



## MANUFACTURING INDUSTRY NOTES

- AUSTRALIAN AND NEW ZEALAND  
STANDARD INDUSTRIAL  
CLASSIFICATION
- 1 This is the second Manufacturing industry publication to be presented under the Australian and New Zealand Standard Industrial Classification (ANZSIC), which has replaced the Australian Standard Industrial Classification (ASIC) used prior to the 1992-93 reference year. Manufacturing collections dating back to the 1989-90 reference year have been coded to the ANZSIC. All time series comparisons in this publication are made on a consistent ANZSIC basis.
- MANUFACTURING PUBLICATIONS
- 2 The publication *Manufacturing Industry, Australia, 1992-93, Preliminary* (8201.0), which introduced the new ANZSIC codes, was published in August 1994. Over the coming months, the remaining 1992-93 series of publications (8221.0 to 8221.7) for Australia, States and the Northern Territory will be released (using these ANZSIC codes). These publications will be closely followed by the 1993-94 suite of publications.
- MANUFACTURING CENSUS
- 3 The 1993-94 collection was a census of manufacturing establishments. All manufacturing businesses were requested to provide data on employment, wages and salaries paid and turnover. A sample of approximately 18 000 establishments was asked to supply additional information on commodities produced and sold. Information on these data items will be available in the publication *Manufacturing Production, Australia: Principal Commodities Produced, 1993-94* (8365.0)
- ADJUSTED FIGURES
- 4 Data for 1993-94 (Table 1) and changes from 1992-93 to 1993-94 (Table 2) have been adjusted for deficiencies in the number of businesses recorded on the ABS Business Register, which is the source for the units included in the manufacturing collection. These adjustments and the reasons for them are described in paragraphs 13 and 14 of the Explanatory Notes at the back of this publication.
- INQUIRIES
- 5 For further information about statistics in this publication and the availability of related unpublished statistics, contact John Ridley on Sydney 02 268 4541.
- 6 For information about other ABS statistics and services please refer to the back cover of this publication.

W. McLennan  
Australian Statistician

## MAIN FEATURES

### OVERVIEW

**1** There were 44 921 manufacturing establishments operating in Australia at 30 June 1994. These establishments employed 922 600 persons (at the end of June 1994), paid \$28 309m in wages and salaries in 1993-94, and recorded \$185 115m in turnover in the year to 30 June 1994.

### EMPLOYMENT

**2** Manufacturing employment between June 1993 and June 1994 remained virtually unchanged, with 922 600 persons employed at the end of June 1994 compared with 922 400 persons employed at the end of June 1993. Over this period, employment rose in Queensland (up 7%) and the Australian Capital Territory (up 2%), while falls in employment were recorded by Tasmania (down 6%), Victoria (down 2%) and South Australia and the Northern Territory (both falling by 1%). Employment in New South Wales and Western Australia remained unchanged.

**3** Employment between June 1993 and June 1994 rose in four of the nine industry subdivisions, fell in four and remained unchanged in one. The industry subdivision with the largest percentage increase was Other manufacturing (up 5%), followed by Food, beverage and tobacco manufacturing (up 3%). The industry subdivision to record the largest percentage fall in employment was Textile, clothing, footwear and leather manufacturing (down 4%), followed by Non-metallic mineral product manufacturing (down 3%). Machinery and equipment manufacturing remained unchanged.

### TURNOVER

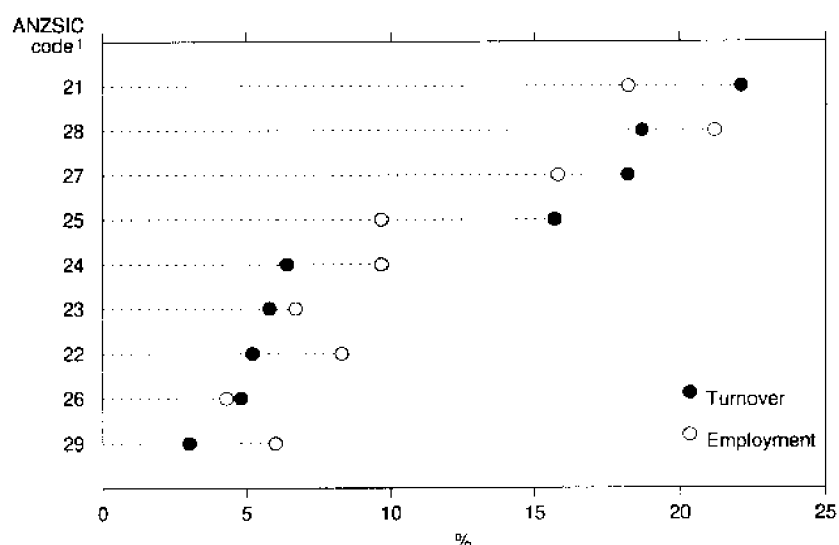
**4** Turnover in current prices rose by \$11 031m or 6% from the turnover figure of \$174 083m in 1992-93.

**5** Between 1992-93 and 1993-94, turnover of manufacturing establishments in constant price terms increased by 5%. All States (except Western Australia which remained unchanged) recorded an increase in turnover, while both Territories recorded a decrease. Queensland (up 11%) showed the largest increase in percentage terms, followed by South Australia (up 8%), Victoria (up 5%), New South Wales (up 4%) and Tasmania (up 2%). The Northern Territory recorded a 4% decrease while the Australian Capital Territory recorded a 1% decrease.

**6** Nationally, eight of the nine industry subdivisions recorded an increase in turnover at constant prices, with Machinery and equipment manufacturing and Other manufacturing (both up 8%) recording the largest percentage increase. Printing, publishing and recorded media (down 2%) was the only industry subdivision to record a decrease.

# DISTRIBUTION OF TURNOVER AND EMPLOYMENT

## DISTRIBUTION OF TURNOVER AND EMPLOYMENT BY ANZSIC SUBDIVISION, AUSTRALIA, 1993-94



<sup>1</sup> For a description of the ANZSIC subdivisions, see Table 1.

**7** The industry subdivision with the largest contribution to turnover in 1993-94 was Food, beverage and tobacco manufacturing [21] (22.1%). The smallest contributor to turnover was Other manufacturing [29] (3.0%).

**8** The industry subdivision with the largest contribution to employment at the end of June 1994 was Machinery and equipment manufacturing [28] (21.2%). The smallest contributor to employment was Non-metallic mineral product manufacturing [26] (4.3%).

## 1

**MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION,  
AUSTRALIA, STATES AND TERRITORIES, 1993-94**

Industry subdivision		Establishments at 30 June <sup>1</sup>	Employment at end of June <sup>2</sup>	Wages and salaries <sup>3</sup>	Turnover
ANZSIC code	Description	No.	'000	\$m	\$m
AUSTRALIA					
21	Food, beverage and tobacco mfg	3 590	168.1	5 034	40 936
22	Textile, clothing, footwear and leather mfg	4 503	77.0	1 825	9 602
23	Wood and paper product mfg	3 985	62.0	1 790	10 740
24	Printing, publishing and recorded media	5 274	89.6	2 831	11 920
25	Petroleum, coal, chemical and associated product mfg	3 026	89.4	3 270	29 060
26	Non-metallic mineral product mfg	1 936	39.4	1 315	8 909
27	Metal product mfg	7 576	146.1	4 842	33 669
28	Machinery and equipment mfg	9 011	196.0	6 181	34 661
29	Other manufacturing	6 020	55.0	1 220	5 617
<b>21-29</b>	<b>Total manufacturing</b>	<b>44 921</b>	<b>922.6</b>	<b>28 309</b>	<b>185 115</b>
NEW SOUTH WALES					
21	Food, beverage and tobacco mfg	1 022	51.7	1 659	12 713
22	Textile, clothing, footwear and leather mfg	1 544	22.9	528	2 962
23	Wood and paper product mfg	1 405	19.4	547	3 377
24	Printing, publishing and recorded media	2 053	35.9	1 200	4 974
25	Petroleum, coal, chemical and associated product mfg	1 055	33.1	1 229	11 362
26	Non-metallic mineral product mfg	586	12.1	414	2 850
27	Metal product mfg	2 756	54.5	1 959	12 881
28	Machinery and equipment mfg	3 053	62.2	2 035	9 531
29	Other manufacturing	1 807	16.5	390	1 796
<b>21-29</b>	<b>Total manufacturing</b>	<b>15 280</b>	<b>308.4</b>	<b>9 960</b>	<b>62 445</b>
VICTORIA					
21	Food, beverage and tobacco mfg	967	44.7	1 404	11 972
22	Textile, clothing, footwear and leather mfg	1 771	36.2	894	4 668
23	Wood and paper product mfg	978	15.9	501	3 034
24	Printing, publishing and recorded media	1 525	26.4	855	3 906
25	Petroleum, coal, chemical and associated product mfg	974	33.6	1 290	10 045
26	Non-metallic mineral product mfg	515	10.1	349	2 200
27	Metal product mfg	1 972	35.5	1 119	7 412
28	Machinery and equipment mfg	2 695	70.1	2 293	14 363
29	Other manufacturing	1 712	15.7	356	1 680
<b>21-29</b>	<b>Total manufacturing</b>	<b>13 109</b>	<b>288.3</b>	<b>9 061</b>	<b>59 282</b>
QUEENSLAND					
21	Food, beverage and tobacco mfg	647	37.2	1 033	8 669
22	Textile, clothing, footwear and leather mfg	641	6.3	125	593
23	Wood and paper product mfg	825	11.7	298	1 668
24	Printing, publishing and recorded media	779	11.8	333	1 364
25	Petroleum, coal, chemical and associated product mfg	457	9.2	301	3 192
26	Non-metallic mineral product mfg	369	8.0	257	1 894
27	Metal product mfg	1 386	25.4	728	5 970
28	Machinery and equipment mfg	1 472	22.7	609	2 731
29	Other manufacturing	1 235	11.2	227	1 026
<b>21-29</b>	<b>Total manufacturing</b>	<b>7 811</b>	<b>143.6</b>	<b>3 912</b>	<b>27 106</b>

For footnotes see end of table.

## 1

**MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION,  
AUSTRALIA, STATES AND TERRITORIES, 1993-94—continued**

Industry subdivision		Establishments at 30 June <sup>1</sup>	Employment at end of June <sup>2</sup>	Wages and salaries <sup>3</sup>	Turnover
ANZSIC code	Description	No.	'000	\$m	\$m
SOUTH AUSTRALIA					
21	Food, beverage and tobacco mfg	418	16.2	430	3 342
22	Textile, clothing, footwear and leather mfg	232	5.6	143	848
23	Wood and paper product mfg	255	6.2	185	973
24	Printing, publishing and recorded media	333	5.6	156	646
25	Petroleum, coal, chemical and associated product mfg	229	7.1	231	1 522
26	Non-metallic mineral product mfg	152	2.8	92	556
27	Metal product mfg	553	12.0	370	2 419
28	Machinery and equipment mfg	693	27.2	867	6 243
29	Other manufacturing	458	4.5	96	436
<b>21-29</b>	<b>Total manufacturing</b>	<b>3 324</b>	<b>87.2</b>	<b>2 572</b>	<b>16 984</b>
WESTERN AUSTRALIA					
21	Food, beverage and tobacco mfg	355	11.1	314	2 680
22	Textile, clothing, footwear and leather mfg	232	3.7	83	318
23	Wood and paper product mfg	319	4.6	128	695
24	Printing, publishing and recorded media	405	6.1	171	649
25	Petroleum, coal, chemical and associated product mfg	243	5.4	190	2 717
26	Non-metallic mineral product mfg	216	4.9	158	1 017
27	Metal product mfg	686	14.0	484	3 841
28	Machinery and equipment mfg	878	10.5	286	1 474
29	Other manufacturing	627	5.8	125	564
<b>21-29</b>	<b>Total manufacturing</b>	<b>3 960</b>	<b>66.2</b>	<b>1 940</b>	<b>13 957</b>
TASMANIA					
21	Food, beverage and tobacco mfg	136	6.0	166	1 374
22	Textile, clothing, footwear and leather mfg	51	1.9	48	199
23	Wood and paper product mfg	147	3.6	115	922
24	Printing, publishing and recorded media	81	1.8	51	146
25	Petroleum, coal, chemical and associated product mfg	51	0.9	26	209
26	Non-metallic mineral product mfg	55	1.0	29	247
27	Metal product mfg	141	3.3	132	793
28	Machinery and equipment mfg	140	2.5	67	236
29	Other manufacturing	111	0.8	14	55
<b>21-29</b>	<b>Total manufacturing</b>	<b>914</b>	<b>21.7</b>	<b>648</b>	<b>4 181</b>
NORTHERN TERRITORY					
21	Food, beverage and tobacco mfg	26	0.6	13	117
22	Textile, clothing, footwear and leather mfg	18	0.1	3	8
23	Wood and paper product mfg	24	0.2	4	20
24	Printing, publishing and recorded media	31	0.4	10	34
25	Petroleum, coal, chemical and associated product mfg	10	0.1	2	9
26	Non-metallic mineral product mfg	18	0.2	7	61
27	Metal product mfg	49	1.0	44	323
28	Machinery and equipment mfg	41	0.3	8	29
29	Other manufacturing	25	0.1	2	8
<b>21-29</b>	<b>Total manufacturing</b>	<b>242</b>	<b>3.0</b>	<b>92</b>	<b>609</b>

For footnotes see end of table.

# 1

## MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION, AUSTRALIA, STATES AND TERRITORIES, 1993-94—continued

Industry subdivision		Establishments at 30 June <sup>1</sup>	Employment at end of June <sup>2</sup>	Wages and salaries <sup>3</sup>	Turnover
ANZSIC code	Description	No.	'000	\$m	\$m
AUSTRALIAN CAPITAL TERRITORY					
21	Food, beverage and tobacco mfg	20	0.6	16	70
22	Textile, clothing, footwear and leather mfg	14	0.1	2	6
23	Wood and paper product mfg	32	0.4	11	50
24	Printing, publishing and recorded media	67	1.7	55	201
25	Petroleum, coal, chemical and associated product mfg	7	—	1	5
26	Non-metallic mineral product mfg	25	0.2	8	84
27	Metal product mfg	33	0.3	7	30
28	Machinery and equipment mfg	39	0.5	15	54
29	Other manufacturing	44	0.4	10	53
<b>21-29</b>	<b>Total manufacturing</b>	<b>281</b>	<b>4.2</b>	<b>125</b>	<b>553</b>

<sup>1</sup> See paragraphs 4-7 and 15 of the Explanatory Notes.

<sup>2</sup> Includes working proprietors.

<sup>3</sup> Excludes the drawings of working proprietors.

# 2

## MANUFACTURING ESTABLISHMENTS: PERCENTAGE CHANGE IN EMPLOYMENT AND TURNOVER (AT AVERAGE 1989-90 PRICES) BY INDUSTRY SUBDIVISION, STATES, TERRITORIES AND AUSTRALIA, 1992-93 TO 1993-94

Industry subdivision		NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
ANZSIC code	Description	%	%	%	%	%	%	%	%	%
EMPLOYMENT AT END OF JUNE										
21	Food, beverage and tobacco mfg	3	1	9	2	-5	1	-3	-5	3
22	Textile, clothing, footwear and leather mfg	-3	-6	-4	-6	2	-3	32	22	-4
23	Wood and paper product mfg	4	3	8	1	1	-20	9	-2	2
24	Printing, publishing and recorded media	0	-3	7	-1	10	7	2	6	1
25	Petroleum, coal, chemical and associated product mfg	-2	-2	6	1	0	-4	9	88	-1
26	Non-metallic mineral product mfg	-8	0	-3	-1	1	16	36	-17	-3
27	Metal product mfg	-5	1	8	-4	-4	-23	-12	55	-2
28	Machinery and equipment mfg	2	-5	9	-2	-1	19	0	-12	0
29	Other manufacturing	6	2	5	5	9	-5	4	3	5
<b>21-29</b>	<b>Total manufacturing</b>	<b>0</b>	<b>-2</b>	<b>7</b>	<b>-1</b>	<b>0</b>	<b>-6</b>	<b>-1</b>	<b>2</b>	<b>0</b>
TURNOVER										
21	Food, beverage and tobacco mfg	5	5	8	8	-3	7	1	-13	5
22	Textile, clothing, footwear and leather mfg	6	3	-5	0	7	2	-8	-1	3
23	Wood and paper product mfg	3	6	4	0	4	-6	29	3	3
24	Printing, publishing and recorded media	-10	5	12	-4	3	5	4	-1	-2
25	Petroleum, coal, chemical and associated product mfg	8	6	13	12	1	-5	-20	86	7
26	Non-metallic mineral product mfg	-7	4	6	3	12	25	15	-4	2
27	Metal product mfg	5	4	21	1	-5	-2	-8	21	6
28	Machinery and equipment mfg	7	6	11	18	5	21	-11	-3	8
29	Other manufacturing	2	12	11	8	19	-9	14	9	8
<b>21-29</b>	<b>Total manufacturing</b>	<b>4</b>	<b>5</b>	<b>11</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>-4</b>	<b>-1</b>	<b>5</b>

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication presents preliminary statistics compiled from a census of manufacturing establishments for 1993–94, with some comparative statistics relating to the preceding year.

**2** The manufacturing collection is conducted on an annual basis. For the 1993–94 collection, all manufacturing businesses were requested to provide data on employment, wages and salaries paid and turnover. A sample of approximately 18 000 establishments was asked to supply additional information on commodities produced and sold.

**3** Manufacturing, as specified in Division C of the Australian and New Zealand Standard Industrial Classification (ANZSIC), broadly relates to the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand.

### SCOPE AND COVERAGE

**4** The unit for which statistics are reported in the manufacturing collection is the establishment. A manufacturing establishment is one predominantly engaged in manufacturing activities, but the data collected for it cover all activities of the establishment (including non-manufacturing activities). Conversely, there are some establishments predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities and which are excluded.

**5** Some of those establishments predominantly engaged in one activity are 'split' into two or more establishments when the secondary activity exceeds a specific value. For 1993–94, this value was \$6.6m in terms of sales and transfers out of goods and services.

**6** Data contained in this publication relate to all manufacturing establishments which operated in Australia during the year ended 30 June 1994, except for those single establishment management units not employing staff at 30 June 1994 (such as sole proprietorships or family partnerships) which have not registered as group employers with the Australian Taxation Office. These types of businesses contribute only marginally to statistical aggregates (other than number of establishments). In addition, the ABS attempts to obtain data for those businesses which either commenced or ceased operation during the year, but it is not possible to obtain data for all of them.

### UNIT DEFINITIONS

**7** The standard units now in use are:

- *Management unit.* The management unit is the highest-level unit within a business, having regard to industry homogeneity, for which accounts are maintained; in nearly all cases, it coincides with the legal entity owning the business (that is, company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.



- **Establishment.** The establishment is the smallest accounting unit of a business, within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data enabling value added to be calculated. In general, an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.

## DATA ITEM DEFINITIONS

**8 Establishments at 30 June.** The number of establishments in operation at 30 June.

**9 Employment at end of June.** The number of working proprietors and the number of employees on the payroll for the last pay period ending in June. (Certain sole proprietors and partnerships not employing others are excluded. See paragraphs 6 and 15.)

**10 Wages and salaries.** The gross wages and salaries paid to all employees of the establishment during the financial year. The drawings of working proprietors are excluded.

**11 Turnover.** Sales (exclusive of excise and sales tax) of goods whether produced by the establishment or not, plus transfers out of goods to other establishments of the same business, plus bounties and subsidies on production, plus all other operating income from outside the business (such as commission income, repair and service income, and income from rent, leasing and hiring), plus capital work done by a business' own employees for own use, or for rental or lease. Receipts from interest, royalties, dividends and the sale of fixed tangible assets are excluded.

**12 Turnover at constant prices.** Comparison of 1993-94 estimates of turnover with previous estimates are made at average 1989-90 prices. This attempts to eliminate the effect of price movements.

## COMPARABILITY WITH PREVIOUS STATISTICS

**13** Data in this publication have been adjusted to allow for lags in processing new businesses to the ABS business register, and omission of some businesses from the business register. First, adjustments have been made to allow for new businesses which had commenced operations but for which details had not been processed on to the ABS business register in time for inclusion in the annual manufacturing industry collection. Second, adjustments have been made for businesses which may have been in existence for some time but which, for various reasons, were not previously added to the ABS business register. Recent investigations have revealed that some of these businesses had been in existence for several years, and their omission from the business register has led to a small but increasing understatement of the results for this collection. The ABS intends to continue to adjust the results of future collections, for new businesses for which details have not been processed to the register in time for inclusion in the annual manufacturing industry collection.

**14** The majority of businesses affected by these lags and omissions and to which both types of adjustments apply are small. Although these adjustments have resulted in counts of manufacturers at 30 June 1994 being adjusted upward by 14%, the effect on 1993-94 turnover is much less at 3%. The effect on employment is an adjustment of 5%. Most States and Territories and most industries were affected to a similar degree.

**15** The 1993–94 data contained in this publication include data relating to those single establishment management units not employing staff at 30 June 1994 (such as sole proprietorships or family partnerships) which have registered as group employers with the Australian Taxation Office. Data in respect of these 'non-employers' were excluded from the scope of the manufacturing collection for the 1988–89 to 1992–93 (inclusive) reference years. However, the inclusion of these types of businesses has only had a marginal affect on statistical aggregates (except for the number of establishments, where the effect has been slightly more significant).

#### RELATED PUBLICATIONS

**16** More detailed manufacturing industry statistics will be released in the publication *Manufacturing Industry, Australia, 1993–94* (8221.0), which is expected to be released in March 1996. Commodities produced and sold statistics will be released in the publication *Manufacturing Production, Australia: Principal Commodities Produced, 1993–94* (8365.0), expected to be released towards the middle of 1996.

#### SYMBOLS AND OTHER USAGES

ANZSIC	Australian and New Zealand Standard Industrial Classification
—	nil or rounded to zero (incl. null cells)

**17** Where figures have been rounded, discrepancies may occur between totals and the sums of the component items.



## *For more information . . .*

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