# PRICES

# **RETAIL PRICES AND PRICE INDEXES**

Retail prices of food and groceries and average rentals of houses have been collected by the Australian Bureau of Statistics for the years extending back to 1901 and, in some cases, by the statistical offices of various States for earlier years.

Retail prices of a more extensive range of commodities (including clothing) and certain services in common demand have been collected at frequent and regular intervals since 1923. (Comparable information was collected for the month of November in each year from 1914 to 1922.) The range of items for which retail prices data are obtained was considerably expanded in 1948 and in later years. Average retail prices of certain food and grocery items in the relevant periods were published in the annual *Labour Report* (now discontinued). An historical perspective giving more detail of these earlier indexes was published in *Year Book Australia 1988* (No. 71).

The current retail price index, the Consumer Price Index (CPI), was published for the first time in August 1960 and was compiled retrospectively to the September quarter 1948. A description of the Consumer Price Index is given below.

Further information about the CPI is contained in a booklet entitled A Guide to the Consumer Price Index (6440.0) which is available from the ABS on request. For a more detailed account, The Australian Consumer Price Index, Concepts, Sources and Methods (6461.0) describes what the index measures, the goods and services included in it, and how the index is produced; it also describes the problems encountered in compiling the CPI and how those are dealt with.

# **Consumer Price Index**

The Consumer Price Index (CPI) measures quarterly changes in the price of a 'basket' of goods and services which account for a high proportion of expenditures by metropolitan wage and salary earner households. This 'basket' covers a wide range of goods and services arranged in the following eight groups: food; clothing; housing; household equipment and operation; transportation; tobacco and alcohol; health and personal care; and recreation and education. The eight groups in turn are divided into 35 sub-groups and 107 expenditure classes.

From its inception in 1960, the CPI covered the six State capital cities. In 1964 the geographical coverage of the CPI was extended to include Canberra. From June quarter 1982 geographic coverage was further extended to include Darwin.

Index numbers at the Group and All Groups levels are published for each capital city and for the weighted average of eight capital cities. Sub-group index numbers are published for the weighted average of eight capital cities.

### Conceptual basis for measuring price changes

The CPI is a quarterly measure of the change in average retail price levels. It provides a method of comparing the average price level for a quarter with the average price level of the reference base year or changes in the average price level from one quarter to the next. In measuring price changes, the CPI aims to measure only pure price changes (i.e. price changes excluding the effects of any changes in the quality or quantity of the goods or services concerned)—in other words to measure, each quarter, the change in the cost of purchasing an identical basket of goods and services. The CPI is a measure of changes in transaction prices—the prices actually paid by consumers for the goods and services they buy. It is not concerned with nominal, recommended or list prices (unless they are the prices consumers actually pay).

The CPI is often loosely, and incorrectly, referred to as a cost-of-living index. However, a true cost-of-living index (if such a measure could be compiled) would not be the same thing as a fixed-weight retail price index like the CPI. A cost-of-living index would need to take account of changes in standards of living and the substitutions that consumers make in response to changing market conditions, such as changes in supply, or in response to disparate price movements.

The CPI measures price change over time and does not provide comparisons between relative price levels at a particular date. For example, it does not show whether beef is dearer than lamb, or whether bus fares are dearer than train fares. The fact that the index number for any particular component is higher than that for another component in a particular quarter does not mean that the first component is more expensive than the second—it merely means that, since the reference base year, prices for the first component have risen more than prices for the second component. Similarly, the CPI does not provide any basis for measuring relative price levels between the different cities. For example it says nothing about whether prices are higher in Sydney or Perth—it shows only whether prices have changed more in Sydney or in Perth.

### Index population

Because the spending patterns of various groups in the population differ somewhat, the pattern of one large group, fairly homogeneous in its spending habits, is chosen for the purpose of calculating the CPI. The CPI population group is, in concept, metropolitan employee households. For this purpose employee households are defined as those households which obtain the major part of their household income from wages and salaries; metropolitan means the eight capital city Statistical Divisions.

### Weighting pattern

Each of the 107 expenditure classes in the current CPI has a fixed weight (i.e. the measure of its relative importance). Details of the weighting pattern are shown in the following table. More detailed information on weighting is published in *The Australian Consumer Price Index: Concepts, Sources and Methods* (6461.0).

Changes in the weighting pattern have been made at approximately five-yearly intervals to take account of changes in household spending patterns. The CPI, in fact, comprises eleven separate series which have been linked to form a continuous series. The eleventh series (i.e. the current series) was introduced in the March quarter 1987, with a weighting pattern based on estimated household expenditure in 1984.

The CPI 'basket of goods and services' covers items which are considered representative of metropolitan households' spending habits and whose prices can be associated with an identifiable and specific quantity of a commodity or service. Income taxes and personal savings, on the other hand, do not form part of the CPI because they cannot be clearly associated with the purchase of a specific quantity of any goods or services.

	Percentag
	contributio
Crowns and sub anouns	to the a
Groups and sub-groups	groups CP
FOOD	19.01
Dairy products	1.53
Cereal products	1.97
Meat and seafoods	3.49
Fresh fruit and vegetables	1.92
Processed fruit and vegetables	0.85
Soft drinks, ice cream and confectionery	2.82
Meals out and take away foods Other food	4.67 1.73
CLOTHING	6.89
Men's and boys' clothing	1.95
Women's and girls' clothing	3.10
Fabrics and knitting wool	0.49
Footwear	1.10
Dry cleaning and shoe repairs	0.23
HOUSING	14.06
Rents	4.45
Home ownership	9.61
HOUSEHOLD EQUIPMENT AND OPERATION	18.42
Fuel and light	2.44
Furniture and floor coverings	4.11
Appliances	1.53
Household textiles	0.69
Household utensils and tools	1.74 3.91
Household supplies and services Postal and telephone services	1.47
Consumer credit charges	2.50
TRANSPORTATION	17.02
Private motoring	16.06
Urban transport fares	0.95
TOBACCO AND ALCOHOL	8.17
Alcoholic drinks	5.95
Cigarettes and tobacco	2.21
HEALTH AND PERSONAL CARE	5.59
Health services	2.99
Personal care products	1.94
Hairdressing services	0.66
RECREATION AND EDUCATION	10.80
Books, newspapers and magazines	1.22
Recreational goods	2.87
Holiday travel and accommodation	3.13
Recreational services Education and child care	2.30 1.25
TOTAL ALL GROUPS	100.00

#### CONSUMER PRICE INDEX—ELEVENTH SERIES: WEIGHTING PATTERN AT DECEMBER QUARTER 1986 WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES

### **Collecting prices**

Since the CPI is designed to measure the impact of changing prices on metropolitan wage and salary earner households, price movements are monitored in the kinds of retail outlets or other establishments where such households normally purchase goods and services. This involves collecting prices from many sources including supermarkets, department stores, footwear stores, restaurants, motor vehicle dealers and service stations, dental surgeries, hotels and clubs, schools, hairdressers, travel agents, airlines, bus operators, house builders, real estate developers, electricians and plumbers. Items such as bus, rail and air fares, electricity and gas charges, telephone charges and local authority rates are collected from the appropriate authorities. Information on rents is obtained from property management companies and government housing authorities. In total, around 100,000 separate price quotations are collected each quarter.

Prices of the goods and services included in the CPI are generally collected quarterly. However, some important items are priced monthly or more frequently (e.g. bread, fresh meat and fish, fresh fruit and vegetables, petrol, alcohol and tobacco) and a small number are collected annually (e.g. seasonal clothing, local government rates and charges).

The bulk of items for which prices are collected quarterly are priced at the middle of the mid-month of the quarter (i.e. in August, November, February and May), but, to facilitate a more even spread of the field collection workload, some goods and services are priced in the first or third months of each quarter. Items priced in the third month are generally those subject to price changes at discrete points of time (e.g. electricity and postal charges); in these cases information is obtained of any changes in price during the quarter so that an average price for the whole quarter can be calculated.

The prices used in the CPI are those that any member of the public would have to pay on the pricing day to purchase the specified good or service. Any sales or excise taxes which the consumer must pay when purchasing specific items are included in the CPI price. Sale prices, discount prices and 'specials' are reflected in the CPI so long as the items concerned are of normal quality (i.e. not damaged or shop soiled) and are offered for sale in reasonable quantities. To ensure that the price movements reflect the experience of the bulk of the metropolitan population, the brands and the varieties of the items which are priced are generally those which sell in greatest volume.

### Changes in quality

Since the CPI aims to measure the price change of a constant basket of goods and services over time it is necessary to ensure that identical or equivalent items are priced in successive time periods. This involves evaluating changes in the quality of goods and services included in the index and removing the effects of such changes so that the index reflects only the price change.

### Periodic revision of the CPI

The CPI is periodically revised in order to ensure it continues to reflect current conditions. CPI revisions have usually been carried out at approximately five-yearly intervals, the most recent having been completed in March 1987. Previous revisions of the CPI were introduced at: December quarter 1963; December quarter 1968; December .quarter 1973; September quarter 1974; September quarter 1976; and March quarter 1982. Following each revision, the new series with its changed composition and weighting pattern is linked to the previous series to form one continuous series. The process of linking ensures that the continuous series reflects only price variations and not differences in costs of the old and new baskets.

Year	Sydney	Mel- bourne	Brisbane	Adelaide	Perth	Hobart	Canberra		Weighted verage of eight capital cities
1978-79	82.4	83.1	83.4	83.2	84.1	83.1	82.3		(b)83.0
1979-80	91.1	91.4	91.5	91.6	91.9	91.6	91.1		(b)91.4
198081	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1981-82	110.2	110.4	110.7	110.5	111.2	110.0	110.7	111.1	110.4
1982-83	123.4	122.8	122.9	123.5	122.5	121.8	124.0	123.1	123.1
1983-84	130.9	132.1	131.7	132.3	131.0	129.9	132.3	130.2	131.6
1984-85	136.0	138.1	137.9	138.7	136.1	136.1	138.8	135.1	137.2
1985-86	147.5	149.8	149.0	150.2	147.1	147.9	150.8	146.2	148.7
1986-87	161.4	163.9	161.8	164.0	161.8	162.5	163.4	159.3	162.6
1987-88	173.7	175.9	173.1	175.0	173.3	174.4	174.7	170.6	174.5

#### CONSUMER PRICE INDEX: ALL GROUPS INDEX NUMBERS (Base of each index: Year 1980-81 = 100.0) (a)

(a) The separate city indexes measure price movements within each city individually. They do not compare price levels between cities. (b) Prior to 1980-81 index numbers are for weighted average of six State capital cities.

#### CONSUMER PRICE INDEX: GROUP INDEX NUMBERS WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES (Base of each index: *Year* 1980–81 = 100.0 unless otherwise noted)

Year	Food	Clothing	Housing	Household equipment and operation	Transport- ation	Tobacco and alcohol	Health and personal care		All groups
1978–79 (b)	79.5	87.3	84.7	83.3	80.9	86.4	83.4		83.0
197980 (b)	90.6	93.3	91.0	90.0	91.3	93.6	91.1		91.4
198081	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
1981-82	108.6	107.1	111.1	110.6	110.3	109.2	124.2		110.4
1982-83	118.5	114.2	122.8	123.8	124.2	124.1	153.2	107.7	123.1
198384	127.7	120.9	131.5	132.6	134.8	139.6	146.5	114.5	131.6
198485	134.4	128.4	141.4	138.9	143.4	151.3	121.8	118.9	137.2
1985-86	144.7	139.0	153.4	150.2	155.5	165.1	133.0	129.5	148.7
198687	156.3	152.3	164.8	161.2	172.9	182.5	154.4	141.5	162.6
1987-88	164.5	164.2	176.2	172.4	186.4	197.8	171.9	152.6	174.5

(a) Base: March quarter 1982 = 100.0. Group index not compiled for earlier quarters. (b) Prior to 1980-81 index numbers are for weighted average of six State capital cities.

CONSUMER PRICE INDEX NUMBERS: AUSTRALIA AND OTHER COUNTRIES (a)
(Base of each index: Year $1980 = 100.0$ )

Period	Australia (b)	Canada	Federal Republic of Germany	Indonesia	Japan	New Zealand	United Kingdom	United States of America
Year—								
1982	122	125	112	123	108	134	122	117
1983	134	132	116	137	110	144	127	121
1984	140	138	118	152	112	153	133	126
1985	149	143	121	159	114	176	142	131
1986	163	149	121	168	115	200	146	133
1987	177	156	121	184	115	231	152	138
Quarter— 1986—								
Sept.	164	150	120	168	115	200	146	133
Dec.	169	151	120	175	115	218	148	134
1987								
Mar.	172	153	121	178	114	223	150	136
June	175	155	121	181	116	230	152	137
Sept.	178	157	121	185	116	234	153	139
Dec.	181	158	121	191	116	238	154	140

(a) The composition of these indexes varies considerably in the various countries. The index numbers show changes in prices in each country over time and do not measure relative price levels between countries. (b) Consumer Price Index (All Groups) converted to base: 1980 = 100.0.

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

#### Long-term linked series

To provide an approximate long-term measure of retail price change for the period since the first Australian retail price index was compiled, a single series of index numbers has been constructed by linking together selected retail price index series from amongst those described above. The index numbers are expressed on a reference base 1945 = 100, which was the end of a period of relative price stability during World War II. The successive series linked together to produce this long-term series of index numbers are:

- from 1901 to 1914, the A Series Index;
- from 1914 to 1946-47, the C Series Index;
- from 1946-47 to 1948-49, a combination of the C Series Index (excluding rent) and the housing group of the CPI;
- from 1948-49 onwards, the CPI.

A considerable range of information on retail prices both in the form of index numbers and average retail prices, for various localities in Australia (in some cases back to 1901) is available in the *Labour Report*, published by the ABS continuously from 1912 to 1973. Various editions of the *Labour Report* also contained detailed descriptions of the methodology used in compiling the various indexes and details of their composition and weighting. A comprehensive description of the C Series Index, including details of its composition and weighting, was last published in *Labour Report* No. 41 in 1952. Descriptive material on the Interim Retail Price Index was last published in *Labour Report* No. 46 in 1958.

Inde		Index		Index	
numbe	Year	number	Year	number	Year
252	1961	78	1931	47	1901
251	1962	74	1932	50	1902
252	1963	71	1933	49	1903
258	1964	73	1934	46	1904
268	1965	74	1935	48	1905
270	1966	75	1936	48	1906
280	1967	78	1937	48	1907
293	1968	80	1938	51	1908
302	1969	82	1939	51	1909
313	1970	85	1940	52	1910
332	1971	89	1941	53	1911
352	1972	97	1942	59	1912
385	1973	101	1943	59	1913
443	1974	100	1944	61	1914
510	1975	100	1945	70	1915
579	1976	102	1946	71	1916
650	1977	106	1947	75	1917
702	1978	117	1948	80	1918
760	1979	128	1949	91	1919
844	1980	140	1950	103	1920
926	1981	167	1951	90	1921
1,028	1982	196	1952	87	1922
1,132	1983	205	1953	89	1923
1,177	1984	206	1954	88	1924
1,257	1985	211	1955	88	1925
1,370	1986	224	1956	90	1926
1,487	1987	229	1957	89	1927
		233	1958	89	1928
		237	1959	91	1929
		245	1960	87	1930

#### RETAIL PRICE INDEX NUMBERS—AUSTRALIA (a) LONG TERM LINKED SERIES (Base: Year 1945 = 100)

(a) The index numbers relate to the weighted average of six State capital cities up to 1980; from 1981 they relate to the weighted average of eight capital cities.

### Average retail prices

Average retail prices for a range of selected (mainly food) items have been published regularly since 1901. Since 1962, data on average retail prices in each of the capital cities have been published quarterly in *Average Retail Prices of Selected Items* (6403.0). Prior to that date information was published in the annual *Labour Report* (now discontinued).

### Indexes of relative retail prices of food

Since 1962 the ABS has conducted an annual survey of food prices in approximately 200 cities and towns throughout Australia. Information from this survey is used to compile index numbers measuring the relative levels of food prices in the different localities at the time the survey is conducted (currently in May each year). The index numbers are produced by combining the prices for the selected food items using a common set of weights (derived from the weighting pattern of the CPI Food Group). The resulting index numbers are expressed on the base: Weighted Average of Eight Capital Cities = 100.

Index numbers for localities in the States are available from the ABS on request.

# **PRODUCER AND WHOLESALE PRICE INDEXES**

### Historical perspective

The first price index of this kind compiled by the ABS was the Melbourne Wholesale Price Index which was introduced in 1912 with index numbers compiled back to 1861 from prices extracted from newspapers and trade publications. Index numbers were compiled up to 1961. The index related chiefly to basic materials and foods weighted in accordance with consumption in about the year 1910 and neither the list of items nor the weighting was varied during the life of the index. A description of the index and a list of the commodities included was last published in *Labour Report* No. 38, 1949.

The next index published was the Wholesale Price (Basic Materials and Foodstuffs) Index which was introduced in 1939; index numbers are available for the period 1928 to 1970. The index related to commodities in their basic or primary form and prices were obtained as near as possible to the point where they made their first effective impact on the local price structure. With few exceptions, prices were obtained from Melbourne sources. The weights were based on estimates of the average annual consumption of the commodities in Australia during the period 1928–29 to 1934–35 inclusive. A list of the commodities and other information concerning the index was last published in *Labour Report* No. 53, 1967.

During the 1960s the ABS began producing a range of price indexes covering materials used and articles produced by defined sectors of the Australian economy. The following indexes are now published monthly:

- · Price Index of Materials Used in House Building
- Price Index of Materials Used in Building Other than House Building
- Price Indexes of Materials Used in Manufacturing Industries
- Price Indexes of Articles Produced by Manufacturing Industry.

Prices are collected from representative suppliers or manufacturers of the materials or articles included in the indexes. Midmonth prices are generally used to compile the two building materials indexes and the Price Indexes of Articles Produced by Manufacturing Industry. Average monthly prices are mainly used to compile the Price Indexes of Materials Used in Manufacturing Industries.

Following is a table giving a broad indication of long-term price changes, drawing on the producer and wholesale price indexes available, on a common reference base: Year 1968-69 = 100.0. The Melbourne Wholesale Price Index and the Wholesale Price (Basic Materials and Foodstuffs) Index have been linked at 1928-29 to provide a continuous series.

### PRICES

	Melbourne Wholesale Price Index (All Groups)	Wholesale Price (Basic Materials and Foodstuffs) Index (All Groups)	ce base: Year 1 Price Index of Materials used in House Building (All Groups)	Price Index of Materials used in Building Other than House Building (All Groups)	Price Indexes of Materials used in Manufacturing Industries (Manu- facturing Division)	Price Indexes of Articles Produced by Manufacturing Industry (Manu- facturing Division)
1861	24.2					
1871	19.3				••	••
1881	17.6					
1891	14.9	••				
1901	15.3					
1911	15.7	••				
1921	30.0		••			
1928-29	28.3	28.3				
1931-32	••	24.4 25.5				••
1936–37 1941–42		25.5 31.9		••		
1941-42		37.0	••	••	••	
1940-47		37.0		••	••	
1956-57		76.4				
				· •		
1960-61		92.5				
1961-62		86.4		·		••
196263		87.4	••		••	
1963-64		90.0				
1964-65		91.3		••		••
1965-66		95.4				
1966-67		98.4	94.1	94.7		
1967-68	••	99.7	96.6	96.8		
1968-69	••	100.0 101.3	100.0	100.0 104.6	100.0 102.6	100.0 103.9
1969–70	••	101.5	104.3	104.0	102.0	105.9
1970-71			108.8	109.4	100.1	108.5
1971-72			115.4	116.5	102.6	113.9
1972-73			123.3	122.1	113.9	120.7
1973-74			142.3	138.1	134.7	134.6
197475			172.5	169.7	145.1	158.1
1975–76			195.8	195.3	158.6	177.8
1976-77			219.1	218.1	182.2	196.9
1977–78			237.1	236.5	198.5	213.8
1978-79	••	••	252.2	253.9	248.8	237.4
1979-80			284.9	286.9	321.8	274.9
198081			323.6	323.9	353.2	305.2
1980-81			355.3	359.8	358.9	328.9
1982-83			389.0	400.6	388.0	360.2
1982-85			419.2	400.0	402.1	382.8
1984-85			452.4	446.2	422.2	404.8
1985-86	••		484.6	481.8	442.9	430.3
198687		••	512.7	519.0	445.0	458.5
1987-88			551.7	564.7	470.3	492.1

### PRODUCER AND WHOLESALE PRICE INDEXES (Reference base: Year 1968-69 = 100.0)

# Price Index of Materials Used in House Building

The Price Index of Materials Used in House Building was first compiled on a reference base 1966-67 = 100.0, using a weighting pattern derived from estimated material usage in 1968-69. Monthly index numbers on a 1966-67 = 100.0 reference base are available for the period July 1966 to September 1986. A detailed description of the first series, including its composition and weighting pattern, is given in the September 1970 issue of the publication *Price Index of Materials Used in House Building* (6408.0) and in *Labour Report* No. 55, 1970.

The current Price Index of Materials Used in House Building for the six State capital cities, on a reference base 1985-86 = 100.0, was introduced in October 1986 and linked to the previous series. The items included, and their weights, were derived from reported values of each material used in selected representative houses constructed in 1985-86. The index for Canberra was introduced in respect of February 1988 on a reference base of 1986-87 = 100.0. Further information concerning the method of compiling the index, including details of its composition and weighting pattern, is given in the October 1986 and February 1988 issues of the publication *Price Index of Materials Used in House Building* (6408.0).

#### PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING SIX STATE CAPITAL CITIES AND CANBERRA (a) (Base of each index: *Year* 1985–86 = 100.0)

Year(b)	Weighted average of six State capital cities	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Canberra
1982-83	81.0	78.2	82.2	79.0	82.5	76.7	80.2	
1983-84	86.0	85.8	88.7	85.4	87.9	83.1	86.5	n.a.
1984-85	93.1	93.3	94.6	92.7	93,4	92.5	93.4	n.a.
198586	100.0	100.0	100.0	100.0	100.0	100.0	100.0	n.a.
198687	105.8	106.2	105.7	104.6	105.1	106.7	105.0	100.0
198788	113.8	114.8	114.3	112.0	110.8	114.2	110.7	109.7

(a) The separate city indexes measure price movement within each city individually. They do not compare price levels between cities. (b) The index series for years prior to 1985-86 are based on the series previously published on a reference base 1966-67 = 100.0. They have been converted to reference base 1985-86 = 100.0 by linking the old and new series at September 1986.

### Price Index of Materials Used in Building other than House Building

The Price Index of Materials Used in Building Other than House Building was first compiled on a reference base 1966-67 = 100.0, using a weighting pattern derived from estimated materials usage in 1966-67. Monthly index numbers on a 1966-67 = 100.0 reference base are available for the period July 1966 to January 1981. A description of the first series, including its composition and weighting pattern, is given in the publications *Price Index of Materials Used in Building Other than House Building*, January 1969 (6407.0) and *Labour Report* No. 54, 1969.

The current Price Index of Materials Used in Building Other than House Building for the six State capital cities was introduced in February 1981 on reference base 1979-80 = 100.0. The index for Darwin was published for the first time in September 1982 on a reference base1981-82 = 100.0. The index for Canberra was first published in respect of November 1987 on a reference base of 1986-87 = 100.0.

This index measures changes in prices of selected materials used in the construction of buildings other than houses. Its composition reflects the usage of materials in the construction of buildings (other than houses) commenced in the three years ending June 1977.

Further information concerning the method of compiling the index, including details of its composition and weighting pattern can be obtained from the February 1981, September 1982 and November 1987 issues of the publication *Price Index of Materials Used in Building Other than House Building* (6407.0).

The tables below show annual 'All groups' index numbers for each State capital city and Darwin and index numbers for selected building materials for the weighted average of six State capital cities. Monthly index numbers for selected materials and special combinations of materials are shown in each issue of the monthly price index publication *Price Index of Materials Used in Building Other than House Building* (6407.0).

#### PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING EIGHT CAPITAL CITIES (a)

	Weighted average of six State capital cities	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	
Base year			1979–80 = 100.0							
1982-83	139.6	141.1	135.9	141.4	143.9	138.4	135.9	111.2	<u>(b)(c)</u> n.a.	
1983-84	147.3	148.1	143.4	151.7	152.6	145.4	145.7	118.3	n.a.	
1984-85	155.5	155.5	152.8	159.4	160.8	153.2	153.5	122.0	n.a.	
1985-86	167.9	167.4	165.2	169.6	174.9	168.1	r167.2	131.1	п.а.	
1986-87	180.9	181.0	177.8	179.7	187.9	183.9	177.9	139.6	100.0	
1987-88	196.8	197.5	192.6	194.4	204.7	201.5	188.9	149.3	111.5	

(a) The separate city indexes measure price movements within each city individually. They do not compare price levels between cities. (b) 1981-1982 = 100.0. (c) 1986-87 = 100.0.

#### PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING INDEX NUMBERS FOR SELECTED BUILDING MATERIALS WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES (Base of each index: Year 1979-80 = 100.0)

	Structural timber	Clay bricks	Ready mixed concrete	Galvanised steel decking cladding and sheet products	Structural steel	Reinforcing steel bar fabric and mesh
1982–83	133.8	142.6	143.3	138.7	138.8	138.9
1983–84	144.9	151.6	149.6	145.3	141.4	148.6
1984–85	160.6	162.9	158.6	150.8	147.6	148.2
1985–86	172.2	173.7	162.6	157.1	158.0	156.8
1986–87	178.6	183.0	167.7	166.8	170.9	165.8
1987–88	184.2	193.7	175.6	181.5	186.2	176.2
	Aluminium windows	Conductors (mains cable and circuitry)	Lamps and light fittings	Non-ferrous pipes	Builders hardward	
1982–83	136.2	135.2	137.8	106.0	143.9	3 162.2   3 177.0   2 189.3   9 201.9
1983–84	144.2	150.3	145.1	113.7	154.8	
1984–85	152.7	171.9	151.0	122.1	163.8	
1985–86	162.4	r197.0	164.0	134.5	182.2	
1986–87	174.2	216.3	180.4	142.4	200.9	
1987–88	192.1	301.3	193.5	183.3	214.7	

### **Price Indexes of Materials Used in Manufacturing Industries**

The Price Index of Materials Used in Manufacturing Industry was first compiled on a reference base 1968-69 = 100.0, using a weighting pattern derived from estimated manufacturing usage in 1971-72. Monthly index numbers on a 1968-69 = 100.0 reference base are available for the period July 1968 to November 1985. A description of the first series, including its composition and weighting pattern, is given in the April 1975 issue of the publication *Price Index of Materials Used in Manufacturing Industry* (6411.0).

The current Price Indexes of Materials Used in Manufacturing Industries were introduced in December 1985 on a reference base 1984-85 = 100.0. Details of their composition and weighting pattern are given in the December 1985 issue of the publication *Price Indexes of Materials Used in Manufacturing Industries* (6411.0). With a few exceptions the items included in the indexes were allocated weights in accordance with the estimated value of manufacturing usage in 1977-78.

These indexes measure changes in prices of materials (including fuels) used by establishments classified to the Manufacturing Division of the Australian Standard Industrial Classification 1983 (ASIC). The indexes are on a net 'sector' basis; that is, each relates only to those materials which are used in the defined sector of Australian manufacturing industry and which have been produced by establishments outside that sector. The following sector price indexes are published:

(i) a net index for the Manufacturing Division of ASIC; and

(ii) net indexes for ten sub-divisions and four groups within the Manufacturing Division.

In addition, indexes are published for selected categories of materials, some of which are presented below.

		Imported	d materials			Home p	roduced	materials	
	Agricul- tural	Mining	Manu- factured	Total imported mater- ials	Agricul- tural, forestry and fishing	Mining	Elec- tricity	Total home produced mater- ials	All mater- ials
1982-83	81.9	94.7	87.5	90.2	90.6	95.8	92.3	92.8	91.9
1983-84	92.8	92.5	91.2	91.8	98.0	95.3	97.1	96.9	95.3
1984-85	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
1985-86	117.3	91.5	117.7	111.8	100.6	101.4	102.9	101.2	104.9
1986-87	126.0	68.9	131.7	117.3	109.3	89.3	107.4	99.1	105.4
1987-88	106.5	67.9	136.4	120.0	118.3	96.3	112.3	106.8	111.4

#### PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES (a): SELECTED CATEGORIES OF MATERIALS (Base of each index: Year 1984-85 = 100.0) (b)

(a) The index is on a net basis and relates in concept only to materials that enter Australian manufacturing industry from other sectors of the Australian economy or from overseas. (b) The index series for years prior to 1984-85 are based on the series previously published on reference base 1968-69 = 100.0. They have been converted to reference base 1984-85 = 100.0 by linking the old and new series in the year 1984-85.

# Price Indexes of Articles Produced by Manufacturing Industry

These indexes measure changes in the prices of articles produced by establishments classified to the Manufacturing Division of the Australian Standard Industrial Classification (ASIC). Indexes are on a 'net basis', i.e. they relate in concept only to those articles which are produced in defined sectors of Australian manufacturing industry for sale or transfer to other sectors or for export or for use as capital equipment. Articles which are sold or transferred to other establishments within the sector for further processing as materials, components, fuels, etc. are excluded.

The following sector price indexes are published:

- (i) a net index for the Manufacturing Division of ASIC (known as the All Manufacturing Industry Index); and
- (ii) a net index for each of the twelve sub-divisions within the Manufacturing Division.

The reference base of the indexes is the year 1968-69 = 100.0. Their composition and weighting reflect estimated net sector production in the year 1971-72.

The items included in the indexes are combined for publication purposes using the structure of ASIC.

Further information concerning the method of compiling monthly index numbers for each index, including details of their composition and weighting, is shown in the June 1976 issue of the publication *Price Indexes of Articles Produced by Manufacturing Industry* (6412.0). Further information about the indexes is also shown in *Year Book* No. 62.

			Net subdivision indexes (b)									
Year	All Manu- facturing Industry Index (c)	Food, beverages and tobacco (21–22)	Textiles (23)	Clothing and footwear (24)	Wood, wood products and furniture (25)		Chemical, petroleum and coal products (27)					
1982-83	360.2	328.2	286.7	316.0	424.9	390.4	442.4					
1983-84	382.8	355.5	305.8	333.2	455.4	413.6	456.8					
1984-85	404.8	377.0	322.6	352.1	494.3	442.2	480.8					
1985-86	430.3	399.1	348.2	376.7	530.4	472.4	499.9					
1986-87	458.5	428.9	383.5	407.2	569.7	513.4	467.9					
1987-88	492.1	454.5	436.6	434.3	609.6	549.3	496.5					

PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY (a) (Base of each index: Year 1968–69 = 100.0)

Year	Glass, clay and other non- metallic mineral products (28)	Basic metal products (29)	Fabricated metal products (31)	ar Transport equipment (32)	Other industrial machinery ad equipment and household appliances (33)	Miscellan- eous manu- facturing products (34)
1982-83	382.1	345.5	452.5	335.4	353.1	313.4
1983-84	404.0	365.5	480.1	358.9	372.6	342.1
1984-85	429.2	381.0	505.3	378.7	390.2	361.4
198586	449.8	396.4	534.4	417.5	417.6	388.1
198687	473.7	422.5	566.9	479.9	449.6	424.2
198788	504.5	471.9	597.8	528.0	484.5	466.2

(a) For a full description of Division C, 'Manufacturing' and the subdivisions within the Manufacturing Division, see Australian Standard Industrial Classification (ASIC). Preliminary Edition, 1969. (b) These indexes are on a net subdivision basis; the index for each subdivision relates in concept to articles which are produced in that subdivision for sale or transfer outside the subdivision. (c) This index is on a net division basis and relates in concept only to articles which are produced in the Manufacturing Division of ASIC for sale or transfer outside the Division.

# FOREIGN TRADE PRICE INDEXES

# Historical Perspective

### **Export Price Index**

An index of export prices has been published by the ABS since 1901. The first index was compiled annually from 1901 to 1916-17 as a current weighted unit value index.

The method of calculation was changed in 1918 to incorporate fixed weights. Weights for all principal exports were calculated based on the average quantities of exports for the period January 1897 to June 1916. These weights were applied to the average unit values of each export in successive years, and a weighted average index of 'price' movements was derived. This index was published for the years 1897 to 1929–30.

An index of export prices was not published again until 1937 when two new series of monthly export price indexes were published, compiled back to 1928. One index used fixed weights and the other used changing weights. The most important methodological change introduced with these indexes was the use of actual export prices in place of unit values. The indexes were compiled until 1962.

The next index was introduced in August 1962 with index numbers compiled back to July 1959. This was a fixed weights index with reference base 1959-60 = 100.0. The weights were based on the average annual value of exports during the five years 1956-57 to 1960-61. By 1969-70 there had been a substantial shift in the relative importance of commodities exported and from July 1969 a new interim series was linked to this index, still with reference base 1959-60 = 100.0, but using weights based on the annual value of exports in 1969-70. Four new commodities—iron ore, bauxite, alumina and mineral sands were included. The interim index was published until June 1979 when it was replaced by the current Export Price Index.

#### **Import Price Index**

The first issue of the Import Price Index produced by the ABS was released in May 1983 with index numbers compiled from September quarter 1981 onwards, on a reference base 1981-82 = 100.0. This index replaced an import price index previously published by the Reserve Bank of Australia on a reference base 1966-67 = 100.0. The Reserve Bank's import price index was published from 1928 until September 1982.

A table giving a broad indication of long term price changes, drawing on the foreign trade price indexes available, is given below.

(Reference base: Year 1968–69 = 100)					
Year	Export Price Index (All Groups)	Import Price Index (All Groups)	Year	Export Price Index (All Groups)	Import Price Index (All Groups)
1901	15		1970-71	99	108
1911	17		1971-72	102	114
1921-22	25		1972-73	131	113
1931-32	18	22	1973-74	157	131
1936-37	29	21	1974-75	177	189
1941-42	27	35	1975-76	193	214
1946-47	53	51	1976-77	216	246
1951-52	123	92	1977-78	227	278
1956-57	115	91	1978-79	256	307
196061	93	95	1979-80	309	403
1961-62	94	94	1980-81	328	450
1962-63	99	94	1981-82	332	458
196364	112	96	1982-83	360	506
1964-65	103	97	1983-84	369	524
1965-66	105	99	1984-85	396	580
196667	103	100	1985-86	· 417	659
1967-68	98	99	1986-87	431	731
196869	100	100			
1969–70	101	103			

#### FOREIGN TRADE PRICE INDEXES (Reference base: Year 1968-69 = 100)

Source: The sources used for the Import Price Index are the Reserve Bank of Australia Bulletin up to and including 1981-82, and the ABS Import Price Index (6414.0) thereafter.

-

### **Current indexes**

The ABS compiles price indexes for merchandise imported into and exported from Australia. The Export Price Index is compiled and published monthly while the Import Price Index is compiled and published quarterly. Both indexes are calculated using fixed weights. Prices are collected from representative importers or exporters of the goods included in the indexes. Average monthly prices are used to compile the Export Price Index and average quarterly prices are used to compile the Import Price Index. Published index numbers for financial years are simple averages of the relevant monthly or quarterly index numbers. Annual index numbers for these indexes are shown below.

# **Import Price Index**

The Import Price Index measures changes in prices of 'imports of merchandise' into Australia. The index numbers for each quarter relate to prices of imports landed in Australia during the quarter.

The commodities directly represented in the index were selected on the basis of their import values and were allocated weights in accordance with the average value of imports for each commodity over the three years ended June 1981.

The selected commodities are combined for publication purposes into broad index groups using three different classifications:

- (i) Australian Import Commodity Classification (AICC) 1980-81 (1204.0)
- (ii) Australian Standard Industrial Classification (ASIC) 1978 (1201.0)
- (iii) United Nations Classification by Broad Economic Categories (BEC) 1976

In addition, BEC categories have been rearranged to form the broader end use classes: Capital goods, Intermediate goods and Consumption goods. Index numbers based on AICC and BEC are presented below.

Further information concerning the method of compiling the index, including details of its composition and weighting pattern, can be obtained from the December quarter 1982 issue of the publication *Import Price Index* (6414.0). More detailed index numbers are shown quarterly in this publication.

(Base of each index: Year 1981-82 = 100.0)										
		AICC Sections								
					Mineral		<u> </u>	Manufac-		Miscel- laneous manufac-
		Food		Crude	fuels	Animal	Chem-	tured	Mach-	tured
		and		mate-	lubric-	and	icals	goods	inery	articles
		live	Bev-	rials	ants and	vegetable	and	classfiied	and	and non-
		animals	erages	inedible	related	oils	related	chiefly	transport	monetary
		chiefly	and	except	mate-	fats and	products	by	equip-	gold
	All	for food	tobacco	fuels	rials	waxes	n.e.s.	material	ment	(8 & 9)
Year	groups	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	part)
1984-8	5 126.5	139.2	139.8	121.0	117.4	146.5	115.4	127.4	130.2	130.9
1985-8	6 143.8	157.2	164.8	135.9	101.0	110.9	132.8	151.0	157.5	155.5
19868	7 159.6	178.8	189.4	148.0	69.3	99.8	145.6	169.4	191.4	177.8

#### IMPORT PRICE INDEX: INDEX NUMBERS BASED ON THE AUSTRALIAN IMPORT COMMODITY CLASSIFICATION (AICC) (Base of each index: *Year* 1981–82 = 100.0)

		Bro	oad economi	c categories			Er	nd use cla	sses
Year	Food and beverages	Indus- trial supplies n.e.s.	Fuels and lubricants	Capital goods (except transport equipment) and parts and accessories thereof	Transport equipment and parts and accessories thereof	Con- sumer goods n.e.s.	Capital goods	Inter- mediate goods	Con- sumption goods
1985–86 1986–87 1987–88	152.5 172.3 160.3	142.3 157.6 163.3	101.0 69.3 75.1	152.7 182.3 181.5	171.2 215.2 218.4	150.9 171.5 171.8	154.9 187.7 187.7	134.9 139.8 143.2	154.0 180.7 182.2

#### IMPORT PRICE INDEX: INDEX NUMBERS FOR BROAD ECONOMIC CATEGORIES (BEC) AND END USE CLASSES (Base of each index: Year 1981-82 = 100.0)

# **Export Price Index**

The current Export Price Index was introduced in July 1979. It relates to 'all exports of merchandise' from Australia. The index numbers for each month relate to prices of those exports of merchandise that are physically shipped from Australia during that month.

The reference base of the index is the year 1974-75 = 100. The commodities directly represented in the index were selected on the basis of their export values and were allocated weights in accordance with the average value of exports for each commodity over the three years ended June 1977.

The selected commodities are combined for publication purposes into broad index groups using two different classifications:

- (iii) Australian Export Commodity Classification (AECC) 1978-79 (1203.0)
- (iv) Australian Standard Industrial Classification (ASIC) 1978 (1201.0)

Further information concerning the method of compiling the index, including details of its composition and weighting pattern, can be obtained from the July 1979 issue of *Export Price Index* (6405.0). More detailed index numbers are shown monthly in this publication.

			AEC	CC Sections		
Year	All groups	Food and live animals (0)	Crude materials inedible (except fuels) (2)	Mineral fuels and lubricants (3)	Animal and vegetable oils and fats (4)	Chemicals and other manufactured exports (5, 6, 7 and 8)
1982-83	203	152	242	287	138	191
1983-84	208	163	242	269	168	203
198485	223	171	264	288	211	216
1985-86	235	180	277	308	183	229
1986-87	243	185	296	280	160	249
1987-88	265	186	357	244	176	278

#### EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN EXPORT COMMODITY CLASSIFICATION (AECC) (Base of each index: *Year* 1974–75 = 100)

	ASIC Divisions		
Year	Agriculture, forestry, fishing and hunting (A)	Mining (B)	Manufacturing (C)
1982-83	158	262	202
1983-84	169	244	212
1984-85	182	265	226
1985-86	184	290	237
1986-87	182	298	251
1987-88	240	267	277

### EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION (ASIC)

# **BIBLIOGRAPHY**

#### **ABS Publications**

.

Monthly Summary of Statistics (1304.0) Digest of Current Economic Statistics (1305.0) Consumer Price Index (6401.0) Average Retail Prices of Selected Items (6403.0) Export Price Index (6405.0) Price Index of Materials Used in Building Other Than House Building (6407.0) Price Index of Materials Used in House Building (6408.0) Price Index of Copper Materials (6410.0) Price Indexes of Materials Used in Manufacturing Industries (6411.0) Price Indexes of Articles Produced by Manufacturing Industry (6412.0) Import Price Index (6414.0)