

MANUFACTURING INDUSTRY

**NEW SOUTH WALES
AND AUSTRALIAN
CAPITAL TERRITORY**

EMBARGO: 11.30AM (CANBERRA TIME) WED 18 OCT 2000

C O N T E N T S

	<i>page</i>
Notes	2
Main features	3

TABLES

MANUFACTURING ESTABLISHMENTS—NSW

1 Summary of operations—1993–94 to 1998–99	9
2 Industry class	11
3 Employment size	18
4 Exported production—employment size	22
5 Proportion of exports	23

MANUFACTURING ESTABLISHMENTS—ACT

6 Summary of operations—1993–94 to 1998–99	24
---	----

ADDITIONAL INFORMATION

Explanatory Notes	26
Technical note 1—data reliability	32
Technical note 2—standard errors	33
Glossary	34

■ For further information about these and related statistics, contact the National Information Service on 1300 135 070 or John Ridley on Sydney (02) 9268 4541.

NOTES

ANNUAL MANUFACTURING INDUSTRY COLLECTION

The 1998–99 collection was conducted as a sample survey of approximately 17,000 manufacturing establishments nationally, which were requested to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. A sub-sample of approximately 7,000 establishments was also asked to provide detailed structural and performance data, and value of sales for commodities produced.

ABOUT THIS ISSUE

For some time now, the ABS has been using Australian Taxation Office (ATO) information on group employer (GE) registrations to add new businesses to the ABS business register. After detailed investigation, it has now been decided to use GE information to delete from the business register those businesses which have ceased trading or are no longer employing staff. As a result, a large number of businesses have been removed from the ABS business register which has had a small impact on published aggregates. For more details, see paragraphs 11–13 of the Explanatory Notes.

DATA REVISIONS

The process of using GE information to delete businesses from the ABS business register has been introduced for the 1998–99 manufacturing survey. This has had an impact on previous years' data. Estimates in Table 1, for the previous three manufacturing collections (covering 1995–96 to 1997–98 inclusive) have been adjusted in such a way as to phase in the impact over this time.

REGIONAL DATA

For information about the availability of sub-State estimates from the 1998–99 collection, see paragraph 26 of the Explanatory Notes.

DATA TO BE RELEASED IN OTHER PUBLICATIONS

More detailed manufacturing industry statistics for each State are being released progressively in a series of publications, *Manufacturing Industry, [State], 1998–99* (Cat. nos 8221.1–8221.6).

Management unit data and a wide range of manufacturing related ABS data, as well as data from other sources, will be presented in the compendium publication *Manufacturing, Australia, 2000* (Cat. no. 8225.0), to be released in December 2000. Management unit data at the total manufacturing level are also included in *Business Operations and Industry Performance, Australia, Preliminary, 1998–99* (Cat. no. 8142.0).

Geoff Smith
Acting Regional Director, New South Wales

MAIN FEATURES

NEW SOUTH WALES

OVERVIEW

Turnover for the year 1998–99 by manufacturing establishments operating in New South Wales was \$71,876m, which resulted in an industry value added (IVA) for the year of \$22,902m. For turnover, this represents a 6.0% increase in current price terms from the \$67,829m recorded for 1997–98. These manufacturing establishments employed 297,000 persons at the end of June 1999 and paid \$11,972m in wages and salaries in 1998–99.

The percentage of Australian manufacturing employment in New South Wales at the end of June 1999 was 32.2%, an increase of 0.4 percentage points on that reported at the end of June 1998. The New South Wales industry subdivisions which made a significant contribution to national manufacturing employment at the end of June 1999 at the industry subdivision level were PRINTING, PUBLISHING AND RECORDED MEDIA (40.7%), PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING (35.9%) and METAL PRODUCT MANUFACTURING (35.0%).

The percentage contribution by New South Wales to total Australian manufacturing turnover and IVA in 1998–99 was 32.5% and 33.2% respectively. For turnover, this represents an increase of 0.7 percentage points on the contribution reported in 1997–98. The New South Wales industry subdivisions which made a significant contribution to national manufacturing turnover and IVA in 1998–99 at the industry subdivision level were also PRINTING, PUBLISHING AND RECORDED MEDIA (45.0% and 42.4% respectively), PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING (38.1% and 37.4% respectively) and METAL PRODUCT MANUFACTURING (34.9% and 37.4% respectively).

STATE COMPARISON

For the third consecutive year, for 1998–99, the contribution to Australian turnover by New South Wales manufacturers (\$71,876m) was below that of manufacturers located in Victoria (\$71,984m). When this first occurred, for 1996–97, it was the first time that this had happened since the commencement of integrated economic statistics with the 1968–69 collection.

Between them, New South Wales and Victoria contributed nearly two-thirds of manufacturing IVA for Australia in 1998–99. In 1998–99, New South Wales (at 33.2%) had the largest share of IVA, followed by Victoria (at 33.1%); whereas in 1997–98, Victoria (at 33.2%) had the largest share of IVA, followed by New South Wales (at 32.4%). This was the only change in the order of the States and Territories in this period.

As in previous years, Victoria and New South Wales were the States in which manufacturing employment was concentrated at the end of June 1999. Victoria accounted for 32.3% of Australian manufacturing employment, with the corresponding figure for New South Wales being 32.2%.

This is the second consecutive year that employment in the Victorian manufacturing industry has exceeded that for New South Wales. This is, however, a decrease of 0.8 percentage points for Victoria and an increase of 0.4 percentage points for New South Wales on the contributions that they recorded 12 months earlier.

INDUSTRY VALUE ADDED

IVA for 1998–99 was \$22,902m. The industry subdivisions with the largest contribution

MAIN FEATURES *continued*

NEW SOUTH WALES

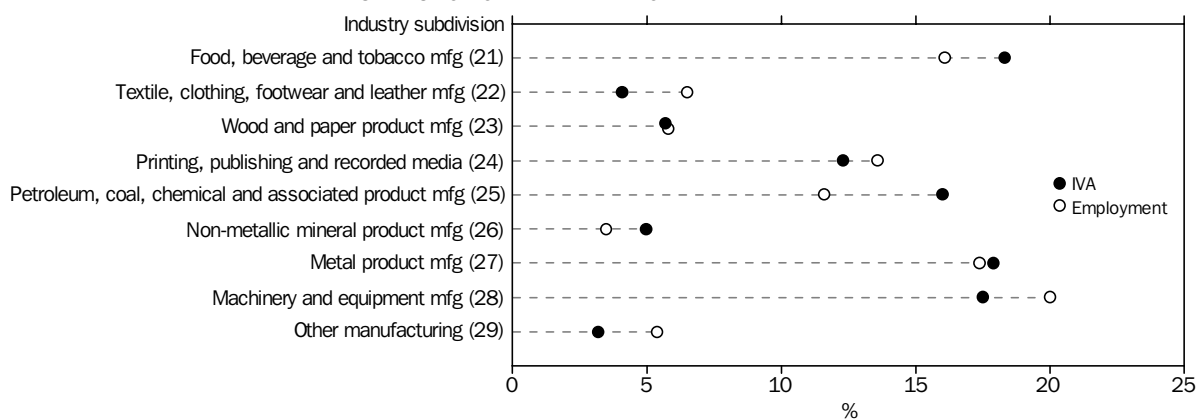
continued

to total manufacturing IVA and the most notable industry classes within those subdivisions (as a percentage of New South Wales' total manufacturing IVA) were:

- FOOD, BEVERAGE AND TOBACCO MANUFACTURING (18.3%), where the industry classes MEAT PROCESSING (ANZSIC Class 2111 at 1.9%), POULTRY PROCESSING (ANZSIC Class 2112 at 1.6%), CEREAL FOOD AND BAKING MIX MANUFACTURING (ANZSIC Class 2152 at 1.6%) and FOOD MANUFACTURING N.E.C. (ANZSIC Class 2179 at 1.6%) were the most substantial.
- METAL PRODUCT MANUFACTURING (17.9%), where the industry classes BASIC IRON AND STEEL MANUFACTURING (ANZSIC Class 2711 at 5.6%), STRUCTURAL STEEL FABRICATING (ANZSIC Class 2741 at 2.0%) and ALUMINIUM SMELTING (ANZSIC Class 2722 at 2.0%) were the most substantial.
- MACHINERY AND EQUIPMENT MANUFACTURING (17.5%), where the industry classes AIRCRAFT MANUFACTURING (ANZSIC Class 2824 at 2.3%), ELECTRONIC EQUIPMENT MANUFACTURING N.E.C. (ANZSIC Class 2849 at 1.9%) and ELECTRICAL EQUIPMENT MANUFACTURING N.E.C. (ANZSIC Class 2859 at 1.2%) were the most substantial.
- PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING (16.0%), where the industry classes MEDICINAL AND PHARMACEUTICAL PRODUCT MANUFACTURING (ANZSIC Class 2543 at 3.8%), PETROLEUM REFINING (ANZSIC Class 2510 at 1.8%) and PLASTIC INJECTION MOULDED PRODUCT MANUFACTURING (ANZSIC Class 2566 at 1.5%) were the most substantial.

Industry classes making a notable contribution to industry value added and not included in the subdivisions listed above included NEWSPAPER PRINTING OR PUBLISHING (ANZSIC Class 2421 at 4.4%) and PRINTING (ANZSIC Class 2412 at 3.4%).

DISTRIBUTION OF IVA AND EMPLOYMENT



The New South Wales manufacturing industry subdivisions in 1998–99 with the highest IVA per person employed were NON-METALLIC MINERAL PRODUCT MANUFACTURING at \$110,600 per person employed and PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING (at \$106,300). In 1997–98, NON-METALLIC MINERAL PRODUCT MANUFACTURING was only the third ranked industry (at \$85,700).

EMPLOYMENT AND WAGES

The New South Wales manufacturing industry employed 297,000 persons at the end of June 1999 and paid \$11,972m in wages and salaries in 1998–99. This represents an average of \$40,300 paid in annual wages and salaries per person employed at the end of June 1999, an increase of 6.8% on the \$37,700 recorded twelve months earlier. (Readers

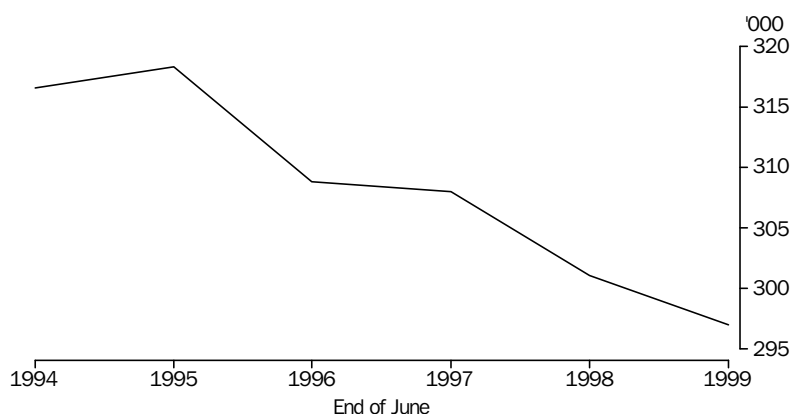
MAIN FEATURES *continued*

NEW SOUTH WALES

continued

should note that the employment figure in this average measures the number of persons employed at the end of June and includes working proprietors. The wages and salaries figure excludes the drawings of working proprietors).

EMPLOYMENT



New South Wales manufacturing employment increased from June 1994 (316,600 persons) to June 1995 (318,300 persons) and has then decreased every year since June 1995. Employment in the New South Wales manufacturing industry decreased by 1.4% or 4,100 persons between June 1998 (301,100 persons) and June 1999 (297,000 persons). Over the five years from June 1994 to June 1999, employment decreased by 6.2% or 19,500 persons.

Between June 1998 and June 1999, employment decreased in seven of the nine manufacturing industry subdivisions and increased in two. TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING recorded the largest decrease in absolute terms (2,800 persons), accounting for 69% of the decrease. The industry subdivisions with the largest percentage decreases were TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING (down 12.8%), WOOD AND PAPER PRODUCT MANUFACTURING (down 9.0%) and FOOD, BEVERAGE AND TOBACCO MANUFACTURING (down 1.7%). The largest percentage and absolute increase was recorded by PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING (up 9.2% from 31,600 persons to 34,500 persons) and the only other increase was recorded by OTHER MANUFACTURING (up 0.4% from 16,000 persons to 16,100 persons).

Average wages and salaries paid per person employed at the end of June rose in all nine industry subdivisions between 1997–98 and 1998–99.

The industry subdivisions to record the largest percentage increases in wages and salaries paid per person employed at the end of June were:

- NON-METALLIC MINERAL PRODUCT MANUFACTURING (up 11.9%—\$39,800 to \$44,500), where 6 (out of 11) industry classes (where publishable) recorded an increase, with the largest being:
 - CONCRETE SLURRY MANUFACTURING (ANZSIC Class 2633) (up 36.6%—\$32,200 to \$44,000);
 - NON-METALLIC MINERAL PRODUCT MANUFACTURING N.E.C. (ANZSIC Class 2640) (up 31.6%—\$35,900 to 47,300); and
 - CLAY BRICK MANUFACTURING (ANZSIC Class 2621)(up 21.7%—\$39,300 to \$47,800).

MAIN FEATURES *continued*

NEW SOUTH WALES

continued

- TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING (up 9.2%—\$26,100 to \$28,500), where 15 (out of 19) industry classes recorded an increase, with the largest being:
 - TEXTILE FINISHING (ANZSIC Class 2215) (up 18.3%—\$25,000 to \$29,600);
 - CLOTHING MANUFACTURING N.E.C. (ANZSIC Class 2249) (up 17.6%—\$20,100 to \$23,700); and
 - WOMEN'S AND GIRLS' WEAR MANUFACTURING (ANZSIC Class 2242) (up 16.1%—\$21,400 to \$24,800).
- PRINTING, PUBLISHING AND RECORDED MEDIA (up 8.9%—\$37,700 to \$41,000), where 5 out of 7 industry classes recorded an increase, with the largest being:
 - BOOK AND OTHER PUBLISHING (ANZSIC Class 2423) (up 16.4%—\$37,600 to \$43,800);
 - PAPER STATIONERY MANUFACTURING (ANZSIC Class 2411) (up 15.4%—\$33,700 to \$38,900); and
 - OTHER PERIODICAL PUBLISHING (ANZSIC Class 2422) (up 15.4%—\$39,700 to \$45,900).

Industry classes belonging to other industry subdivisions and which had the largest percentage increases between 1997–98 and 1998–99 in wages and salaries paid per person employed at the end of June were MILK AND CREAM PROCESSING (ANZSIC Class 2121) (up 47.0%—\$40,300 to \$59,300), DAIRY PRODUCT MANUFACTURING N.E.C. (ANZSIC Class 2129) (up 41.9%—\$36,500 to \$51,800), WOOD CHIPPING (ANZSIC Class 2312) (up 38.1%—\$34,800 to \$48,000) and RUBBER TYRE MANUFACTURING (ANZSIC Class 2551) (up 38.1%—\$24,300 to \$33,500).

TURNOVER

Turnover rose, in current price terms, by \$4,047m to \$71,876m for 1998–99. This represents a 6.0% increase on the \$67,829m recorded for 1997–98.

For the second time and for the second consecutive year since ANZSIC industry data were introduced for 1989–90, FOOD, BEVERAGE AND TOBACCO MANUFACTURING is the largest contributor to total New South Wales manufacturing turnover. METAL PRODUCT MANUFACTURING is the second largest contributor to total New South Wales manufacturing turnover for both 1997–98 and 1998–99.

Eight of the nine manufacturing industry subdivisions recorded an increase in turnover between 1997–98 and 1998–99. The largest increase in percentage terms was recorded by NON-METALLIC MINERAL PRODUCT MANUFACTURING (up 19.0%) and the largest increase in dollar terms was recorded by MACHINERY AND EQUIPMENT MANUFACTURING (up \$1,128m).

The industry classes (where publishable) with the largest percentage increases between 1997–98 and 1998–99 were:

- DAIRY PRODUCT MANUFACTURING N.E.C. (ANZSIC Class 2129) (up 109.9% or \$389m);
- PREFABRICATED BUILDING MANUFACTURING N.E.C. (ANZSIC Class 2919) (up 99.0% or \$15m); and
- PESTICIDE MANUFACTURING (ANZSIC Class 2544) (up 90.6% or \$340m).

The industry classes with the largest dollar increases between 1997–98 and 1998–99 were:

- DAIRY PRODUCT MANUFACTURING N.E.C. (ANZSIC Class 2129) (up \$389m or 109.9%);
- PESTICIDE MANUFACTURING (ANZSIC Class 2544) (up \$340m or 90.6%);
- ELECTRONIC EQUIPMENT MANUFACTURING N.E.C. (ANZSIC Class 2849) (up \$334m or 28.1%); and
- NEWSPAPER PRINTING OR PUBLISHING (ANZSIC Class 2421) (up \$311m or 14.8%).

MAIN FEATURES *continued*

NEW SOUTH WALES

continued

The industry classes (where publishable) with the largest percentage decreases between 1997–8 and 1998–99 were:

- TRANSPORT EQUIPMENT MANUFACTURING N.E.C. (ANZSIC Class 2829) (down 55.4% or \$3m);
- TOY AND SPORTING GOOD MANUFACTURING (ANZSIC Class 2942) (down 47.5% or \$50m); and
- SLEEPWEAR, UNDERWEAR AND INFANT CLOTHING MANUFACTURING (ANZSIC Class 2243) (down 41.6% or \$93m).

The industry classes with the largest dollar decreases between 1997–98 and 1998–99 were:

- PETROLEUM REFINING (ANZSIC Class 2510) (down \$348m or 12.2%);
- MILK AND CREAM PROCESSING (ANZSIC Class 2121) (down \$247m or 32.8%); and
- SHEET METAL PRODUCT MANUFACTURING N.E.C. (ANZSIC Class 2759) (down \$144m or 22.1%).

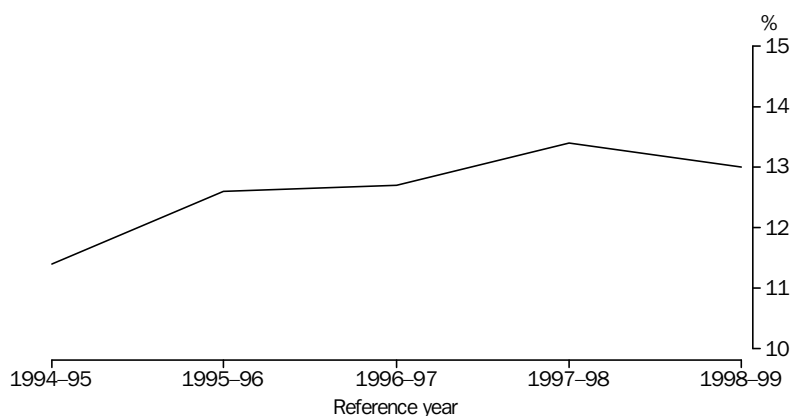
EXPORTS

For 1998–99, New South Wales manufacturers directly exported \$8,446m of the goods that they produced. This represents a 1.6% increase on the \$8,316m recorded for 1997–98, although the percentage of the total sales and transfers out of goods for sale produced that were exported has decreased (from 13.4% for 1997–98 to 13.0% for 1998–99).

Manufacturers' direct exports increased in six industry subdivisions and decreased in the other three between 1997–98 and 1998–99. The largest increase in direct exports was recorded by METAL PRODUCT MANUFACTURING (up \$140m—from \$2,579m to \$2,719m or 5.4%), closely followed by MACHINERY AND EQUIPMENT MANUFACTURING (up \$120m—from \$1,339m to \$1,459m or 9.0%). A significant decrease was recorded by FOOD, BEVERAGE AND TOBACCO MANUFACTURING (down 5.1%—from \$2,149m to \$2,039m).

Commencing with the 1994–95 manufacturing collection, data on exports have been collected as part of the annual manufacturing collection. Exports as a proportion of sales and transfers out of goods for sale produced has increased annually, rising from 11.4% for 1994–95 to 13.4% for 1997–98 before falling (for the first time) to 13.0% for 1998–99.

EXPORTS AS A PROPORTION OF GOODS PRODUCED



AUSTRALIAN CAPITAL TERRITORY

Turnover for the year 1998–99 by manufacturing establishments operating in the Australian Capital Territory was \$586.6m, which resulted in an industry value added (IVA) for the year of \$225.1m. For turnover, this is effectively no change from the figure

MAIN FEATURES *continued*

AUSTRALIAN CAPITAL TERRITORY *continued*

recorded for 1997–98 (\$586.1m). Manufacturing employment at the end of June 1999 was 3,339 persons, a decrease of 12.6% from the 3,820 persons recorded 12 months earlier. The percentage contribution by the Australian Capital Territory to total Australian manufacturing turnover and IVA in 1998–99 was 0.3% and to employment at the end of June was 0.4%.

PRINTING, PUBLISHING AND RECORDED MEDIA again was the largest contributor to total manufacturing employment at the end of June 1999 (36.5%), annual turnover (34.0%) and annual IVA (43.0%). Other large contributors were MACHINERY AND EQUIPMENT MANUFACTURING (17.4%, 16.1% and 15.6% respectively) and FOOD, BEVERAGE AND TOBACCO MANUFACTURING (12.5%, 20.0% and 11.5% respectively). The smallest contributor again was PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING (0.7%, 0.5% and 0.7% respectively).

Seven of the nine industry subdivisions recorded a decrease in the level of employment between June 1998 and June 1999, with the remaining two recording an increase. OTHER MANUFACTURING recorded the largest percentage increase for employment (up 6.9%—from 334 persons to 357 persons). PRINTING, PUBLISHING AND RECORDED MEDIA recorded the largest decrease in employment in absolute terms (down 261 persons—from 1,479 persons to 1,218 persons).

Overall turnover increased by only 0.1% from 1997–98 to 1998–99, with four industry subdivisions recording an increase, four recording decreases and one remaining steady. WOOD AND PAPER PRODUCT MANUFACTURING had the largest percentage increase in turnover (up 30.0%—from \$40.4m to \$52.5m). NON-METALLIC MINERAL PRODUCT MANUFACTURING recorded the largest percentage decrease in turnover (down 30.1%—from \$40.6m to \$28.4). The largest absolute decrease in turnover was by MACHINERY AND EQUIPMENT MANUFACTURING (down \$12.6m or 11.8%—from \$106.9m to \$94.3m).

MANUFACTURING ESTABLISHMENTS(a)(b), Summary of Operations(c)—NSW

Reference year	Employment at end of June(d) '000	Wages and salaries(e)(f) \$m	Turnover(f) \$m	Industry gross product(f) \$m	Industry value added(f) \$m	Wages and salaries to turnover(f) ratio	Turnover per person employed (f)(g) \$'000	Industry value added per person employed (f)(h) \$'000
FOOD, BEVERAGE AND TOBACCO MANUFACTURING								
1998–99	47.7	1 913.3	14 827.1	..	4 202.1	0.13	310.6	88.0
1997–98	48.6	1 809.1	(i)14 077.3	(j)4 097.1	(j)4 214.5	0.13	289.8	86.7
1996–97	48.2	1 729.4	13 325.6	3 149.8	..	0.13	276.5	..
1995–96	47.9	(k)1 596.1	12 981.3	3 279.7	..	0.12	271.2	..
1994–95	49.2	1 562.5	12 732.1	..	..	0.12	258.6	..
1993–94	50.9	1 638.1	12 496.9	..	..	0.13	245.5	..
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING								
1998–99	19.4	553.9	2 956.0	..	935.0	0.19	152.2	48.1
1997–98	22.3	581.6	(i)3 098.9	(j)971.0	(j)999.2	0.19	139.2	44.9
1996–97	23.7	624.7	3 220.9	1 026.6	..	0.19	135.8	..
1995–96	23.9	(k)592.8	3 236.7	1 038.9	..	0.18	135.6	..
1994–95	25.8	630.8	3 241.2	..	..	0.19	125.6	..
1993–94	24.1	546.8	3 003.2	..	..	0.18	124.9	..
WOOD AND PAPER PRODUCT MANUFACTURING								
1998–99	17.1	617.6	3 682.0	..	1 299.9	0.17	215.2	76.0
1997–98	18.8	626.7	(i)3 416.5	(j)1 148.4	(j)1 192.6	0.18	181.7	63.4
1996–97	18.8	622.3	3 384.0	1 157.6	..	0.18	179.5	..
1995–96	20.6	(k)609.6	3 577.7	1 278.1	..	0.17	174.1	..
1994–95	20.7	627.0	3 604.7	..	..	0.17	174.2	..
1993–94	20.0	554.0	3 427.9	..	..	0.16	171.8	..
PRINTING, PUBLISHING AND RECORDED MEDIA								
1998–99	40.4	1 659.2	7 201.1	..	2 811.0	0.23	178.1	69.5
1997–98	40.8	1 537.5	(i)6 751.5	(j)2 947.9	(j)2 827.4	0.23	165.5	69.3
1996–97	39.1	1 454.2	6 735.7	2 993.6	..	0.22	172.5	..
1995–96	36.6	(k)1 359.6	6 325.0	2 892.2	..	0.21	173.0	..
1994–95	37.8	1 318.9	6 055.5	..	..	0.22	160.0	..
1993–94	37.0	1 218.7	5 595.5	..	..	0.22	151.3	..
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING								
1998–99	34.5	1 527.7	12 836.7	..	3 665.9	0.12	372.3	106.3
1997–98	31.6	1 358.2	(i)11 922.6	(j)3 267.8	(j)3 382.8	0.11	377.6	107.1
1996–97	32.0	1 332.2	11 898.6	3 170.2	..	0.11	371.3	..
1995–96	33.8	(k)1 308.5	11 546.2	3 228.2	..	0.11	341.6	..
1994–95	32.2	1 250.7	11 420.9	..	..	0.11	354.2	..
1993–94	33.7	1 240.6	11 375.9	..	..	0.11	337.1	..

.. not applicable

(a) See paragraph 5 of the Explanatory Notes.

(b) Group Employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) For factors affecting comparability of data over the time period shown, see paragraphs 14–20 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Value data are at current prices and therefore do not discount the impact of price changes.

(g) Turnover divided by the number of persons employed at the end of June.

(h) Industry value added divided by the number of persons employed at the end of June.

(i) From the 1997–98 manufacturing collection and onwards, new international standards apply to the calculation of turnover. For more details see paragraphs 14 and 15 of the Explanatory Notes.

(j) From the 1997–98 manufacturing collection and onwards, industry value added (IVA) replaces industry gross product (IGP) as the measure of an industry's contribution to gross domestic product. IGP has also been shown for 1997–98. For more details, see paragraphs 16 and 17 of the Explanatory Notes.

(k) For 1995–96, excludes provision expenses for employee entitlements. See paragraph 19 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a)(b), Summary of Operations(c)—NSW *continued*

Reference year	Employment at end of June(d)	Wages and salaries(e)(f)	Turnover(f)	Industry gross product(f)	Industry value added(f)	Wages and salaries to turnover(f)	Turnover per person employed (f)(g)	Industry value added per person employed (f)(h)
	'000	\$m	\$m	\$m	\$m	ratio	\$'000	\$'000
NON-METALLIC MINERAL PRODUCT MANUFACTURING								
1998–99	10.4	463.5	3 302.6	..	1 152.3	0.14	317.0	110.6
1997–98	10.5	418.3	(i)2 774.3	(j)864.1	(j)901.3	0.15	263.8	85.7
1996–97	11.4	422.1	2 690.1	831.9	..	0.16	236.4	..
1995–96	11.3	(k)385.0	2 632.6	887.9	..	0.15	232.9	..
1994–95	12.2	424.2	2 897.6	..	..	0.15	236.9	..
1993–94	11.8	405.6	2 769.0	..	..	0.15	234.9	..
METAL PRODUCT MANUFACTURING								
1998–99	51.8	2 286.9	13 601.6	..	4 100.7	0.17	262.5	79.1
1997–98	52.2	2 184.4	(i)13 463.4	(j)4 261.3	(j)4 417.5	0.16	257.7	84.6
1996–97	53.5	2 217.8	13 904.8	4 070.6	..	0.16	260.1	..
1995–96	52.2	(k)2 043.0	13 950.0	4 306.4	..	0.15	267.5	..
1994–95	56.7	2 163.7	13 667.4	..	..	0.16	241.2	..
1993–94	57.5	2 045.4	13 260.3	..	..	0.15	230.6	..
MACHINERY AND EQUIPMENT MANUFACTURING								
1998–99	59.5	2 505.9	11 499.5	..	4 002.4	0.22	193.3	67.3
1997–98	60.3	2 415.4	(i)10 371.1	(j)3 619.9	(j)3 797.5	0.23	172.0	63.0
1996–97	64.6	2 444.4	10 703.6	3 745.8	..	0.23	165.6	..
1995–96	66.4	(k)2 306.9	10 713.8	3 763.1	..	0.22	161.2	..
1994–95	67.2	2 217.2	10 458.8	..	..	0.21	155.7	..
1993–94	64.3	2 084.6	9 788.2	..	..	0.21	152.2	..
OTHER MANUFACTURING								
1998–99	16.1	444.5	1 969.6	..	733.3	0.23	122.4	45.6
1997–98	16.0	429.2	(i)1 953.6	(j)663.4	(j)687.4	0.22	121.9	42.9
1996–97	16.6	420.1	1 934.5	684.4	..	0.22	116.4	..
1995–96	16.3	(k)399.6	1 874.6	688.2	..	0.21	115.2	..
1994–95	16.5	405.3	1 852.2	..	..	0.22	112.3	..
1993–94	17.3	406.0	1 864.6	..	..	0.22	107.5	..
TOTAL MANUFACTURING								
1998–99	297.0	11 972.5	71 876.2	..	22 902.5	0.17	242.0	77.1
1997–98	301.1	11 360.4	(i)67 829.2	(j)21 841.0	(j)22 420.2	0.17	225.3	74.5
1996–97	308.0	11 267.2	67 797.7	20 830.5	..	0.17	220.2	..
1995–96	308.8	(k)10 601.0	66 837.9	21 362.7	..	0.16	216.4	..
1994–95	318.3	10 600.4	65 930.3	..	..	0.16	207.1	..
1993–94	316.6	10 139.8	63 581.6	..	..	0.16	200.8	..

.. not applicable

(a) See paragraph 5 of the Explanatory Notes.

(b) Group Employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) For factors affecting comparability of data over the time period shown, see paragraphs 14–20 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Value data are at current prices and therefore do not discount the impact of price changes.

(g) Turnover divided by the number of persons employed at the end of June.

(h) Industry value added divided by the number of persons employed at the end of June.

(i) From the 1997–98 manufacturing collection and onwards, new international standards apply to the calculation of turnover. For more details see paragraphs 14 and 15 of the Explanatory Notes.

(j) From the 1997–98 manufacturing collection and onwards, industry value added (IVA) replaces industry gross product (IGP) as the measure of an industry's contribution to gross domestic product. IGP has also been shown for 1997–98. For more details, see paragraphs 16 and 17 of the Explanatory Notes.

(k) For 1995–96, excludes provision expenses for employee entitlements. See paragraph 19 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a)(b), Industry Class—NSW

INDUSTRY CLASS ANZSIC Code	Description	Employment at end of June (c) no.	Wages and salaries (d) \$m	Turnover \$m	Industry value added \$m	Turnover per person employed (e) \$'000	Industry value added per person employed (f) \$'000
FOOD, BEVERAGE AND TOBACCO MFG							
211	Meat and meat product mfg						
2111	Meat processing	8 197	305.4	1 781.5	434.1	217.3	53.0
2112	Poultry processing	6 691	218.2	1 112.1	373.3	166.2	55.8
2113	Bacon, ham and smallgoods mfg	1 760	53.3	428.0	129.0	243.2	73.3
	<i>Total</i>	<i>16 648</i>	<i>576.9</i>	<i>3 321.6</i>	<i>936.4</i>	<i>199.5</i>	<i>56.2</i>
212	Dairy product mfg						
2121	Milk and cream processing	993	58.9	504.8	83.6	508.3	84.2
2122	Ice cream mfg	807	48.4	262.4	107.4	325.2	133.1
2129	Dairy product mfg n.e.c.	1 571	81.4	743.5	130.1	473.4	82.9
	<i>Total</i>	<i>3 371</i>	<i>188.7</i>	<i>1 510.7</i>	<i>321.2</i>	<i>448.2</i>	<i>95.3</i>
213	Fruit and vegetable processing	2 618	97.0	732.8	133.2	279.9	50.9
214	Oil and fat mfg	840	47.0	561.3	121.0	668.3	144.1
215	Flour mill and cereal food mfg						
2151	Flour mill product mfg	1 191	59.0	726.4	151.9	609.6	127.5
2152	Cereal food and baking mix mfg	2 201	82.0	1 164.8	368.8	529.2	167.6
	<i>Total</i>	<i>3 392</i>	<i>140.9</i>	<i>1 891.2</i>	<i>520.7</i>	<i>557.5</i>	<i>153.5</i>
216	Bakery product mfg						
2161	Bread mfg	2 858	120.4	404.0	148.0	141.3	51.8
2162	Cake and pastry mfg	2 285	75.9	318.1	95.9	139.2	42.0
2163	Biscuit mfg	961	41.9	280.5	147.8	291.7	153.8
	<i>Total</i>	<i>6 105</i>	<i>238.3</i>	<i>1 002.6</i>	<i>391.8</i>	<i>164.2</i>	<i>64.2</i>
217	Other food mfg						
2171	Sugar mfg	532	np	np	np	np	np
2172	Confectionery mfg	1 272	np	np	np	np	np
2173	Seafood processing	703	26.1	149.1	26.7	212.0	38.0
2174	Prepared animal and bird feed mfg	1 723	82.7	1 036.1	262.5	601.3	152.4
2179	Food mfg n.e.c.	5 263	207.3	1 091.9	364.3	207.5	69.2
	<i>Total</i>	<i>9 494</i>	<i>391.1</i>	<i>2 861.1</i>	<i>824.4</i>	<i>301.4</i>	<i>86.8</i>
218	Beverage and malt mfg						
2181	Soft drink, cordial and syrup mfg	2 042	82.5	880.2	259.9	431.0	127.3
2182	Beer and malt mfg	870	np	np	np	np	np
2183	Wine mfg	1 710	53.0	695.0	187.5	406.4	109.6
2184	Spirit mfg	np	np	np	np	np	np
	<i>Total</i>	<i>np</i>	<i>np</i>	<i>np</i>	<i>np</i>	<i>np</i>	<i>np</i>
219	Tobacco product mfg	np	np	np	np	np	np
21	Total food, beverage and tobacco mfg	47 741	1 913.3	14 827.1	4 202.1	310.6	88.0

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Turnover divided by the number of persons employed at the end of June.

(f) Industry value added divided by the number of persons employed at the end of June.

INDUSTRY CLASS ANZSIC		Employment at end of June (c)	Wages and salaries (d)	Turnover	Industry value added	Turnover per person employed (e)	Industry value added per person employed (f)
Code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG							
221	Textile fibre, yarn and woven fabric mfg						
2211	Wool scouring	635	np	np	np	np	np
2212	Synthetic fibre textile mfg	862	30.9	172.7	54.6	200.3	63.4
2213	Cotton textile mfg	789	31.9	141.4	45.5	179.4	57.6
2214	Wool textile mfg	709	np	np	np	np	np
2215	Textile finishing	373	11.0	58.1	20.9	155.7	55.9
	<i>Total</i>	3 367	127.4	585.4	201.3	173.8	59.8
222	Textile product mfg						
2221	Made-up textile product mfg	1 603	35.0	215.2	65.5	134.3	40.8
2222	Textile floor covering mfg	308	12.3	62.7	19.3	203.6	62.6
2223	Rope, cordage and twine mfg	99	2.8	16.1	7.0	163.5	70.7
2229	Textile product mfg n.e.c.	654	17.1	80.7	25.9	123.5	39.6
	<i>Total</i>	2 663	67.1	374.8	117.6	140.7	44.1
223	Knitting mills						
2231	Hosiery mfg	np	np	np	np	np	np
2232	Cardigan and pullover mfg	np	np	np	np	np	np
2239	Knitting mill product mfg n.e.c.	870	27.1	211.3	45.8	242.7	52.6
	<i>Total</i>	1 570	46.7	293.1	74.4	186.7	47.4
224	Clothing mfg						
2241	Men's and boys' wear mfg	2 062	63.8	273.0	81.0	132.4	39.3
2242	Women's and girls' wear mfg	3 600	89.3	558.3	158.7	155.1	44.1
2243	Sleepwear, underwear and infant clothing mfg	845	28.5	130.5	40.0	154.4	47.3
2249	Clothing mfg n.e.c.	3 530	83.5	465.9	196.0	132.0	55.5
	<i>Total</i>	10 038	265.1	1 427.7	475.7	142.2	47.4
225	Footwear mfg	1 146	27.9	108.1	34.4	94.3	30.0
226	Leather and leather product mfg						
2261	Leather tanning and fur dressing	472	15.8	139.9	22.6	296.6	48.0
2262	Leather and leather substitute product mfg	169	3.8	27.1	9.0	160.9	53.5
	<i>Total</i>	640	19.6	167.0	31.6	260.8	49.4
22	Total textile, clothing, footwear and leather mfg	19 424	553.9	2 956.0	935.0	152.2	48.1
WOOD AND PAPER PRODUCT MFG							
231	Log sawmilling and timber dressing						
2311	Log sawmilling	1 156	31.1	155.0	70.4	134.1	60.9
2312	Wood chipping	141	6.8	61.5	32.1	437.9	228.4
2313	Timber resawing and dressing	1 264	50.6	264.1	111.2	209.0	88.0
	<i>Total</i>	2 560	88.5	480.6	213.7	187.8	83.5
232	Other wood product mfg						
2321	Plywood and veneer mfg	441	13.7	69.0	22.6	156.3	51.3
2322	Fabricated wood mfg	1 000	43.7	285.6	87.1	285.5	87.1
2323	Wooden structural component mfg	6 117	165.9	1 016.6	263.7	166.2	43.1
2329	Wood product mfg n.e.c.	1 602	40.4	155.3	56.3	96.9	35.1
	<i>Total</i>	9 160	263.7	1 526.4	429.7	166.6	46.9

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Turnover divided by the number of persons employed at the end of June.

(f) Industry value added divided by the number of persons employed at the end of June.

INDUSTRY CLASS ANZSIC Code	Description	Employment at end of June (c) no.	Wages and salaries (d) \$m	Turnover \$m	Industry value added \$m	Turnover per person employed (e) \$'000	Industry value added per person employed (f) \$'000
WOOD AND PAPER PRODUCT MFG <i>cont.</i>							
233	Paper and paper product mfg						
2331	Pulp, paper and paperboard mfg	1 382	75.7	643.1	274.6	465.4	198.7
2332	Solid paperboard container mfg	1 096	51.3	233.4	98.8	213.0	90.2
2333	Corrugated paperboard container mfg	1 530	82.0	400.9	159.1	262.1	104.0
2334	Paper bag and sack mfg	247	9.5	55.4	19.7	224.0	79.5
2339	Paper product mfg n.e.c.	1 136	46.8	342.2	104.3	301.3	91.8
	<i>Total</i>	5 390	265.4	1 674.9	656.5	310.7	121.8
23	Total wood and paper product mfg	17 110	617.6	3 682.0	1 299.9	215.2	76.0
PRINTING, PUBLISHING AND RECORDED MEDIA							
241	Printing and services to printing						
2411	Paper stationery mfg	2 916	113.3	474.2	181.0	162.6	62.1
2412	Printing	14 282	523.4	1 990.0	772.2	139.3	54.1
2413	Services to printing	2 100	78.7	209.5	114.8	99.7	54.6
	<i>Total</i>	19 298	715.5	2 673.7	1 067.9	138.5	55.3
242	Publishing						
2421	Newspaper printing or publishing	12 221	556.8	2 410.0	996.4	197.2	81.5
2422	Other periodical publishing	4 339	199.1	919.9	314.0	212.0	72.4
2423	Book and other publishing	3 158	138.3	685.5	199.0	217.1	63.0
	<i>Total</i>	19 718	894.1	4 015.4	1 509.4	203.6	76.5
243	Recorded media manufacturing and publishing	1 409	49.6	511.9	233.7	363.3	165.9
24	Total printing, publishing and recorded media	40 425	1 659.2	7 201.1	2 811.0	178.1	69.5
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG							
251	Petroleum refining	1 608	104.6	2 495.4	411.4	1 552.3	255.9
252	Petroleum and coal product mfg n.e.c.	115	8.1	117.9	29.0	1 022.2	251.4
253	Basic chemical mfg						
2531	Fertiliser mfg	np	np	np	np	np	np
2532	Industrial gas mfg	np	np	np	np	np	np
2533	Synthetic resin mfg	927	52.4	573.7	124.9	619.0	134.8
2534	Organic industrial chemical mfg n.e.c.	330	21.2	327.4	51.5	991.7	155.9
2535	Inorganic industrial chemical mfg n.e.c.	1 300	77.4	502.7	167.9	386.6	129.1
	<i>Total</i>	3 148	181.7	1 612.9	423.0	512.3	134.4
254	Other chemical product mfg						
2541	Explosive mfg	670	31.9	186.3	60.2	278.3	90.0
2542	Paint mfg	2 123	84.6	479.4	182.2	225.9	85.8
2543	Medicinal and pharmaceutical product mfg	6 802	313.5	2 916.1	880.7	428.7	129.5
2544	Pesticide mfg	838	53.6	715.4	172.7	853.6	206.1
2545	Soap and other detergent mfg	1 813	76.7	732.8	245.8	404.2	135.6
2546	Cosmetic and toiletry preparation mfg	3 307	118.7	670.5	205.0	202.7	62.0
2547	Ink mfg	232	9.9	92.8	29.6	400.6	127.9
2549	Chemical product mfg n.e.c.	1 437	69.4	473.9	141.7	329.7	98.6
	<i>Total</i>	17 221	758.2	6 267.3	1 918.1	363.9	111.4

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Turnover divided by the number of persons employed at the end of June.

(f) Industry value added divided by the number of persons employed at the end of June.

INDUSTRY CLASS ANZSIC Code	Description	Employment at end of June (c) no.	Wages and salaries (d) \$m	Turnover \$m	Industry value added \$m	Turnover per person employed (e) \$'000	Industry value added per person employed (f) \$'000
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG <i>cont.</i>							
255	Rubber product mfg						
2551	Rubber tyre mfg	244	8.2	50.1	15.8	205.1	64.9
2559	Rubber product mfg n.e.c.	1 084	41.3	152.0	61.7	140.2	56.9
	<i>Total</i>	1 328	49.5	202.1	77.5	152.1	58.4
256	Plastic product mfg						
2561	Plastic blow moulded product mfg	1 030	52.9	305.7	134.1	296.8	130.2
2562	Plastic extruded product mfg	1 440	57.1	318.2	81.5	220.9	56.6
2563	Plastic bag and film mfg	1 604	60.4	337.6	111.5	210.5	69.5
2564	Plastic product rigid fibre reinforced mfg	1 186	47.6	179.1	66.3	151.1	55.9
2565	Plastic foam product mfg	1 279	47.5	229.9	78.7	179.8	61.5
2566	Plastic injection moulded product mfg	4 518	160.0	770.5	334.9	170.5	74.1
	<i>Total</i>	11 056	425.6	2 141.0	806.9	193.6	73.0
25	Total petroleum, coal, chemical and associated product mfg	34 477	1 527.7	12 836.7	3 665.9	372.3	106.3
NON-METALLIC MINERAL PRODUCT MFG							
261	Glass and glass product mfg	1 532	72.2	310.0	114.1	202.3	74.5
262	Ceramic mfg						
2621	Clay brick mfg	1 021	48.8	272.3	111.3	266.6	109.0
2622	Ceramic product mfg	489	18.8	118.5	44.0	242.1	89.9
2623	Ceramic tile and pipe mfg	93	np	np	np	np	np
2629	Ceramic product mfg n.e.c.	601	np	np	np	np	np
	<i>Total</i>	2 205	95.8	551.7	237.8	250.2	107.8
263	Cement, lime, plaster and concrete product mfg						
2631	Cement and lime mfg	465	np	np	np	np	np
2632	Plaster product mfg	641	22.4	207.0	90.8	322.9	141.7
2633	Concrete slurry mfg	1 949	85.7	986.0	202.5	505.8	103.9
2634	Concrete pipe and box culvert mfg	371	np	np	np	np	np
2635	Concrete product mfg n.e.c.	1 336	53.3	398.8	169.4	298.4	126.7
	<i>Total</i>	4 763	204.7	1 895.8	590.4	398.0	124.0
264	Non-metallic mineral product mfg n.e.c.	1 920	90.8	545.2	209.9	284.0	109.4
26	Total non-metallic mineral product mfg	10 420	463.5	3 302.6	1 152.3	317.0	110.6
METAL PRODUCT MFG							
271	Iron and steel mfg						
2711	Basic iron and steel mfg	11 334	783.2	4 761.2	1 289.9	420.1	113.8
2712	Iron and steel casting and forging	1 862	81.0	389.0	154.7	208.9	83.1
2713	Steel pipe and tube mfg	1 966	92.1	484.4	138.9	246.4	70.6
	<i>Total</i>	15 162	956.3	5 634.6	1 583.5	371.6	104.4

np not available for publication but included in totals where applicable, unless otherwise indicated

— nil or rounded to zero (including null cells)

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Turnover divided by the number of persons employed at the end of June.

(f) Industry value added divided by the number of persons employed at the end of June.

INDUSTRY CLASS ANZSIC Code	Description	Employment at end of June (c) no.	Wages and salaries (d) \$m	Turnover \$m	Industry value added \$m	Turnover per person employed (e) \$'000	Industry value added per person employed (f) \$'000
METAL PRODUCT MFG <i>cont.</i>							
272	Basic non-ferrous metal mfg						
2721	Alumina production	—	—	—	—	—	—
2722	Aluminium smelting	1 965	102.9	1 462.5	449.6	744.2	228.8
2723	Copper, silver, lead and zinc smelting, refining	625	31.2	290.9	44.8	465.8	71.8
2729	Basic non-ferrous metal mfg n.e.c.	*130	*4.5	*21.9	*3.9	167.9	29.9
	<i>Total</i>	2 720	138.6	1 775.3	498.4	652.7	183.2
273	Non-ferrous basic metal product mfg						
2731	Aluminium rolling, drawing, extruding	1 491	80.0	680.7	126.6	456.6	84.9
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	1 120	51.7	534.5	107.3	477.3	95.8
2733	Non-ferrous metal casting	*464	*14.6	*47.7	*20.6	**102.8	**44.5
	<i>Total</i>	3 074	146.3	1 262.8	254.5	410.8	82.8
274	Structural metal product mfg						
2741	Structural steel fabricating	6 167	238.0	1 328.3	452.3	215.4	73.3
2742	Architectural aluminium product mfg	3 971	120.1	693.2	206.8	174.6	52.1
2749	Structural metal product mfg n.e.c.	2 165	71.0	355.5	129.1	164.2	59.6
	<i>Total</i>	12 303	429.0	2 376.9	788.2	193.2	64.1
275	Sheet metal product mfg						
2751	Metal container mfg	1 520	66.8	385.8	120.2	253.8	79.1
2759	Sheet metal product mfg n.e.c.	3 713	127.2	507.0	203.1	136.5	54.7
	<i>Total</i>	5 233	194.0	892.8	323.2	170.6	61.8
276	Fabricated metal product mfg						
2761	Hand tool and general hardware mfg	683	20.9	71.5	24.7	104.6	36.1
2762	Spring and wire product mfg	2 219	85.5	497.9	164.3	224.4	74.0
2763	Nut, bolt, screw and rivet mfg	379	12.5	63.1	19.6	166.6	51.6
2764	Metal coating and finishing	2 217	71.0	232.4	120.5	104.8	54.3
2765	Non-ferrous pipe fitting mfg	650	24.5	90.3	33.5	138.9	51.5
2769	Fabricated metal product mfg n.e.c.	7 185	208.3	704.0	290.3	98.0	40.4
	<i>Total</i>	13 333	422.6	1 659.2	652.9	124.4	49.0
27	Total metal product mfg	51 825	2 286.9	13 601.6	4 100.7	262.5	79.1
MACHINERY AND EQUIPMENT MFG							
281	Motor vehicle and part mfg						
2811	Motor vehicle mfg	3	—	0.4	0.2	115.0	73.8
2812	Motor vehicle body mfg	1 351	40.7	228.6	68.8	169.3	50.9
2813	Automotive electrical and instrument mfg	796	28.3	133.5	49.3	167.6	61.9
2819	Automotive component mfg n.e.c.	3 309	126.7	567.4	205.2	171.5	62.0
	<i>Total</i>	5 459	195.7	929.9	323.4	170.3	59.2

— nil or rounded to zero (including null cells)

* estimate has a relative standard error of between 25% and 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Turnover divided by the number of persons employed at the end of June.

(f) Industry value added divided by the number of persons employed at the end of June.

INDUSTRY CLASS ANZSIC Code	Description	Employment at end of June (c) no.	Wages and salaries (d) \$m	Turnover \$m	Industry value added \$m	Turnover per person employed (e) \$'000	Industry value added per person employed (f) \$'000
MACHINERY AND EQUIPMENT MFG <i>cont.</i>							
282	Other transport equipment mfg						
2821	Shipbuilding	1 417	79.3	308.8	124.5	218.0	87.9
2822	Boatbuilding	892	23.0	104.3	35.0	117.0	39.2
2823	Railway equipment mfg	1 686	66.6	249.6	132.4	148.1	78.6
2824	Aircraft mfg	5 428	325.1	1 062.7	534.5	195.8	98.5
2829	Transport equipment mfg n.e.c.	32	0.4	2.8	0.6	87.2	18.0
	<i>Total</i>	9 454	494.5	1 728.3	827.0	182.8	87.5
283	Photographic and scientific equipment mfg						
2831	Photographic and optical good mfg	*485	*15.6	*65.0	*26.5	134.0	54.6
2832	Medical and surgical equipment mfg	2 138	72.1	403.2	153.8	188.6	71.9
2839	Professional and scientific equipment mfg n.e.c.	1 433	64.1	225.2	95.4	157.1	66.6
	<i>Total</i>	4 056	151.8	693.4	275.7	170.9	68.0
284	Electronic equipment mfg						
2841	Computer and business machine mfg	1 022	44.9	499.5	83.1	488.5	81.3
2842	Telecommunication, broadcasting and transceiving equipment mfg	2 811	156.3	664.0	188.4	236.2	67.0
2849	Electronic equipment mfg n.e.c.	5 953	269.6	1 522.6	436.3	255.8	73.3
	<i>Total</i>	9 787	470.8	2 686.1	707.8	274.5	72.3
285	Electrical equipment and appliance mfg						
2851	Household appliance mfg	4 495	164.2	840.3	261.9	186.9	58.3
2852	Electric cable and wire mfg	2 042	103.3	624.8	161.9	306.0	79.3
2853	Battery mfg	196	np	np	np	np	np
2854	Electric light and sign mfg	2 399	np	np	np	np	np
2859	Electrical equipment mfg n.e.c.	5 403	203.7	804.6	279.4	148.9	51.7
	<i>Total</i>	14 535	549.9	2 659.8	842.2	183.0	57.9
286	Industrial machinery and equipment mfg						
2861	Agricultural machinery mfg	1 284	28.3	162.1	63.4	126.2	49.4
2862	Mining and construction machinery mfg	2 491	124.9	625.3	155.6	251.0	62.4
2863	Food processing machinery mfg	486	11.9	63.9	22.8	131.5	46.9
2864	Machine tool and part mfg	2 372	87.1	255.2	136.7	107.6	57.6
2865	Lifting and material handling equipment mfg	3 191	152.1	668.2	245.3	209.4	76.9
2866	Pump and compressor mfg	1 063	49.6	221.0	91.9	207.8	86.4
2867	Commercial space heating and cooling equipment mfg	904	37.2	172.2	59.5	190.5	65.8
2869	Industrial machinery and equipment mfg n.e.c.	4 416	152.1	634.1	251.0	143.6	56.9
	<i>Total</i>	16 207	643.2	2 802.1	1 026.2	172.9	63.3
28	Total machinery and equipment mfg	59 499	2 505.9	11 499.5	4 002.4	193.3	67.3
OTHER MANUFACTURING							
291	Prefabricated building mfg						
2911	Prefabricated metal building mfg	398	13.5	96.4	25.6	242.2	64.4
2919	Prefabricated building mfg n.e.c.	193	4.9	29.5	12.6	153.0	65.5
	<i>Total</i>	591	18.4	126.0	38.3	213.1	64.7

* estimate has a relative standard error of between 25% and 50% and should be used with caution

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Turnover divided by the number of persons employed at the end of June.

(f) Industry value added divided by the number of persons employed at the end of June.

INDUSTRY CLASS		Employment at end of June (c)	Wages and salaries (d)	Turnover	Industry value added	Turnover per person employed (e)	Industry value added per person employed (f)
ANZSIC Code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
OTHER MANUFACTURING <i>cont.</i>							
292	Furniture mfg						
2921	Wooden furniture and upholstered seat mfg	7 055	181.1	734.1	264.3	104.1	37.5
2922	Sheet metal furniture mfg	2 263	69.2	280.5	114.8	124.0	50.7
2923	Mattress mfg (except rubber)	718	20.5	113.2	43.8	157.6	60.9
2929	Furniture mfg n.e.c.	2 218	63.5	289.3	110.7	130.4	49.9
	<i>Total</i>	12 254	334.3	1 417.2	533.5	115.6	43.5
294	Miscellaneous mfg						
2941	Jewellery and silverware mfg	1 041	28.1	135.1	39.4	129.7	37.8
2942	Toy and sporting good mfg	558	13.2	55.4	21.3	99.3	38.1
2949	Manufacturing n.e.c.	1 649	50.5	236.0	100.8	143.1	61.1
	<i>Total</i>	3 249	91.8	426.5	161.5	131.3	49.7
29	Total other manufacturing	16 094	444.5	1 969.6	733.3	122.4	45.6
21–29	TOTAL MANUFACTURING	297 015	11 972.5	71 876.2	22 902.5	242.0	77.1

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Turnover divided by the number of persons employed at the end of June.

(f) Industry value added divided by the number of persons employed at the end of June.

MANUFACTURING ESTABLISHMENTS(a)(b), Employment Size(c)—NSW

Employment size group	Employment at end of June(d) ..		Wages and salaries(e)(f)		Turnover(f)		Industry value added(f)	
	no.	%	\$m	%	\$m	%	\$m	%
FOOD, BEVERAGE AND TOBACCO MANUFACTURING								
0–4 persons	651	1.4	9.6	0.5	94.7	0.6	25.4	0.6
5–9 persons	1 435	3.0	29.1	1.5	192.3	1.3	49.9	1.2
10–19 persons	2 918	6.1	73.6	3.9	729.8	5.0	193.5	4.6
20–49 persons	4 982	10.4	168.8	8.9	1 449.8	9.9	386.3	9.2
50–99 persons	4 407	9.2	163.5	8.6	1 438.0	9.8	332.2	7.9
Total less than 100 persons	14 392	30.1	444.5	23.5	3 904.6	26.6	987.3	23.5
100–199 persons	6 591	13.8	256.0	13.5	2 314.4	15.8	559.8	13.3
200–499 persons	12 509	26.2	577.9	30.5	5 281.8	35.9	1 669.7	39.8
500–999 persons	10 097	21.1	np	np	np	np	np	np
1 000 or more persons	4 151	8.7	np	np	np	np	np	np
Total 100 or more persons	33 348	69.9	1 448.3	76.5	10 789.3	73.4	3 208.5	76.5
Total	47 741	100.0	1 892.8	100.0	14 693.8	100.0	4 195.8	100.0
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING								
0–4 persons	2 310	11.9	35.7	6.5	186.4	6.3	85.5	9.1
5–9 persons	2 571	13.2	52.7	9.5	315.4	10.7	110.2	11.8
10–19 persons	1 957	10.1	47.4	8.6	231.6	7.9	80.2	8.6
20–49 persons	3 261	16.8	90.3	16.4	476.1	16.1	144.5	15.5
50–99 persons	3 565	18.4	123.0	22.3	807.3	27.4	230.3	24.6
Total less than 100 persons	13 663	70.3	349.0	63.2	2 016.9	68.4	650.7	69.6
100–199 persons	2 327	12.0	np	np	np	np	np	np
200–499 persons	2 209	11.4	74.4	13.5	321.9	10.9	110.6	11.8
500–999 persons	1 225	6.3	np	np	np	np	np	np
1 000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	5 761	29.7	202.8	36.8	933.2	31.6	284.2	30.4
Total	19 424	100.0	551.8	100.0	2 950.1	100.0	934.8	100.0
WOOD AND PAPER PRODUCT MANUFACTURING								
0–4 persons	2 515	14.7	43.9	7.2	204.6	5.6	64.7	5.0
5–9 persons	931	5.4	23.9	3.9	104.6	2.9	31.5	2.4
10–19 persons	2 015	11.8	60.9	9.9	245.0	6.7	90.5	7.0
20–49 persons	3 031	17.7	85.3	13.9	648.8	17.7	164.1	12.7
50–99 persons	1 746	10.2	62.2	10.1	356.8	9.7	128.9	10.0
Total less than 100 persons	10 238	59.8	276.2	45.1	1 559.9	42.6	479.6	37.1
100–199 persons	3 094	18.1	135.0	22.0	884.8	24.2	332.2	25.7
200–499 persons	3 180	18.6	np	np	np	np	np	np
500–999 persons	599	3.5	np	np	np	np	np	np
1 000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	6 873	40.2	336.7	54.9	2 100.5	57.4	811.5	62.9
Total	17 110	100.0	613.0	100.0	3 660.4	100.0	1 291.1	100.0

np not available for publication but included in totals where applicable, unless otherwise indicated

— nil or rounded to zero (including null cells)

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Data in this table reflect the size of individual manufacturing establishments. These data do not necessarily reflect the size of the business which owns and operates the establishment. For a further example (relating to unincorporated joint ventures) of why caution should be used in interpreting these data, see paragraph 22 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Figures may differ slightly from those presented in other tables because they exclude those manufacturing establishments which operated during 1998–99 but were not operating at 30 June 1999. See paragraph 21 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a)(b), Employment Size(c)—NSW *continued*

Employment size group	Employment at end of June(d) ..		Wages and salaries(e)(f)		Turnover(f)		Industry value added(f)	
	no.	%	\$m	%	\$m	%	\$m	%
PRINTING, PUBLISHING AND RECORDED MEDIA								
0–4 persons	2 453	6.1	59.2	3.6	226.2	3.2	88.0	3.1
5–9 persons	3 275	8.1	109.4	6.6	431.3	6.0	174.2	6.2
10–19 persons	3 729	9.2	120.5	7.3	410.3	5.7	165.1	5.9
20–49 persons	5 792	14.3	209.7	12.7	715.5	10.0	266.2	9.5
50–99 persons	5 959	14.7	245.9	14.9	1 131.2	15.8	530.1	18.9
<i>Total less than 100 persons</i>	<i>21 207</i>	<i>52.5</i>	<i>744.7</i>	<i>45.1</i>	<i>2 914.5</i>	<i>40.6</i>	<i>1 223.5</i>	<i>43.7</i>
100–199 persons	6 517	16.1	271.8	16.5	1 137.7	15.9	403.3	14.4
200–499 persons	5 266	13.0	237.6	14.4	954.8	13.3	378.6	13.5
500–999 persons	3 169	7.8	142.0	8.6	990.8	13.8	288.6	10.3
1 000 or more persons	4 266	10.6	256.0	15.5	1 172.9	16.4	507.9	18.1
<i>Total 100 or more persons</i>	<i>19 218</i>	<i>47.5</i>	<i>907.5</i>	<i>54.9</i>	<i>4 256.3</i>	<i>59.4</i>	<i>1 578.5</i>	<i>56.3</i>
Total	40 425	100.0	1 652.2	100.0	7 170.8	100.0	2 802.1	100.0
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING								
0–4 persons	1 034	3.0	23.3	1.5	110.9	0.9	37.3	1.0
5–9 persons	1 698	4.9	39.7	2.6	231.8	1.8	70.5	1.9
10–19 persons	2 809	8.1	100.4	6.6	665.2	5.2	223.5	6.1
20–49 persons	4 526	13.1	195.8	12.9	1 318.2	10.3	429.5	11.7
50–99 persons	7 145	20.7	315.4	20.7	2 011.3	15.7	649.0	17.7
<i>Total less than 100 persons</i>	<i>17 212</i>	<i>49.9</i>	<i>674.5</i>	<i>44.3</i>	<i>4 337.4</i>	<i>33.8</i>	<i>1 409.9</i>	<i>38.5</i>
100–199 persons	7 141	20.7	361.8	23.8	2 784.5	21.7	776.0	21.2
200–499 persons	10 125	29.4	486.7	32.0	5 697.6	44.4	1 477.5	40.3
500–999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>17 265</i>	<i>50.1</i>	<i>848.5</i>	<i>55.7</i>	<i>8 482.0</i>	<i>66.2</i>	<i>2 253.4</i>	<i>61.5</i>
Total	34 477	100.0	1 523.0	100.0	12 819.4	100.0	3 663.3	100.0
NON-METALLIC MINERAL PRODUCT MANUFACTURING								
0–4 persons	685	6.6	13.3	2.9	91.0	2.8	27.8	2.4
5–9 persons	771	7.4	26.3	5.7	163.2	4.9	55.3	4.8
10–19 persons	913	8.8	24.5	5.3	123.4	3.7	48.9	4.2
20–49 persons	1 359	13.0	60.4	13.1	411.9	12.5	135.7	11.8
50–99 persons	1 260	12.1	62.1	13.4	445.0	13.5	209.7	18.2
<i>Total less than 100 persons</i>	<i>4 989</i>	<i>47.9</i>	<i>186.6</i>	<i>40.3</i>	<i>1 234.4</i>	<i>37.4</i>	<i>477.5</i>	<i>41.5</i>
100–199 persons	3 189	30.6	152.1	32.9	1 443.9	43.7	450.2	39.1
200–499 persons	2 242	21.5	123.9	26.8	623.1	18.9	224.2	19.5
500–999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>5 431</i>	<i>52.1</i>	<i>276.0</i>	<i>59.7</i>	<i>2 067.0</i>	<i>62.6</i>	<i>674.4</i>	<i>58.5</i>
Total	10 420	100.0	462.6	100.0	3 301.4	100.0	1 151.9	100.0

— nil or rounded to zero (including null cells)

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Data in this table reflect the size of individual manufacturing establishments. These data do not necessarily reflect the size of the business which owns and operates the establishment. For a further example (relating to unincorporated joint ventures) of why caution should be used in interpreting these data, see paragraph 22 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Figures may differ slightly from those presented in other tables because they exclude those manufacturing establishments which operated during 1998–99 but were not operating at 30 June 1999. See paragraph 21 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a)(b), Employment Size(c)—NSW *continued*

Employment size group	Employment at end of June(d) ..		Wages and salaries(e)(f)		Turnover(f)		Industry value added(f)	
	no.	%	\$m	%	\$m	%	\$m	%
METAL PRODUCT MANUFACTURING								
0–4 persons	3 549	6.8	72.6	3.2	1 288.6	9.5	759.1	18.6
5–9 persons	4 759	9.2	138.9	6.1	545.8	4.0	213.9	5.2
10–19 persons	4 465	8.6	146.8	6.4	754.0	5.6	268.7	6.6
20–49 persons	8 572	16.5	287.5	12.6	1 324.4	9.8	455.8	11.1
50–99 persons	5 743	11.1	228.6	10.0	1 258.5	9.3	400.8	9.8
<i>Total less than 100 persons</i>	<i>27 088</i>	<i>52.3</i>	<i>874.3</i>	<i>38.4</i>	<i>5 171.3</i>	<i>38.1</i>	<i>2 098.3</i>	<i>51.3</i>
100–199 persons	5 728	11.1	242.0	10.6	1 493.4	11.0	406.1	9.9
200–499 persons	4 790	9.2	235.8	10.3	1 807.2	13.3	427.1	10.4
500–999 persons	4 181	8.1	np	np	np	np	np	np
1 000 or more persons	10 038	19.4	np	np	np	np	np	np
<i>Total 100 or more persons</i>	<i>24 737</i>	<i>47.7</i>	<i>1 404.4</i>	<i>61.6</i>	<i>8 384.7</i>	<i>61.9</i>	<i>1 991.5</i>	<i>48.7</i>
Total	51 825	100.0	2 278.7	100.0	13 556.0	100.0	4 089.8	100.0
MACHINERY AND EQUIPMENT MANUFACTURING								
0–4 persons	3 229	5.4	69.5	2.8	307.1	2.7	115.7	2.9
5–9 persons	4 212	7.1	114.0	4.6	453.6	4.0	163.5	4.1
10–19 persons	4 587	7.7	148.6	5.9	635.5	5.5	243.4	6.1
20–49 persons	7 764	13.0	285.1	11.4	1 421.7	12.4	462.6	11.6
50–99 persons	6 640	11.2	280.9	11.2	1 327.5	11.6	398.2	10.0
<i>Total less than 100 persons</i>	<i>26 432</i>	<i>44.4</i>	<i>898.1</i>	<i>35.9</i>	<i>4 145.4</i>	<i>36.1</i>	<i>1 383.4</i>	<i>34.6</i>
100–199 persons	7 038	11.8	323.9	13.0	1 617.2	14.1	451.8	11.3
200–499 persons	12 432	20.9	568.1	22.7	2 662.2	23.2	961.9	24.1
500–999 persons	5 938	10.0	np	np	np	np	np	np
1 000 or more persons	7 659	12.9	np	np	np	np	np	np
<i>Total 100 or more persons</i>	<i>33 066</i>	<i>55.6</i>	<i>1 601.2</i>	<i>64.1</i>	<i>7 336.7</i>	<i>63.9</i>	<i>2 611.5</i>	<i>65.4</i>
Total	59 499	100.0	2 499.3	100.0	11 482.1	100.0	3 994.8	100.0
OTHER MANUFACTURING								
0–4 persons	2 508	15.6	54.6	12.3	216.9	11.1	75.7	10.3
5–9 persons	3 062	19.0	78.7	17.8	307.6	15.7	122.5	16.7
10–19 persons	3 525	21.9	96.9	21.9	403.8	20.6	150.6	20.6
20–49 persons	3 241	20.1	92.1	20.8	439.8	22.4	163.0	22.3
50–99 persons	1 342	8.3	40.5	9.2	227.6	11.6	79.2	10.8
<i>Total less than 100 persons</i>	<i>13 679</i>	<i>85.0</i>	<i>362.8</i>	<i>81.9</i>	<i>1 595.7</i>	<i>81.3</i>	<i>590.9</i>	<i>80.7</i>
100–199 persons	2 098	13.0	np	np	np	np	np	np
200–499 persons	317	2.0	np	np	np	np	np	np
500–999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>2 415</i>	<i>15.0</i>	<i>80.0</i>	<i>18.1</i>	<i>367.2</i>	<i>18.7</i>	<i>141.5</i>	<i>19.3</i>
Total	16 094	100.0	442.7	100.0	1 962.9	100.0	732.4	100.0

np not available for publication but included in totals where applicable, unless otherwise indicated

— nil or rounded to zero (including null cells)

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Data in this table reflect the size of individual manufacturing establishments. These data do not necessarily reflect the size of the business which owns and operates the establishment. For a further example (relating to unincorporated joint ventures) of why caution should be used in interpreting these data, see paragraph 22 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Figures may differ slightly from those presented in other tables because they exclude those manufacturing establishments which operated during 1998–99 but were not operating at 30 June 1999. See paragraph 21 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a)(b), Employment Size(c)—NSW *continued*

<i>Employment size group</i>	<i>Employment at end of June(d) ..</i>		<i>Wages and salaries(e)(f)</i>		<i>Turnover(f)</i>		<i>Industry value added(f)</i>	
	<i>no.</i>	<i>%</i>	<i>\$m</i>	<i>%</i>	<i>\$m</i>	<i>%</i>	<i>\$m</i>	<i>%</i>
TOTAL MANUFACTURING								
0–4 persons	18 935	6.4	381.7	3.2	2 726.4	3.8	1 279.2	5.6
5–9 persons	22 713	7.6	612.5	5.1	2 745.6	3.8	991.4	4.3
10–19 persons	26 918	9.1	819.6	6.9	4 198.5	5.9	1 464.3	6.4
20–49 persons	42 527	14.3	1 475.0	12.4	8 206.2	11.5	2 607.6	11.4
50–99 persons	37 807	12.7	1 521.9	12.8	9 003.2	12.6	2 958.4	12.9
<i>Total less than 100 persons</i>	<i>148 900</i>	<i>50.1</i>	<i>4 810.8</i>	<i>40.4</i>	<i>26 880.1</i>	<i>37.5</i>	<i>9 301.0</i>	<i>40.7</i>
100–199 persons	43 722	14.7	1 897.5	15.9	12 431.1	17.4	3 632.1	15.9
200–499 persons	53 071	17.9	2 487.4	20.9	18 470.5	25.8	5 710.0	25.0
500–999 persons	25 208	8.5	1 181.6	9.9	6 918.7	9.7	2 042.5	8.9
1 000 or more persons	26 113	8.8	1 538.9	12.9	6 896.6	9.6	2 170.3	9.5
<i>Total 100 or more persons</i>	<i>148 115</i>	<i>49.9</i>	<i>7 105.3</i>	<i>59.6</i>	<i>44 717.0</i>	<i>62.5</i>	<i>13 555.0</i>	<i>59.3</i>
Total	297 015	100.0	11 916.1	100.0	71 597.0	100.0	22 856.0	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) Data in this table reflect the size of individual manufacturing establishments. These data do not necessarily reflect the size of the business which owns and operates the establishment. For a further example (relating to unincorporated joint ventures) of why caution should be used in interpreting these data, see paragraph 22 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Figures may differ slightly from those presented in other tables because they exclude those manufacturing establishments which operated during 1998–99 but were not operating at 30 June 1999. See paragraph 21 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a)(b), Exported Production(c)—Employment Size(d)—NSW

INDUSTRY SUBDIVISION		Sales and transfers out of goods produced	Amount exported by this business or its agent	Exports as a proportion of sales and transfers out of goods produced
ANZSIC code	Description	\$m	\$m	%
0-49 PERSONS				
21	Food, beverage and tobacco mfg	2 355.4	231.1	9.8
22	Textile, clothing, footwear and leather mfg	1 105.9	45.3	4.1
23	Wood and paper product mfg	1 139.4	13.7	1.2
24	Printing, publishing and recorded media	1 463.1	28.8	2.0
25	Petroleum, coal, chemical and associated product mfg	2 241.5	102.1	4.6
26	Non-metallic mineral product mfg	732.8	6.5	0.9
27	Metal product mfg	3 461.2	923.7	26.7
28	Machinery and equipment mfg	2 438.0	230.9	9.5
29	Other manufacturing	1 277.9	28.4	2.2
21-29	Total manufacturing	16 215.2	1 610.6	9.9
50-99 PERSONS				
21	Food, beverage and tobacco mfg	1 397.4	114.4	8.2
22	Textile, clothing, footwear and leather mfg	740.8	112.8	15.2
23	Wood and paper product mfg	341.5	49.3	14.4
24	Printing, publishing and recorded media	967.5	226.2	23.4
25	Petroleum, coal, chemical and associated product mfg	1 911.6	188.8	9.9
26	Non-metallic mineral product mfg	386.6	3.9	1.0
27	Metal product mfg	1 130.7	48.0	4.2
28	Machinery and equipment mfg	1 169.4	168.6	14.4
29	Other manufacturing	213.2	21.8	10.2
21-29	Total manufacturing	8 258.8	933.9	11.3
100 OR MORE PERSONS				
21	Food, beverage and tobacco mfg	10 581.9	1 692.9	16.0
22	Textile, clothing, footwear and leather mfg	838.3	181.5	21.7
23	Wood and paper product mfg	2 053.3	70.3	3.4
24	Printing, publishing and recorded media	2 422.8	114.9	4.7
25	Petroleum, coal, chemical and associated product mfg	8 276.2	931.1	11.3
26	Non-metallic mineral product mfg	1 955.7	58.7	3.0
27	Metal product mfg	8 158.3	1 747.0	21.4
28	Machinery and equipment mfg	5 855.0	1 059.7	18.1
29	Other manufacturing	341.6	45.5	13.3
21-29	Total manufacturing	40 483.2	5 901.6	14.6
TOTAL				
21	Food, beverage and tobacco mfg	14 334.7	2 038.5	14.2
22	Textile, clothing, footwear and leather mfg	2 685.0	339.6	12.6
23	Wood and paper product mfg	3 534.3	133.3	3.8
24	Printing, publishing and recorded media	4 853.4	369.9	7.6
25	Petroleum, coal, chemical and associated product mfg	12 429.3	1 222.1	9.8
26	Non-metallic mineral product mfg	3 075.1	69.1	2.2
27	Metal product mfg	12 750.2	2 718.7	21.3
28	Machinery and equipment mfg	9 462.4	1 459.3	15.4
29	Other manufacturing	1 832.8	95.7	5.2
21-29	Total manufacturing	64 957.2	8 446.1	13.0

(a) See paragraph 5 of the Explanatory Notes.

(b) Group employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11-13 of the Explanatory Notes.

(c) See paragraphs 23-25 of the Explanatory Notes.

(d) Data in this table reflect the size of individual manufacturing establishments. These data do not necessarily reflect the size of the business which owns and operates the establishment. For a further example (relating to unincorporated joint ventures) of why caution should be used in interpreting these data, see paragraph 22 of the Explanatory Notes. Also, this table excludes those manufacturing establishments which operated during 1998-99 but were not operating at 30 June 1999. See paragraph 21 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a), Summary Data—Proportion of Exports(b)—NSW

INDUSTRY SUBDIVISION		Employment at end of June(c)	Wages and salaries(d)	Turnover	Industry value added
ANZSIC code	Description	%	%	%	%
DO NOT EXPORT					
21	Food, beverage and tobacco mfg	47.4	43.3	33.4	33.7
22	Textile, clothing, footwear and leather mfg	54.8	45.4	39.8	44.8
23	Wood and paper product mfg	71.3	65.3	58.0	53.9
24	Printing, publishing and recorded media	74.8	72.8	66.5	69.6
25	Petroleum, coal, chemical and associated product mfg	34.2	31.6	24.6	30.0
26	Non-metallic mineral product mfg	62.5	60.3	63.6	58.0
27	Metal product mfg	50.9	37.7	30.6	35.2
28	Machinery and equipment mfg	51.6	50.2	47.8	49.3
29	Other manufacturing	78.3	74.5	69.9	70.3
21-29	Total manufacturing	55.1	49.3	40.8	44.5
EXPORTS UP TO AND INCLUDING 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	43.7	47.3	54.6	56.3
22	Textile, clothing, footwear and leather mfg	40.1	49.1	51.1	48.0
23	Wood and paper product mfg	np	np	np	np
24	Printing, publishing and recorded media	22.9	24.5	27.6	23.4
25	Petroleum, coal, chemical and associated product mfg	64.3	67.2	74.4	68.9
26	Non-metallic mineral product mfg	np	np	np	np
27	Metal product mfg	44.7	56.9	58.8	54.9
28	Machinery and equipment mfg	41.3	41.3	42.8	41.0
29	Other manufacturing	np	np	np	np
21-29	Total manufacturing	40.3	45.5	51.9	48.7
EXPORTS MORE THAN 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	8.9	9.4	12.0	10.0
22	Textile, clothing, footwear and leather mfg	5.1	5.5	9.1	7.3
23	Wood and paper product mfg	np	np	np	np
24	Printing, publishing and recorded media	2.3	2.7	5.9	6.9
25	Petroleum, coal, chemical and associated product mfg	1.5	1.2	1.0	1.1
26	Non-metallic mineral product mfg	np	np	np	np
27	Metal product mfg	4.4	5.4	10.5	9.9
28	Machinery and equipment mfg	7.0	8.4	9.3	9.7
29	Other manufacturing	np	np	np	np
21-29	Total manufacturing	4.6	5.2	7.3	6.9

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraphs 23-25 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

MANUFACTURING ESTABLISHMENTS(a)(b), Summary of Operations(c)—ACT

Reference year	Employment at end of June(d) no.	Wages and salaries(e)(f) \$m	Turnover(f) \$m	Industry gross product(f) \$m	Industry value added(f) \$m	Wages and salaries to turnover(f) ratio	Turnover per person employed(f)(g) \$'000	Industry value added per person employed(f)(h) \$'000
FOOD, BEVERAGE AND TOBACCO MANUFACTURING								
1998–99	418	14.3	117.1	..	25.9	0.12	280.4	62.0
1997–98	430	14.2	(i)119.3	(j)29.3	(j)30.5	0.12	277.3	70.8
1996–97	327	10.9	64.8	19.2	..	0.17	198.1	..
1995–96	470	(k)14.3	74.0	19.7	..	0.19	157.5	..
1994–95	560	14.9	75.9	..	..	0.20	135.4	..
1993–94	595	15.8	69.1	..	..	0.23	116.1	..
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING								
1998–99	134	2.1	10.2	..	4.5	0.21	76.0	33.4
1997–98	154	2.0	(i)11.0	(j)5.2	(j)5.3	0.18	71.5	34.4
1996–97	121	1.7	8.1	3.7	..	0.21	67.2	..
1995–96	105	(k)1.8	9.7	4.5	..	0.19	92.4	..
1994–95	92	1.9	6.9	..	..	0.27	74.4	..
1993–94	105	1.8	6.0	..	..	0.30	57.3	..
WOOD AND PAPER PRODUCT MANUFACTURING								
1998–99	269	10.0	52.5	..	22.9	0.19	195.5	85.3
1997–98	263	7.4	(i)40.4	(j)12.0	(j)12.6	0.18	153.8	48.1
1996–97	254	8.8	43.7	11.6	..	0.20	172.2	..
1995–96	300	(k)9.0	42.9	13.5	..	0.21	143.0	..
1994–95	351	11.3	51.1	..	..	0.22	145.6	..
1993–94	380	10.6	53.4	..	..	0.20	140.5	..
PRINTING, PUBLISHING AND RECORDED MEDIA								
1998–99	1 218	46.0	199.4	..	96.8	0.23	163.8	79.5
1997–98	1 479	49.0	(i)191.7	(j)85.0	(j)88.2	0.26	129.7	59.7
1996–97	1 514	50.4	213.8	119.4	..	0.24	141.2	..
1995–96	1 764	(k)60.5	213.7	98.9	..	0.28	121.2	..
1994–95	1 940	64.1	217.8	..	..	0.29	112.3	..
1993–94	1 849	55.1	203.2	..	..	0.27	109.9	..
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING								
1998–99	25	0.8	2.8	..	1.5	0.29	109.4	60.1
1997–98	28	0.8	(i)2.8	(j)1.2	(j)1.2	0.27	100.1	43.2
1996–97	27	0.6	2.6	1.0	..	0.25	97.9	..
1995–96	30	(k)0.8	3.1	1.1	..	0.25	104.9	..
1994–95	*55	1.2	*6.7	..	..	*0.19	121.6	..
1993–94	38	0.9	4.5	..	..	0.21	117.2	..

.. not applicable

* estimate has a relative standard error of between 25% and 50% and should be used with caution

(a) See paragraph 5 of the Explanatory Notes.

(b) Group Employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) For factors affecting comparability of data over the time period shown, see paragraphs 14–20 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Value data are at current prices and therefore do not discount the impact of price changes.

(g) Turnover divided by the number of persons employed at the end of June.

(h) Industry value added divided by the number of persons employed at the end of June.

(i) From the 1997–98 manufacturing collection and onwards, new international standards apply to the calculation of turnover. For more details see paragraphs 14 and 15 of the Explanatory Notes.

(j) From the 1997–98 manufacturing collection and onwards, industry value added (IVA) replaces industry gross product (IGP) as the measure of an industry's contribution to gross domestic product. IGP has also been shown for 1997–98. For more details, see paragraphs 16 and 17 of the Explanatory Notes.

(k) For 1995–96, excludes provision expenses for employer entitlements. See paragraph 19 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a)(b), Summary of Operations(c)—ACT *continued*

Reference year	Employment at end of June(d) no.	Wages and salaries(e)(f) \$m	Turnover(f) \$m	Industry gross product(f) \$m	Industry value added(f) \$m	Wages and salaries to turnover(f) ratio	Turnover per person employed(f)(g) \$'000	Industry value added per person employed(f)(h) \$'000
NON-METALLIC MINERAL PRODUCT MANUFACTURING								
1998–99	100	3.3	28.4	..	9.2	0.12	284.1	92.5
1997–98	136	3.3	(i)40.6	(j)9.1	(j)9.3	0.08	299.2	68.7
1996–97	135	3.8	45.0	7.0	..	0.08	332.9	..
1995–96	140	(k)3.9	47.9	15.4	..	0.08	341.5	..
1994–95	166	3.9	59.1	..	..	0.07	356.1	..
1993–94	209	7.9	80.3	..	..	0.10	384.0	..
METAL PRODUCT MANUFACTURING								
1998–99	236	6.9	32.5	..	11.5	0.21	137.4	48.7
1997–98	258	7.6	(i)30.4	(j)10.4	(j)10.9	0.25	118.0	42.1
1996–97	277	8.2	32.8	10.2	..	0.25	118.5	..
1995–96	*255	(k)7.7	40.3	*11.9	..	0.19	157.8	..
1994–95	252	6.5	28.4	..	..	0.23	112.6	..
1993–94	254	6.6	28.5	..	..	0.23	112.3	..
MACHINERY AND EQUIPMENT MANUFACTURING								
1998–99	582	17.9	94.3	..	35.0	0.19	161.9	60.2
1997–98	739	24.4	(i)106.9	(j)41.9	(j)44.7	0.23	144.7	60.5
1996–97	587	18.4	98.7	37.7	..	0.19	168.2	..
1995–96	464	(k)12.7	59.3	30.3	..	0.21	127.9	..
1994–95	547	18.1	64.9	..	..	0.28	118.5	..
1993–94	581	17.0	60.2	..	..	0.28	103.6	..
OTHER MANUFACTURING								
1998–99	357	10.4	49.5	..	17.8	0.21	138.6	49.7
1997–98	334	10.2	(i)42.8	(j)10.2	(j)10.8	0.24	128.2	32.4
1996–97	326	9.6	43.2	13.9	..	0.22	132.7	..
1995–96	415	(k)10.5	55.7	20.8	..	0.19	134.1	..
1994–95	370	9.8	48.9	..	..	0.20	131.9	..
1993–94	388	10.1	52.0	..	..	0.19	134.1	..
TOTAL MANUFACTURING								
1998–99	3 339	111.7	586.6	..	225.1	0.19	175.7	67.4
1997–98	3 820	119.0	(i)586.1	(j)204.2	(j)213.5	0.20	153.4	55.9
1996–97	3 568	112.4	552.8	223.8	..	0.20	155.0	..
1995–96	3 942	(k)121.1	546.6	216.2	..	0.22	138.6	..
1994–95	4 334	131.7	559.5	..	..	0.24	129.1	..
1993–94	4 397	125.8	557.2	..	..	0.23	126.7	..

.. not applicable

* estimate has a relative standard error of between 25% and 50% and should be used with caution

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 5 of the Explanatory Notes.

(b) Group Employer information held by the Australian Taxation Office is now being used to delete those businesses which have ceased trading or are no longer employing staff. See paragraphs 11–13 of the Explanatory Notes.

(c) For factors affecting comparability of data over the time period shown, see paragraphs 14–20 of the Explanatory Notes.

(d) Includes working proprietors.

(e) Excludes the drawings of working proprietors.

(f) Value data are at current prices and therefore do not discount the impact of price changes.

(g) Turnover divided by the number of persons employed at the end of June.

(h) Industry value added divided by the number of persons employed at the end of June.

(i) From the 1997–98 manufacturing collection and onwards, new international standards apply to the calculation of turnover. For more details see paragraphs 14 and 15 of the Explanatory Notes.

(j) From the 1997–98 manufacturing collection and onwards, industry value added (IVA) replaces industry gross product (IGP) as the measure of an industry's contribution to gross domestic product. IGP has also been shown for 1997–98. For more details, see paragraphs 16 and 17 of the Explanatory Notes.

(k) For 1995–96, excludes provision expenses for employer entitlements. See paragraph 19 of the Explanatory Notes.

EXPLANATORY NOTES

INTRODUCTION

1 This publication presents final statistics for New South Wales and the Australian Capital Territory compiled from a survey of manufacturing establishments for 1998–99, with some comparative statistics relating to preceding years. The emphasis of this publication is on the release of statistics for the main data items included in the survey.

2 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.

3 The manufacturing collection is conducted on an annual basis. For the 1998–99 collection, a sample of approximately 17,000 establishments nationally were asked to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. Data on IVA are also available from this collection. In addition, a variety of samples was selected to produce data on a range of other variables. The next manufacturing census will be conducted in respect of 2001–02, with sample surveys conducted for the next two years.

4 Estimates of IVA were compiled using data from the 17,000 sample population and a sub-sample of approximately 7,000 establishments which were asked to provide detailed structural and performance data. These 7,000 establishments were also asked to supply value of sales for commodities produced. The availability of this fine level commodity/activity data for these units has enabled better identification of inscope establishments as well as providing a basis for an objective industry code to be allocated to responding units. A sample of approximately 5,200 manufacturing management units was asked the detailed information required to derive operating profit before tax. Selected data from the annual manufacturing collection and data from other collections are included in the compendium publication *Manufacturing, Australia, 2000* (Cat. no. 8225.0).

SCOPE AND COVERAGE

5 The business unit for which statistics are presented in this publication 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; these are excluded from the collection.

6 A small number of manufacturing establishments engage, in a significant way, in a variety of activities which are normally carried out by different industries. For example, a predominantly manufacturing establishment may also undertake significant amounts of wholesaling. Similarly, a manufacturing establishment may produce significant volumes of a variety of goods which are normally produced in different manufacturing industries. In such cases, the original establishment is 'split' into a separate establishment for each significant activity which belongs to a separate industry. For the 1998–99 manufacturing collection, 'significant' was defined as turnover of \$7.3 million or more.

7 The statistics in this publication exclude some very small manufacturers. Those excluded are manufacturers not employing staff at 30 June of the reference year (such as sole proprietorships or family partnerships) which had not registered as group employers (GE) with the Australian Taxation Office (ATO). Though a substantial number, these businesses would contribute only marginally to aggregate data were they to be included. In addition, the ABS

EXPLANATORY NOTES *continued*

SCOPE AND COVERAGE

continued

attempts to obtain data for those businesses which ceased operation during the year, but it is not possible to obtain data for all of them.

STANDARD UNITS

8 For the definition of the standard business units now in use, see the Glossary.

RELIABILITY OF ESTIMATES

9 For information on this subject, see Technical Note 1.

DATA ADJUSTED

10 Data in this issue continue to be adjusted to allow for lags in processing new businesses to the ABS business register, i.e. adjustments have been made to allow for new businesses which had commenced operations but for which details had not been processed to the ABS business register in time for inclusion in the annual manufacturing industry collection. Adjustments of this type will continue to be applied in future periods. The majority of businesses affected by these lags are small in size. The effect of these adjustments on 1998–99 New South Wales employment is an increase of 0.7% while the effect on turnover is an increase of 0.3%. The corresponding figures for the Australian Capital Territory are 1.6% and 1.0% respectively. All industry subdivisions were affected to a similar degree.

11 For some time now, the ABS has been using ATO information on GE registrations to add new businesses to the ABS business register. After detailed investigation, it has now been decided to use GE information to delete from the business register those businesses which have ceased trading or are no longer employing staff.

12 The process of using GE information to delete businesses from the ABS business register has been introduced for the 1998–99 manufacturing survey. The result is that a large number of businesses were removed from the business register and, therefore, from the population for the 1998–99 manufacturing survey. This process will now also be ongoing, but the number of businesses removed in future years will be relatively small.

13 The use of GE information to delete businesses from the ABS business register has also impacted on previous years' data. Estimates for the previous three manufacturing collections (covering 1995–96 to 1997–98 inclusive) have been adjusted in such a way as to phase in the impact over this time. The impact on survey results has been to reduce estimates slightly. For example, total New South Wales manufacturing employment for 1997–98 was reduced by 1.3% and turnover by 0.7% while, for the Australian Capital Territory, employment was reduced by 1.4% and turnover by 0.7%. For periods before 1995–96, the impact is estimated to have been negligible. The impacts of the ongoing process are also expected to be negligible.

COMPARABILITY WITH PREVIOUS STATISTICS

14 Commencing with estimates for 1997–98, the definition of turnover has changed in line with new international standards for measuring economic variables. The composition of turnover estimates under the new standards is as follows:

Turnover (as previously defined)
plus Income from intellectual property royalties
equals Turnover (new standards)

15 Conceptually, some further differences exist between turnover on the old and new bases (particularly in relation to own account production of computer software, own account mineral exploration, and own account production of literary, entertainment or artistic originals). However, as these activities are

EXPLANATORY NOTES *continued*

COMPARABILITY WITH PREVIOUS STATISTICS *continued*

relatively unimportant for manufacturing industries, no attempt has been made to measure them.

16 Commencing with estimates for 1997–98, under new international standards, contribution to gross domestic product (GDP) by manufacturing industries is being measured by the variable 'Industry value added' (IVA). Estimates for IVA measure the value added by an industry to the intermediate inputs used by that industry. Previously, the corresponding contribution to GDP was measured by the variable 'Industry gross product' (IGP). It should also be noted that IVA is not the same variable as 'Value added' which was published for manufacturing establishments until 1992–93.

17 Composition of IVA estimates and their relationship to IGP estimates are:

	Turnover (new standards)
plus	Closing inventories
less	Opening inventories
less	Intermediate input expenses (see the operating expenses entry in the Glossary)
equals	IVA
	IVA
plus	Intellectual property royalty expenses
less	Intellectual property royalty income
less	Computer software expenses not capitalised by the business
less	Selected indirect taxes (For manufacturing industries, the main types are fringe benefits tax, payroll tax, land rates and land taxes.)
equals	IGP

18 Commencing with the 1994–95 manufacturing collection, multi-establishment management units have been 'collapsed' for reporting purposes into single establishment management units, unless they had significant activity in more than one industry and/or State or Territory. The effect of this process is that most manufacturing businesses which previously reported for more than one establishment were asked to combine operations by those establishments into a single reporting unit. The effect of this on manufacturing statistics as contained in this publication has been minimal.

19 For the 1995–96 collection only, provision expenses for employee entitlements were excluded from wages and salaries. For all other years, these provision expenses are included in wages and salaries.

20 Periodic collections of the Retail and Wholesale Divisions of ANZSIC, conducted for the 1998–99 reference year, identified a number of businesses which were predominantly manufacturers. A small number of these cases were determined to be significant in some manufacturing industries and have therefore been added into the manufacturing collection for 1998–99. The effect of these additional units on published aggregates have been calculated as adding 0.9% to employment and 0.8% to turnover for New South Wales but had no effect for total turnover or employment for the Australian Capital Territory.

EMPLOYMENT SIZE DATA

21 Summary of operations data at the industry subdivision level classified by the employment size of individual manufacturing establishments (see the Glossary for its definition) are presented in table 3. Similarly, exports of goods produced data at the industry subdivision level classified by the broad employment size of individual manufacturing establishments are presented in table 4. The statistics in these two tables relate only to those manufacturing establishments operating at 30 June 1999. As such, the figures presented represent a slightly different population from those presented in the other tables

EXPLANATORY NOTES *continued*

EMPLOYMENT SIZE DATA

continued

from the manufacturing collection. These other tables include data for those manufacturing establishments which operated at any time during 1998–99.

22 The treatment of unincorporated joint ventures according to the ABS's standard units definitions has an effect on the data when the data are classified by employment size. This is because joint venture participants report details of turnover, but often have few or no employees or operating expenses. The labour for such operations is usually employed and paid for by the joint venture operator. Similarly, the operating expenses are usually reported by the joint venture operator. On the other hand, the operator does not report any details of turnover (unless it also happens to be a participant). If each of these joint venture operations were to be treated as a single business unit in the statistics, it is highly probable that the METAL PRODUCT MANUFACTURING industry would reflect a similar dominance pattern to the other manufacturing industries. In other words, in the statistics in tables 3 and 4, the participants in unincorporated joint ventures are recorded in the 0–4 persons employment size category, whereas the operators of the unincorporated joint ventures are recorded in larger employment size categories. This treatment affects the relative contribution of the various employment size categories for this industry.

EXPORTS BY

MANUFACTURERS

23 All establishments included in the manufacturing collection were asked whether they exported and, if so, what percentage of their sales of goods produced plus transfers out of goods produced by the establishment for sale were exported by their business or an agent on their behalf. The data presented in table 4 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. The data in table 4 exclude those manufacturing establishments which operated during 1998–99 but were not operating at 30 June 1999.

24 The statistics presented in table 4 for the value of exports by manufacturers or their agents are not intended to be the same as the value of exports classified by manufacturing industry of origin as published by the ABS in international trade statistics. These latter statistics are intended to measure total exports regardless of which business or organisation does the exporting (and to identify the probable industry from which the goods originated), whereas the statistics in tables 4 and 5 only include exports directly undertaken by the manufacturer or by its agent.

25 The data in table 4 showing exports by manufacturers or their agents can be expected to show a much lower value than the exports data from the international trade series. The main reason is that for many exports of goods manufactured in Australia, the actual exporting activity is undertaken by a business other than the manufacturer. Also, the value of goods produced on a commission or fee basis for non-manufacturing businesses and which are then exported is not included in the data in tables 4 and 5. Examples of relevant commission work are the 'slaughtering fee' charged by an abattoir for processing livestock owned by a meat exporter and the 'tolling fee' charged by an aluminium smelter to process ores owned by other (e.g. mining) businesses. Also excluded from tables 4 and 5 are any exports by manufacturers of goods which were not produced by that manufacturer. These and other goods exported (e.g. re-exports) are included in the international trade data. Finally, differences in valuation of exports arise because the value of exports in the international trade series would include the value to the manufacturer plus profit margins for the exporter and for any intermediaries between the manufacturer and the exporter.

EXPLANATORY NOTES *continued*

REGIONAL DATA

26 Current investigations carried out by the ABS have shown that it is possible to produce some regional or sub-State estimates in survey collection years. The ABS proposes to make sub-State data available later this year, after the release of the *Manufacturing Industry, [State], 1998–99* publication series. For further information about the availability of sub-State data, please contact John Ridley on Sydney (02) 9268 4541.

27 Sub-State data in census years will continue to be published in the *Manufacturing Industry, [State]* series or will be available as unpublished data.

ACKNOWLEDGMENT

28 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

INFORMATION PAPER

29 The *Information Paper: Availability of Statistics Related to Manufacturing* (Cat. no. 8205.0) outlines the vast amount of published and unpublished data available from the annual manufacturing industry collection, as well as data from other ABS collections.

RELATED PUBLICATIONS

30 A series of publications *Manufacturing Industry, [State], 1998–99* (Cat. nos 8221.1–8221.6) will be produced for each State. These publications are being released progressively.

31 Users may also wish to refer to the following publications:

- *Business Operations and Industry Performance, Australia, 1998–99* (Cat. no. 8140.0), to be released in December 2000—Annual publication
- *Business Operations and Industry Performance, Australia, Preliminary, 1998–99* (Cat. no. 8142.0), released on 12 May 2000—Annual publication
- *Environment Protection Expenditure, Australia, 1995–96 and 1996–97* (Cat. no. 4603.0), released on 2 July 1999—Biennial publication
- *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0), released on 21 March 1996—Irregular publication
- *Information Paper: Availability of Statistics Related to Manufacturing, 1997* (Cat. no. 8205.0), released on 16 January 1998—Irregular publication
- *Information Paper: Improvements to ABS Economic Statistics, 1997* (Cat. no. 1357.0), released on 22 August 1997—Irregular publication
- *Inventories and Sales, Selected Industries, Australia* (Cat. no. 5629.0)—Quarterly publication
- *Labour Force, Australia* (Cat. no. 6203.0)—Monthly publication
- *Manufacturing, Australia, 2000* (Cat. no. 8225.0), to be released in December 2000—Annual publication
- *Manufacturing Industry, Australia, Preliminary, 1999–2000* (Cat. no. 8201.0), to be released in March 2001—Annual publication

BACK DATA AND UNPUBLISHED STATISTICS

32 A range of manufacturing industry statistics publications is available for previous years. As well, a considerable amount of data from the annual manufacturing collection exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request. In general, unpublished data consist of finer industry dissections of the published data. Other more detailed data may also be available. A charge is made for providing unpublished information. The information paper (Cat. no. 8205.0) referred to in paragraphs 29 and 31 also provides more details.

EXPLANATORY NOTES *continued*

ROUNDING

33 Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS business register (see paragraph 10), this 'rounding rule' also applies to employment counts.

34 Proportions, ratios and other calculated figures shown in this publication have been calculated using unrounded estimates and may be different from, but are more accurate than, calculations based on the rounded estimates.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
ATO	Australian Taxation Office
f.o.b.	free on board
GDP	gross domestic product
GE	group employer
IGP	industry gross product
IVA	Industry value added
mfg	manufacturing
n.e.c.	not elsewhere classified

TECHNICAL NOTE 1 DATA RELIABILITY

TESAMPLE ERROR

1 The 1998–99 manufacturing survey was designed primarily to deliver industry class estimates for Australia and States for the data items employment, wages and salaries, turnover and IVA. For the two Territories, the sample was designed to deliver industry subdivision data only.

2 All 1998–99 (and 1994–95, 1995–96 and 1997–98) data contained in this publication have been obtained from samples of manufacturers. As such, these data are subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all manufacturers in the population. The measure of the likely difference as used by the ABS is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units. There are about 2 chances in 3 that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.

3 The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error. The relative standard errors for the 1998–99 employment, wages and salaries, turnover and IVA data for New South Wales presented in this publication are nearly all 3% or less for industry subdivisions except for OTHER MANUFACTURING (for which they are marginally higher) (see Technical Note 2) and most are 4.5% or less for industry classes. The relative standard errors for the industry subdivision estimates for the Australian Capital Territory are mainly 4% or less (see Technical Note 2).

4 Relative standard errors at the industry subdivision level for New South Wales and the Australian Capital Territory for selected data items representing the full range of data contained in this publication are shown in Technical Note 2. Detailed relative standard errors can be made available on request.

NON SAMPLE ERROR

5 The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of inadequacies in available sources from which the population frame was compiled, imperfections in reporting by providers, errors made in collection such as in recording and coding data, and errors made in processing data. Inaccuracies of this kind are referred to collectively as non-sampling error and they may occur in any enumeration, whether it be a full census or a sample.

6 While it is not possible to quantify non-sampling error, every effort is made to reduce it to a minimum. Collection forms are designed to be easy to complete and assist businesses to report accurately. Efficient and effective operating procedures and systems are used to compile the statistics.

TECHNICAL NOTE 2 STANDARD ERRORS

SELECTED DATA ITEMS

NEW SOUTH WALES

INDUSTRY SUBDIVISION		Employment at end of June(a)	Wages and salaries(b)	Turnover	Industry value added	Amount exported by this business or its agent
ANZSIC Code	Description	%	%	%	%	%
21	Food, beverage and tobacco mfg	1.6	1.2	1.3	1.0	3.0
22	Textile, clothing, footwear and leather mfg	2.6	2.0	2.1	2.6	2.5
23	Wood and paper product mfg	5.6	5.1	1.8	2.8	1.3
24	Printing, publishing and recorded media	3.2	2.9	2.1	2.8	17.5
25	Petroleum, coal, chemical and associated product mfg	2.0	1.4	0.9	1.1	3.3
26	Non-metallic mineral product mfg	2.2	1.3	1.1	1.4	1.7
27	Metal product mfg	2.8	2.0	1.4	2.4	0.2
28	Machinery and equipment mfg	1.5	1.2	1.0	1.1	1.9
29	Other manufacturing	4.2	4.2	3.6	4.0	4.2
21-29	Total manufacturing	0.9	0.7	0.5	0.7	1.2

(a) Includes working proprietors.

(b) Excludes the drawings of working proprietors.

AUSTRALIAN CAPITAL TERRITORY

INDUSTRY SUBDIVISION		Employment at end of June(a)	Wages and salaries(b)	Turnover	Industry value added
ANZSIC Code	Description	%	%	%	%
21	Food, beverage and tobacco mfg	7.5	3.9	2.5	4.1
22	Textile, clothing, footwear and leather mfg	3.6	3.9	5.7	7.8
23	Wood and paper product mfg	2.3	0.6	1.5	1.0
24	Printing, publishing and recorded media	5.5	4.1	4.0	3.4
25	Petroleum, coal, chemical and associated product mfg	—	—	—	—
26	Non-metallic mineral product mfg	4.5	4.4	0.8	1.7
27	Metal product mfg	9.5	9.5	13.4	11.0
28	Machinery and equipment mfg	5.7	5.2	3.0	2.8
29	Other manufacturing	9.1	9.9	5.9	5.4
21-29	Total manufacturing	2.7	2.2	1.8	1.7

— nil or rounded to zero (including null cells)

(a) Includes working proprietors.

(b) Excludes the drawings of working proprietors.

GLOSSARY

ABS	Australian Bureau of Statistics
Amount exported by this business unit or its agent	This represents the sales value of goods produced by an establishment (or for it on commission), including the value of manufactured goods transferred to other establishments of the business unit for sale, that are exported (or are intended for export) outside Australia by the business unit or by its agent.
ANZSIC	Australian and New Zealand Standard Industrial Classification
Capitalised work done for own use	<p>Capitalised work done by the employees or proprietors of an establishment for use by the business unit or for rental or lease to other businesses. The main types of work are manufacturing, constructing, installing or repairing assets and development of computer software. This work is valued at the capitalised costs of the materials and the wages and salaries involved.</p> <p>Conceptually, this item should also include own account mineral exploration and own account production of literary, entertainment or artistic originals. However, these activities are relatively unimportant for manufacturers and have not been measured for manufacturing industries.</p>
Change in inventories	The value of total closing inventories minus total opening inventories.
Closing inventories	The value of all inventories of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the end of the reference period.
Commission manufacturing	<p>Significant amounts of manufacturing are undertaken on a commission basis by one manufacturer on behalf of another manufacturer or by a manufacturer on behalf of a non-manufacturer. Typically, a commission manufacturing transaction will involve a client commissioning the production of goods by a producing establishment from materials provided by the client. Ownership of those materials remains with the client. Similarly, the goods made from those materials are owned by the client.</p> <p>For the purposes of the estimates in this publication, the producing establishment reports the commission fee as service income along with wages and salaries and any other expenses incurred.</p> <p>If the client is a manufacturing establishment, then in addition to data for their own manufacturing operations, the client reports the sales and stocks of the commissioned goods, the cost of the materials provided to the producing establishment, the commission fee paid and the value of any other intermediate inputs related to the commission transaction. If the client is not a manufacturing establishment, no data are reported by the client.</p>
Employment at end of June	The number of working proprietors, working partners, permanent, part-time, temporary and casual employees, and managerial and executive employees working for an establishment during the last pay period ending in June each year. Employees absent on paid or prepaid leave are included, as are employees on workers' compensation who continue to be paid through the payroll system. Non-salaried directors, self-employed persons such as consultants, contractors and persons paid solely by commission without a retainer, and volunteer workers are excluded.
Enterprise group	A unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the <i>Corporations Legislation Amendment Act 1991</i>). These may be legal entities such as trusts and partnerships as well as companies. Majority ownership is not required for control to be exercised.
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

GLOSSARY *continued*

Establishment <i>continued</i>	detailed data i.e. the data needed to compile turnover, opening and closing inventories, purchases and transfers in, motor vehicle running expenses, freight and cartage expenses, commission expenses, rent, leasing and hiring expenses, and repair and maintenance expenses. In general, an establishment covers all operations at a physical location, but may consist of groups of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.
Establishments that do not export	Establishments that reported no exports (either by their business unit or for them by an agent) of goods that they produced.
Establishments with exports of more than 50% of sales	Establishments that reported exports (either by their business unit or for them by an agent) of more than 50% of sales and transfers out of goods for sale that they produced.
Establishments with exports up to and including 50% of sales	Establishments that reported exports (either by their business unit or for them by an agent) of up to and including 50% of sales and transfers out of goods for sale that they produced.
Exports as a proportion of sales and transfers out of goods produced (table 4)	For an individual establishment, this represents the percentage of the total sales and transfers out of goods for sale produced by the establishment (or for it on commission) which are exported (or are intended for export) outside Australia by the business unit or by its agent. In table 4, the ratio is calculated by dividing the total value of goods exported by the total value of sales and transfers out of goods for sale produced by all establishments, not just the aggregated value for those units which exported.
Funding by Federal, State or Local Governments for operational costs	Funding by Federal, State or Local Governments for operational costs (e.g. wages and salaries, rent). Included are bounties, subsidies, export grants and apprenticeship schemes.
Industry class	Within ANZSIC, there is a structure comprising four levels ranging from industry division (broadest level) to the industry class (finest level). At the industry class level, the activities are narrowly defined and recognised by a four-digit code, e.g. Industry Class 2331 for PULP, PAPER AND PAPERBOARD MANUFACTURING. Usually, an activity is primarily confined to one class. However, some activities may be primary to more than one class.
Industry gross product (IGP)	For periods prior to 1997–98, estimates of IGP represented the measure of the contribution by manufacturing industries to gross domestic product (GDP). However, commencing with estimates for 1997–98 following introduction of new international standards for measuring economic variables, IGP has been replaced by the variable industry value added (IVA) for the purpose of measuring industry contribution to GDP. The relationship between IVA estimates and IGP estimates is: <div style="margin-left: 40px;"> IVA plus Intellectual property royalty expenses less Intellectual property royalty income less Computer software expenses not capitalised by the business less Selected indirect taxes (For manufacturing industries, the main types are fringe benefits tax, payroll tax, land rates and land taxes.) equals IGP </div>
Industry group	This is the intermediate level within the manufacturing industry division of ANZSIC and is recognised by a three-digit code, e.g. industry group 233 for PAPER AND PAPER PRODUCT MANUFACTURING. It gives more detail than the industry subdivision and is created in a way that groups like industry classes together.
Industry subdivision	This is the broadest level category within the manufacturing industry division of ANZSIC and is recognised by a two-digit code, e.g. industry subdivision 23 for

GLOSSARY *continued*

Industry subdivision <i>continued</i>	<p>WOOD AND PAPER PRODUCT MANUFACTURING. Industry subdivisions are built up from industry groups which, in turn, are built up from industry classes. The following list gives the manufacturing industry subdivision codes and their descriptions:</p> <ul style="list-style-type: none"> 21 Food, beverage and tobacco mfg 22 Textile, clothing, footwear and leather mfg 23 Wood and paper product mfg 24 Printing, publishing and recorded media 25 Petroleum, coal, chemical and associated product mfg 26 Non-metallic mineral product mfg 27 Metal product mfg 28 Machinery and equipment mfg 29 Other manufacturing 										
Industry value added (IVA)	<p>IVA represents the value added by an industry to the intermediate inputs used by the industry. Commencing with estimates for 1997–98, IVA has replaced industry gross product (IGP) as the measure of the contribution by manufacturing industries to gross domestic product. See the entry for industry gross product for an explanation of the differences between IVA and IGP.</p> <p>The derivation of IVA is as follows:</p> <table style="margin-left: 40px; border: none;"> <tr> <td></td><td>Turnover (new standards)</td></tr> <tr> <td>plus</td><td>Closing inventories</td></tr> <tr> <td>less</td><td>Opening inventories</td></tr> <tr> <td>less</td><td>Intermediate input expenses (for details, see the entry for operating expenses)</td></tr> <tr> <td>equals</td><td>IVA</td></tr> </table> <p>However, it should be noted that IVA is not a measure of operating profits before tax. Wages, salaries and most other labour costs are not taken into account in its calculation and nor are most insurance premiums, interest expenses or depreciation and a number of lesser expenses (see the entry for operating expenses for further detail).</p>		Turnover (new standards)	plus	Closing inventories	less	Opening inventories	less	Intermediate input expenses (for details, see the entry for operating expenses)	equals	IVA
	Turnover (new standards)										
plus	Closing inventories										
less	Opening inventories										
less	Intermediate input expenses (for details, see the entry for operating expenses)										
equals	IVA										
Industry value added (IVA) per person employed	<p>IVA of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.</p>										
Intermediate inputs	<p>Intermediate inputs consist of materials and certain services which are used up in the production process. Definitions of relevant component items are also included in this Glossary. It is calculated as:</p> <table style="margin-left: 40px; border: none;"> <tr> <td></td><td>Intermediate input expenses (for details, see the entry for operating expenses)</td></tr> <tr> <td>plus</td><td>Opening inventories</td></tr> <tr> <td>less</td><td>Closing inventories</td></tr> </table>		Intermediate input expenses (for details, see the entry for operating expenses)	plus	Opening inventories	less	Closing inventories				
	Intermediate input expenses (for details, see the entry for operating expenses)										
plus	Opening inventories										
less	Closing inventories										
Location	<p>A location is a physical unit of the establishment. It consists usually of an unbroken physical area or site, occupied by an establishment, at which, or from which, the establishment engages in productive activity on a relatively permanent basis. An establishment can consist of one or more locations. In specified circumstances, non-contiguous sites occupied by the same establishment can be combined to form a location.</p>										
Management unit	<p>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</p>										

GLOSSARY *continued*

Management unit <i>continued</i>	'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.
Manufacturing establishment	An establishment predominantly engaged in manufacturing activities. The data collected for such establishments 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.
Manufacturing management unit	A management unit predominantly engaged in manufacturing activities. The data collected for such management units cover all activities of the management unit (including in respect of non-manufacturing activities). Conversely, there are some management units predominantly engaged in non-manufacturing activities which have establishments engaged in manufacturing activities and which are excluded.
Opening inventories	The value of all inventories of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the beginning of the reference period.
Operating expenses	<p>For the purposes of calculating economic and accounting variables for manufacturing industries, operating expenses incurred by businesses are divided into several categories. However, some expenses are excluded entirely from all such calculations. These expenses are extraordinary expenses, capitalised expenses, income tax and other direct taxes, sales taxes and excise payable to Governments, capital repayments or losses on asset sales, dividends, donations or foreign exchange losses.</p> <p>Remaining expenses are categorised as follows:</p> <p><i>Intermediate input expenses</i></p> <p>Intermediate input expenses cover the major expenses incurred by manufacturers in producing and distributing goods and services produced (except labour costs), namely:</p> <ul style="list-style-type: none"> ■ purchases and transfers in of materials, components, containers and packaging materials, electricity, fuels and water, and purchases of goods for resale ■ motor vehicle running expenses, freight and cartage expenses, repair and maintenance expenses ■ rent, leasing and hiring expenses (except for finance lease payments) ■ contract, subcontract and commission expenses <p>Also included in the calculation of intermediate inputs are advertising expenses, audit and other accounting expenses, bank fees and charges (except interest), cleaning expenses, environmental protection expenses, intellectual property royalty expenses, legal fees, management fees, paper, printing and stationery expenses, postal and telecommunication expenses, staff training expenses, and travelling, accommodation and entertainment expenses.</p> <p>Excluded from this category are selected labour costs and other operating expenses as defined below:</p> <p><i>Selected labour costs</i></p> <p>Wages and salaries including provision expenses for employee entitlements</p> <p>Employer contributions to superannuation funds</p> <p>Workers' compensation costs</p> <p>Payroll tax and Fringe benefits tax</p> <p><i>Other operating expenses</i></p> <p>This group of expenses is not included in the calculation of the above economic variables but is included in the calculation of the accounting variable operating profit before tax. Included in this group of expenses are bad and doubtful debts,</p>

GLOSSARY *continued*

Operating expenses <i>continued</i>	computer software expenses not capitalised by businesses, depreciation and amortisation, insurance premiums (except workers' compensation and compulsory third party motor vehicle insurance premiums), interest expenses, land rates and taxes, mineral/petroleum expenses not capitalised by businesses, and natural resource royalties expenses.
Own account capital work	Capitalised work done by the employees or proprietors of an establishment for use by the business unit or for rental or lease to other businesses. The main types of work are manufacturing, constructing, installing or repairing assets and development of computer software. This work is valued at the capitalised costs of the materials and the wages and salaries involved. Conceptually, this item should also include own account mineral exploration and own account production of literary, entertainment or artistic originals. However, these activities are relatively unimportant for manufacturers and have not been measured for manufacturing industries.
Purchases	Purchases of materials, components, containers and packaging materials, electricity, fuels and water, and of goods for resale. The purchase of parts and fuel for motor vehicles is excluded.
Purchases and transfers in	Purchases of materials, components, containers and packaging materials, electricity, fuels and water, and of goods for resale, plus transfers in of goods from other establishments of the same business for further processing, assembly, installation or for sale or resale. Transfers in are valued, for statistical purposes, at prices commensurate with the prices which would have been paid if the establishments concerned had been under separate ownership, i.e. at commercial selling price. The purchase of parts and fuel for motor vehicles is excluded.
Reference period	Businesses are asked to report data for the financial year ended 30 June. However, if a business has a different financial year, it is asked to report for the 12-month period which ends between 1 October of the previous year and 30 September of the current year. This period is then used as a substitute for the financial year ended 30 June. For example, for the 1998–99 collection, a business may have reported data for the year ended 31 December 1998.
Sales and transfers out of goods	Includes sales of goods whether or not produced by the business and sales of goods produced for the business on a commission basis (see the entry for commission manufacturing). Also includes transfers of goods to other establishments of the same business or to related businesses and installation and delivery charges not separately invoiced to customers. Progress payments relating to long term contracts are included if they are billed in the period. Sales are valued net of discounts given and exclusive of excise, sales tax and duties receivable on behalf of the Government. Exports are valued f.o.b. (export freight charges are excluded). Transfers to other establishments of the same business are valued, for statistical purposes, at commercial value (i.e. the value which would have applied had the establishments concerned been under separate ownership).
Sales and transfers out of goods produced (table 4)	Sales as defined in sales and transfers out of goods, plus transfers out of goods produced by this establishment for sale. Transfers to other establishments of the same business are valued, for statistical purposes, at commercial value (i.e. the value which would have applied had the establishments concerned been under separate ownership).
Service income	Income received from service activities. Included are income from work done or sales made on a commission basis, income from repair, maintenance or servicing, installation and delivery charges separately invoiced to customers, advertising income and management fees/charges received from related or unrelated

GLOSSARY *continued*

Service income *continued* businesses. Service income is valued net of discounts given. For periods commencing with 1997–98, under new international standards, income from intellectual property royalties and rent, leasing and hiring income (except from finance leases) have also been classified as service income. Rent, leasing and hiring income is income derived from the ownership of land, buildings, vehicles, machinery or equipment, excluding any income from finance leases.

For further explanation on the treatment of commission manufacturing activities, see the entry for commission manufacturing.

Turnover Turnover comprises sales (exclusive of excise and sales tax) of goods whether or not produced by the establishment and transfers of goods to other establishments of the same business, plus service income, funding by Federal, State or Local Governments for operational costs, and own account capital work. Definitions of the various component items appear in this Glossary.

Excluded from turnover are interest income, income from natural resource royalties, funding by Federal, State or Local Governments for specific capital items, dividends, and receipts from the sale of fixed tangible assets.

There are some conceptual differences between turnover as estimated in this publication and turnover as defined by the new international standards. These differences are explained as part of the definition of the component item own account capital work. Full compliance with the new standards would make very little difference to estimates of turnover.

Note (a): The above definition of turnover is used in calculating the variable industry value added. A slightly different definition of turnover was used prior to 1997–98 to calculate the now superseded variable industry gross product. This earlier definition excluded income from intellectual property royalties and the value of computer software developed in-house for use by the business or for rental or lease to other businesses.

Note (b): Transfers to other establishments of the same business referred to in the definition of turnover are valued, for statistical purposes, at prices commensurate with the prices which would have been received if the establishments concerned had been under separate ownership, i.e. at commercial selling price. A significant proportion of the commodities manufactured by some industries is manufactured on commission for non-manufacturing businesses from materials owned and supplied by those businesses. As a consequence, the turnover figures do not reflect the gross value of those commodities but only the commission earned relating to them.

Turnover per person employed Turnover of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.

Wages and salaries The gross wages and salaries (including capitalised wages and salaries) of all employees of the establishment. The item includes severance, termination and redundancy payments, but excludes reimbursements or allowances to employees for travel, entertainment, etc. For the 1995–96 collection only, provision expenses for employee entitlements (e.g. provisions for annual leave and leave bonus, long service leave, sick leave, and severance, termination and redundancy payments) are excluded. The drawings of working proprietors are also excluded.

Wages and salaries to turnover ratio The wages and salaries paid by manufacturing establishments which operated during the year ended 30 June as a proportion of the turnover of manufacturing establishments which operated during the same year.

FOR MORE INFORMATION...

- INTERNET** www.abs.gov.au the ABS web site is the best place to start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a statistical profile.
- LIBRARY** A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.
- CPI INFOLINE** For current and historical Consumer Price Index data, call 1902 981 074 (call cost 77c per minute).
- DIAL-A-STATISTIC** For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

INFORMATION SERVICE

Data which have been published and can be provided within five minutes are free of charge. Our information consultants can also help you to access the full range of ABS information—ABS user-pays services can be tailored to your needs, time frame and budget. Publications may be purchased. Specialists are on hand to help you with analytical or methodological advice.

- PHONE** **1300 135 070**
- EMAIL** **client.services@abs.gov.au**
- FAX** 1300 135 211
- POST** Client Services, ABS, GPO Box 796, Sydney 1041

WHY NOT SUBSCRIBE?

ABS subscription services provide regular, convenient and prompt deliveries of ABS publications and products as they are released. Email delivery of monthly and quarterly publications is available.

- PHONE** 1300 366 323
- EMAIL** subscriptions@abs.gov.au
- FAX** 03 9615 7848
- POST** Subscription Services, ABS, GPO Box 2796Y, Melbourne 3001



2822110007988
ISSN 1326-9836

RRP \$21.00