



PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY AUSTRALIA, FEBRUARY 1981

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MAIN FEATURES

The All Manufacturing Industry Index increased by 1.0% in February 1981.

A significant proportion of this increase was caused by higher prices for petroleum products, sheet metal products and motor vehicles.

Between February 1980 and February 1981 the All Manufacturing Industry Index increased by 9.2%.

EXPLANATORY NOTES

Scope and composition

The indexes in this publication measure changes in prices of articles produced by establishments classified to the Manufacturing Division of the Australian Standard Industrial Classification (ASIC). The data shown in Tables 1 and 2 relate to indexes on a *net sector basis*; that is, they relate in concept only to those articles which are produced in defined 'sectors' of Australian manufacturing industry for sale or transfer to other sectors or for export or for use as capital equipment. Articles which are sold or transferred to other establishments within the sector for further processing (as materials, components, fuels, etc) are excluded. Capital equipment produced is within the scope of the index even if sold or transferred to other manufacturing establishments in the sector.

2. This publication contains the following sector price indexes:

- a *net* index for the Manufacturing Division of ASIC.
- a *net* index for each of the twelve subdivisions within the Manufacturing Division.

In addition, indexes are published for three special groupings which are components of particular *net* subdivision indexes (see paragraphs 6 and 7).

3. 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 or for use as capital equipment. Articles sold or

transferred by establishments in the Manufacturing Division to other establishments in that division for further processing are outside the scope of this index. In other words, the pricing and weights for the *All Manufacturing Industry Index* reflect sales and transfers of articles at the point of exit from the Manufacturing Division.

4. The *net subdivision indexes* for each of the twelve 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 or for use as capital equipment. The pricing and weights for the *net subdivision indexes* reflect, in general, sales and transfers of articles at the point of exit from the respective subdivisions.

5. For ASIC subdivisions 21-22, 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 *All Manufacturing Industry Index* are regarded as providing valid indicators of price movement for these subdivisions. For ASIC subdivisions 23, 26, 27, 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).

Special groupings

6. Indexes for three special groupings are shown in Table 3. One grouping relates to 'Food, beverages and tobacco, excluding meat and abattoir by-products, and raw sugar'. Some items included in the Food, beverages and tobacco Subdivision index are subject to considerable short term fluctuations which do not necessarily indicate changes in trend and this special grouping is published in order to exclude some of the more uneven price movements which frequently occur in this subdivision.

7. The other two special groupings, 'Appliances and electrical equipment' and 'Industrial machinery and equipment etc.' were published following requests for a dissection of the 'Other industrial machinery and equipment and household appliances' Subdivision index.

Items and weights

8. The items included in these indexes were selected on the basis of values of articles produced in 1971-72, by establishments classified to the Manufacturing Division of ASIC in the Census of Manufacturing Establishments.

9. The indexes are *fixed weights* indexes. The selected items were allocated weights in accordance with estimated *net* sector production (see paragraph 3) in the year 1971-72 valued at the relevant prices applying in the *reference base year 1968-69*. 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.

10. The selected items were combined for weighting and classification purposes using the structure of the Australian Standard Industrial Classification (ASIC). The items have been combined according to the ASIC classes and groups in which they are primarily produced. Percentage contributions of articles to the *All Manufacturing Industry Index aggregate* were shown in the Appendix to the June 1976 (initial) issue of this publication. Percentage contributions of articles to each of the *subdivision index aggregates* may be obtained on request.

Prices

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 goods concerned, but in some cases prices collected in connection with 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 manufacturer's 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. 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 discounts, delivery arrangements, destination, etc) in order to avoid variations in price that are attributable solely to a changing mix of transactions over time.

14. The May 1977 and earlier issues of this publication contain detailed explanations of:

- model pricing (a technique for measuring price change for unique or complex products).
- methods used for introducing significantly changed specifications into the index.
- treatment of discounts.

Index numbers

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

16. All index numbers for the current month and the previous month are preliminary and subject to revision. Figures for earlier months will generally not be revised where the changes would have a minor effect.

Percentage changes

17. The following example illustrates the method of calculating percentage changes:

All Manufacturing Industry Index

July 1980	292.6 (See Table 2)
less June 1980	289.2 (See Table 2)
Change in index points	+3.4

$$\text{Percentage change} = \frac{+3.4}{289.2} \times 100 = +1.2\%$$

Related publications

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

Price Index of Materials Used in Manufacturing Industry, Australia (6411.0) — issued monthly

Price Index of Materials Used in Building Other than House Building, Six State Capital Cities (6407.0) — issued monthly

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

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

19. Other ABS publications which may be of interest include:

Wage Rates Indexes, Australia (Preliminary) (6311.0) — issued monthly

Wage Rates, Australia (6312.0) — issued monthly

Average Weekly Earnings, Australia (6302.0) — issued quarterly

20. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0) which is available free of charge from any ABS office.

Symbols and other usages

p preliminary series subject to revision

r series revised since previous issue

— nil or rounded to zero

R.J. CAMERON
Australian Statistician

TABLE 1. PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY (a)
PERCENTAGE CHANGES

	All Manufacturing Industries Index (c)											
	Net subdivision indexes (b)											Transport equip.
	Food, beverages and tobacco (21-22)	Textiles (23)	Clothing and footwear (24)	Wood, wood products and furniture (25)	Paper, paper products and printing (26)	Chemical, petroleum and coal products (27)	Glass, clay and other non-metallic mineral products (28)	Basic metal products (29)	Fabricated metal products (31)			
%	%	%	%	%	%	%	%	%	%	%	%	
	<i>Change from previous year—</i>											
1977-78	+8.6	+8.7	+8.2	+8.2	+7.0	+8.9	+10.0	+8.5	+6.7	+9.7		
1978-79	+11.0	+15.7	+6.1	+5.9	+6.2	+5.7	+16.1	+7.7	+10.8	+7.1		
1979-80	+15.8	+17.7	+11.6	+7.1	+12.5	+10.0	+31.9	+12.0	+19.2	+12.6		
	<i>Change from corresponding month of previous year—</i>											
1979-80—												
January	+16.6	+19.8	+10.9	+6.8	+13.6	+10.1	+28.8	+11.2	+25.2	+13.5		
February	+17.2	+18.1	+13.0	+8.0	+13.9	+11.6	+36.8	+11.5	+23.7	+14.7		
March	+16.6	+16.4	+13.7	+8.2	+14.3	+11.5	+37.1	+12.1	+19.8	+14.4		
April	+15.0	+12.0	+13.1	+8.1	+15.9	+12.1	+37.6	+11.7	+13.2	+15.2		
May	+13.9	+9.7	+13.7	+7.6	+15.3	+13.9	+34.9	+12.3	+11.0	+15.2		
June	+13.3	+7.5	+13.4	+7.9	+15.8	+14.5	+33.1	+12.9	+12.8	+17.0		
1980-81—												
July	+12.9	+8.1	+12.8	+7.4	+16.7	+15.3	+37.6	+12.1	+10.6	+17.1		
August	+13.4	+10.1	+12.4	+7.6	+17.2	+14.3	+25.6	+12.7	+11.6	+17.2		
September	+13.7	+12.0	+12.6	+7.8	+16.6	+13.7	+24.0	+13.5	+10.5	+17.7		
October	+12.7	+10.1	+11.5	+7.8	+16.6	+13.3	+22.7	+13.7	+9.0	+17.3		
November	+12.1	+9.9	+9.4	+7.1	+14.8	+12.5	+22.4	+13.6	+8.9	+16.5		
December	+11.8	+10.7	+10.6	+7.9	+14.0	+12.2	+22.9	+13.7	+4.6	+13.9		
January p	+10.7	+9.6	+10.6	+8.6	+12.5	+11.9	+21.6	+14.4	+0.5	+13.4		
February p	+9.2	+8.5	+10.6	+9.0	+12.0	+11.8	+15.4	+13.9	-1.7	+12.5		
	<i>Change from previous month—</i>											
1979-80—												
January	+1.5	+1.0	+0.8	+0.1	+2.3	+0.7	+2.4	+1.3	+3.9	+1.7		
February	+2.8	+1.0	+2.3	+2.1	+1.4	+2.0	+8.2	+1.5	+2.9	+2.4		
March	+0.8	+0.7	+0.8	+0.8	+0.9	+0.2	+2.2	+1.1	0.9	+0.4		
April	+0.2	0.3	+0.8	+0.3	+2.4	+0.9	+1.8	+1.3	3.6	+0.8		
May	+0.4	+0.4	+1.3	—	+1.1	+2.0	—	+1.0	-1.1	+0.4		
June	+0.7	+0.8	+0.1	+0.3	+0.6	+0.5	+0.2	+0.8	+2.5	+1.8		
1980-81—												
July	+1.2	+1.0	+0.9	+1.2	+1.6	+1.4	+0.9	+1.4	+0.4	+2.4		
August	+1.3	+1.4	+0.5	+0.9	+1.0	+1.0	+3.2	+1.6	+1.0	+1.3		
September	+0.9	+1.8	+0.7	+0.7	+0.5	+0.5	+0.5	+1.6	+0.2	+1.1		
October	+0.4	—	+0.2	+0.3	+1.1	+1.2	+0.2	+0.8	+0.6	+0.2		
November	+0.5	+0.7	+0.9	+0.2	+0.1	+0.5	+0.5	+0.2	0.2	+0.6		
December	+0.8	+1.7	+0.9	+0.8	+0.4	+0.7	+1.1	+0.5	1.0	+0.2		
January p	+0.5	—	+0.7	+0.7	+0.7	+0.9	+1.3	+1.4	+1.9	+1.3		
February p	+1.0	+0.1	+2.1	+2.5	+0.9	+1.0	+2.7	+1.1	+0.5	+1.6		

For footnotes see Table 2

TABLE 2. PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY (a)
(Base of each index : Year 1968-69 = 100.0)

	All Manufacturing Industry Index (c)	Net subdivision indexes (b)											
		Food, beverages and tobacco (21-22)	Textiles (23)	Clothing and footwear (24)	Wood, wood products and furniture (25)	Paper, paper products and printing (26)	Chemical, petroleum and coal products (27)	Glass, clay and other non- metallic mineral products (28)	Basic metal products (29)	Fabricated metal products (31)	Transport equipment (32)	Other industrial machinery and equipment and household appli- ances (d) (33)	Miscellan- eous manu- facturing products (34)
1977-78	213.8	195.6	193.3	225.2	264.0	231.7	200.7	219.8	214.0	268.7	211.6	215.3	192.4
1978-79	237.4	226.4	205.1	238.4	280.4	245.0	233.1	236.8	237.2	287.7	230.2	232.2	209.8
1979-80	274.9	266.5	228.8	255.3	315.5	269.6	307.4	265.2	282.7	323.9	252.2	261.3	252.5
1979-80—													
January	276.3	268.7	227.9	253.5	318.1	270.4	301.0	264.4	293.6	327.2	253.6	262.8	254.7
February	283.1	271.5	233.1	258.7	322.4	275.8	325.7	268.4	302.0	335.1	256.7	268.5	260.5
March	285.4	273.3	236.2	260.8	325.2	276.3	333.0	271.4	299.2	336.3	257.0	272.6	262.8
April	286.0	272.6	238.2	261.7	333.0	278.9	338.9	274.8	288.3	338.9	258.0	273.9	262.7
May	287.2	273.6	241.2	261.8	336.6	284.5	338.9	277.5	285.2	340.1	261.8	274.7	263.0
June	289.2	275.9	241.5	262.5	338.5	285.9	339.6	279.8	292.4	346.3	262.4	275.8	264.1
1980-81—													
July	292.6	278.7	243.6	265.7	343.9	290.0	342.5	283.6	293.6	354.5	264.8	278.5	266.6
August	296.5	282.5	244.9	268.0	347.5	292.8	353.3	288.1	296.6	359.2	267.0	281.4	269.0
September	299.3	287.7	246.7	270.0	349.2	294.2	354.9	292.6	297.2	363.0	267.7	282.4	270.8
October	300.4	287.7	247.2	270.7	352.9	297.7	355.5	294.8	299.1	363.8	270.2	284.3	270.4
November	302.0	289.7	248.0	271.2	353.3	299.2	357.3	295.3	298.6	365.6	272.7	285.7	271.3
December	304.4	294.5	250.2	273.3	354.7	301.3	361.1	296.7	295.5	366.4	274.6	287.1	272.9
January p	305.9	294.4	252.0	275.2	358.0	305.3	366.0	302.4	295.2	371.1	275.4	288.8	273.3
February p	309.1	294.6	257.9	282.0	361.1	308.3	376.0	305.8	296.8	376.9	278.3	292.4	275.4

(a) For a full description of Division C 'Manufacturing' and the subdivisions within the Manufacturing Division see Australian Standard Industrial Classification (ASIC), Preliminary Edition, 1969. (b) These indexes are on a 'net subdivision' basis; see paragraphs 1.4 and 5. (c) This index is on a net division basis and relates in concept only to articles which are produced in the Manufacturing Division of ASIC for sale or transfer outside the Division; see paragraphs 1 and 3. (d) For a dissection of this index, see Table 3.

TABLE 3. PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY — SPECIAL GROUPINGS (a)

Period	Food, beverages and tobacco, excluding meat and abattoir by-products, and raw sugar	Other industrial machinery and equipment and household appliances (33)	
		Appliances and electrical equipment (33.2)	Industrial machinery and equipment etc. (b) (33.1 and 33.3)
INDEX NUMBERS (Base of each index: Year 1968-69 = 100.0)			
1977-78	203.5	186.0	252.5
1978-79	217.8	200.1	273.0
1979-80	244.4	224.4	308.2
<i>1979-80—</i>			
January	244.8	224.2	311.9
February	246.7	231.5	315.4
March	249.6	235.4	319.8
April	252.3	235.9	322.0
May	254.7	236.1	323.6
June	256.9	236.4	326.0
<i>1980-81—</i>			
July	260.2	239.6	327.8
August	263.4	240.8	333.0
September	265.9	241.5	334.4
October	267.2	243.6	336.2
November	269.7	244.4	338.1
December	274.6	244.4	341.3
January p	276.3	245.2	346.4
February p	279.2	246.6	350.6
PERCENTAGE CHANGES			
%			
<i>Change from previous year—</i>			
1977-78	+10.1	+5.3	+10.6
1978-79	+7.0	+7.6	+8.1
1979-80	+12.2	+12.1	+12.9
<i>Change from corresponding month of previous year—</i>			
<i>1979-80—</i>			
January	+13.0	+11.9	+13.9
February	+12.3	+14.4	+13.6
March	+13.0	+15.1	+14.9
April	+12.7	+14.0	+14.9
May	+12.5	+13.6	+15.0
June	+12.0	+13.4	+15.1
<i>1980-81—</i>			
July	+11.5	+14.4	+14.4
August	+11.5	+13.2	+13.9
September	+12.1	+12.9	+13.8
October	+12.2	+12.4	+13.0
November	+12.2	+11.2	+11.5
December	+13.3	+10.5	+11.7
January p	+12.9	+9.4	+11.1
February p	+13.2	+6.5	+11.2
<i>Change from previous month—</i>			
<i>1979-80—</i>			
January	+1.0	+1.4	+2.1
February	+0.8	+3.3	+1.1
March	+1.2	+1.7	+1.4
April	+1.1	+0.2	+0.7
May	+1.0	+0.1	+0.5
June	+0.9	—	+0.7
<i>1980-81—</i>			
July	+1.3	+1.4	+0.6
August	+1.2	+0.5	+1.6
September	+0.9	+0.7	+0.4
October	+0.5	+0.9	+0.5
November	+0.9	+0.3	+0.6
December	+1.8	—	+0.9
January p	+0.6	+0.3	+1.5
February p	+1.0	+0.6	+1.2

(a) ASIC two digit subdivision and three digit group codes are shown in brackets. (b) Includes photographic, professional and scientific equipment