100 lb.	7,352,520	14.63
Soda, nitrate—				Lamb	lb.	87,245,740	1.48
Chilean	ton	3,600	0.02	Mutton	lb.	458,081,320	3.78
Sulphur	ton	95,500	0.62	Pork	lb.	49,923,380	1.38
Principally Home-produced—				Butterfat	lb.	204,156,640	6.57
Arsenic	ton	1,531	0.02	Lard	lb.	1,497,840	0.03
Blood and bone	ton	34,431	0.18	Milk	gallon	167,838,800	5.22
Methylated spirits	gallon	2,374,000	0.09	Currants	lb.	10,391,520	0.17
Soda crystals	ton	4,986	0.03	Sultanas	lb.	18,893,700	0.33
Superphosphate	ton	704,144	1.44	Grapes	ton	98,668	0.45
Sulphuric acid	ton	226,450	1.05	Total			55.74
Total			3.74	All Groups—			
				Principally Imported			23.11
				Principally Home-produced			76.89
				Total			100.00

(a) Includes weights transferred from deleted articles.

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.		All Groups.	
								(a)	(b)	(c)	(d)
1928	100	100	100	100	100	100	100	100	100	100	100
1929	100	102	83	98	77	98	98	101	103	103	103
1930	95	108	61	95	55	100	93	105	92	95	95
1931	89	109	57	98	58	101	92	111	79	87	87
1932	83	107	54	98	53	98	88	108	76	84	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	90	134	90	100
1941	88	134	82	106	98	137	112	105	156	91	107
1942	97	151	95	116	104	134	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	283
1953	307	217	467	276	154	301	286	307	285	285	291
1954	305	204	387	260	185	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	226	272	278	197	457	304	311	318	300	304
1959	306	216	279	271	273	445	303	319	308	300	308
1960	316	211	278	272	278	459	308	349	308	332	337
1960—	314	210	295	274	283	454	308	326	309	316	314
January	316	210	283	274	299	454	309	325	311	315	314
February	317	211	284	274	293	460	310	329	311	319	317
March	317	211	284	274	293	460	310	329	311	319	317
April	317	211	287	273	286	460	310	341	310	327	323
May	317	211	287	273	287	460	309	348	310	331	326
June	317	212	287	273	286	460	308	345	308	345	336
July	317	213	276	271	264	460	308	369	307	347	337
August	315	212	263	271	276	460	307	372	306	348	338
September	316	213	266	271	280	460	308	367	307	345	336
October	316	210	264	271	286	460	307	357	306	338	330
November	316	209	271	271	285	460	307	346	307	330	325
December	314	209	270	271	258	460	305	344	307	330	323

(a) Excluding potatoes and onions. See para. 3 on page 44.
(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 unsuited 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	2,696	3,225	1,934
1919	.. 2,121	2,363	1,987	1,651	1,514	2,342	2,852	2,896	2,035
1920	.. 2,302	2,625	2,460	2,213	1,920	3,279	3,226	2,834	2,483
1921	.. 2,373	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	1,714	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	1,665
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	.. 3,502	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, 1959 and 1960 were 5,384, 5,548, 5,916, 5,814, 5,575, 5,394 and 5,857 respectively.

§ 4. International Comparisons: Wholesale Price Index Numbers.

The following table gives index numbers of wholesale prices during the period 1952 to December, 1960 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)(g)	IRELAND.
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	222	103	105	121	106	107	247	113
1959	106	101	305	104	105	126	105	111	(c)	113
1960	112	102	399	104	105	130	107	118	(c)	113
1960—										
March Qtr.	108	103	365	104	106	130	106	114	(c)	112
June	113	103	377	105	105	130	106	117	(c)	113
Sept.	116	102	404	104	105	128	107	120	(c)	112
Dec.	112	102	450	104	105	131	108	121	(c)	112

Period.	ITALY.	JAPAN (Tokyo).	NETHERLANDS.	NEW ZEALAND.	NORWAY.	PHILIPPINES (Manila).	SWEDEN.	UNION OF SOUTH AFRICA.	UNITED KINGDOM (d)	UNITED STATES OF AMERICA.
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
1955	100	98	102	100	104	92	103	104	..	101
1956	102	102	104	104	109	95	108	105	..	104
1957	103	105	107	105	113	99	110	107	..	107
1958	101	98	105	108	111	103	107	107	..	108
1959	98	99	106	110	111	104	108	107	..	108
1960	99	101	103	110	112	108	111	109	..	109
1960—										
March Qtr.	99	101	105	110	112	107	110	108	103	109
June	99	100	103	110	111	106	111	108	102	109
Sept.	99	101	102	110	111	109	111	109	101	108
Dec.	99	102	102	111	112	112	112	110	101	109

(g) Imported goods. (b) Home-produced goods only. (c) Not available. (d) Basic materials and fuel—Base: 1954 = 100

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.