

Prices

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Prices are a key factor in the operation of the economy, and the indexes which measure movements in the various categories of prices are used extensively by a wide range of users who need to be aware of and to analyse price movements. This chapter provides an outline of various price indexes, their history, and their underlying concepts and methodology, more details of which are contained in the source publications referred to throughout the chapter and in the bibliography.

CONSUMER PRICE INDEX

The Consumer Price Index (CPI) measures quarterly changes in the retail 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 subgroups and 107 expenditure classes.

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*.

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. Subgroup index numbers are published for the weighted average of eight capital cities. Expenditure class index numbers are available for each city plus the weighted average of eight capital cities.

21.1 CONSUMER PRICE INDEX: ALL GROUPS INDEX NUMBERS (Reference base year 1989-90 = 100.0)(a)

Year	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Canberra	Darwin	Weighted average of eight capital cities
1980-81	49.3	49.1	50.2	49.7	49.6	50.4	50.0	52.7	49.4
1981-82	54.3	54.2	55.6	54.9	55.1	55.5	55.3	58.5	54.6
1982-83	60.8	60.3	61.7	61.4	60.7	61.5	61.9	64.8	60.9
1983-84	64.5	64.9	66.1	65.8	65.0	65.5	66.1	68.5	65.0
1984-85	67.0	67.8	69.2	68.9	67.5	68.6	69.3	71.1	67.8
1985-86	72.7	73.6	74.8	74.7	72.9	74.6	75.3	77.0	73.5
1986-87	79.5	80.5	81.2	81.5	80.2	81.9	81.6	83.9	80.4
1987-88	85.6	86.4	86.9	87.0	85.9	87.9	87.3	89.8	86.3
1988-89(b)	92.5	92.3	93.0	93.3	92.3	93.4	93.1	94.2	92.6
1989-90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990-91	104.9	105.8	104.9	106.2	105.1	104.9	105.1	105.7	105.3
1991-92	106.7	108.1	107.0	108.9	105.9	107.1	107.8	108.0	107.3

(a) The separate city indexes measure price movements within each city individually. They do not compare price levels between cities.

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

Source: *Consumer Price Index (6401.0)*.

21.2 CONSUMER PRICE INDEX: GROUP INDEX NUMBERS
WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES
 (Reference base year 1989-90 = 100.0)

<i>Year</i>	<i>Food</i>	<i>Clothing</i>	<i>Housing</i>	<i>Household equipment and operation</i>	<i>Transport- ation</i>	<i>Tobacco and alcohol</i>	<i>Health and personal care</i>	<i>Recreation and educ- ation(a)</i>	<i>All groups</i>
1980-81	51.9	54.1	43.8	52.0	47.8	44.2	50.1	..	49.4
1981-82	56.3	57.9	48.7	57.5	52.7	48.2	62.2	..	54.6
1982-83	61.5	61.7	53.8	64.4	59.4	54.8	76.7	62.6	60.9
1983-84	66.3	65.3	57.6	69.0	64.4	61.7	73.4	66.6	65.0
1984-85	69.7	69.4	62.0	72.3	68.5	66.8	61.0	69.1	67.8
1985-86	75.1	75.1	67.2	78.1	74.4	72.9	66.6	75.3	73.5
1986-87	81.1	82.4	72.2	83.9	82.7	80.6	77.3	82.2	80.4
1987-88	85.3	88.8	77.2	89.7	89.1	87.4	86.1	88.7	86.3
1988-89(b)	93.4	95.1	86.9	94.8	92.5	92.4	93.3	94.2	92.6
1989-90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990-91	103.3	104.6	103.5	105.1	106.9	108.8	109.6	105.0	105.3
1991-92	105.8	106.4	98.9	107.5	108.8	115.0	121.3	106.9	107.3

(a) Group first compiled for 1982-83. (b) Series for Housing and All groups have been affected by a change in the treatment of mortgage interest charges from March Quarter 1989.

Source: *Consumer Price Index* (6401.0).

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 (that is, 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 (that is, the measure of its relative importance). Details of the weighting pattern are shown in the following table.

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 twelve separate series which have been linked to form a continuous series. The 12th series (that is, the current series) was introduced in the

September quarter 1992, with a weighting pattern based on estimated household expenditure in 1988-89.

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.

21.3 CONSUMER PRICE INDEX — 12TH SERIES: WEIGHTING PATTERN AT JUNE QUARTER 1992 WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES

<i>Groups and subgroups</i>	<i>Percentage contribution to the All Groups CPI</i>
Food	18.324
Dairy products	1.463
Cereal products	2.097
Meat and seafoods	3.001
Fresh fruit and vegetables	1.417
Processed fruit and vegetables	0.829
Soft drinks, ice cream and confectionery	2.890
Meals out and take away foods	4.959
Other food	1.668
Clothing	6.264
Men's and boys' clothing	1.686
Women's and girls clothing	2.545
Fabrics and knitting wool	0.746
Footwear	1.063
Dry cleaning and shoe repairs	0.224
Housing	15.900
Rents	4.865
Home ownership	11.035
Household equipment and operation	18.370
Fuel and light	2.339
Furniture and floor coverings	4.344
Appliances	1.538
Household textiles	0.754
Household utensils and tools	1.212
Household supplies and services	3.970
Postal and telephone services	1.715
Consumer credit charges	2.498
Transportation	15.967
Private motoring	14.755
Urban transport fares	1.212

... continued

**21.3 CONSUMER PRICE INDEX — 12TH SERIES: WEIGHTING PATTERN AT
JUNE QUARTER 1992
WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES — *continued***

<i>Groups and subgroups</i>	<i>Percentage contribution to the All Groups CPI</i>
Tobacco and alcohol	7.475
Alcoholic drinks	5.061
Cigarettes and tobacco	2.414
Health and personal care	6.850
Health services	3.961
Personal care products	2.097
Hairdressing services	0.792
Recreation and education	10.850
Books, newspapers and magazines	1.146
Recreational goods	2.564
Holiday travel and accommodation	2.349
Recreational services	2.852
Education and child care	1.939
Total All Groups	100.000

Source: The Australian Consumer Price Index 12th Series Review (6450.0).

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 (for example, bread, fresh meat and fish, fresh fruit and vegetables, petrol, alcohol and tobacco) and a small number are collected annually (for

example, seasonal clothing, local government rates and charges).

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 (that is, 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.

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 being completed in the September quarter 1992. Previous revisions of the CPI were introduced at: December quarter 1963; December quarter 1968; December quarter 1973; September quarter 1974; September quarter 1976; March quarter

1982; and March quarter 1987. 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.

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.

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. 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; and
- from 1948-49 onwards, the CPI.

21.4 RETAIL PRICE INDEX NUMBERS(a), LONG-TERM LINKED SERIES (Reference base year 1945 = 100)

Year	Index number	Year	Index number	Year	Index number	Year	Index Number
1901	47	1924	88	1947	106	1970	313
1902	50	1925	88	1948	117	1971	332
1903	49	1926	90	1949	128	1972	352
1904	46	1927	89	1950	140	1973	385
1905	48	1928	89	1951	167	1974	443
1906	48	1929	91	1952	196	1975	510
1907	48	1930	87	1953	205	1976	579
1908	51	1931	78	1954	206	1977	650
1909	51	1932	74	1955	211	1978	702
1910	52	1933	71	1956	224	1979	766
1911	53	1934	73	1957	229	1980	844
1912	59	1935	74	1958	233	1981	926
1913	59	1936	75	1959	237	1982	1,028
1914	61	1937	78	1960	245	1983	1,132
1915	70	1938	80	1961	252	1984	1,177
1916	71	1939	82	1962	251	1985	1,257
1917	75	1940	85	1963	252	1986	1,370
1918	80	1941	89	1964	258	1987	1,487
1919	91	1942	97	1965	268	1988	1,594
1920	103	1943	101	1966	276	1989	1,714
1921	90	1944	100	1967	286	1990	1,839
1922	87	1945	100	1968	293	1991	1,898
1923	89	1946	102	1969	302	1992	1,917

(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.

Source: *Labour Report and Consumer Price Index (6401.0)*.

Comparison with other countries

The following table provides a comparison of the Australian CPI with that of selected other countries.

21.5 CONSUMER PRICE INDEX NUMBERS: AUSTRALIA AND OTHER COUNTRIES(a)
(Reference base year 1980 = 100.0 (b))

<i>Period</i>	<i>Australia</i>	<i>Canada</i>	<i>Germany (c)</i>	<i>Japan</i>	<i>New Zealand</i>	<i>United Kingdom</i>	<i>United States of America</i>
Year							
1986	76.9	148.9	120.9	115.2	199.5	146.3	133.0
1987	83.4	155.6	121.2	115.3	230.9	152.4	137.9
1988	89.4	161.8	122.8	116.2	245.6	159.9	143.6
1989	96.2	169.9	126.2	118.8	259.6	172.3	150.5
1990	103.2	178.1	129.5	122.4	275.6	188.6	158.6
1991	106.5	188.1	134.0	126.4	282.8	199.7	165.3
Quarter							
1990							
September	103.3	178.8	129.7	122.7	277.3	191.6	159.7
December	106.0	181.3	130.9	124.8	280.3	194.6	162.3
1991							
March	105.8	186.5	131.9	125.4	262.0	195.7	163.6
June	106.0	187.9	133.2	126.4	282.3	199.8	164.6
September	106.6	189.0	135.1	126.3	283.3	200.7	165.9
December	107.6	188.7	136.0	127.9	283.0	202.7	167.1
1992							
March	107.6	189.6	137.7	127.4	284.3	203.8	168.3
June	107.3	190.5	139.1	129.2	285.0	208.1	169.6
September	107.4	191.3	139.8	n.y.a.	286.0	208.0	171.0
December	107.9	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.

(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) Except Australia, for which base year is 1989-90 = 100.0. (c) Since 3 October 1990 no longer known as Federal Republic of Germany.

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

PRODUCER PRICE INDEXES

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.

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 present range of producer price indexes was developed and produced progressively from the 1960s. The current indexes relate to the building industry, manufacturing industry, and (not included in this chapter) the mining industry.

21.6 PRODUCER AND WHOLESALE PRICE INDEXES
(Reference base year 1968-69 = 100.0)

<i>Year</i>	<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
1989-90	658.4	665.3	502.4	559.9
1990-91	688.7	699.2	522.7	584.6
1991-92	690.1	703.4	509.6	586.7

Source: Labour Report; Price Index of Materials Used in Building Other than House Building, Eight Capital Cities (6407.0); Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (6408.0); Price Indexes of Materials Used in Manufacturing Industries, Australia (6411.0); Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0).

A description of the main producer price indexes is given below. In addition to the figures contained in the various ABS producer and foreign trade publications, a large volume of unpublished figures is available on request. These price indexes are used by both the government and private sectors for applications such as adjusting business contracts. They are also used extensively for economic analysis.

Price Index of Materials Used in House Building

The Price Index of Materials Used in House Building measures changes in prices of selected materials used in the construction of houses in each capital city Statistical Division.

It was first compiled on a reference base of 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.

The current indexes for the six State capital cities were introduced in October 1986 on a reference base of 1985-86 = 100.0 and were linked to the previous series. The items were selected and allocated weights on the basis of the estimated values of each material used in a sample of 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.

21.7 PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING(a)
(Reference base year 1985-86 = 100.0)

Year(b)	Weighted average of six State capital cities	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Canberra (c)
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
1989-90	135.8	139.1	133.5	134.1	129.7	140.8	128.0	130.5
1990-91	142.1	145.7	138.1	141.9	136.2	148.7	134.2	136.4
1991-92	142.4	146.1	137.3	144.7	135.5	149.3	138.3	140.3

(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. (c) Reference base 1986-87 = 100.0.

Source: *Price Index of Materials Used in House Building, Six State Capital Cities and Canberra* (6408.0).

Price Index of Materials Used in Building Other than House Building

The Price Index of Materials Used in Building Other than House Building measures changes in prices of selected materials used in the construction of buildings other than houses in metropolitan areas. The types of building directly represented in the index are:

- flats and other dwellings;
- hotels, motels and hostels;
- shops;
- factories;
- offices;
- other business premises;
- education buildings;
- health buildings; and
- other non-residential buildings.

It was first compiled on a reference base of 1966-67 = 100.0 using a weighting pattern derived from estimated materials usage in 1966-67. Monthly index numbers for this first series are available for the period July 1966 to January 1981.

The current indexes for the six State capital cities were introduced in February 1981 on a reference base of 1979-80 = 100.0. Its composition reflects the usage of materials in the construction of buildings (other than houses) commenced in the three years ending June 1977. An index for Darwin was published for the first time in September 1982 on a reference base of 1981-82 = 100.0 and an index for Canberra was introduced in November 1987 on a reference base of 1986-87 = 100.0.

21.8 PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING(a) (Reference base year 1979-80 = 100.0)

Year	Weighted average of six State capital cities	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin (b)	Canberra (c)
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
1989-90	231.9	231.3	227.8	233.9	237.1	240.0	216.8	171.9	132.2
1990-91	243.7	244.2	238.0	245.2	249.6	253.2	225.2	181.1	140.4
1991-92	245.2	247.8	235.6	251.3	250.0	252.5	232.1	186.6	143.7

(a) The separate city indexes measure price movements within each city individually. They do not compare price levels between cities.

(b) Reference base 1981-82 = 100.0. (c) Reference base 1986-87 = 100.0.

Source: Price Index of Materials Used in Building Other than House Building, Eight Capital Cities (6407.0).

21.9 PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING INDEX NUMBERS FOR SELECTED BUILDING MATERIALS WEIGHTED AVERAGE OF SIX STATE CAPITAL CITIES (Reference base year 1979-80 = 100.0)

Year	Structural timber	Clay bricks	Ready mixed concrete	Galvanised steel decking cladding and sheet products	Structural steel	Reinforcing steel bar fabric and mesh
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
1989-90	221.1	245.7	210.3	221.3	219.0	210.3
1990-91	226.8	254.4	230.1	232.8	223.4	223.8
1991-92	221.8	258.0	222.9	235.9	220.5	222.4

Year	Aluminium windows	Conductors (mains cable and circuitry)	Lamps and light fittings	Non-ferrous pipes	Builders' hardware	Paint
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
1989-90	223.8	447.7	211.2	215.6	252.2	254.1
1990-91	227.9	511.7	210.9	220.0	264.5	275.7
1991-92	222.6	508.6	212.9	217.4	276.8	296.5

Source: Price Index of Materials Used in Building Other Than House Building, Eight Capital Cities (6407.0).

Price Indexes of Materials Used in Manufacturing Industries

These indexes measure changes in prices of materials (including fuels) used by establishments classified to the Manufacturing Division of the Australian Standard Industrial Classification (ASIC), 1983 edition.

Separate price indexes are published for materials used in Manufacturing Industry as a whole, for 14 separate Manufacturing sectors (defined in terms of ASIC Subdivisions or ASIC Groups) and for selected groups of

materials classified according to whether the material is home produced or imported.

The indexes are compiled and published on a *net sector basis*, that is, each index includes only those materials which are used in the defined sector of Australian manufacturing industry and which have been produced by establishments outside that sector.

The indexes were first compiled on a reference base of 1968-69 = 100.0, using a weighting pattern derived from estimated manufacturing usage in 1971-72. Monthly

index numbers for this first series are available for the period July 1968 to November 1985.

The current indexes were introduced in December 1985 on a reference base of

1984-85 = 100.0. 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.

21.10 PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES(a)
SELECTED CATEGORIES OF MATERIALS
 (Reference base year 1984-85 = 100.0)

Year	Imported materials				Home produced materials				
	Agricultural	Mining	Manufactured	Total imported materials	Agricultural, forestry and fishing	Mining	Electricity	Total home produced materials	All materials
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
1989-90	85.5	66.1	139.5	121.1	134.0	103.5	123.6	117.9	119.0
1990-91	83.5	79.7	140.3	124.7	126.9	119.1	128.9	123.3	123.8
1991-92	85.0	70.2	141.3	123.3	128.7	108.7	133.0	119.3	120.7

(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.

Source: *Price Indexes of Materials Used in Manufacturing Industries, Australia (6411.0)*.

Price Indexes of Articles Produced by Manufacturing Industry

These indexes measure movements in the prices of articles produced by manufacturing industry. For the purpose of the index, manufacturing industry is defined to be establishments classified to the Manufacturing Division of the ASIC, 1983 edition.

The indexes are constructed on a *net sector* basis. This approach means that:

- The All Manufacturing Industry Index represents price movements of goods which are produced by establishments in the Manufacturing Division, for sale or transfer to establishments outside the Manufacturing Division, for export, or for use as capital equipment. Articles which are sold or transferred to other establishments within manufacturing industry for further processing or for use as inputs are excluded.

- The net subdivision indexes for each of the manufacturing subdivisions represent movements in prices of goods produced by establishments in the respective subdivisions, for sale or transfer to other subdivisions within manufacturing or to establishments outside the Manufacturing Division, for export, or for use as capital equipment. Sales or transfers to establishments within the subdivision are excluded.

The indexes were first published in June 1976 on a reference base of 1968-69 = 100.0, with indexes compiled retrospectively to July 1968. The composition and weighting patterns of the indexes were based on the value of production in 1971-72.

The current indexes were introduced from May 1990. The composition and weighting pattern are based on the value of production in 1986-87 and the indexes are on a reference base of 1988-89 = 100.0.

21.11 PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY(a)
(Reference base year 1988-89 = 100.0)

<i>Net subdivision indexes</i>								
<i>Year</i>	<i>All Manufacturing Industry Index</i>	<i>Food, beverages and tobacco (21)</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>Chemicals and chemical products (275 & 276)</i>	<i>Petroleum products (277 & 278)</i>
1986-87	87.2	88.1	83.1	87.1	85.3	89.6	n.a.	n.a.
1987-88	93.6	93.4	94.6	92.9	91.3	95.9	n.a.	n.a.
1988-89	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1989-90	106.5	106.9	103.2	107.3	107.6	104.3	104.4	118.4
1990-91	111.2	109.5	103.4	112.0	112.7	111.0	109.3	150.1
1991-92	111.6	112.3	102.9	114.9	114.2	117.3	109.9	134.3

<i>Year</i>	<i>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 machinery and equipment (33)</i>	<i>Miscellaneous manufacturing products (34)</i>
1986-87	86.5	81.1	87.7	85.4	86.9	85.2
1987-88	92.1	90.5	92.5	93.9	93.7	93.7
1988-89	100.0	100.0	100.0	100.0	100.0	100.0
1989-90	108.7	105.6	107.9	105.6	104.2	103.7
1990-91	117.2	106.2	113.7	109.9	107.0	106.4
1991-92	119.3	99.9	114.3	112.7	107.0	107.8

(a) For a full description of Division C, 'Manufacturing' and the subdivisions within the Manufacturing Division, see *Australian Standard Industrial Classification (ASIC)* (1201.0), 1983 edition.

Source: *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0).

FOREIGN TRADE PRICE INDEXES

The first index of export prices 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, applied to the average unit values of each export in successive years. This index was published for the years 1897 to 1929-30.

Two new series of monthly export price indexes were published in 1937, compiled back to 1928. One index used fixed weights and the other used changing weights. The methodology was changed and actual export prices were used instead of unit values. The indexes were compiled until 1962.

In 1962, a fixed weights index on the reference base of 1959-60 = 100.0 was introduced. A new interim series was linked to this index, still with a reference base of 1959-60 = 100.0, but from July 1969 with updated weights. The interim index was

replaced in 1979 by an index on a reference base of 1974-75. In 1990, the current index was released.

The first import price index produced by the ABS covered the period from September quarter 1981 to September quarter 1991 on a reference base of 1981-82 = 100.0. This index replaced an index previously published by the Reserve Bank of Australia on a reference base of 1966-67 = 100.0. The Reserve Bank's import price index was published from 1928 until September 1982.

The latest Import Price Index series was introduced in December 1991 with monthly index numbers compiled from April 1991 onwards, on a reference base of 1989-90 = 100.0.

To give a broad indication of long-term changes, the following table draws on the available foreign trade indexes.

Export Price Index

The index measures changes in the prices of all exports of merchandise from Australia,

including re-exports (that is, goods which are imported into Australia and exported at a later date without physical alteration). The index numbers for each month relate to prices of exports actually shipped during that month.

The current Export Price Index is a fixed weights index compiled on a reference base of 1989-90 = 100.0, with the weights based predominantly on Australian exports for 1988-89.

In general, prices are obtained from major exporters of the selected commodities included in the index.

The commodities included in the current index have been combined into broad index groups in three ways. Index numbers are produced for groupings defined in terms of the Australian Harmonized Export Commodity Classification (AHECC), on an industry of origin basis defined in terms of the Australian Standard Industrial Classification (ASIC) and for selected Sections of the Standard International Trade Classification (SITC).

21.12 FOREIGN TRADE PRICE INDEXES (Reference base year 1968-69 = 100)

<i>Year</i>	<i>Export Price Index (All Groups)</i>	<i>Import Price Index (All Groups)</i>	<i>Year</i>	<i>Export Price Index (All Groups)</i>	<i>Import Price Index (All Groups)</i>
1901	15	..	1971-72	102	114
1911	17	..	1972-73	131	113
1921-22	25	..	1973-74	157	131
1931-32	18	22	1974-75	177	189
1936-37	29	21	1975-76	193	214
1941-42	27	35	1976-77	216	246
1946-47	53	51	1977-78	227	278
1951-52	123	92	1978-79	256	307
1956-57	115	91	1979-80	309	403
1960-61	93	95	1980-81	328	450
1961-62	94	94	1981-82	332	458
1962-63	99	94	1982-83	360	506
1963-64	112	96	1983-84	369	524
1964-65	103	97	1984-85	396	580
1965-66	105	99	1985-86	417	659
1966-67	103	100	1986-87	431	731
1967-68	98	99	1987-88	469	742
1968-69	100	100	1988-89	501	694
1969-70	101	103	1989-90	529	729
1970-71	99	108	1990-91	503	752
			1991-92	474	749

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, Australia (6414.0) thereafter. The source used for the Export Price Index is the ABS Export Price Index, Australia (6405.0).

21.13 EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN HARMONIZED EXPORT COMMODITY CLASSIFICATION (AHECC)(a) (Reference base year 1989-90 = 100.0)

						AHECC Sections
Year	All groups	Live animals, animal products	Vegetable products	Prepared foodstuffs	Mineral products	Products of chemical or allied industries
1989-90	100.0	100.0	100.0	100.0	100.0	100.0
1990-91	95.0	96.1	77.9	91.8	108.3	100.2
1991-92	89.6	97.6	83.1	87.9	103.1	89.6

For footnotes see end of table.

**21.13 EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN HARMONIZED
EXPORT COMMODITY CLASSIFICATION (AHECC)(a) — continued**
(Reference base year 1989–90 = 100.0)

Year	AHECC Sections				
	Wool and cotton fibres	Gold, diamonds and coin	Base metals and articles of base metals	Machinery and mechanical appliances	Motor vehicles, aircraft and vessels
1989–90	100.0	100.0	100.0	100.0	100.0
1990–91	77.8	96.6	92.6	97.8	100.0
1991–92	66.6	91.8	79.7	94.8	100.4

(a) Data prior to 1989–90 are not available because AHECC is not strictly comparable with the AECG formerly used.
Source: *Export Price Index, Australia* (6405.0).

**21.14 EXPORT PRICE INDEX: INDEX NUMBERS BASED ON AUSTRALIAN STANDARD
INDUSTRIAL CLASSIFICATION (ASIC)**
(Reference base year 1989–90 = 100.0)

Year	ASIC Divisions		
	Agriculture	Mining	Manufacturing
1986–87	71	93	81
1987–88	93	84	89
1988–89	103	83	96
1989–90	100.0	100.0	100.0
1990–91	77.2	106.5	96.9
1991–92	72.9	103.5	89.8

Source: *Export Price Index, Australia* (6405.0).

Import Price Index

The Import Price Index measures changes in prices of imports of merchandise into Australia on a free on board country of origin basis. The index numbers for each month relate to prices of imports landed in Australia during the month.

The Import Price Index was first published in May 1983 on a reference base of 1981–82 = 100.0. Quarterly index numbers are available from the September quarter 1981 to the September quarter 1991.

A review of the index was completed in December 1991. The resulting index is on a reference base of 1989–90 = 100.0 and uses a weighting pattern based on the pattern of

Australian imports during 1988–89 and 1989–90. Monthly index numbers are available from April 1991.

Prices of individual shipments are obtained from major importers of the selected items.

Index items have been grouped according to four different classifications:

- the Standard International Trade Classification (SITC);
- the Combined Customs Tariff and Statistical Nomenclature;
- on an industry of origin basis defined in terms of the ASIC; and
- the United Nations Classification by Broad Economic Categories (BEC).

**21.15 IMPORT PRICE INDEX: INDEX NUMBERS BASED
ON THE STANDARD INTERNATIONAL TRADE CLASSIFICATION (SITC)**
(Reference base year 1989-90 = 100.0)

<i>SITC section</i>	<i>1989-90</i>	<i>1990-91</i>	<i>1991-92</i>
Food and live animals chiefly for food	100.0	98.7	98.1
Beverages and tobacco	100.0	107.2	115.7
Crude materials, inedible, except fuels	100.0	94.6	90.8
Mineral fuels, lubricants and other related materials	100.0	119.0	92.5
Animal and vegetable oils, fats and waxes	100.0	96.3	116.6
Chemicals and related products n.e.s.	100.0	100.4	100.5
Manufactured goods classified chiefly by material	100.0	102.1	103.3
Machinery and transport equipment	100.0	102.6	104.8
Miscellaneous manufactured articles	100.0	103.0	105.7
Commodities and transactions not elsewhere classified	100.0	96.0	91.4
All groups	100.0	103.2	102.7

Source: Import Price Index, Australia (6414.0).

**21.16 IMPORT PRICE INDEX: INDUSTRY OF ORIGIN INDEX NUMBERS
BASED ON THE AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION (ASIC)**
(Reference base year 1989-90 = 100.0)

<i>Division</i>	<i>1989-90</i>	<i>1990-91</i>	<i>1991-92</i>
Agriculture, forestry, fishing and hunting	100.0	97.6	99.7
Mining	100.0	120.8	105.5
Manufacturing	100.0	102.5	102.6

Source: Import Price Index, Australia (6414.0).

**21.17 IMPORT PRICE INDEX: INDEX NUMBERS FOR
BROAD ECONOMIC CATEGORIES (BEC) AND END USE CLASSES**
(Reference base year 1989-90 = 100.0)

<i>Categories/Classes</i>	<i>1989-90</i>	<i>1990-91</i>	<i>1991-92</i>
<i>Broad Economic Categories</i>			
Food and beverages	100.0	100.3	102.1
Industrial supplies n.e.s.	100.0	99.9	98.8
Fuels and lubricants	100.0	119.1	94.7
Capital goods and parts and accessories thereof	100.0	103.6	102.3
Transport equipment and parts and accessories thereof	100.0	102.5	108.5
Consumer goods n.e.s.	100.0	102.6	106.0
<i>End Use Classes</i>			
Capital goods	100.0	103.7	105.1
Intermediate goods	100.0	102.9	98.6
Consumption goods	100.0	103.4	107.0

Source: Import Price Index, Australia (6414.0).

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FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

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