

# PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) TUES 27 JAN 1998

## DECEMBER QTR KEY FIGURES

	<b>% change Sep Qtr 97 to Dec Qtr 97</b>	<b>% change Dec Qtr 96 to Dec Qtr 97</b>
<b>Manufacturing division</b>	<b>0.7</b>	<b>1.8</b>
Food, beverages and tobacco	1.2	2.8
Textiles	0.3	2.9
Clothing and footwear	-0.1	2.0
Wood, wood products and furniture	0.2	0.8
Paper, paper products, printing and publishing	-0.1	1.0
Chemicals and chemical products	-0.9	-0.5
Petroleum products	7.7	-3.3
Non-metallic mineral products	-0.2	1.1
Basic metal products	-1.1	7.0
Fabricated metal products	0.3	1.1
Transport equipment	0.5	0.8
Other machinery and equipment	0.3	1.6
Miscellaneous manufacturing	-0.4	0.6

## DECEMBER QTR KEY POINTS

### MANUFACTURING DIVISION INDEX

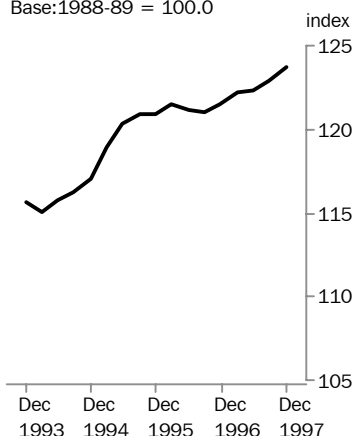
- Price increases for petroleum products were the main contributors to the increase in the index.

### MAJOR MOVEMENTS

- Prices for refined petroleum products rose reflecting higher world oil prices.
- Processed seafood prices rose.
- Export beef prices increased.
- Prices for refined copper and zinc fell in line with world prices.

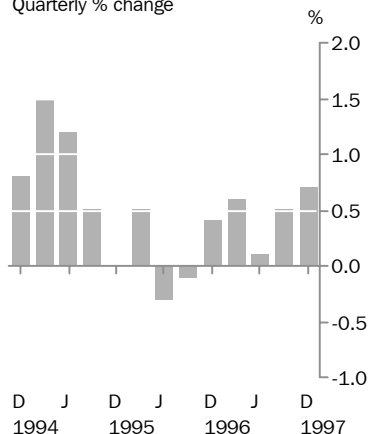
### Manufacturing division

Base:1988-89 = 100.0



### Manufacturing division

Quarterly % change



- For further information about these and related statistics, contact Margaret Hayes on 02 6252 5541, or any ABS Office.

# NOTES

## FORTHCOMING ISSUES

*ISSUE (Quarter)*

*RELEASE DATE*

March 1998

20 April 1998

June 1998

21 July 1998



## CHANGES IN THIS ISSUE

There are no changes in this issue.



W. McLennan  
Australian Statistician

## MANUFACTURING DIVISION INDEX

<i>Period</i>	<i>Index numbers(a)</i>	<i>% change from corresponding quarter of previous year</i>	<i>% change from previous period</i>
<b>1993-94</b>	115.5		1.0
<b>1994-95</b>	118.1		2.3
<b>1995-96</b>	121.1		2.5
<b>1996-97</b>	121.8		0.6
<b>1993</b>			
December	115.7	1.4	0.1
<b>1994</b>			
March	115.0	0.4	-0.6
June	115.8	0.9	0.7
September	116.2	0.5	0.3
December	117.1	1.2	0.8
<b>1995</b>			
March	118.9	3.4	1.5
June	120.3	3.9	1.2
September	120.9	4.0	0.5
December	120.9	3.2	0.0
<b>1996</b>			
March	121.5	2.2	0.5
June	121.1	0.7	-0.3
September	121.0	0.1	-0.1
December	121.5	0.5	0.4
<b>1997</b>			
March	122.2	0.6	0.6
June	122.3	1.0	0.1
September	122.9	1.6	0.5
December	123.7	1.8	0.7

(a) Base of each index: 1988-89 = 100.0

## MANUFACTURING DIVISION INDEX(a), Contribution of Subdivisions and Groups

Category	September Qtr 1997	December Qtr 1997	Change	
Manufacturing division	122.9	123.7	0.8	
ASIC SUBDIVISION OR GROUP: Contribution to Manufacturing Division Index (index points)				
21	Food, beverages and tobacco	31.00	31.37	0.37
23	Textiles	2.86	2.87	0.01
24	Clothing and footwear	5.68	5.68	0.00
25	Wood, wood products and furniture	6.96	6.98	0.02
26	Paper, paper products, printing and publishing	10.51	10.50	-0.01
275-276	Basic chemicals and other chemical products	7.22	7.16	-0.06
277-278	Petroleum and coal products	5.18	5.58	0.40
28	Non-metallic mineral products	6.39	6.37	-0.02
29	Basic metal products	10.25	10.14	-0.11
31	Fabricated metal products	8.59	8.62	0.03
32	Transport equipment	10.79	10.85	0.06
33	Other machinery and equipment	13.31	13.35	0.04
34	Miscellaneous manufacturing	4.21	4.19	-0.02

(a) For an explanation of this table see paragraph 19 of the Explanatory Notes

## MANUFACTURING SUBDIVISION INDEXES(a)

<i>Period</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, printing and publishing (26)</i>	<i>Basic chemicals and other chemical products (275-276)</i>
<b>1993-94</b>	120.5	102.2	117.2	122.5	122.0	110.3
<b>1994-95</b>	123.1	105.6	118.3	126.1	125.2	113.6
<b>1995-96</b>	125.9	106.4	121.5	127.1	132.9	117.0
<b>1996-97</b>	127.2	106.8	122.9	128.0	135.6	116.1
<b>1993</b>						
December	120.5	102.0	116.9	121.6	122.0	110.3
<b>1994</b>						
March	120.3	102.1	117.2	123.4	122.2	110.4
June	120.8	103.3	117.5	124.7	122.8	110.1
September	120.7	104.1	117.8	124.8	123.9	110.8
December	121.8	104.9	118.2	125.6	124.6	112.5
<b>1995</b>						
March	124.1	105.9	118.2	126.5	125.5	114.2
June	125.6	107.5	118.9	127.4	126.7	116.7
September	125.2	107.2	120.4	127.1	130.7	118.1
December	126.3	105.9	121.5	127.3	132.7	117.2
<b>1996</b>						
March	126.6	105.9	122.0	127.2	134.1	116.3
June	125.4	106.4	121.9	126.7	134.1	116.5
September	126.3	106.7	122.3	127.2	135.2	116.5
December	127.0	106.4	122.4	127.9	135.4	115.8
<b>1997</b>						
March	127.3	106.7	122.8	128.4	135.7	115.9
June	128.1	107.3	123.9	128.6	136.0	116.1
September	129.0	108.4	124.9	128.6	136.9	116.0
December	130.5	108.6	124.8	128.9	136.7	115.2

(a) Base of each index: 1988-89 = 100.0

MANUFACTURING SUBDIVISION INDEXES(a) *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>
<b>1993-94</b>	127.3	120.7	99.9	114.8	119.1	109.9	112.4
<b>1994-95</b>	120.9	124.2	107.2	116.2	120.7	111.2	116.2
<b>1995-96</b>	125.0	124.6	109.9	119.2	122.3	112.4	119.7
<b>1996-97</b>	130.2	125.4	103.7	120.7	121.9	113.5	120.8
<b>1993</b>							
December	133.4	120.3	100.0	114.7	118.8	109.9	112.2
<b>1994</b>							
March	115.7	120.3	99.3	114.6	119.4	109.9	112.7
June	125.3	122.1	99.2	114.8	119.9	109.8	113.2
September	121.1	123.4	101.4	114.5	120.5	110.2	114.2
December	116.8	124.2	105.3	115.2	120.4	110.9	115.5
<b>1995</b>							
March	120.5	124.4	110.1	116.8	119.6	111.8	116.5
June	125.1	124.9	112.1	118.3	122.1	112.0	118.4
September	124.0	125.2	113.0	118.7	122.3	111.9	119.3
December	122.0	124.5	110.4	119.0	122.1	111.8	119.3
<b>1996</b>							
March	126.1	124.5	109.6	119.4	122.2	112.4	119.6
June	127.8	124.2	106.7	119.7	122.6	113.4	120.4
September	121.7	124.5	103.8	119.9	122.3	113.3	120.7
December	134.9	125.1	101.6	120.6	121.7	113.3	120.9
<b>1997</b>							
March	138.3	125.6	103.5	121.0	121.8	113.6	120.9
June	125.7	126.2	105.7	121.3	121.6	113.9	120.8
September	121.2	126.5	108.2	121.4	122.1	114.2	120.9
December	130.5	126.5	108.1	121.8	122.6	114.5	120.7

(a) 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.

### SCOPE

**2** 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 (e.g. 'Wholesale and retail trade') or are overseas consumers (including overseas manufacturing establishments).

### CLASSIFICATION

**3** 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.

**4** 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.

**5** 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

**6** 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.

**7** 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.

## EXPLANATORY NOTES

### ITEMS AND WEIGHTS *continued*

**8** 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.

**9** 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, *Review of Price Indexes of Articles Produced by Manufacturing Industry* (6418.0).

### PRICE MEASUREMENT

**10** 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.

**11** 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.

**12** 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.

**13** 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.

**14** 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.



## EXPLANATORY NOTES

### INDEX NUMBERS

**15** Index numbers for financial years are simple averages of the relevant quarterly index numbers.

### REVISIONS

**16** In cases where more complete information is obtained after index numbers for a period have been published, or it is discovered that incorrect prices have been used in compiling the indexes, revisions to index numbers may occur in subsequent issues of this publication.

### ANALYSIS OF INDEX CHANGES

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

**18** 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 Quarter 1997	123.7	(see Table 1)
less December Quarter 1996	121.5	(see Table 1)
Change in index points	2.2	
Percentage change =	$\frac{2.2}{123.7}$	x 100 = 1.8

**19** 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 5.58 index points to the total Manufacturing Division index number of 123.7 for December Quarter 1997 and 0.40 index points to the net change of 0.8 index points.

### FURTHER INFORMATION

**20** 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.

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

### RELATED PUBLICATIONS

**22** 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* (6407.0)
- *Price Index of Materials Used in House Building, Six State Capital Cities* (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).

**23** 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).

## EXPLANATORY NOTES

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RELATED PUBLICATIONS <i>continued</i>	<b>24</b> Current publications produced by the ABS are listed in the <i>Catalogue of Publications and Products, Australia</i> (1101.0). The ABS also issues, on Tuesdays and Fridays, a <i>Release Advice</i> (1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.
UNPUBLISHED STATISTICS	<b>25</b> 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 Margaret Hayes on 02 6252 5541 or to any ABS office.
SYMBOLS AND OTHER USAGES	ASIC Australian Standard Industrial Classification r revised



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