

# PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY AUSTRALIA

EMBARGOED UNTIL 11:30AM MON 13 FEBRUARY 1995

## DECEMBER KEY FIGURES

	% change Nov 94 to Dec 94	% change Dec 93 to Dec 94
<b>Manufacturing Division</b>	<b>0.0</b>	<b>1.6</b>
Food, beverages and tobacco	-0.1	1.2
Clothing and footwear	-0.2	0.8
Chemicals and chemical products	0.3	2.5
Petroleum products	-1.9	-7.7
Basic metal products	0.9	6.6
Fabricated metal products	0.8	1.0
Transport equipment	-0.2	1.2
Other machinery and equipment	0.2	0.9

## DECEMBER KEY POINTS

### MANUFACTURING DIVISION INDEX

- Price rises for basic metal products, together with increases for a small number of items were offset by price falls for petroleum products and other items.
- Continued strong world demand for base metals resulted in higher prices for base metal products. The monthly rate of price increase for basic metal products rose 0.9 per cent in December compared with increases of 1.4 per cent in November and 1.9 per cent in October.

### MAJOR MOVEMENTS

- Higher prices were recorded for refined aluminium (7.6 per cent) and nickel (10.5 per cent).
- Prices of refined petroleum products fell 2.0 per cent.



**Australian  
Bureau of  
Statistics**

### Manufacturing Division

Base:1988-89 = 100.0

Index

125

120

115

110

105

100

95

90

85

80

75

70

65

60

55

50

45

40

35

30

25

20

15

10

5

0

-5

-10

-15

-20

-25

-30

-35

-40

-45

-50

-55

-60

-65

-70

-75

-80

-85

-90

-95

-100

-105

-110

-115

-120

-125

-130

-135

-140

-145

-150

-155

-160

-165

-170

-175

-180

-185

-190

-195

-200

Dec 1990 Dec 1991 Dec 1992 Dec 1993 Dec 1994

### Manufacturing Division

Monthly % change

%

0.6

0.4

0.2

0.0

-0.2

-0.4

-0.6

-0.8

-1.0

-1.2

-1.4

-1.6

-1.8

-2.0

-2.2

-2.4

-2.6

-2.8

-3.0

-3.2

-3.4

-3.6

-3.8

-4.0

-4.2

-4.4

-4.6

-4.8

-5.0

-5.2

-5.4

-5.6

-5.8

-6.0

-6.2

-6.4

-6.6

-6.8

-7.0

-7.2

-7.4

O D F A J A O D  
1993 1994

## INQUIRIES

- For further information about these and related statistics, contact Mark Dickson on 06 252 5541, or any ABS Office.

# PRICE INDEX NOTES

## FORTHCOMING ISSUES

### ISSUE

### RELEASE DATE

January 1995

13 March 1995

February 1995

12 April 1995

March 1995

12 May 1995

\*\*\*\*\*

## CHANGES IN THIS ISSUE

There are no changes in this issue.

\*\*\*\*\*

RICHARD MADDEN

ACTING AUSTRALIAN STATISTICIAN

## MANUFACTURING DIVISION INDEX

<i>Period</i>	<i>Index numbers<sup>1</sup></i>	<i>% change from corresponding month of previous year</i>	<i>% change from previous period</i>
<b>1991-92</b>	111.6		0.4
<b>1992-93</b>	114.3		2.4
<b>1993-94</b>	115.5		1.0
<b>1993</b>			
October	115.9	1.6	-0.1
November	115.8	1.4	-0.1
December	115.4	1.1	-0.3
<b>1994</b>			
January	115.0	0.4	-0.3
February	114.8	0.0	-0.2
March	115.2	0.8	0.3
April	115.5	1.0	0.3
May	115.8	1.0	0.3
June	116.1	0.7	0.3
July	116.2	0.6	0.1
August	116.2	0.7	0.0
September	116.3	0.3	0.1
October	116.8	0.8	0.4
November	117.3	1.3	0.4
December	117.3	1.6	0.0

<sup>1</sup> Base of each index: 1988-89 = 100.0

MANUFACTURING DIVISION INDEX, Contribution of Subdivisions and Groups<sup>1</sup>

Category	November 1994	December 1994	Change
Manufacturing Division	117.3	117.3	0.0
ASIC SUBDIVISION OR GROUP: Contribution to Manufacturing Division Index (index points)			
21 Food, beverages and tobacco	29.29	29.29	0.00
23 Textiles	2.75	2.76	0.01
24 Clothing and footwear	5.37	5.37	0.00
25 Wood, wood products and furniture	6.80	6.81	0.01
26 Paper, paper products, printing and publishing	9.56	9.56	0.00
275-276 Basic chemicals and other chemical products	6.86	6.82	-0.04
277-278 Petroleum and coal products	5.04	4.94	-0.10
28 Non-metallic mineral products	6.28	6.29	0.01
29 Basic metal products	9.86	9.99	0.13
31 Fabricated metal products	8.13	8.20	0.07
32 Transport equipment	10.66	10.64	-0.02
33 Other machinery and equipment	12.60	12.63	0.03
34 Miscellaneous manufacturing	4.06	4.04	-0.02

<sup>1</sup> For an explanation of this table see paragraph 20 of the Explanatory Notes

MANUFACTURING SUBDIVISION INDEXES<sup>1</sup>

Period	Food, beverages and tobacco (21)	Textiles (23)	Clothing and footwear (24)	Wood, wood products and furniture (25)	Paper, paper products, printing and publishing (26)	Basic chemicals and other chemical products (275-276)
<b>1991-92</b>	112.3	102.9	114.9	114.2	117.3	109.9
<b>1992-93</b>	116.2	101.8	116.1	116.5	119.9	111.1
<b>1993-94</b>	120.5	102.2	117.1	122.5	122.0	110.3
<b>1993</b>						
October	120.6	102.1	116.6	121.3	121.8	110.3
November	120.6	102.1	116.9	121.6	122.1	110.5
December	120.4	101.9	117.1	122.0	122.1	110.2
<b>1994</b>						
January	120.3	101.8	116.9	122.6	122.0	110.5
February	119.7	101.8	117.2	123.5	122.1	110.5
March	120.8	102.8	117.4	124.1	122.5	110.1
April	120.9	102.8	117.4	124.6	122.5	110.0
May	120.8	103.3	117.4	124.7	122.8	110.0
June	120.6	103.7	117.7	124.8	123.0	110.4
July	120.5	104.1	117.7	124.6	123.3	110.4
August	120.4	104.1	117.7	124.7	124.1	110.8
September	121.2	104.2	117.9	125.0	124.4	111.1
October	121.5	105.1	118.4	125.3	124.5	111.9
November	122.0	104.7	118.2	125.7	124.6	112.6
December	121.9	104.8	118.0	125.7	124.7	112.9

<sup>1</sup> Base of each index: 1988-89 = 100.0

MANUFACTURING SUBDIVISION INDEXES<sup>1</sup> *continued*

Period	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)
<b>1991-92</b>	134.3	119.3	99.9	114.3	112.7	107.0	107.8
<b>1992-93</b>	143.9	119.3	100.6	114.7	116.0	109.3	109.6
<b>1993-94</b>	127.2	120.8	99.8	114.8	119.1	109.9	112.4
<b>1993</b>							
October	139.8	120.3	99.9	114.9	118.8	109.9	112.0
November	135.0	120.5	100.1	114.6	118.6	109.8	112.3
December	125.4	120.2	99.9	114.7	118.9	110.0	112.2
<b>1994</b>							
January	117.7	120.2	99.6	114.6	119.3	110.0	112.5
February	113.8	120.2	99.1	114.4	119.4	109.9	112.8
March	115.7	120.6	99.1	114.7	119.4	109.8	112.8
April	121.7	121.5	98.0	114.7	119.8	109.8	112.8
May	126.5	122.1	99.1	114.9	119.9	109.7	113.0
June	127.6	122.8	100.4	114.8	120.1	110.0	113.9
July	126.0	122.7	101.1	114.5	120.7	110.0	113.9
August	122.2	123.3	100.9	114.6	120.6	110.1	114.3
September	115.1	124.1	102.1	114.4	120.2	110.5	114.4
October	116.7	124.1	104.0	114.8	120.3	110.9	115.5
November	118.0	124.2	105.5	114.9	120.5	110.8	115.6
December	115.7	124.2	106.5	115.8	120.3	111.0	115.3

<sup>1</sup> Base of each index: 1988-89 = 100.0

# EXPLANATORY NOTES

\*\*\*\*\*

## INTRODUCTION

**1** This publication presents index numbers for articles produced by establishments classified to designated 'sectors' of Australian manufacturing industry — the Price Indexes of Articles Produced by Manufacturing Industry. They are calculated on the reference base 1988–89 = 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 articles which are produced by the defined 'sector' of Australian manufacturing industry and which are sold or transferred to establishments outside that 'sector' or used as capital equipment. These establishments are either Australian manufacturing establishments classified to other manufacturing 'sectors' or to other divisions of Australian industry (eg 'Wholesale and retail trade') or are overseas consumers (including overseas manufacturing establishments).

## CLASSIFICATION

**4** The Manufacturing Division index measures changes in prices of articles which are produced by establishments classified to Australian Standard Industrial Classification (ASIC) Division C, Manufacturing, which have been sold or transferred to establishments outside the Manufacturing Division, are for export or are for use as capital equipment. It excludes semi-processed articles which have been produced by establishments within the Manufacturing Division and sold or transferred to other establishments within the Manufacturing Division for further processing. The index reflects sales and transfers of articles at the point of exit from the Manufacturing Division.

**5** The indexes for ASIC Subdivisions and Groups measure changes in prices of articles produced by establishments classified to each defined ASIC manufacturing 'sector' which are sold or transferred to establishments outside that 'sector'. These exclude semi-processed articles which have been produced by establishments within the specific 'sector' and sold or transferred to establishments in the same 'sector' for further processing. The pricing and weights for these net 'sector' indexes therefore reflect sales and transfers out at the point of exit from the respective ASIC Subdivision or ASIC Groups.

**6** For ASIC Subdivisions 21, 24, 25, 28, 31, 32 and 33, only a minor proportion of sales and transfers is to other manufacturing subdivisions. Therefore the relevant components of the Manufacturing Division index are regarded as providing valid indicators of price movement for these subdivisions. For ASIC Subdivisions 23, 26, 29 and 34 there is a significant proportion of sales to other subdivisions of manufacturing. To compile net indexes for these subdivisions, it has therefore been necessary to price additional items to represent transactions between these and other subdivisions, and also to establish weights appropriate to each subdivision (i.e. weights based on all articles produced by the subdivision for sale or transfer outside the subdivision).

## ITEMS AND WEIGHTS

**7** The indexes are fixed weights indexes. The items included in the index were selected on the basis of values of articles produced in 1986–87. The selected items were allocated weights in accordance with the estimated value of manufacturing production in 1986–87 valued at the relevant prices applying in the reference base year, 1988–89.

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

ITEMS AND WEIGHTS (continued)

**9** The selected items have been grouped in accordance with the classification rules of ASIC. The items have been combined according to the ASIC classes and groups in which they are primarily produced.

**10** Percentage contributions, in 1988–89, of each article to the Manufacturing Division index were shown in the Appendix to the May 1990 issue of this publication. Percentage contributions of articles to each subdivision index were shown in an information paper (6418.0).

PRICE MEASUREMENT

**11** Most of the prices used in these indexes relate to the mid point of the month. Prices are generally obtained from principal manufacturers of the articles concerned, but in some cases prices collected for other indexes are used (adjusted to the correct pricing basis as far as possible). Prices are manufacturers' selling prices, exclusive of excise and sales tax, and reflect the effects of subsidies and bounties paid to manufacturers.

**12** The prices reflect industry selling practices. For example, if costs such as handling and distribution are included in the manufacturers' selling price this is the price used in the index. Where handling and distribution charges are paid separately by the purchaser the prices used exclude such charges.

**13** As far as possible, actual transactions prices are used in these indexes – that is, the prices actually paid by buyers of manufacturers' products. The actual price paid for anything can be described in various ways. Instead of being described as a single price (as usually happens in retail shops) a price for a manufacturer's product may be described in terms of the components that make up the price—for instance 'list price less (particular types of) discount'. It is these net prices that buyers pay to sellers that the ABS aims to use in compiling these price indexes.

**14** The ABS asks respondent businesses to report details of the discounts they offer so that actual transactions prices can be calculated. However, as manufacturers offer many different types of discounts to buyers (e.g. trade discounts, settlement discounts, quantity discounts, competitive discounts), the identification of the discounts and the way in which they are applied by manufacturers pose considerable problems for the ABS. To the extent that discounts are identified and measured, their effects are taken into account in calculating the indexes. However, because of the difficulties involved in obtaining full details of discounts, the effect of the discounts may sometimes be on a partly estimated basis. Sometimes new discounts, or changes in the way discounts are applied by manufacturers, are identified only after index numbers for a particular period have been published. In such cases, or in any other case where it is discovered that incorrect prices have been used in compiling the indexes, revisions to index numbers will occur in subsequent issues of this publication.

**15** Price series relate to goods of fixed specifications with the aim of incorporating in the index price changes for representative articles of constant quality. Consistent with this approach, prices in general relate to a standard representative set of transactions (in terms of quantity, delivery arrangements, destination, etc.) in order to avoid variations in price that are attributable solely to a changing mix of transactions over time.



[illegible]

## REVISIONS

**17** 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.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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

**19** 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 —

December 1994	117.3	(see Table 1)
less December 1993	115.4	(see Table 1)
Change in index points	1.9	
Percentage change =	$\frac{1.9}{115.4} \times 100 = 1.6$	

**20** Table 2 provides an analysis of the contribution which ASIC subdivisions and groups make to the Manufacturing Division index. For example, Petroleum and coal products contributed 4.94 index points to the total Manufacturing Division index number of 117.3 for December 1994 and -0.10 index points to the net change of 0.0 index points.

\_\_\_\_\_

**21.** The May 1990 issue of this publication and an information paper (6418.0) contain more detailed descriptions of the indexes and their relationship with previous indexes.

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

THESE RESULTS ARE DISCUSSED IN

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

- *Price Indexes of Materials Used in Manufacturing Industries, Australia (6411.0)*
- *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)*
- *Price Index of Copper Materials, Australia (6410.0)*
- *Price Index of Materials Used in Coal Mining, Australia (6415.0)*
- *Export Price Index, Australia (6405.0)*
- *Import Price Index, Australia (6414.0)*

**24** Other ABS publications which may be of interest include:

- *Award Rates of Pay Indexes, Australia* (6312.0)
- *Average Weekly Earnings, States and Australia* (6302.0)

\*\*\*\*\*

RELATED PUBLICATIONS (continued)    **25** 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.

UNPUBLISHED STATISTICS                **26** 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 Mark Dickson on 06 252 5541 or to any ABS office.

SYMBOLS AND OTHER USAGES            ASIC    Australian Standard Industrial Classification  
r        figure or series revised since previous issue



## FOR MORE INFORMATION . . .

The ABS publishes a wide range of information on Australia's economic and social conditions. A catalogue of publications and products is available from any of our offices (see below).

### INFORMATION CONSULTANCY SERVICES

Special tables or in-depth data investigations are provided by the ABS Information Consultancy Service in each of our offices (see below).

### ELECTRONIC DATA SERVICES

A large range of data is available via on-line services, diskette, magnetic tape, tape cartridge and CD ROM. For more details about our electronic data services, contact any ABS office (see below).

### BOOKSHOP AND SUBSCRIPTIONS

There is a large number of ABS publications available from the ABS Bookshops in each of our offices. You can also receive any of our publications on a regular basis. Join our subscription mailing service and have your publications mailed to you in Australia at no additional cost. Telephone our Publications Subscription Service toll free Australia wide on 008 0206 08.

### ABS EMAIL ADDRESSES

Keylink	STAT.INFO/ABS
X.400	(C:AU,A:TELMEMO,O:ABS,SN:INFO,FN:STAT)
Internet	STAT.INFO@ABS. TELEMEMO.AU

### GENERAL SALES AND INQUIRIES

* Sydney 02 268 4611	* Adelaide 08 237 7100
* Melbourne 03 615 7000	* Hobart 002 20 5800
* Brisbane 07 222 6351	* Darwin 089 43 2111
* Perth 09 360 5140	* Canberra 06 252 6007

■ Information Services, ABS  
PO Box 10, Belconnen ACT 2616



2641200012943

ISSN 1031-0029

RRP \$11.00