



## PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY AUSTRALIA, NOVEMBER 1985

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### MAIN FEATURES

- The All groups index rose by 0.8% in November 1985.
- The Home produced index rose by 0.5%. Over half of this increase was caused by higher prices for cattle and calves.
- The Imported materials index rose by 1.4%. Almost half of this increase was caused by higher prices for crude petroleum.
- The All groups index rose by 10.3% between November 1984 and November 1985.

*Note: The ABS is currently preparing a new and expanded set of price indexes relating to materials and fuels used in Australian manufacturing industries. The new indexes will be published for the first time in the December 1985 issue of this publication which is scheduled for release in late February 1986. That issue will contain index numbers back to July 1985 on reference base: Year 1984-85=100.0. The existing series of index numbers on reference base: Year 1968-69=100.0, will be replaced by index numbers from the new series from July 1985 onward.*

### EXPLANATORY NOTES

#### Introduction

The price index contained in this publication relates to an important input (namely materials and fuels), to manufacturing industry. It does not reflect changes in other important costs such as labour and capital inputs to manufacturing, and taxes incurred during manufacturing.

#### Scope and composition

2. The composition of the index presented in this publication is based on materials used by establishments classified to Division C, Manufacturing, of the *Australian Standard Industrial Classification* (ASIC). The index is on a *net basis*; that is, it relates only to those materials which are used by establishments within the Manufacturing Division in Australia and which have been produced by establishments outside that Division. Such

outside establishments are either Australian establishments classified to other Divisions of Australian industry (e.g. Mining or Agriculture) or are overseas producers (including overseas manufacturing establishments).

3. Materials purchased by establishments classified to the Manufacturing Division of ASIC from other establishments in that Division are outside the scope of the index, but the same materials when purchased from overseas are included. In other words, the pricing and weights for the index reflect *usage of materials at the point of entry to the Manufacturing Division*.

#### Items and weights

4. The index is a *fixed weights index*. The items included in the index were selected on the basis of values of materials used, in 1971-72, by establishments classified to the Manufacturing Division of ASIC. The selection was made from data reported in the 1971-72 Census of Manufacturing Establishments, and in 1971-72 import statistics.

5. The selected items were allocated weights in accordance with estimated manufacturing usage in the year 1971-72. 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.

6. The percentage contributions for each of the index items are based on estimated usage in 1971-72, valued at the relevant prices applying in the *reference base year 1968-69*. Percentage contributions (as at the reference base year) were published in the April 1975 issue of this publication and are also available from the ABS on request.

#### Classifications

7. The selected items have been combined into broad *index groups* using two different approaches. Table 2 presents index numbers for groups based on the ASIC. These groups have been formed by allocating each of the index items to an *industry of origin* (e.g. home produced agriculture; or imported manufacturing). Table 2 also

shows index numbers for 'total imported materials' and 'total home produced materials'. Table 3 presents index numbers for groups based on the United Nations Standard International Trade Classification (SITC (R) 1961). This has the effect of combining like commodities within broad *commodity groups* (e.g. food, live animals and tobacco).

8. Table 1 shows percentage changes for index groups based on SITC, and for 'total imported materials' and 'total home produced materials'.

#### Special grouping

9. Prices of the materials included in this index are affected by many different influences and a significant proportion fluctuate considerably in price. This is particularly the case in the 'Food, live animals and tobacco' group where the series is significantly affected by fluctuating prices for live animals and sugar cane. A special grouping 'Food and tobacco, excluding live animals and sugar cane' is presented in Table 3 in order to indicate the general trend in prices for food and tobacco.

#### Prices

10. Prices used in the index are mainly monthly average prices. Prices of home produced items are generally obtained from principal users (manufacturers) but in some cases from major suppliers (producers or wholesalers). Prices of imported items are obtained from suppliers (importers) and users (manufacturers).

11. In concept, pricing for the index is at the point at which the materials physically enter the manufacturing sector. Therefore, as far as possible, prices are on a *delivered into store* basis.

12. Price series relate to *goods of fixed specifications* with the aim of incorporating in the index price changes for representative materials of *constant quality*.

13. In general, prices recorded in the index for a given month refer to materials delivered to manufacturers in that month.

14. The treatment of the following topics is explained in the September 1977 and previous issues of this publication:

- (a) prices of transferred goods
- (b) seasonal items.

#### Index numbers

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

16. Index numbers for the current month and the previous month are preliminary and subject to revision. However, from time to time, index numbers for earlier months may be revised. This will occur whenever the ABS discovers that prices previously reported by respondents are incorrect and corrected prices are obtained. It can also occur for those materials (e.g. iron ore, sugar cane) where estimated prices have been used in

the index. When final prices become available at the end of the financial year, these revised prices are incorporated in the index.

#### Percentage changes

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

<i>All groups index number—</i>	
July 1985	459.0 (see Table 2)
less June 1985	458.9 (see Table 2)
Change in index points	+0.1
	+0.1
<i>Percentage change =</i>	$\frac{\quad}{458.9} \times 100 = \text{---}$

#### Related publications

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

*Price Indexes of Articles Produced by Manufacturing Industry, Australia (6412.0)—issued monthly*

*Price Index of Materials Used in Building Other than House Building, Six State Capital Cities and Darwin (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*

*Import Price Index, Australia (6414.0)—issued quarterly*

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

*Award Rates of Pay Indexes, Australia (6312.0)—issued monthly*

*Average Weekly Earnings, States and Australia (6302.0)—issued quarterly*

20. Current publications produced by the ABS are listed in the *Catalogue of Publications, 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.

#### Symbols and other usages

— nil or rounded to zero

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TABLE 1. PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY(a)  
PERCENTAGE CHANGES

	Manufactured materials (imported)(b)		Other materials (imported and home produced)(c)			All groups	Special groupings			
	Chemicals	Metal manufactures, components for transport equipment and machinery	Other manufactured materials(b)	Food, live animals and tobacco	Crude materials (excl. fuels)		Electricity, gas and fuels	Total imported materials	Total home produced materials	Food and tobacco excl. live animals and sugar cane
<i>Change from previous year—</i>										
1982-83	+7.2	+7.2	+9.1	+2.6	+8.0	+14.1	+8.1	+6.7	+8.8	+10.5
1983-84	+4.4	+4.1	+2.6	+8.2	+4.9	-1.4	+3.6	+1.8	+4.5	+3.0
1984-85	+7.4	+8.4	+9.9	+1.9	+6.4	+6.2	+5.0	+8.9	+3.2	+0.1
<i>Change from corresponding month of previous year—</i>										
<i>1984-85—</i>										
September	+3.0	+4.6	+4.4	+4.5	+0.1	+0.2	+2.2	+3.6	+1.5	+1.0
October	+3.2	+4.6	+4.8	+5.2	+1.7	+0.2	+2.7	+4.2	+2.1	+1.0
November	+3.5	+4.4	+6.0	+4.6	+2.8	+0.6	+2.9	+4.8	+2.0	+0.4
December	+3.5	+4.3	+6.0	+1.3	+2.8	+0.4	+1.7	+4.6	+0.3	-2.4
January	+4.2	+4.8	+8.1	-0.3	+3.6	+3.8	+2.5	+4.9	+1.4	-2.2
February	+5.6	+8.8	+9.2	-1.3	+6.4	+5.3	+3.4	+7.5	+1.5	-1.1
March	+7.5	+11.7	+14.9	-0.2	+10.5	+10.6	+6.7	+13.2	+3.7	-0.5
April	+11.9	+15.7	+16.5	+1.8	+16.2	+12.4	+9.4	+17.1	+5.8	+0.3
May	+20.0	+16.8	+19.6	+0.9	+15.6	+21.3	+12.6	+20.7	+8.8	+2.0
June	+21.1	+18.1	+23.4	+3.1	+14.5	+20.9	+13.4	+21.3	+9.6	+2.7
<i>1985-86—</i>										
July(e)	+22.6	+16.4	+21.4	+2.6	+11.6	+20.1	+12.4	+21.4	+8.1	+3.5
August(e)	+20.7	+15.9	+20.0	-1.9	+11.0	+19.2	+10.1	+19.8	+5.6	+4.0
September(e)	+20.0	+15.0	+18.1	-1.1	+11.4	+14.2	+8.7	+16.3	+5.0	+3.6
October(e)	+19.8	+19.4	+17.6	-1.1	+10.7	+15.0	+9.1	+17.3	+5.1	+3.3
November(e)	+20.1	+23.4	+18.4	+1.3	+10.1	+15.5	+10.3	+18.7	+6.2	+4.1
<i>Change from previous month—</i>										
<i>1984-85—</i>										
September	+1.0	+0.4	+0.8	-1.1	-1.1	+0.5	-0.3	+0.8	-0.8	-0.3
October	+0.4	-0.4	+0.7	-2.2	-0.5	+0.1	-0.8	+0.2	-1.3	
November	+0.3	+0.7	+0.7	-1.3	+0.2	+0.2	-0.3	+0.7	-0.6	-0.2
December	+0.1	+0.1	+0.2	-0.7	+0.1	-0.2	-0.3	-0.2	-0.3	-0.2
January	+0.5	+0.4	+1.4	+0.3	+0.3	+1.6	+0.8	+0.4	+1.0	+0.6
February	+1.0	+3.6	+0.8	+1.1	+3.8	+1.1	+1.7	+2.5	+1.3	+1.3
March	+1.8	+3.1	+5.7	+2.0	+4.0	+3.6	+5.0	+5.5	+2.6	+0.9
April	+4.0	+4.3	+1.8	+0.6	+5.5	+1.7	+2.5	+3.7	+1.9	+0.7
May	+7.1	+1.5	+1.7	-1.4	+0.5	+7.9	+2.9	+3.3	+2.6	+0.4
June	+1.7	+2.0	+4.4	+1.8	+0.1	—	+1.0	+1.2	+0.9	+0.6
<i>1985-86—</i>										
July(e)	+1.9	-0.2	—	-0.4	-1.2	+0.8	—	+1.5	-0.7	-0.8
August(e)	-0.7	+0.6	+0.5	-1.5	-0.9	-0.7	-0.9	-0.6	-1.0	+0.4
September(e)	+0.4	-0.2	-0.8	-0.2	-0.7	-3.7	-1.6	-2.1	-1.3	-0.1
October(e)	+0.3	+0.3	+0.3	-2.2	-1.2	+0.8	-0.4	+1.0	-1.3	-0.3
November(e)	+0.5	+2.6	+1.4	+1.1	-0.4	+0.8	+0.8	+1.4	+0.5	+0.5

For footnotes see Table 3.

TABLE 2. PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY(a)  
 GROUP INDEX NUMBERS BASED ON AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION  
 (Base of each index : Year 1968-69 = 100.0)

Value weight(d)	Imported materials				Home produced materials				All groups	
	Agriculture 1.92%	Mining 4.17%	Manufacturing 21.07%	Total imported materials 27.16%	Agriculture 47.04%	Forestry and fishing 1.12%	Mining 18.92%	Electricity 5.76%	Total home produced materials 72.84%	100%
1982-83	303.6	1,318.7	310.6	464.9	288.8	378.8	541.1	333.9	359.3	388.0
1983-84	344.0	1,288.2	323.6	473.1	312.3	410.1	538.2	351.3	375.6	402.1
1984-85	370.6	1,393.1	354.8	515.3	317.9	447.4	564.9	361.8	387.5	422.2
<i>1984-85—</i>										
September	359.8	1,321.0	339.6	491.7	321.8	430.8	536.5	358.8	382.2	411.9
October	362.5	1,321.4	340.5	492.7	314.7	431.0	534.5	358.8	377.1	408.5
November	364.9	1,320.7	341.6	493.6	310.9	433.9	534.1	363.1	374.9	407.1
December	360.3	1,315.7	341.8	492.6	308.9	433.1	534.4	363.1	373.7	406.0
January	356.5	1,317.7	344.0	494.4	310.0	452.3	545.6	363.0	377.6	409.3
February	362.2	1,362.7	350.4	506.6	313.9	455.8	554.3	363.0	382.4	416.1
March	369.2	1,461.2	366.0	534.4	320.4	459.6	576.2	363.0	392.4	430.9
April	382.9	1,526.2	377.5	554.2	325.2	474.6	592.6	363.0	399.9	441.8
May	403.1	1,578.8	388.7	572.4	320.5	468.8	645.1	363.0	410.4	454.4
June	416.0	1,584.1	395.1	579.1	325.4	469.2	645.7	365.7	414.0	458.9
<i>1985-86—</i>										
July(e)	418.8	1,621.9	398.8	588.0	323.1	481.0	638.8	365.7	410.9	459.0
August(e)	425.0	1,597.8	398.3	584.3	317.4	499.7	635.6	365.7	406.7	454.9
September(e)	414.2	1,534.7	395.7	571.9	316.1	498.6	618.4	365.7	401.4	447.7
October(e)	403.5	1,558.3	399.7	577.9	308.7	509.5	615.3	370.5	396.3	445.7
November(e)	396.9	1,585.1	405.2	585.8	312.0	518.3	613.6	371.3	398.2	449.2

For footnotes see Table 3.

TABLE 3. PRICE INDEX OF MATERIALS USED IN MANUFACTURING INDUSTRY(a)  
 GROUP INDEX NUMBERS BASED ON STANDARD INTERNATIONAL TRADE CLASSIFICATION  
 (Base of each index : Year 1968-69 = 100.0)

Value weight (d)	Manufactured materials (imported)(b)			Other materials (imported and home produced)(c)			All groups	Special grouping
	Chemicals 6.67%	Metal manufactures, components for transport equipment and machinery 5.21%	Other manufactured materials(b) 5.76%	Food, live animals and tobacco 45.87%	Crude materials (excl. fuels) 20.66%	Electricity, gas and fuels 15.83%		
1982-83	271.0	343.9	280.8	291.2	303.9	880.7	388.0	296.7
1983-84	282.8	358.0	288.0	315.2	318.9	868.7	402.1	305.6
1984-85	303.8	388.1	316.5	321.2	339.3	922.8	422.2	305.8
1984-85—								
September	291.7	374.9	301.2	325.7	324.1	879.6	411.9	302.4
October	293.0	373.4	303.3	318.5	322.4	880.2	408.5	302.5
November	293.8	370.8	305.5	314.5	322.9	882.4	407.1	301.8
December	294.2	371.2	306.0	312.3	323.1	880.4	406.0	301.1
January	295.7	372.8	310.2	313.3	324.2	894.6	409.3	302.9
February	298.7	386.3	312.7	316.8	336.6	904.6	416.1	306.8
March	304.0	398.4	330.4	323.0	350.0	950.2	430.9	309.5
April	316.2	415.7	336.3	328.2	369.1	966.1	441.8	311.6
May	338.5	421.8	342.0	323.7	371.1	1,042.6	454.4	313.0
June	344.4	430.2	357.0	329.4	371.6	1,042.5	458.9	315.0
1985-86—								
July(e)	350.9	429.5	356.9	328.0	367.1	1,050.8	459.0	312.4
August(e)	348.6	432.0	358.7	323.0	363.9	1,043.2	454.9	313.6
September(e)	350.1	431.0	355.8	322.2	361.2	1,004.2	447.7	313.4
October(e)	351.0	445.9	356.8	315.1	357.0	1,011.9	445.7	312.6
November(e)	352.9	457.6	361.8	318.5	355.6	1,019.5	449.2	314.1

(a) The index is on a net basis, and relates in concept only to materials that enter Australian manufacturing industry from other sectors of the Australian economy or from overseas. See paragraphs 2 and 3, Explanatory Notes.  
 (b) Excluding the manufactured imported crude materials listed in footnote (c). (c) Includes imported fuel oil and the following manufactured imported crude materials: Synthetic rubber, hardwood, softwood, woodpulp, synthetic fibre, vegetable oils. (d) Composition and weighting pattern as at reference base year; see paragraphs 2 and 6, Explanatory Notes. (e) Index numbers from July 1985 onward will be replaced by new series in the next issue of this publication (see note following Main Features).