

AUSTRALIAN BUREAU OF STATISTICS Canberra

CATALOGUE NO. 6412.0

NOON 8 FEBRUARY 1978

LIBRARY
- 8 FEB 1978

PRICE INDEXES OF ARTICLES PRODUCED BY MANUFACTURING INDUSTRY NOVEMBER 1977

INQUIRIES

If you want to know more about these statistics ring Mr Terry Harlow Canberra 525539 or our State Office, or write to Information Services, ABS, P.O. Box 10, Belconnen, A.C.T. 2616
For copies of this publication contact Information Services, Canberra 526627 or State offices.

SUMMARY OF MOVEMENTS

The All Manufacturing Industry index increased by 0.3% between October and November 1977.

The All Manufacturing Industry index rose by 9.7% between November 1976 and November 1977, compared with a rise of 9.9% between November 1975 and November 1976 and a rise of 13.3% between November 1974 and November 1975.

EXPLANATORY NOTES

Scope and composition

The indexes in this bulletin 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 bulletin contains the following sector price indexes:

- a *net* index for the Manufacturing Division of ASIC.
- *net* indexes for selected 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 Manufacturing Division or for use as capital equipment. Articles sold or transferred by establishments in 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 Manufacturing Division.

4. Indexes are also shown for *selected subdivisions within the Manufacturing Division*. 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 considered representative of the purpose of compiling net indexes for these subdivisions. These indexes reflect movements in prices of articles produced primarily by the respective subdivisions for sale or transfer outside the Manufacturing Division or to other subdivisions within Manufacturing or for use as capital equipment.

5. 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 is therefore necessary to price some additional items and 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). This work has now been completed for Subdivisions 26, 27 and 29 and data are shown for these Subdivisions in Tables 1 and 2. The development of net indexes for the remaining subdivisions of manufacturing is proceeding and additional indexes will be published in this bulletin as they become available. Articles produced in these remaining subdivisions and sold outside Manufacturing Division are, of course, already included in the index for All Manufacturing Industry.

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.' have been prepared 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 initial issue of this bulletin. Percentage contributions of articles to each of the selected *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

Index number as at July 1977 206.7 (see Table 2)

Index number as at June 1977 205.0 (see Table 2)

$$\text{Percentage change} = \frac{206.7 - 205.0}{205.0} \times 100 = 0.8\%$$

Related Publications

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

- . *Price Index of Materials used in Manufacturing Industry* (6411.0)
- . *Price Index of Materials Used in Building Other than House Building* (6407.0)
- . *Price Index of Materials Used in House Building* (6408.0)
- . *Price Index of Electrical Installation Materials* (6409.0)
- . *Price Indexes of Metallic Materials* (6410.0)

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

- . *Wage Rates Indexes, Preliminary* (6311.0)
- . *Wage Rates and Earnings* (6312.0)
- . *Average Weekly Earnings* (6302.0)

20. All publications produced by the ABS are listed in *Catalogue of Publications 1977* (1101.0) which is available free of charge from any ABS office.

Symbols used

- p - preliminary, subject to revision
- r - revised

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

	Selected net subdivision indexes (c)										Other industrial machinery and equipment and household appliances (d) (33)
	All Manufacturing Industry Index (b)	Food, beverages and tobacco (21-22)	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)	
	%	%	%	%	%	%	%	%	%	%	%
Change from previous year -											
1974-75	+17.5	+7.1	+18.0	+27.7	+25.2	+27.6	+22.1	+17.4	+28.7	+21.1	+20.0
1975-76	+12.5	+6.9	+14.8	+15.7	+16.5	+18.1	+15.7	+14.5	+18.5	+16.3	+12.8
1976-77	+10.7	+10.1	+12.4	+12.2	+8.4	+8.4	+10.5	+15.3	+12.8	+10.9	+11.3
Change from corresponding month of previous year -											
1976-77											
October	+9.8	+9.1	+14.1	+13.2	+8.1	+6.7	+12.3	+13.8	+13.6	+11.5	+10.9
November	+9.9	+8.1	+14.2	+13.5	+8.6	+6.1	+11.6	+14.5	+13.3	+11.0	+10.4
December	+10.7	+9.5	+13.4	+11.7	+8.4	+5.9	+11.4	+17.7	+13.9	+11.3	+10.0
January	+11.0	+9.6	+11.6	+12.8	+8.8	+8.5	+10.3	+17.2	+13.5	+10.6	+11.5
February	+11.4	+10.1	+11.2	+13.2	+8.5	+9.2	+10.9	+18.0	+13.1	+10.3	+12.5
March	+11.3	+11.4	+10.7	+12.1	+7.6	+9.0	+9.8	+16.0	+10.3	+11.0	+12.2
April	+10.9	+11.1	+10.9	+10.9	+8.2	+8.9	+9.2	+12.4	+9.9	+10.1	+11.8
May	+10.1	+11.5	+9.9	+9.6	+8.1	+7.8	+7.1	+10.8	+9.0	+9.3	+10.1
June	+9.7	+11.9	+9.6	+9.6	+7.6	+7.2	+6.7	+8.9	+8.8	+8.2	+10.0
1977-78											
July	+9.9	+10.9	+9.9	+9.4	+7.6	+7.8	+7.7	+9.1	+9.6	+8.5	+9.7
August	+9.4	+9.5	+7.5	+9.6	+7.3	+7.9	+8.0	+9.5	+10.4	+8.8	+9.0
September	+9.9	+9.2	+9.1	+10.0	+8.3	+10.3	+8.5	+10.2	+10.9	+8.1	+8.9
October p	+10.1	+9.5	+9.1	+9.0	+9.7	+11.9	+8.2	+9.4	+9.9	+8.4	+9.0
November p	+9.7	+9.6	+8.8	+7.6	+9.8	+11.9	+8.5	+9.6	+9.5	+8.6	+9.3
Change from previous month -											
1976-77											
October	+0.5	+0.5	+0.1	+1.1	..	+0.8	+0.7	+0.9	+1.3	+0.5	+0.1
November	+0.7	+0.1	+0.4	+1.7	+0.7	+0.2	+1.0	+1.2	+1.0	+0.2	+0.4
December	+1.4	+1.9	..	+0.5	+0.5	+0.6	+0.2	+3.4	+1.0	+0.9	+2.0
January	+1.2	+1.2	+0.4	+1.4	+1.8	+2.3	+0.6	+0.8	+0.3	+0.5	+1.3
February	+1.2	+1.6	+1.6	+1.2	+0.6	+0.7	+1.4	+1.0	+0.8	+0.5	+0.9
March	+1.0	+1.4	+1.0	+0.2	+0.3	+0.4	+0.2	+1.6	+0.6	+1.5	+0.9
April	+0.8	+0.8	+0.4	+0.8	+1.4	+1.0	+0.3	+0.3	+0.8	+0.5	+0.9
May	+0.1	..	+0.3	+1.0	..	-0.1	..	+0.1	+0.2	+0.2	+0.2
June	+0.3	+0.2	+0.5	+0.5	+0.3	+0.3	+0.6	-0.9	+1.0	+0.8	+0.6
1977-78											
July	+0.8	+0.7	+1.3	+0.6	+0.6	+0.7	+1.3	+1.1	+1.4	+0.8	+0.5
August	+0.4	+0.1	+0.8	+0.3	+0.5	+0.4	+0.8	+0.2	+1.2	+0.7	+0.3
September	+0.9	+0.5	+2.0	+0.4	+1.4	+2.6	+1.0	+0.1	+0.9	+0.5	+0.4
October p	+0.7	+0.8	+0.1	+0.2	+1.3	+2.3	+0.5	+0.2	+0.4	+0.8	+0.2
November p	+0.3	+0.2	+0.1	+0.3	+0.8	+0.1	+1.2	+1.3	+0.6	+0.3	+0.6

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) (c)

	All Manufacturing Industry Index (b)	Selected net subdivision indexes (c)									Other industrial machinery and equipment and household appliances (d) (33)
		Food, beverages and tobacco (21-22)	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)	
1974-75	158.1	153.0	161.3	190.0	168.5	142.4	158.3	151.9	183.2	151.2	158.9
1975-76	177.8	163.5	185.2	219.9	196.3	168.2	183.2	174.0	217.1	175.8	179.2
1976-77	196.9	180.0	208.1	246.8	212.8	182.4	202.5	200.6	244.9	195.0	199.4
1976-77											
October	191.5	175.1	205.3	240.0	208.2	178.8	199.4	192.7	240.5	191.8	193.9
November	192.9	175.3	206.2	244.0	209.6	179.1	201.3	195.0	243.0	192.2	194.6
December	195.6	178.6	206.2	245.2	210.6	180.1	201.8	201.6	245.4	194.6	196.4
January	198.0	180.7	207.1	248.7	214.3	184.3	203.0	203.2	246.1	195.6	200.3
February	200.4	183.6	210.5	251.6	215.5	185.6	205.9	205.2	248.0	196.3	203.0
March	202.4	186.1	212.5	252.0	216.1	186.3	206.3	208.4	249.5	199.3	204.9
April	204.0	187.5	213.3	254.0	219.2	188.1	206.9	209.0	251.4	200.2	206.8
May	204.3	187.5	213.9	256.6	219.3	188.0	206.9	209.3	251.8	200.6	207.2
June	205.0	187.9	214.9	257.8	219.9	188.5	208.1	207.4	254.3	202.3	208.5
1977-78											
July	206.7	189.3	217.7	259.4	221.2	189.9	210.9	209.7	257.8	203.9	209.5
August	207.6	189.4	219.4	260.1	222.3	190.7	212.6	210.2	261.0	205.3	210.1
September	r209.4	190.3	r223.7	261.1	r225.4	195.6	214.8	210.5	263.3	206.3	210.9
October p	r210.9	191.8	r224.0	261.6	r228.4	200.1	215.8	r210.9	264.4	208.0	211.4
November p	211.6	192.1	224.3	262.5	230.2	200.4	218.4	213.7	266.1	208.7	212.7

(a) For a full description of Division C, 'Manufacturing' and the selected subdivisions see Australian Standard Industrial Classification (ASIC), Preliminary Edition, 1969. (b) 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. (c) Indexes for the remaining subdivisions of Manufacturing Division are in the process of development. The indexes are on a 'net subdivision' basis; see paragraphs 1, 4 and 5. (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 (332)	Industrial machinery and equipment etc. (b) (331 and 333)
INDEX NUMBERS (Base of each index: Year 1968-69 = 100.0)			
1974-75	151.7	146.1	175.2
1975-76	168.5	159.9	203.6
1976-77	184.8	176.7	228.3
1976-77			
October	180.5	173.2	220.2
November	181.5	173.7	221.3
December	183.0	174.7	224.0
January	184.9	177.4	229.4
February	187.6	178.9	233.6
March	189.1	180.6	235.7
April	191.1	182.2	238.2
May	191.9	182.1	239.4
June	194.0	182.2	241.8
1977-78			
July	197.3	182.2	244.4
August	198.6	182.0	245.6
September	199.7	182.7	247.0
October p	201.8	183.1	247.5
November p	202.9	184.6	248.5
PERCENTAGE CHANGES			
	%	%	%
Change from previous year -			
1974-75	+17.1	+16.0	+24.8
1975-76	+11.1	+9.4	+16.2
1976-77	+9.7	+10.5	+12.1
Change from corresponding month of previous year -			
1976-77			
October	+9.7	+10.6	+11.1
November	+9.6	+10.1	+10.8
December	+9.0	+9.5	+10.5
January	+8.8	+10.6	+12.5
February	+9.6	+11.2	+13.9
March	+10.1	+11.3	+13.0
April	+10.5	+10.9	+12.8
May	+10.4	+9.0	+11.2
June	+10.9	+8.2	+11.7
1977-78			
July	+11.7	+7.2	+12.3
August	+11.5	+5.6	+12.3
September	+11.8	+5.6	+12.4
October p	+11.8	+5.7	+12.4
November p	+11.8	+6.3	+12.3
Change from previous month -			
1976-77			
September	+0.3	+0.3	+0.5
October	+1.0	+0.1	+0.2
November	+0.6	+0.3	+0.5
December	+0.8	+0.6	+1.2
January	+1.0	+1.5	+2.4
February	+1.5	+0.8	+1.8
March	+0.8	+1.0	+0.9
April	+1.1	+0.9	+1.1
May	+0.4	-0.1	+0.5
June	+1.1	+0.1	+1.0
1977-78			
July	+1.7	..	+1.1
August	+0.7	-0.1	+0.5
September	+0.6	+0.4	+0.6
October p	+1.1	+0.2	+0.2
November p	+0.5	+0.8	+0.4

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