

**PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES
AUSTRALIA, DECEMBER 1989**

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MAIN FEATURES

Change between—

	November 1989 and December 1989 %	December 1988 and December 1989 %
Manufacturing Division	+0.2	+9.1
Imported Materials	—	+6.9
Home Produced Materials	+0.3	+10.5

The Manufacturing Division index increased by 0.2% (+0.2 index points) in December 1989. This reflects the net impact of a number of price rises partly offset by a number of price falls. The main price changes were:

Imported materials—

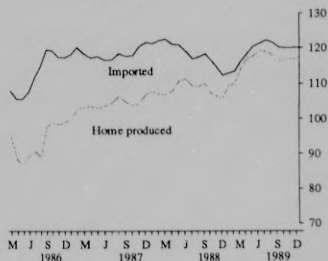
None of the price movements for imported materials were significant.

Home produced materials—

- Increased prices for crude petroleum (+0.19 index points).
- Decreased prices for cattle (-0.16 index points).

MANUFACTURING DIVISION

Index Numbers
(Base Year 1984-85 = 100.0)



Annual Percentage Change

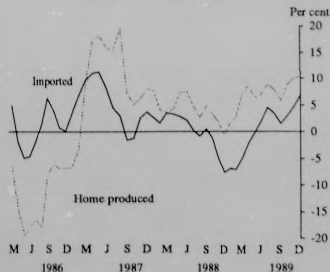


TABLE 1. PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES
 MANUFACTURING DIVISION INDEXES
 (Base of each Index : Year 1984-85 = 100.0)

	Manufacturing Division	Source of materials	
		Imported Materials	Home Produced Materials
INDEX NUMBERS			
1986-87	105.4	117.3	99.1
1987-88	111.4	120.0	106.8
1988-89	113.1	116.5	111.3
<i>1988-89—</i>			
October	110.4	116.4	107.2
November	109.1	114.5	106.3
December	108.3	112.3	106.1
January	110.6	112.9	109.4
February	111.2	113.4	110.0
March	114.9	116.2	114.2
April	117.5	118.3	117.0
May	118.6	120.5	117.6
June	119.9	121.3	119.1
<i>1989-90—</i>			
July	120.1	122.2	118.9
August	119.2	121.5	117.9
September	117.7	120.1	116.4
October	117.8	119.9	116.7
November p	118.0	120.0	116.9
December p	118.2	120.0	117.2
PERCENTAGE CHANGES			
		<i>Change from previous year</i>	
1986-87	+0.5	+4.9	-2.1
1987-88	+5.7	+2.3	+7.8
1988-89	+1.5	-2.9	+4.2
<i>Change from corresponding month of previous year</i>			
<i>1988-89—</i>			
October	+1.7	-1.2	+3.3
November	-0.8	-5.0	+1.8
December	-3.2	-7.6	-0.7
January	-1.6	-6.9	+1.7
February	-1.0	-7.1	+2.7
March	+2.3	-5.1	+6.9
April	+4.5	-2.3	+8.5
May	+3.9	-0.3	+6.4
June	+5.2	+1.9	+6.9
<i>1989-90—</i>			
July	+7.3	+4.5	+8.8
August	+6.3	+3.4	+7.9
September	+4.3	+1.5	+5.9
October	+6.7	+3.0	+8.9
November p	+8.2	+4.8	+10.0
December p	+9.1	+6.9	+10.5
<i>Change from previous month</i>			
<i>1988-89—</i>			
October	-2.1	-1.6	-2.5
November	-1.2	-1.6	-0.8
December	-0.7	-1.9	-0.2
January	+2.1	+0.5	+3.1
February	+0.5	+0.4	+0.5
March	+3.3	+2.5	+3.8
April	+2.3	+1.8	+2.5
May	+0.9	+1.9	+0.5
June	+1.1	+0.7	+1.3
<i>1989-90—</i>			
July	+0.2	+0.7	-0.2
August	-0.7	-0.6	-0.8
September	-1.3	-1.2	-1.3
October	+0.1	-0.2	+0.3
November p	+0.2	+0.1	+0.2
December p	+0.2	—	+0.3

TABLE 2. PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES
CONTRIBUTION OF SELECTED CATEGORIES OF MATERIALS TO MANUFACTURING DIVISION INDEX
(expressed in terms of total Manufacturing Division index points) (a)

Category	November 1989 p	December 1989 p	Change
Manufacturing Division	118.0	118.2	+0.2
<i>Contributions to Division Index (in index points)—</i>			
All Imported Materials	41.43	41.46	+0.03
Selected Imported Materials			
Crude petroleum and condensates	3.76	3.83	+0.07
Textile fibres, yarns and fabrics	5.29	5.37	+0.08
Pulp, paper and materials made of paper	3.35	3.33	-0.02
Chemicals and chemical based materials	8.85	8.85	—
Basic iron and steel	2.85	2.85	—
Components for machinery and equipment	8.60	8.54	-0.06
All Home Produced Materials	76.52	76.72	+0.20
Selected Home Produced Materials			
Live animals	15.84	15.82	-0.02
Other agricultural materials	17.04	17.00	-0.04
Hardwood and softwood logs	1.74	1.80	+0.06
Fish, prawns and lobsters	1.34	1.31	-0.03
Metal ores and concentrates	11.33	11.41	+0.08
Coal, crude petroleum and gas	19.29	19.47	+0.18
Electricity	5.40	5.40	—

(a) For an explanation of this table see paragraph 26 of the Explanatory Notes and in the Appendix to the February 1988 issue of this publication.

TABLE 3. PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES MANUFACTURING DIVISION
INDEX NUMBERS FOR SELECTED CATEGORIES OF MATERIALS
(Base of each index : Year 1984-85 = 100.0)

	Imported materials									
	Agricultural(a)	Crude petroleum and condensates	Mining material(a)	Textile fibres, yarns and fabrics	Pulp, paper and materials made of paper	Chemicals and chemical based materials	Basic iron and steel	Components for machinery and equipment	Manufactured material(a)	All imported material(a)
INDEX NUMBERS										
1986-87	126.0	60.6	68.9	136.3	119.1	132.8	125.4	147.6	131.7	117.3
1987-88	106.5	61.6	67.9	142.9	120.5	142.0	128.2	148.0	136.4	120.0
1988-89	95.3	47.6	56.7	139.6	122.3	150.9	134.8	139.9	135.8	116.5
1988-89—										
October	96.4	40.6	50.9	143.5	124.1	150.9	134.1	141.5	137.2	116.4
November	95.1	37.8	48.4	142.5	119.8	149.8	133.1	138.7	135.5	114.5
December	90.6	37.1	47.4	138.6	119.7	146.1	132.6	136.3	133.1	112.3
January	91.1	43.5	52.8	138.3	124.9	144.9	132.3	139.9	137.3	115.9
February	89.5	48.2	56.6	135.2	117.2	146.0	134.9	132.7	131.8	113.8
March	92.0	51.0	59.4	137.7	119.7	150.6	137.0	137.3	136.7	116.3
April	94.5	56.1	64.2	137.0	121.4	151.5	137.6	138.6	135.9	118.3
May	94.1	58.3	66.3	137.6	126.6	157.8	138.3	139.9	138.2	120.5
June	94.6	58.6	66.8	138.1	129.2	158.8	139.3	140.6	139.1	121.3
1989-90—										
July	95.7	58.2	66.9	138.5	130.2	160.0	139.6	142.6	140.3	122.2
August	95.8	57.8	66.0	139.3	132.3	159.2	131.0	142.3	139.6	121.5
September	90.2	55.0	63.5	138.6	131.1	156.1	131.5	143.1	138.8	120.1
October	85.3	55.5	63.9	140.0	130.3	156.3	131.9	142.3	138.6	119.9
November p	83.1	56.7	65.0	140.0	129.4	156.3	131.8	141.4	138.4	120.0
December p	82.9	57.8	65.9	142.2	128.8	156.3	131.7	140.3	138.3	120.0
PERCENTAGE CHANGES										
Change from previous year										
1986-87	+7.4	-30.5	-24.7	+12.3	+9.9	+9.5	+4.6	+20.8	+11.9	+4.9
1987-88	-13.5	+1.7	-1.5	+4.8	+1.2	+6.9	+2.2	+0.3	+3.6	+2.3
1988-89	-10.5	-22.7	-16.5	-2.3	+1.8	+6.3	+5.1	-6.1	-0.4	-2.9
Change from corresponding month of previous year										
1988-89—										
October	-7.4	-36.4	-27.2	+2.1	+5.2	+12.9	+10.2	-4.5	+3.2	-1.2
November	-10.0	-44.2	-34.0	+0.2	-0.6	+9.0	+4.6	-6.7	-0.1	-5.0
December	-16.6	-42.1	-34.1	-3.2	-1.2	+1.5	-0.1	-7.2	-7.0	-7.6
January	-13.9	-27.6	-20.8	-5.7	-3.2	+0.6	+1.2	-8.7	-4.5	-6.9
February	-17.7	-20.2	-15.1	-7.6	-0.9	-0.9	-0.3	-11.1	-3.6	-7.1
March	-16.1	-12.7	-8.2	-7.1	-2.1	-2.1	-2.7	-4.3	-5.3	-4.3
April	-12.7	+7.9	+8.4	-6.4	-2.2	-0.1	+2.4	-6.3	-3.3	-2.3
May	-10.6	+5.8	+5.1	-6.1	-4.1	+5.1	+1.9	-4.2	-0.6	-0.3
June	-10.1	+8.9	+9.5	-4.0	+6.8	+6.7	+7.6	-3.6	+1.4	+1.9
1989-90—										
July	-8.6	+23.3	+20.1	-2.7	+5.6	+8.5	+6.2	+0.4	+3.1	+4.5
August	-3.1	+24.0	+18.1	-2.4	+6.6	+4.7	+0.3	+0.5	+1.9	+3.4
September	-9.8	+19.6	+14.4	-3.5	+4.5	+1.1	-2.5	+1.1	+0.4	+1.5
October	-11.5	+17.3	+25.5	+2.7	+6.0	+3.6	-1.6	+0.6	+1.0	+3.0
November p	-12.6	+30.0	+34.3	-1.8	+8.0	+4.3	-1.0	+1.9	+2.1	+4.8
December p	-8.5	+55.8	+39.0	-2.6	+7.6	+7.0	-0.7	+2.9	+3.9	+6.9
Change from previous month										
1988-89—										
October	-3.6	-11.7	-8.3	-0.1	-1.0	-2.3	-0.6	-0.1	-0.8	-1.6
November	-1.3	-6.9	-4.9	-0.7	-3.5	-0.7	-0.7	-2.0	-1.2	-1.6
December	-4.7	-1.9	-2.1	-1.7	-0.1	-2.5	-0.4	-1.7	-1.8	-1.9
January	+0.6	+17.3	+11.4	-2.3	-2.0	-0.8	-0.3	-0.3	-0.6	+0.5
February	-1.8	+10.8	+7.2	-1.2	-0.1	+0.8	-2.4	-0.4	+0.4	+0.4
March	+2.8	+5.8	+4.9	+1.1	+2.1	+3.2	+1.6	+3.5	+2.2	+2.5
April	+1.7	+10.0	+8.1	+0.2	+4.4	+0.6	+0.6	+0.9	+0.9	+1.8
May	-0.4	+3.9	+3.3	+0.4	+4.3	+4.2	+0.5	+0.4	+1.9	+1.9
June	+0.5	+0.8	+0.8	+0.4	+2.1	+0.6	+0.5	+0.7	+0.7	+0.7
1989-90—										
July	+1.2	-0.7	+1.3	+0.3	+0.8	+0.8	+0.2	+1.4	+0.9	+0.7
August	+0.1	-0.7	+1.3	+0.6	+1.6	-0.5	-6.2	-0.2	-0.5	-0.6
September	-5.8	-4.8	-3.8	-0.5	-0.9	-1.9	+0.4	+0.6	-0.6	-1.2
October	-5.4	+0.9	+1.3	-0.6	-0.6	+0.1	+0.3	-0.6	-0.1	-0.2
November p	-2.6	+2.2	+1.7	-0.3	-0.7	—	—	-0.1	-0.1	+0.1
December p	-0.2	+1.9	+1.4	+1.6	-0.5	—	-0.1	-0.8	-0.1	—

For footnotes see end of Table 3

TABLE 3. PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES
MANUFACTURING DIVISION INDEX NUMBERS FOR SELECTED CATEGORIES OF MATERIALS—continued
(Base of each index = Year 1984-85 = 100.0)

	Home produced materials										
	Live animals	Other agricultural materials	Hardwood and softwood logs	Fish, prawns and lobsters	Agricultural forestry and fishing materials(a)		Metal ores and concentrates	Coal, crude petroleum and gas	Mining materials(a)	Electricity(a)	All home produced materials(a)
INDEX NUMBERS											
1986-87	108.1	107.5	118.6	146.0	109.3	113.8	79.3	89.3	107.4	99.1	
1987-88	112.5	121.4	126.2	160.3	118.3	132.1	82.6	96.3	112.3	106.8	
1988-89	124.2	135.4	140.4	166.2	131.0	150.8	71.6	93.6	118.3	111.3	
1988-89—											
October	121.8	132.6	139.3	181.6	129.0	145.6	64.1	87.3	117.5	107.2	
November	120.1	134.4	142.0	167.6	128.7	150.2	60.3	85.7	117.9	106.3	
December	118.6	132.3	135.9	153.8	126.4	150.0	62.7	81.3	118.3	106.1	
January	119.3	134.1	146.8	163.8	128.4	146.3	70.7	91.9	118.7	109.4	
February	119.4	135.0	147.7	145.6	128.3	151.2	70.9	93.2	119.0	110.0	
March	125.2	140.8	148.6	156.4	134.0	154.3	75.2	96.9	118.2	114.2	
April	128.8	141.2	137.7	159.6	135.5	165.3	77.8	101.3	118.8	117.0	
May	129.8	141.6	138.8	162.1	136.3	165.0	78.4	101.6	118.9	117.6	
June	131.7	142.1	138.7	167.8	137.9	160.3	79.9	103.6	119.1	119.1	
1989-90—											
July	130.6	141.6	143.5	183.3	137.5	160.9	81.0	102.7	122.9	118.9	
August	127.0	140.5	144.1	164.3	135.4	160.3	80.7	102.5	123.0	117.9	
September	122.2	139.4	149.3	185.7	132.8	157.2	80.4	101.5	123.2	116.4	
October	118.9	139.5	149.4	182.7	131.2	158.7	82.6	103.5	123.2	116.7	
November p	119.0	140.2	143.4	174.5	131.0	156.1	84.2	104.0	123.5	116.9	
December p	118.8	139.8	147.6	170.5	130.8	157.3	85.0	104.9	123.5	117.2	
PERCENTAGE CHANGES											
	Change from previous year										
1986-87	+10.9	+5.9	+8.5	+16.1	+8.6	+5.5	-20.2	-11.9	+4.4	-2.1	
1987-88	+4.1	+12.9	+6.4	+9.8	+8.2	+16.1	+4.2	+7.8	+4.6	+7.8	
1988-89	+10.4	+11.5	+11.3	+10.7	+14.2	+14.2	-13.3	-2.8	+5.3	+4.2	
	Change from corresponding month of previous year										
1988-89—											
October	+16.7	+14.7	+11.6	+13.4	+15.4	+16.7	-23.9	-8.7	+4.8	+3.3	
November	+17.3	+15.0	+13.6	+6.9	+15.5	+25.5	-28.5	-12.0	+5.1	+1.8	
December	+11.0	+11.3	+8.9	-2.2	+10.6	+9.1	-27.2	-12.6	+5.7	-0.7	
January	+8.3	+10.7	+14.4	+11.1	+9.4	+15.8	-7.1	-1.1	+7.1	+1.7	
February	+7.2	+10.3	+15.4	-10.3	+8.4	+11.1	-13.4	-3.7	+6.1	+2.7	
March	+10.6	+11.3	+15.6	-1.3	+10.7	+15.6	-4.4	+3.0	+5.4	+6.9	
April	+10.6	+10.7	+11.2	+7.2	+10.2	+7.2	-0.6	+8.4	+8.5	+8.5	
May	+4.2	+8.2	+7.8	-4.5	+5.8	+19.6	+0.8	+7.3	+4.5	+6.4	
June	+0.3	+8.9	+9.6	-2.6	+4.1	+17.0	+9.3	+10.7	+4.6	+6.9	
1989-90—											
July	+3.4	+7.9	+7.9	+5.2	+6.2	+17.9	+11.0	+12.9	+4.7	+8.8	
August	+1.6	+9.2	+4.1	+2.3	+5.1	+15.2	+11.3	+12.0	+4.6	+7.9	
September	-1.5	+2.5	+2.5	+2.3	+9.9	+11.8	+10.4	+10.4	+5.9	+5.9	
October	-2.4	+5.2	+7.3	+0.6	+1.7	+9.0	+28.9	+18.6	+4.9	+8.9	
November p	-0.9	+4.3	+1.0	+4.1	+1.8	+3.9	+39.6	+21.4	+4.7	+10.0	
December p	+0.2	+5.7	+8.6	+10.9	+3.5	+4.9	+35.6	+20.3	+4.4	+10.5	
	Change from previous month										
1988-89—											
October	-1.8	+0.4	+0.9	+0.3	-0.6	+1.8	-10.8	-5.0	-0.3	-2.5	
November	-1.4	+1.4	+0.9	-7.7	-0.2	+3.2	-5.9	-1.8	+0.3	-0.8	
December	-1.2	-1.6	-4.3	-8.2	-1.8	-0.1	+4.0	+1.8	+0.3	-0.2	
January	+0.6	+1.4	+8.0	+6.5	+1.6	+1.8	+12.8	+5.4	+0.3	+3.1	
February	+0.1	+0.7	+0.6	-11.1	-0.1	+3.3	+0.3	+1.4	+0.5	+0.3	
March	+4.9	+4.3	+0.6	+7.4	+4.4	+2.1	+6.1	+4.0	-0.8	+3.8	
April	+2.9	+0.3	+7.3	+2.0	+1.1	+7.1	+3.5	+4.0	+0.6	+2.5	
May	+0.8	+0.3	+0.8	+1.6	+0.6	+0.2	+0.8	+0.3	+0.1	+0.5	
June	+1.5	+0.4	-0.1	+3.5	+1.0	-1.0	+4.5	+2.0	+0.2	+1.3	
1989-90—											
July	-0.8	-0.4	+3.5	+9.2	-0.1	-1.5	-1.1	-0.9	+3.2	-0.2	
August	-2.8	-0.8	+0.4	+3.0	-1.5	-0.4	-0.4	-0.2	+0.1	-1.8	
September	-3.8	+0.3	+0.3	+1.9	-1.9	-1.9	-0.4	-1.0	+0.2	-1.3	
October	-2.7	+0.1	+0.1	-1.6	-1.2	-1.0	+2.7	+1.0	—	+0.3	
November p	+0.1	+0.5	-4.0	-4.5	-0.2	-1.6	+1.9	+0.5	+0.2	+0.2	
December p	-0.2	-0.3	+2.9	-2.3	-0.2	+0.8	+1.0	+0.9	—	+0.3	

(a) Index numbers are available for these series back to July 1968. Annual index numbers for the period 1968-69 to 1984-85 on reference base: Year 1984-85 = 100.0 are shown in Table A5 in the Appendix to the December 1985 issue of this publication.

TABLE 4. PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES
MANUFACTURING SUBDIVISION INDEXES
(Base of each index: Year 1984-85 = 100.0)

	Food, beverages and tobacco (21)	Textiles (22)	Clothing (244-245)	Footwear (246)	Wood, wood products and furniture (25)	Paper, paper products and publishing (26)	Basic chemicals and other chemical products (272-279)	Petroleum and coal products (277-278)	Non-metallic mineral products (28)	Basic metal products (29)	Fabricated metal products (31)	Transport equipment (32)	Other machinery and equipment (33)	Miscellaneous manufacturing (34)
INDEX NUMBERS														
1986-87	108.6	125.6	126.9	123.9	118.1	115.4	116.1	72.1	110.5	108.4	115.2	130.2	120.7	118.3
1987-88	114.1	153.9	136.3	134.7	125.5	119.6	119.8	74.5	117.0	122.3	127.1	136.5	130.6	137.7
1988-89	125.1	153.1	138.6	137.7	133.4	127.0	125.5	61.0	121.0	136.8	140.7	138.4	136.2	135.9
1988-89—														
October	122.9	158.5	138.3	138.6	132.6	127.5	126.2	53.0	122.9	133.4	139.0	138.9	135.5	137.1
November	122.5	158.9	140.1	138.0	131.7	126.1	129.6	36.7	122.9	136.4	139.8	137.9	135.1	136.4
December	121.6	151.2	139.1	138.2	132.4	125.5	125.0	20.0	120.0	136.2	140.3	136.9	136.3	137.8
January	123.2	148.8	136.2	135.3	133.3	125.3	123.0	59.0	119.7	134.1	141.0	137.9	136.4	133.4
February	122.8	149.7	137.2	135.1	135.1	125.4	123.4	60.5	119.4	137.7	141.3	138.8	135.1	135.1
March	127.6	148.8	138.4	137.1	135.8	126.7	124.6	64.8	120.1	139.4	143.7	138.9	139.0	133.1
April	129.7	148.0	138.5	137.3	133.2	129.2	125.8	67.9	121.3	146.3	144.3	139.4	138.4	134.1
May	130.3	146.9	139.2	138.4	134.2	129.2	127.3	69.2	121.8	145.7	146.2	140.4	138.5	135.1
June	131.6	144.8	139.7	137.9	134.1	130.7	127.7	72.3	121.8	144.8	144.2	140.6	138.0	135.5
1989-90—														
July	131.5	145.3	139.6	143.9	136.7	130.7	129.6	70.8	124.2	144.4	144.1	141.9	138.4	137.5
August	130.0	145.3	139.9	143.7	137.6	132.6	129.5	70.5	125.3	143.6	141.2	141.4	138.6	137.1
September	127.9	144.7	138.0	145.1	142.0	132.4	128.6	69.5	125.4	141.6	144.0	141.6	136.7	136.7
October	126.7	144.5	139.3	141.7	143.2	131.4	128.3	71.6	124.7	143.7	144.2	143.0	141.1	136.4
November p	126.7	144.4	139.6	142.0	141.7	132.5	128.6	73.1	126.0	142.9	144.1	142.5	140.6	137.4
December p	126.4	146.0	140.7	141.7	142.8	132.6	128.3	74.1	125.8	143.8	143.8	141.8	139.9	137.0
PERCENTAGE CHANGES														
1986-87	+6.8	+13.6	+10.7	+12.4	+7.9	+7.1	+3.2	-24.8	+6.8	+1.8	+5.9	+14.5	+8.8	+9.4
1987-88	+5.1	+22.5	+7.4	+8.7	+6.3	+3.6	+3.3	+3.1	+5.9	+12.8	+10.3	+4.8	+8.2	+12.2
1988-89	+9.6	-0.5	+1.7	+2.2	+6.3	+6.2	+4.8	-18.1	+3.4	+11.9	+10.7	+1.4	+4.3	+2.4
Change from corresponding month of previous year														
1988-89—														
October	+11.8	+9.4	+2.5	+4.2	+7.9	+8.9	+8.2	-30.5	+5.9	+14.1	+13.9	+3.0	+6.1	+5.5
November	+12.0	+7.1	+3.5	+3.8	+8.3	+5.8	+6.0	-36.3	+5.8	+12.0	+12.2	+2.1	+4.0	+1.8
December	+9.3	—	+2.4	+2.3	+5.1	+3.9	+3.2	-2.1	+9.2	+11.1	+11.1	+2.0	+3.0	+2.0
January	+8.6	+2.6	+0.8	+0.8	+6.3	+3.9	+1.6	-21.4	+4.1	+6.1	+9.9	+0.4	+1.1	-0.4
February	+10.2	+7.6	-0.4	+2.5	+5.2	+3.2	+1.1	-17.7	+1.8	+10.2	+9.5	+0.7	+0.5	-1.8
March	+10.6	-9.4	-1.1	-1.4	+6.3	+3.3	+1.1	-7.8	+1.4	+10.2	+7.7	+0.5	+1.1	-1.8
April	+12.1	-5.8	-0.8	-1.2	+3.7	+3.4	+2.1	-0.7	+3.1	+15.9	+9.4	+0.1	+3.9	-1.7
May	+7.5	-13.2	+0.8	+0.1	+3.7	+3.3	+4.3	+0.3	+2.4	+16.3	+13.9	+0.2	+3.7	-2.7
June	+6.3	-13.6	+1.2	+0.4	+4.7	+7.1	+4.4	+8.4	+3.0	+13.0	+7.1	+0.4	+3.3	-1.2
1989-90—														
July	+7.3	-10.3	+1.5	+5.5	+4.9	+5.5	+4.7	+13.1	+3.8	+13.9	+5.9	+2.2	+4.2	-1.2
August	+6.3	-9.5	+1.5	+4.0	+3.9	+4.2	+1.2	+14.1	+3.5	+11.4	+3.6	+1.9	+4.9	-1.7
September	+4.8	+3.5	+0.4	+7.5	+4.9	+7.5	+0.9	+13.9	+4.8	+7.7	+6.0	+3.7	+5.4	+1.3
October	+3.1	-8.8	+0.7	+2.2	+8.0	+4.5	+1.7	+8.1	+1.5	+7.4	+5.0	+4.1	+4.1	+1.3
November p	+3.4	-9.1	-0.4	+2.9	+6.0	+5.1	+2.4	+8.3	+2.7	+4.8	+3.1	+3.3	+3.2	+1.7
December p	+3.9	-3.4	+1.2	+2.5	+7.9	+5.0	+1.0	+45.3	+4.8	+5.6	+2.5	+3.4	+2.3	-0.6
Change from previous month														
1988-89—														
October	-0.6	-0.1	-0.1	+0.3	+0.2	-0.4	-1.0	-13.1	+1.7	+1.2	+0.4	+0.1	+0.8	-1.0
November	-0.3	+0.3	-0.3	-0.4	+0.8	-1.1	-0.5	-7.0	-0.2	+2.2	+0.6	+0.7	+0.6	-1.5
December	-0.7	-4.8	-0.7	+0.1	-1.0	-0.9	-0.8	+3.4	-2.3	+1.1	+0.4	-0.7	-0.3	-3.2
January	+1.3	-1.8	-0.6	-1.2	+2.2	-0.4	-0.3	+15.7	-0.3	-1.5	-0.4	-0.1	-0.3	-2.0
February	-0.3	+0.8	-0.7	+0.4	-0.1	+0.5	+0.1	+0.2	+1.0	+2.7	+0.1	-1.5	-0.4	-1.0
March	+3.9	-0.6	+0.8	+0.0	+0.1	+0.5	+1.0	+2.8	+0.1	+1.2	+3.0	+2.4	+0.4	+0.8
April	+1.6	+0.5	+0.1	+0.1	-1.9	+0.4	+0.4	+4.5	+1.0	+4.9	+0.4	+0.4	+0.4	-1.0
May	+0.5	-0.7	+0.5	+0.8	+0.8	+1.5	+1.3	+1.9	+0.4	+0.4	-0.1	+0.7	+0.1	+0.7
June	+1.0	-1.4	+0.4	-0.4	-0.1	+2.2	+0.3	+6.5	-0.6	—	—	+0.1	-0.4	+0.3
1989-90—														
July	-0.1	+0.3	-0.1	+4.4	+1.9	+0.8	+1.5	-2.1	+2.0	-0.3	-0.1	+0.9	+0.3	+1.5
August	-1.1	-1.4	-0.2	-0.1	+0.5	+0.7	-0.1	-0.4	-0.6	-0.6	-2.0	-0.4	+0.1	-0.3
September	-1.6	-0.4	-1.4	+1.0	+3.3	-0.2	-0.7	-1.4	+1.4	+2.0	+1.8	+2.2	+2.3	+0.3
October	-0.9	-0.1	+0.9	+2.3	+0.8	+0.0	+0.2	+3.0	+0.9	+1.5	+0.1	+0.7	+0.4	+0.4
November p	-0.1	+0.1	+0.2	+0.2	-1.0	-0.6	-0.2	+2.1	+1.0	-0.6	+0.1	+0.3	+0.4	+0.7
December p	-0.7	+1.1	+0.8	-0.2	+0.8	+0.1	-0.7	+1.4	-0.7	+0.6	-0.2	-0.5	-0.5	-0.3

TABLE 5. SELECTED METALLIC MATERIALS USED IN FABRICATED METAL PRODUCTS INDUSTRY
(ASIC Subdivision 31)
(Base of each index : Year 1984-85 = 100.0)

	<i>Iron and steel</i> (a)	<i>Aluminium</i> (a)	<i>Copper and brass</i> (a)	<i>Zinc</i> (a)
INDEX NUMBERS				
1986-87	115.3	113.9	114.4	114.7
1987-88	124.6	134.5	145.8	114.8
1988-89	135.1	157.9	165.2	160.1
<i>1988-89—</i>				
October	133.8	159.8	153.8	142.6
November	133.6	156.6	175.2	147.0
December	133.8	157.0	177.5	147.9
January	134.0	156.6	177.5	155.2
February	135.1	156.0	167.9	172.8
March	137.0	158.8	180.2	196.9
April	138.7	157.6	176.6	183.4
May	139.3	157.5	173.0	178.4
June	139.4	159.2	166.8	189.6
<i>1989-90—</i>				
July	139.7	157.4	163.0	184.9
August	135.8	154.9	167.2	184.5
September	138.8	153.1	178.0	199.6
October	139.4	153.0	175.6	187.8
November p	139.7	151.5	171.3	188.8
December p	140.1	152.3	163.6	173.1
PERCENTAGE CHANGES				
	<i>Change from previous year</i>			
1986-87	+4.7	+10.0	+5.9	+15.2
1987-88	+8.1	+18.1	+27.4	+0.1
1988-89	+8.4	+17.4	+13.3	+39.5
<i>Change from corresponding month of previous year</i>				
<i>1988-89—</i>				
October	+11.2	+24.7	+16.8	+30.7
November	+9.7	+20.8	+15.6	+32.7
December	+9.2	+18.4	+7.6	+30.0
January	+7.1	+16.1	+1.4	+38.9
February	+4.8	+16.1	+10.8	+51.8
March	+6.3	+15.7	+20.5	+69.3
April	+7.4	+12.3	+15.6	+52.2
May	+8.1	+3.3	+19.3	+46.0
June	+7.4	+2.4	+9.2	+50.1
<i>1989-90—</i>				
July	+6.5	+0.1	+9.7	+34.6
August	+3.0	-2.4	+20.7	+39.8
September	+4.0	-4.2	+21.3	+44.2
October	+4.2	-4.3	+14.2	+31.7
November p	+4.6	-3.3	-2.2	+28.4
December p	+4.7	-3.0	-7.8	+17.0
<i>Change from previous month</i>				
<i>1988-89—</i>				
October	+0.2	—	+4.8	+3.0
November	-0.1	-2.0	+13.9	+3.1
December	+0.1	+0.3	+1.3	+0.6
January	+0.1	-0.3	—	+4.9
February	+0.8	-0.4	-5.4	+11.3
March	+1.4	+1.8	+7.3	+13.9
April	+1.2	-0.8	-2.0	-6.9
May	+0.4	-0.1	-2.0	-2.7
June	+0.1	+1.1	-3.6	+6.3
<i>1989-90—</i>				
July	+0.2	-1.1	-2.3	-2.5
August	-2.8	-1.6	+2.6	-0.2
September	+2.2	-1.2	+6.5	+8.2
October	+0.4	-0.1	-1.3	-5.9
November p	+0.2	-1.0	-2.4	+0.5
December p	+0.3	+0.5	-4.5	-8.3

(a) These index numbers replace series previously published in Table 1 of the 'Price Indexes of Metallic Materials, Australia' (Catalogue No. 6410.0). Except for Zinc, index numbers are available for these series back to July 1968. Zinc index numbers are only available back to July 1976. Annual index numbers for the period 1963-69 to 1984-85, on reference base : Year 1984-85 = 100.0, are shown in Table A6 in the Appendix to the December 1985 issue of this publication.

EXPLANATORY NOTES

Introduction

This publication contains a set of price indexes relating to materials used in Australian manufacturing industries. Each index is presented on *reference base*: Year 1984-85 = 100.0.

2. Table 1 contains index numbers for materials used in the Manufacturing Industry as a whole (Division C of the *Australian Standard Industrial Classification* (ASIC)) and for Imported materials and Home Produced materials contributing to the Division index.

3. Table 2 provides an analysis of the contributions which selected categories of materials make to the total Manufacturing Division index (see paragraph 26).

4. Table 3 contains index numbers for selected groups of commodities used in the Manufacturing Division. These include index numbers for Imported materials and Home Produced materials and for selected commodity groupings within each of these categories.

5. Table 4 contains index numbers for materials used in 14 Manufacturing 'sectors'. These 'sectors' are defined in terms of ASIC Subdivisions, ASIC Groups or combinations of ASIC Groups.

6. Table 5 contains index numbers for selected commodities used in the Fabricated Metal Products index (ASIC Subdivision 31).

7. Some of the index number series in Tables 3 and 4 replace series that were included in this publication prior to the December 1985 issue. The index numbers in Table 5 replace series previously published in Table 1 of *Price Indexes of Metallic Materials — Australia* (6410.0). Details of the relationship between new and old series are set out in paragraphs 20 to 25 of and in the Appendix to the December 1985 issue of this publication.

8. The Appendix to the December 1985 issue provides details of the composition and weighting of each index included in this publication. It also advises users about linking (new) index number series on the *reference base*: Year 1984-85 = 100.0 and (old) index number series on the *reference base*: Year 1968-69 = 100.0. The Appendix also contains tables of linked annual index numbers for the period from 1968-69 to 1984-85 on *reference base*: Year 1984-85 = 100.0.

Scope and composition

9. The composition of each of the indexes in this publication is based on materials (including fuels) used by establishments classified to designated 'sectors' of Australian manufacturing industry (i.e. ASIC Division C, Manufacturing). 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'. These establishments are either Australian manufacturing establishments classified to

other manufacturing 'sectors' or to other Divisions of Australian industry (e.g. 'Agriculture, forestry, fishing and hunting' or 'Mining') or are overseas producers (including overseas manufacturing establishments).

10. The Manufacturing Division index measures changes in prices of materials (including fuels) used by establishments classified to ASIC Division C, Manufacturing, which have been purchased or transferred in from establishments outside the Manufacturing Division. It excludes semi-processed materials which have been produced by establishments within the Manufacturing Division and are sold or transferred to other establishments within the Manufacturing Division. The index reflects purchases of materials at the point of entry to the Manufacturing Division.

11. The indexes for ASIC Subdivisions 21, 23, 25, 26, 28, 29, 31, 32, 33 and 34 and the indexes for ASIC Groups 244-245, 246,275-276 and 277-278 measure changes in prices of materials (including fuels) used by establishments classified to each defined ASIC manufacturing 'sector' which have been purchased or transferred in from establishments outside that 'sector'. Each excludes semi-processed materials which have been produced by establishments within that specific 'sector' and sold or transferred to establishments in the same 'sector'. The pricing and weights for these *net 'sector'* indexes therefore reflect purchases and transfers in at the point of entry to the respective ASIC Subdivision, or ASIC Group or Group combination.

Items and weights

12. These indexes are *fixed weight indexes*. The items included in the indexes were selected on the basis of values of materials used in 1977-78. With a few exceptions the selected items were allocated weights in accordance with the estimated value of manufacturing usage in 1977-78.

The exceptions are:

- (a) Fuels (e.g. crude petroleum, natural gas, electricity) which were allocated weights on the basis of estimated 1982-83 usage.
- (b) Cereal grains, which were allocated weights based on estimated manufacturing usage in 1977-78 and 1978-79.
- (c) Live animals, which were allocated weights based on the average value of slaughterings in 1981-82, 1982-83 and 1983-84.

Many of the selected items carry not only the weight of directly priced materials but also the weight of unpriced materials whose prices are considered to move similarly to those of directly priced materials.

13. For the Manufacturing Division index, individual materials have been grouped into two broad categories: Imported materials and Home Produced materials. Within

each of these categories materials have been grouped on the basis of ASIC *industry of origin* (i.e. the industry in which, in accordance with the classification rules of ASIC, the materials are primarily produced in Australia or the industry in which the materials would be classified had the materials been produced in Australia). Percentage contributions in 1984-85, of individual materials to the relevant commodity groups and to the Manufacturing Division as a whole are set out in Table A1 in the Appendix to the December 1985 issue of this publication.

14. Percentage contributions, in 1984-85, for each material to each 'sector' index are set out in Table A2 in the Appendix to the December 1985 issue of this publication.

Prices

15. For those materials subject to significant price variation throughout the month (e.g. agricultural materials, metal ores and concentrates and imported materials generally) average monthly prices are used in compiling these indexes. All other materials are priced at the midpoint of the month. Prices of home produced materials are generally obtained from manufacturers who use the material but in some cases prices are obtained from suppliers (producers or wholesalers). Prices of imported materials are generally obtained from importers.

16. In concept, pricing for these indexes is at the point at which the material physically enters the defined manufacturing 'sector'. Therefore, as far as possible, prices are on a *delivered into store* basis.

Prices of transferred goods

17. Transfers which do not take place on the open market present problems in the measurement of price change. An example is where a vertically integrated enterprise extracts a mineral (mining activity) and also processes it (manufacturing activity). Since the material is transferred from one part of the enterprise to another there is usually no transaction price. In such instances various methods of imputing changes in market prices have been adopted. Depending on circumstances and the availability of data, these methods include using changes in opportunity cost (based, for example, on the price of the material in an established market) or changes in cost (based on expenses actually incurred in obtaining the material). Imputations of this kind enter partly into price series for materials such as nickel concentrates, silver-lead concentrates and zinc concentrates.

Seasonal materials

18. In the case of some seasonal materials such as fruit and vegetables, where deliveries do not occur over the whole year, the previous season's prices are repeated for the months outside the selling season until the subsequent season's prices become operative.

Estimated prices

19. For items such as sugar cane and iron ore, where prices are only determined annually, the final prices are sometimes not known until during or after the relevant

season or contract period, and sometimes not for many months after the close of the season or contract period. Estimates of the current season or contract period price are used in index calculations until the final price becomes available. Incorporation of such final prices may involve lengthy revisions to index numbers.

Electricity

20. The index numbers for electricity published in Table 3 are based on prices paid for electricity used by a representative sample of manufacturing establishments. Both 'tariff' prices and special contract prices are included in the calculations.

Index numbers

21. Index numbers for financial years are simple averages of the monthly index numbers.

22. Index numbers for the latest month and the previous month are preliminary and subject to revision. Index numbers which include estimated prices for materials (e.g. iron ore, sugar cane) are also preliminary until actual prices are obtained at the end of the season or contract period (see paragraph 19 above). Revisions might also occur to index numbers for any earlier period if the ABS discovers that any prices previously reported by respondents are incorrect and corrected prices are obtained.

Analysis of index changes

23. Care should be exercised when interpreting month-to-month movements in the indexes as short-term movements do not necessarily indicate changes in trend.

24. Movements in indexes from one period to another can be expressed either as changes in 'index points' or as percentage changes. The following example illustrates the method of calculating index points changes and percentage changes between any two periods:

Manufacturing Division index numbers—

July 1989	120.1 (see Table 1)
less June 1989	119.9 (see Table 1)
Change in index points	+0.2

$$\text{Percentage change} = \frac{+0.2}{119.9} \times 100 = +0.2\%$$

25. In this publication percentage changes are shown in respect of movements between:

- consecutive financial years
- corresponding months of consecutive years
- consecutive months.

26. Table 2 provides an analysis of the contribution which selected categories of materials make to the total Manufacturing Division index. For example, imported crude petroleum and condensates contributed 3.83 index points to the total Manufacturing Division index number of 118.2 for December 1989 and +0.07 index points to the

net change in that month (which on this occasion was +0.2 index points). A further explanation is provided in the Appendix to the February 1988 issue of Catalogue No. 6411.0.

Related publications

27. Users may also wish to refer to the following price index publications which are available on request:

Price Indexes of Copper Materials, Australia (6410.0)—issued monthly

Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0)—issued monthly

Price Index of Materials Used in Building Other Than House Building, Eight Capital Cities (6407.0)—issued monthly

Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (6408.0)—issued monthly

Import Price Index, Australia (6414.0)—issued quarterly

Export Price Index, Australia (6405.0)—issued monthly.

28. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

Symbols and other usages

- p preliminary — series subject to revision
 — nil or rounded to zero
 r figure revised since previous issue

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