

PRICE INDEXES OF MATERIALS USED IN MANUFACTURING INDUSTRIES AUSTRALIA

EMBARGOED UNTIL 11:30AM FRI 16 JUNE 1995

APRIL KEY FIGURES

	% change Mar 95 to Apr 95	% change Apr 94 to Apr 95
Manufacturing Division	1.1	8.4
Imported materials	1.8	11.7
Home produced materials	0.6	6.5

APRIL KEY POINTS

MANUFACTURING DIVISION INDEX

- The increase in the Manufacturing division index was mainly due to the cumulative effect of relatively small price rises across a broad range of imported materials. The continued weakening of the Australian dollar against most of the major trading currencies was a significant contributor to the overall increase.
- Price increases for some key home produced materials also contributed to the upward movement of the index.

MAJOR MOVEMENTS

- Prices for home produced crude petroleum continued to increase as in previous months.
- Agricultural materials including wheat, sheep and lambs and barley showed noticeable increases but these rises were partly offset by decreased prices for cattle and calves and pigs.
- World shortages led to further price increases for some chemicals.

Manufacturing Division

Base: 1984-85 = 100.0

Index
170
160
150
140
130
120
110

— Imported
--- Home produced

Apr 1991 Apr 1992 Apr 1993 Apr 1994 Apr 1995

Manufacturing Division

Monthly % change

%
3
2
1
0
-1
-2

F A J A O D F A
1994 1995

INQUIRIES

- For further information about these and related statistics, contact Geoff Brown on 06 252 5348, or any ABS Office.

PRICE INDEX NOTES

FORTHCOMING ISSUES

ISSUE

RELEASE DATE

May 1995

17 July 1995

June 1995

16 August 1995

July 1995

18 September 1995

CHANGES IN THIS ISSUE

There are no changes in this issue.

W. McLennan
Australian Statistician

MANUFACTURING DIVISION INDEX¹

SOURCE OF MATERIALS.....

<i>Period</i>	<i>Manufacturing Division</i>	<i>Imported materials</i>	<i>Home produced materials</i>
1991-92	120.7	123.3	119.3
1992-93	126.6	130.6	124.6
1993-94	124.6	131.7	120.9
1994			
February	121.7	128.8	118.0
March	122.0	127.7	119.0
April	121.7	127.0	118.9
May	123.2	129.4	119.8
June	124.0	129.2	121.3
July	125.1	131.1	121.9
August	125.6	132.2	122.1
September	124.6	132.1	120.7
October	125.1	133.6	120.6
November	125.3	134.0	120.6
December	124.5	132.6	120.3
1995			
January	126.1	132.1	122.9
February	128.9	136.0	125.1
March	130.5	139.4	125.8
April	131.9	141.9	126.6

¹ Base of each index: 1984-85 = 100.0

MANUFACTURING DIVISION INDEX, Percentage changes

SOURCE OF MATERIALS.....

<i>Period</i>	<i>Manufacturing Division</i>	<i>Imported materials</i>	<i>Home produced materials</i>
PERCENTAGE CHANGE (from previous year)			
1991-92	-2.5	-1.1	-3.2
1992-93	4.9	5.9	4.4
1993-94	-1.6	0.8	-3.0
PERCENTAGE CHANGE (from corresponding month of previous year)			
1994			
February	-3.9	-1.5	-5.3
March	-3.1	-1.7	-3.9
April	-2.6	-2.0	-3.0
May	-1.7	-1.0	-2.2
June	-2.5	-3.8	-1.7
July	-1.7	-2.5	-1.2
August	-1.2	-0.8	-1.5
September	-2.7	-2.5	-2.9
October	-2.0	-1.6	-2.1
November	-0.6	-0.9	-0.4
December	0.4	-0.7	1.1
1995			
January	2.8	1.1	3.8
February	5.9	5.6	6.0
March	7.0	9.2	5.7
April	8.4	11.7	6.5
PERCENTAGE CHANGE (from previous month)			
1994			
February	-0.8	-1.5	-0.3
March	0.2	-0.9	0.8
April	-0.2	-0.5	-0.1
May	1.2	1.9	0.8
June	0.6	-0.2	1.3
July	0.9	1.5	0.5
August	0.4	0.8	0.2
September	-0.8	-0.1	-1.1
October	0.4	1.1	-0.1
November	0.2	0.3	0.0
December	-0.6	-1.0	-0.2
1995			
January	1.3	-0.4	2.2
February	2.2	3.0	1.8
March	1.2	2.5	0.6
April	1.1	1.8	0.6

MANUFACTURING DIVISION INDEX, Contribution of Categories of Materials¹

Category	March 1995	April 1995	Change
Manufacturing Division	130.5	131.9	1.4
IMPORTED MATERIALS: Contribution to Manufacturing Division Index (index points)			
All imported materials	48.15	49.01	0.86
Crude petroleum and condensates	4.07	4.07	0.00
Textile fibres, yarns and fabrics	6.08	6.15	0.07
Pulp, paper and materials made of paper	3.29	3.33	0.04
Chemicals and chemical based materials	10.30	10.65	0.35
Basic iron and steel	2.75	2.75	0.00
Components for machinery and equipment	10.87	11.11	0.24
Other imported materials	10.79	10.95	0.16
HOME PRODUCED MATERIALS: Contribution to Manufacturing Division Index (index points)			
All home produced materials	82.35	82.87	0.52
Live animals	17.49	17.14	-0.35
Other agricultural materials	19.59	20.17	0.58
Hardwood and softwood logs	1.91	1.92	0.01
Fish, prawns and lobsters	1.86	1.84	-0.02
Metal ores and concentrates	10.51	10.56	0.05
Coal, crude petroleum and gas	19.68	19.98	0.30
Electricity	5.76	5.76	0.00
Other home produced materials	5.55	5.50	-0.05

¹ For an explanation of this table see paragraph 16 of the Explanatory Notes

MANUFACTURING DIVISION INDEX, Selected Categories of Imported Materials¹

<i>Period</i>	<i>Agricultural materials</i>	<i>Crude petroleum and condensates</i>	<i>Mining materials</i>	<i>Textile fibres, yarns and fabrics</i>	<i>Pulp, paper and materials made of paper</i>	<i>Chemicals and chemical based materials</i>	<i>Basic iron and steel</i>	<i>Components for machinery and equipment</i>	<i>Manufactured materials</i>	<i>All imported materials</i>
1991-92	85.0	61.8	70.2	140.0	124.5	162.6	128.2	145.5	141.3	123.3
1992-93	89.6	67.2	72.5	148.7	125.1	165.4	125.6	162.7	150.2	130.6
1993-94	92.7	57.2	63.1	152.6	121.8	162.9	123.3	178.4	154.4	131.7
1994										
February	91.3	54.3	60.3	149.5	120.9	159.0	123.3	173.0	151.4	128.8
March	91.8	51.7	58.1	148.4	118.9	156.8	122.8	174.6	150.5	127.7
April	92.2	49.8	56.7	150.1	117.2	156.3	122.7	174.0	150.0	127.0
May	92.9	55.1	61.1	153.6	116.7	161.2	122.4	174.7	151.9	129.4
June	98.8	56.4	62.2	152.0	118.0	159.5	121.7	172.6	151.0	129.2
July	95.7	59.6	64.8	155.2	118.4	162.4	121.6	175.5	152.9	131.1
August	99.6	62.0	67.0	154.8	120.3	163.5	124.0	175.4	153.6	132.2
September	104.1	57.9	63.8	159.7	119.2	166.2	123.2	174.5	154.2	132.1
October	129.1	56.8	62.7	160.4	120.5	166.8	124.7	175.8	155.3	133.6
November	132.9	56.5	62.4	159.8	122.6	170.8	124.3	175.6	155.8	134.0
December	133.7	55.9	61.6	157.7	121.9	168.3	123.4	172.5	154.1	132.6
1995										
January	128.9	55.1	61.0	152.9	123.2	167.4	123.6	171.3	153.8	132.1
February	134.7	58.5	64.8	156.4	125.0	175.5	126.0	174.2	157.7	136.0
March	143.7	61.3	67.3	160.8	126.9	181.6	126.6	178.5	161.1	139.4
April	144.5	61.3	67.3	162.6	128.6	187.9	126.7	182.5	164.4	141.9

¹ Base of each index: 1984-85 = 100.0

MANUFACTURING DIVISION INDEX, Selected Categories of Home Produced Materials¹

Period	Live animals	Other agricultural materials	Hardwood and softwood logs	Fish, prawns and lobsters	Agricultural, forestry and fishing materials	Metal ores and concentrates	Coal, crude petroleum and gas	Mining materials	Electricity	All home produced materials
1991-92	120.8	131.1	155.8	182.6	128.7	139.2	93.3	108.7	133.0	119.3
1992-93	129.5	135.3	155.3	198.9	135.2	141.6	99.3	113.6	133.2	124.6
1993-94	139.9	136.0	154.4	250.6	141.9	130.5	85.2	100.4	132.8	120.9
1994										
February	139.1	134.8	153.9	237.3	140.6	129.8	78.9	95.9	132.5	118.0
March	142.6	136.9	154.1	244.4	143.4	130.1	78.2	95.5	132.1	119.0
April	143.4	136.5	155.1	241.3	143.6	130.8	77.6	95.2	132.2	118.9
May	140.2	138.0	155.3	251.6	143.0	132.8	80.2	97.5	131.9	119.8
June	138.0	141.0	155.0	283.1	144.1	136.0	82.0	99.5	131.9	121.3
July	136.5	139.0	153.1	283.7	142.5	137.5	85.1	102.5	129.5	121.9
August	136.0	143.6	153.7	280.3	144.2	136.0	83.9	101.3	129.6	122.1
September	131.6	148.8	154.8	279.4	144.4	135.0	79.9	98.4	129.9	120.7
October	123.8	155.3	154.6	278.7	143.5	136.3	80.4	99.1	130.4	120.6
November	123.4	157.8	154.7	263.8	144.0	139.5	78.8	98.7	129.8	120.6
December	126.4	156.9	154.5	248.6	144.6	141.9	76.1	97.2	131.1	120.3
1995										
January	125.0	158.9	156.0	247.2	144.8	146.3	81.9	102.3	131.4	122.9
February	129.7	161.1	157.5	236.5	147.8	145.5	84.7	104.1	131.8	125.1
March	131.3	161.1	156.2	242.1	148.7	144.8	85.9	104.7	131.6	125.8
April	128.7	165.9	157.0	239.4	149.5	145.5	87.2	105.8	131.4	126.6

¹ Base of each index: 1984-85 = 100.0

MANUFACTURING SUBDIVISION INDEXES¹

Period	Food, beverages and tobacco (21)	Textiles (23)	Clothing (244-245)	Footwear (246)	Wood, wood products and furniture (25)	Paper, paper products, printing and publishing (26)	Basic chemicals and other chemical products (275-276)
1991-92	128.8	126.4	146.2	143.5	148.4	137.5	137.7
1992-93	134.3	128.2	151.3	142.9	153.9	138.0	137.0
1993-94	138.7	130.7	150.8	147.2	161.5	135.4	134.1
1994							
February	137.3	129.6	147.6	146.7	161.0	134.5	132.8
March	139.0	131.2	146.9	147.3	161.3	133.2	131.0
April	139.0	133.1	148.0	147.9	158.8	132.1	131.4
May	138.3	136.2	149.3	148.1	158.8	131.9	133.5
June	139.6	136.8	149.4	151.3	157.3	132.4	133.2
July	138.1	139.6	150.2	154.0	156.5	133.1	133.2
August	139.6	140.7	150.8	154.8	156.4	134.5	134.6
September	139.8	147.6	152.2	155.0	156.1	135.1	135.8
October	140.3	149.6	152.8	155.4	156.4	136.1	136.0
November	141.0	149.6	151.9	155.5	157.5	137.2	136.6
December	141.2	148.4	150.8	156.8	157.1	138.0	136.9
1995							
January	141.4	146.3	149.7	157.2	158.1	139.1	137.1
February	144.1	150.8	151.9	158.0	159.7	140.4	140.9
March	145.2	154.1	154.0	159.9	160.6	141.9	143.4
April	146.1	155.8	155.0	159.4	160.6	144.6	146.3

¹ Base of each index: 1984-85 = 100.0

MANUFACTURING SUBDIVISION INDEXES¹ *continued*

<i>Period</i>	<i>Petroleum and coal products (277-278)</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 (34)</i>
1991-92	81.6	147.2	136.5	146.9	145.3	140.2	125.4
1992-93	88.2	149.0	135.5	146.3	154.1	143.1	131.5
1993-94	73.8	140.3	125.4	146.0	164.0	144.3	133.2
1994							
February	68.0	139.7	124.5	146.0	161.2	143.5	132.2
March	66.7	139.4	124.4	146.1	161.9	143.9	133.4
April	65.7	139.5	124.5	145.4	161.7	143.6	133.3
May	69.2	140.3	125.6	146.1	162.7	143.8	133.2
June	70.9	140.0	128.0	146.6	161.6	144.5	135.0
July	74.3	143.5	128.6	147.3	163.7	145.2	135.2
August	73.8	143.4	127.8	148.0	163.5	145.8	136.5
September	69.4	144.3	128.0	148.1	162.7	146.4	138.1
October	69.6	144.4	128.8	148.8	163.8	147.1	140.3
November	68.2	144.5	130.0	149.6	164.0	148.0	140.4
December	65.7	146.9	133.1	150.4	162.4	148.7	143.6
1995							
January	70.4	147.0	137.3	151.3	162.2	150.5	145.5
February	73.6	146.7	138.5	154.0	164.4	150.6	147.0
March	75.2	147.9	138.6	154.3	166.9	151.5	149.4
April	76.3	148.0	140.9	154.1	169.5	153.1	150.7

¹ Base of each index: 1984-85 = 100.0

MANUFACTURING SUBDIVISION INDEX, Selected Metallic Materials¹

USED IN THE FABRICATED METAL PRODUCTS INDUSTRY.....

<i>Period</i>	<i>Iron and Steel</i>	<i>Aluminium</i>	<i>Copper and brass</i>	<i>Zinc</i>
1991-92	146.4	141.0	171.0	143.6
1992-93	145.4	135.8	180.0	155.0
1993-94	147.1	130.8	168.6	138.7
1994				
February	147.7	129.6	164.9	142.1
March	147.6	131.0	167.0	138.0
April	147.6	125.3	166.5	136.0
May	147.4	128.7	174.4	134.5
June	147.3	127.9	185.1	136.5
July	147.3	132.1	189.4	136.1
August	148.6	130.3	188.9	134.8
September	148.2	131.1	190.0	132.8
October	148.4	132.3	193.7	136.1
November	148.3	135.2	203.3	138.2
December	148.2	137.0	209.8	142.1
1995				
January	148.4	141.7	211.0	138.1
February	149.2	157.7	213.5	142.8
March	149.3	160.7	211.8	137.6
April	149.3	155.7	217.1	136.3

¹ Base of each index: 1984-85 = 100.0

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents index numbers that are based on materials (including fuels) used by establishments classified to designated 'sectors' of Australian manufacturing industry — the Price Indexes of Materials Used in Manufacturing Industries. They are calculated on the reference base 1984–85 = 100.0.

2 Index numbers for the current month and the previous month are preliminary and subject to revision.

SCOPE

3 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 (eg 'Agriculture, forestry, fishing and hunting' or 'Mining') or are overseas producers (including overseas manufacturing establishments).

CLASSIFICATION

4 The Manufacturing Division index measures changes in prices of materials (including fuels) used by establishments classified to Australian Standard Industrial Classification (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 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.

5 The indexes for ASIC Subdivisions and the indexes for ASIC Groups and 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'. These exclude semi-processed materials which have been produced by establishments within the 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

6 The indexes are fixed weights indexes. The items included in the indexes were selected on the basis of values of materials used in 1977–78. The selected items were allocated weights in accordance with the estimated value of manufacturing usage in 1977–78 except for the following:

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

7 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.

ITEMS AND WEIGHTS (continued)

8 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 material 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 were shown in Table A1 in the Appendix to the December 1985 issue of this publication.

9 Percentage contributions, in 1984-85, of each material to each 'sector' index were shown in Table A2 in the Appendix to the December 1985 issue of this publication.

PRICE MEASUREMENT

10 For those materials subject to significant price variation throughout the month (e.g. agricultural materials, and metal ores and concentrates) average monthly prices are used in compiling these indexes. Other materials are priced at the mid point in 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.

11 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.

Transferred Goods

Transfers which do not take place on the open market present problems for 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 the 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

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

For items such as sugar cane, where prices are only determined annually, the final prices are sometimes not known until the relevant season or contract period has been at least partly completed. 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.

PRICE MEASUREMENT (continued)

Electricity The index numbers for electricity published in Table 4 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 **12** Index numbers for financial years are simple averages of monthly index numbers.

REVISIONS **13** Index numbers for the current month and the previous month are preliminary and subject to revision. From time to time index numbers for earlier months may also be revised. This will occur whenever the ABS obtains more complete information or discovers that incorrect prices have been used.

ANALYSIS OF INDEX CHANGES **14** Care should be exercised when interpreting month-to-month movements in the indexes as short-term movements do not necessarily indicate changes in trend.

15 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 —

April 1995	131.9	(see Table 1)
less April 1994	121.7	(see Table 1)
Change in index points	10.2	
Percentage change	$\frac{10.2}{121.7} \times 100 = 8.4$	

16 Table 3 provides an analysis of the contributions which selected categories of materials make to the total Manufacturing Division index. For example, Live animals contributed 17.14 index points to the total Manufacturing Division index number of 131.9 for April 1995 and -0.35 index points to the net change of 1.4 index points. A further explanation is provided in the Appendix to the February 1988 issue of this publication.

FURTHER INFORMATION **17** The December 1985 issue of this publication contains a more detailed description of the indexes and their relationship with previous indexes.

18 Further information on the indexes is presented in the publication *Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods* (6419.0).

RELATED PUBLICATIONS **19** Users may also wish to refer to the following publications which are available from ABS Bookshops:

- *Price Index of Materials Used in Coal Mining, Australia* (6415.0)
- *Price Index of Copper Materials, Australia* (6410.0)
- *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0)
- *Price Index of Materials Used in Building Other than House Building, Six State Capital Cities and Canberra* (6407.0)
- *Price Index of Materials Used in House Building, Six State Capital Cities and Canberra* (6408.0)
- *Import Price Index, Australia* (6414.0)
- *Export Price Index, Australia* (6405.0)



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UNPUBLISHED STATISTICS **21** As well as the statistics included in this and related publications, the ABS may have other relevant unpublished data available. Inquiries should be made to Geoff Brown on 06 252 5348 or to any ABS office.

SYMBOLS AND OTHER USAGES ASIC Australian Standard Industrial Classification
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2641100004956

ISSN 1031-0649

RRP \$12.00

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