
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.

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

<i>Groups and sub-groups</i>	<i>Percentage contribution to the all groups CPI</i>
Food	19.013
Dairy products	1.536
Cereal products	1.978
Meat and seafoods	3.495
Fresh fruit and vegetables	1.921
Processed fruit and vegetables	0.852
Soft drinks, ice cream and confectionery	2.829
Meals out and take away foods	4.671
Other food	1.731
Clothing	6.898
Men's and boys' clothing	1.952
Women's and girls' clothing	3.102
Fabrics and knitting wool	0.499
Footwear	1.107
Dry cleaning and shoe repairs	0.238
Housing	14.062
Rents	4.450
Home ownership	9.612
Household Equipment and Operation	18.429
Fuel and light	2.442
Furniture and floor coverings	4.115
Appliances	1.535
Household textiles	0.690
Household utensils and tools	1.748
Household supplies and services	3.918
Postal and telephone services	1.478
Consumer credit charges	2.503
Transportation	17.025
Private motoring	16.069
Urban transport fares	0.956
Tobacco and Alcohol	8.173
Alcoholic drinks	5.955
Cigarettes and tobacco	2.218
Health and Personal Care	5.596
Health services	2.992
Personal care products	1.943
Hairdressing services	0.661
Recreation and Education	10.804
Books, newspapers and magazines	1.229
Recreational goods	2.877
Holiday travel and accommodation	3.135
Recreational services	2.305
Education and child care	1.258
Total All Groups	100.000

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.

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

Year	Sydney	Mel- bourne	Brisbane	Adelaide	Perth	Hobart	Canberra	Darwin	Weighted average of eight capi- tal cities
1979-80	91.1	91.4	91.5	91.6	91.9	91.6	91.1	..	(b)91.4
1980-81	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
1988-89 (c)	187.7	187.9	185.4	187.8	186.1	185.3	186.3	178.9	187.3

(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. (c) These series have been affected by a change in the treatment of mortgage interest charges from March Quarter 1989.

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 Transport- ation	Tobacco and alcohol	Health and personal care	Recreation and edu- cation (a)	All groups
1979-80 (b)	90.6	93.3	91.0	90.0	91.3	93.6	91.1	.. 91.4
1980-81	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
1983-84	127.7	120.9	131.5	132.6	134.8	139.6	146.5	114.5 131.6
1984-85	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
1986-87	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
1988-89 (c)	179.9	175.9	198.4	182.2	193.7	209.1	186.3	162.1 187.3

(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. (c) Series for Housing and all groups have been affected by a change in the treatment of mortgage interest charges from March Quarter 1989.

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—								
1983		134	132	116	137	110	144	127
1984		140	138	118	152	112	153	133
1985		149	143	121	159	114	176	142
1986		162	149	121	168	115	200	146
1987		176	156	121	184	115	231	152
1988		189	162	122	199	116	245	160
Quarter—								
1987—								
Sept.		178	157	121	185	116	234	153
Dec.		181	158	121	191	116	238	154
1988—								
Mar.		184	159	122	194	115	243	155
June		187	161	122	197	116	244	159
Sept.		191	163	123	201	116	244	161
Dec.		195	164	123	203	117	250	165

(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.

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

Year	Index number	Year	Index number	Year	Index number
1901	47	1931	78	1961	252
1902	50	1932	74	1962	251
1903	49	1933	71	1963	252
1904	46	1934	73	1964	258
1905	48	1935	74	1965	268
1906	48	1936	75	1966	276
1907	48	1937	78	1967	286
1908	51	1938	80	1968	293
1909	51	1939	82	1969	302
1910	52	1940	85	1970	313
1911	53	1941	89	1971	332
1912	59	1942	97	1972	352
1913	59	1943	101	1973	385
1914	61	1944	100	1974	443
1915	70	1945	100	1975	510
1916	71	1946	102	1976	579
1917	75	1947	106	1977	650
1918	80	1948	117	1978	702
1919	91	1949	128	1979	766
1920	103	1950	140	1980	844
1921	90	1951	167	1981	926
1922	87	1952	196	1982	1,028
1923	89	1953	205	1983	1,132
1924	88	1954	206	1984	1,177
1925	88	1955	211	1985	1,257
1926	90	1956	224	1986	1,370
1927	89	1957	229	1987	1,487
1928	89	1958	233	1988	1,594
1929	91	1959	237		
1930	87	1960	245		

(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 selected 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.

House price indexes

House price indexes are compiled for use in calculating the mortgage interest charges component of the CPI. Separate indexes are constructed for *Established houses* and *Project homes* and these are published quarterly for each of the eight capital cities in *House Price Indexes: Eight Capital Cities* (6416.0)

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.
- Price Indexes of Materials Used in Coal Mining

Prices are collected from representative suppliers or manufacturers of the materials or articles included in the indexes. Mid month prices are generally used to compile the two

building materials indexes, the Price Indexes of Articles Produced by Manufacturing Industry and the Price Indexes of Materials Used in Coal Mining. 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.

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

	<i>Melbourne Wholesale Price Index (All Groups)</i>	<i>Wholesale Price (Basic Materials and Foodstuffs) Index (All Groups)</i>	<i>Price Index of Materials used in House Building (All Groups)</i>	<i>Price Index of Materials used in Building Other than House Building (All Groups)</i>	<i>Price Indexes of Materials used in Manufacturing Industries (Manufacturing Division)</i>	<i>Price Indexes of Articles Produced by Manufacturing Industry (Manufacturing Division)</i>
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	..	..	..	..
1936-37	..	25.5	..	..	..	..
1941-42	..	31.9	..	..	..	..
1946-47	..	37.0	..	..	..	..
1951-52	..	37.0	..	..	..	..
1956-57	..	76.4	..	..	..	..
1960-61	..	92.5	..	..	..	..
1961-62	..	86.4	..	..	..	..
1962-63	..	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	100.0	100.0	100.0	100.0
1969-70	..	101.3	104.3	104.6	102.6	103.9
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
1974-75	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
1980-81	323.6	323.9	353.2	305.2
1981-82	355.3	359.8	358.9	328.9
1982-83	389.0	400.6	388.0	360.2
1983-84	419.2	422.7	402.1	382.8
1984-85	452.4	446.2	422.2	404.8
1985-86	484.6	481.8	442.9	430.3
1986-87	512.7	519.0	445.0	458.5
1987-88	551.7	564.7	470.3	492.1
1988-89	611.3	616.6	477.5	526.0

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	
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.
1985-86	100.0	100.0	100.0	100.0	100.0	100.0	100.0	n.a.
1986-87	105.8	106.2	105.7	104.6	105.1	106.7	105.0	100.0
1987-88	113.8	114.8	114.3	112.0	110.8	114.2	110.7	109.7
1988-89	126.1	128.4	125.8	123.8	120.9	128.1	120.0	121.0

(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 base 1981-82 = 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)**

Base year	Weighted average of six State capital cities								
	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	
	1979-80 = 100.0							(b)	(c)
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	167.2	131.1	n.a.
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
1988-89	214.9	214.7	211.6	213.7	220.7	221.8	204.7	161.7	122.3

(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
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
1988-89	208.2	221.2	193.7	199.6	204.3	193.1

	Conductors (mains cable and circuitry)					
	Aluminium windows	Lamps and light fittings	Non-ferrous pipes	Builders' hardware	Paint	
1983-84	144.2	150.3	145.1	113.7	154.8	162.2
1984-85	152.7	171.9	151.0	122.1	163.8	177.0
1985-86	162.4	197.0	164.0	134.5	182.2	189.3
1986-87	174.2	216.3	180.4	142.4	200.9	201.9
1987-88	192.1	301.3	193.5	183.3	214.7	208.9
1988-89	210.0	369.7	206.2	209.7	235.6	228.4

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.

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

	<i>Imported materials</i>				<i>Home produced materials</i>				
	<i>Agricul- tural</i>	<i>Mining</i>	<i>Manu- factured</i>	<i>Total imported mater- ials</i>	<i>Agricul- tural, forestry and fishing</i>	<i>Mining</i>	<i>Elec- tricity</i>	<i>Total home produced mater- ials</i>	<i>All mater- ials</i>
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	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
1988-89	95.3	56.7	135.8	116.5	131.0	93.6	118.3	111.3	113.1

(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 Materials Used In Coal Mining

The Price Indexes of Materials Used in Coal Mining are compiled on a reference base 1987-88 = 100.0, using a weighting pattern derived from estimated materials usage in the operation of open cut and underground coal mines in the three years ended June 1987.

A description of this series, including its composition and weighting pattern, is given in the publication *Price Indexes of Materials Used in Coal Mining*, November 1988 (6415.0).

Index series are published which measure price movements in materials used in open cut and underground coal mining operations separately. For the purpose of these indexes, coal mining operations encompass the removal of overburden, the extraction, washing and preparation of the coal and its transportation to the rail head. Materials are defined to be those consumable and replacement parts normally used up in these activities. Items of capital equipment are not included within the scope of the index.

The Open Cut and Underground indexes enable comparisons to be drawn between them as to the differences in degree of price movement from period to period. They do not measure differences in price levels between the two types of mining.

PRICE INDEXES OF MATERIALS USED IN COAL MINING
(Base of each index: Year 1987-88 = 100.0)

	<i>Open cut</i>	<i>Underground</i>
1987-88	100.0	100.0
1988-89	99.9	106.8

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.

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

Year	<i>Net subdivision indexes (b)</i>						
	<i>All Manu- facturing Industry Index (c)</i>	<i>Food, beverages and tobacco (21-22)</i>	<i>Textiles (23)</i>	<i>Clothing and footwear (24)</i>	<i>Wood, wood products and furniture (25)</i>	<i>Paper, paper products and printing (26)</i>	<i>Chemical, petroleum and coal products (27)</i>
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
1988-89	526.0	486.5	461.5	467.6	667.8	573.1	495.9

Year	<i>Glass, clay and other non- metallic mineral products (28)</i>	<i>Basic metal products (29)</i>	<i>Fabricated metal products (31)</i>	<i>Transport equipment (32)</i>	<i>Other industrial machinery and equipment and household appliances (33)</i>	<i>Miscellan- eous manu- facturing products (34)</i>
	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
1985-86	449.8	396.4	534.4	417.5	417.6	388.1
1986-87	473.7	422.5	566.9	479.9	449.6	424.2
1987-88	504.5	471.9	597.8	528.0	484.5	466.2
1988-89	548.1	521.2	646.2	562.3	517.3	497.6

(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.

FOREIGN TRADE PRICE INDEXES (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
1960-61	93	95	1979-80	309	403
1961-62	94	94	1980-81	328	450
1962-63	99	94	1981-82	332	458
1963-64	112	96	1982-83	360	506
1964-65	103	97	1983-84	369	524
1965-66	105	99	1984-85	396	580
1966-67	103	100	1985-86	417	659
1967-68	98	99	1986-87	431	731
1968-69	100	100	1987-88	469	742
1969-70	101	103	1988-89	501	p694

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.

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

<i>AICC Section</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89p</i>
(0) Food and live animals chiefly for food	178.8	162.4	149.8
(1) Beverages and tobacco	189.4	192.2	183.0
(2) Crude materials, inedible, except fuels	148.0	153.4	161.7
(3) Mineral fuels, lubricants and related materials	69.3	75.1	60.3
(4) Animal and vegetable oils, fats and waxes	99.8	105.4	102.5
(5) Chemicals and related products n.e.s.	145.6	153.0	152.1
(6) Manufactured goods classified chiefly by material	169.4	173.4	167.9
(7) Machinery and transport equipment	191.4	191.9	177.0
(8&9 part) Miscellaneous manufactured articles and non-monetary gold	177.8	178.7	167.8
All groups	159.6	162.0	151.6

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

	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89p</i>
<i>Broad Economic Categories</i>			
Food and beverages	172.3	160.3	149.0
Industrial supplies n.e.s.	157.6	163.3	161.6
Fuels and lubricants	69.3	75.1	60.3
Capital goods (except transport equipment) and parts and accessories thereof	182.3	181.5	166.2
Transport equipment and parts and accessories thereof	215.2	218.4	205.1
Consumer goods n.e.s.	171.5	171.8	161.6
<i>End Use Classes</i>			
Capital goods	187.7	187.7	174.6
Intermediate goods	139.8	143.2	134.7
Consumption goods	180.7	182.2	170.4

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:

(i) *Australian Export Commodity Classification (AECC) 1978-79 (1203.0)*

(ii) *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.

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

Year	AECC Sections					All groups
	<i>Food and live animals (0)</i>	<i>Crude materials inedible (except fuels) (2)</i>	<i>Mineral fuels and lubricants (3)</i>	<i>Animal and vegetable oils and fats (4)</i>	<i>Chemicals and other manufactured exports (5, 6, 7 and 8)</i>	
1983-84	208	163	242	269	168	203
1984-85	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
1988-89	283	206	383	228	173	301

EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION (ASIC) (Base of each index: Year 1974-75 = 100)

Year	ASIC Divisions		
	<i>Agriculture, forestry, fishing and hunting (A)</i>	<i>Mining (B)</i>	<i>Manufacturing (C)</i>
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
1988-89	266	266	298

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