

CHAPTER 2. WHOLESALE PRICES AND PRICE INDEXES

General

Two indexes of wholesale prices of basic materials have been compiled by the Bureau. These are: (i) The Melbourne Wholesale Price Index (now obsolete, see page 43), and (ii) The Wholesale Price (Basic Materials and Foodstuffs) Index.

Work is proceeding on the preparation of new series of wholesale price index numbers relating to materials used and articles produced by sectors of industry. The first of these new series will relate to materials used in the building industry and in manufacturing industry. (For details of new indexes published during 1969, see Section XVIII of the Appendix to this volume). To a considerable extent, these first series will constitute a currently representative replacement for the present Basic Materials and Foodstuffs Wholesale Price Index. In the interim, the existing index will continue to be compiled and published mainly to meet the needs of those who require it for special purposes. The groups of the existing index relate primarily to a commodity type classification and have never purported to represent the materials used or articles produced by defined sectors of industry.

A special purpose index 'Wholesale Price Index of Electrical Installation Materials' is also published by the Bureau (see page 41).

Wholesale Price (Basic Materials and Foodstuffs) Index

1. General

The Wholesale Price (Basic Materials and Foodstuffs) Index extends back to the year 1928 and is compiled monthly.

2. 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 the selected items 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 subsidised and the home-consumption price for wool was used to calculate the index numbers shown in the table on pages 40-1.

3. 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.

4. 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. The validity of the weighting and the representativeness of the index have become increasingly affected by changes in usage and in industrial structure.

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	ton	57,246,000	1.69
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	gal	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	ft	7,270,000	0.31
Linseed oil	gal	2,250,000	0.45	Glass, window	100 sq ft	82,370	0.07
Lubricating oil	gal	3,960,000	0.26	Lime	ton	51,144	0.08
Kerosene, power	gal	21,000,000	0.41	Plaster	ton	33,000	0.21
Petrol	gal	218,000,000	5.79	Timber, hardwoods	100 sup ft	2,575,000	3.20
Principally Home-produced—				White lead	cwt	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—			
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	0.23
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	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	bus	5,185,260	0.67
Chemicals—				Maize	bus	330,640	0.05
Principally Imported—				Oats	bus	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	bus	41,880,980	5.44
Potash, sulphate	ton	2,025	0.01	Peas	bus	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	gal	167,838,800	5.22
Methylated spirits	gal	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

5. 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							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
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	125
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
1960	316	211	278	272	278	459	308	349	308	332	327
1961	310	204	286	274	238	460	303	331	301	319	314
1962	306	198	290	268	216	460	298	318	296	309	306
1963	303	196	338	249	176	473	298	329	300	316	312
1964	302	195	337	234	175	516	303	339	303	324	319
1965	310	199	296	245	198	531	308	355	304	338	330
1966	309	207	313	298	236	533	319	372	309	355	344
1967	312	209	286	321	185	536	318	386	313	363	350
1966—											
January	306	208	313	269	235	530	314	351	308	338	331
February	308	208	314	278	246	531	317	357	309	343	335
March	308	208	318	287	269	531	319	376	309	357	346
April	307	207	322	287	266	531	319	372	310	354	344
May	305	207	322	287	255	532	317	369	309	351	341
June	306	207	322	287	230	532	317	367	308	350	340
July	306	207	322	304	229	532	318	374	309	356	344
August	311	208	318	317	234	532	322	382	310	363	350
September	312	208	309	315	223	536	321	381	309	363	349
October	311	208	299	315	207	538	320	379	310	360	348
November	312	207	299	315	212	538	320	379	310	360	348
December	313	206	298	315	223	538	320	378	311	360	348

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

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS—*continued*

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
1967—											
January	315	206	294	315	212	538	320	377	310	359	347
February	315	207	298	315	203	537	320	376	312	357	346
March	313	206	293	315	210	537	319	381	312	360	348
April	312	206	293	315	210	537	319	379	311	359	347
May	311	208	297	315	202	537	319	381	312	360	348
June	311	207	292	315	182	532	317	396	311	370	355
July	310	207	287	320	172	534	316	404	311	375	359
August	310	208	274	328	167	535	316	409	311	378	361
September	310	214	273	328	168	535	318	400	315	371	357
October	310	213	273	328	176	536	318	377	314	356	345
November	311	212	278	328	169	536	318	375	316	354	345
December	313	212	281	328	154	536	318	376	315	355	345

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

Wholesale Price Index of Electrical Installation Materials

1. General

This special purpose index was introduced in 1964 and index numbers, from August 1959 onwards, have been published at quarterly intervals*. In addition to its use in connection with the Bureau's constant price estimates in the national accounting field, the index has a direct value as a measure of changes in the aggregate cost of materials used in an important part of the building industry (other than house-building).

2. Commodities and grouping

The items in this index have been selected as representative of materials used in electrical installation in structures such as hospitals, schools, factories and multi-storeyed commercial buildings and flats. These items are divided into three main groups for which separate indexes in addition to the 'All Groups' index are compiled. The combination of materials selected is fixed as to quantity and quality. A list of the components of the index is set out below with the percentage contribution of each to the All Groups index in the reference base year 1959-60.

3. Price quotations

The items are priced as at the middle of the month for which index numbers are published. The basis of pricing is the price to electrical contractors, delivered on site or into store, metropolitan area Sydney and Melbourne. The price series used relate to specific standards for each item and in some cases are combinations of prices for different makes, types, etc.

The units of quantity specified as the basis for collecting prices are representative lots normally purchased by electrical contractors, inclusive of quantity discounts and packing and quantity extras, etc.

4. Method of construction

The index is a fixed-weights index with the reference base: Year 1959-60 = 100. In general, the weights were derived from information relating to the values of materials used in selected

* Since February 1969 published monthly.

representative projects in Sydney and Melbourne during the three years 1960-61 to 1962-63. The projects selected for this purpose had a minimum electrical materials and labour content of \$10,000. Selected representative items carry the weights of similar items not directly priced.

The index is compiled by the method known as 'the weighted arithmetic mean of price relatives'. Each quarter*, base period percentage value weights are applied to indexes of price movement relative to 1959-60.

WHOLESALE PRICE INDEX OF ELECTRICAL INSTALLATION MATERIALS

COMPOSITION AND WEIGHTING PATTERN AS AT REFERENCE BASE YEAR: 1959-60

Components	Percentage contribution to All Groups index
1. CONDUCTORS GROUP	40.00
Mains—	
Insulated cables	14.79
Glands	0.70
Bare copper strand	0.50
Copper bus-bar	3.50
	19.49
Circuits—	
Insulated cables and wire	19.08
Bare copper strand	1.43
	20.51
2. CONDUIT AND ACCESSORIES GROUP	25.00
Conduit and Ducting—	
Metal conduit	10.79
Metal and plastic ducting	9.46
	20.25
Accessories—	
Metal and plastic junction boxes	2.59
Metal and plastic accessories—Other	2.16
	4.75
3. SWITCH-BOARD AND SWITCH-GEAR MATERIAL GROUP	35.00
Bakelite Accessories—	
Mounting blocks	0.65
Switches	1.40
Terminal boxes	0.10
	2.15
Fluorescent Components and Lamps—	
Fluorescent tubes and starters	1.37
Incandescent lamps	0.58
	1.95
Iron Clad Accessories—	
Switch plug	1.67
Plug top	0.64
Other accessories	1.30
	3.61
Switch-board Accessories' Components—	
Mild steel	3.07
Aluminium bar	0.86
Contactors	4.90
Circuit breakers	11.00
Other accessories	7.46
	27.29
TOTAL	100.00

5. Index numbers

Index numbers for each group of items and for all groups combined for the index of wholesale prices of electrical installation materials are given in the following table. Current index numbers are published quarterly* in the mimeographed statistical bulletin *Wholesale Price Indexes—Price Index of Electrical Installation Materials*.

*Monthly since February 1969.

WHOLESALE PRICE INDEX OF ELECTRICAL INSTALLATION MATERIALS

GROUPS AND ALL GROUPS—INDEX NUMBERS
(Base of each Index: Year 1959-60 = 100.0 (a))

Period	Conductors	Conduit and Accessories	Switch-board and Switch-gear Material	All Groups
Year—				
1959-60	100.0	100.0	100.0	100.0
1960-61	99.5	102.3	100.9	100.7
1961-62	98.7	102.8	99.8	100.1
1962-63	96.8	103.6	100.5	99.8
1963-64	93.2	103.7	100.8	98.5
1964-65	110.6	104.6	105.2	107.2
1965-66	105.8	104.2	106.6	105.7
1966-67	120.2	105.8	109.2	112.8
1962-63—November	97.9	103.6	100.6	100.3
February	97.9	103.6	100.6	100.3
May	93.4	103.6	100.7	98.5
1963-64—August	93.3	103.4	100.8	98.5
November	93.3	103.8	100.8	98.6
February	93.5	103.8	100.8	98.7
May	92.6	103.8	100.9	98.3
1964-65—August	96.4	104.4	103.8	101.0
November	103.3	104.4	104.7	104.0
February	121.3	104.4	106.0	111.7
May	121.3	105.1	106.3	112.0
1965-66—August	104.2	105.3	106.3	105.2
November	104.3	104.1	106.3	105.0
February	108.3	103.7	106.9	106.6
May	106.5	103.8	106.9	106.0
1966-67—August	124.1	104.5	106.9	113.2
November	122.6	106.2	109.8	114.0
February	122.6	106.3	110.1	114.2
May	111.3	106.3	110.0	109.6
1967-68—August	111.5	106.3	110.3	109.8
November	123.1	105.3	112.4	114.9

(a) Figures are shown to one decimal place to avoid distortions that would occur in rounding off the index numbers to the nearest whole number.

Melbourne Wholesale Price Index

An index of Melbourne wholesale prices was first computed in 1912. It related 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 was varied except for some changes in the building materials group in 1949. The series has some historical significance as a measure of changes in the prices, since the year 1861, of its component items combined in the proportions in which they were in common use about the year 1910. A description of the index and a list of commodities included in it were published in Labour Report No. 38, 1949, pages 43-5. Index numbers up to the year 1961, the last period for which the index was compiled, are shown in Labour Report No. 49, page 42.

International comparisons: Wholesale price index numbers

The following table gives index numbers of wholesale prices during the period 1963 to December 1967, for Australia and other countries. Except where otherwise noted, the average prices in each country for the year 1963 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: 1963 = 100)

Period	AUSTRALIA	BELGIUM	BRAZIL	CANADA	DENMARK	FRANCE	GERMANY (Fed. Rep.)	INDIA	IRELAND(e)
1963	100	100	100	100	100	100	100	100	100
1964	102	105	192	100	103	102	101	112	106
1965	106	106	290	102	106	103	104	122	111
1966	110	108	396	106	109	105	105	133	113
1967	112	107	497	108	110	105	104	160	116
1966—									
Dec. Qtr	112	108	434	107	109	106	105	144	112
1967—									
March Qtr	111	108	465	107	109	106	105	152	115
June	112	108	483	108	110	104	104	158	116
Sept.	115	106	508	108	110	103	104	166	115
Dec.	111	106	531	109	112	105	104	163	117

Period	ITALY	JAPAN (Tokyo)	NETHERLANDS	NEW ZEALAND	NORWAY	PHILIPPINES (Manila)	SOUTH AFRICA(c)	SWEDEN	UNITED KINGDOM	UNITED STATES OF AMERICA
1963	100	100	100	100	100	100	100	100	100	100
1964	103	100	106	105	105	105	102	104	104	100
1965	105	-101	110	106	108	107	106	109	104	102
1966	-107	103	115	107	110	112	110	112	108	106
1967	106	105	115	107	112	117	112	112	107	106
1966—										
Dec. Qtr	106	104	115	106	111	113	112	112	107	106
1967—										
March Qtr	106	105	115	106	111	114	111	115	107	106
June	106	105	117	108	110	115	112	112	105	106
Sept.	106	105	115	106	113	117	113	112	105	106
Dec.	107	106	115	108	113	121	113	113	110	106

(e) Home-produced goods only.

NOTE: The symbol - on each side of an index number (e.g. -95-) indicates that two series have been linked at that period.