

MANUFACTURING INDUSTRY

NEW SOUTH WALES AND AUSTRALIAN CAPITAL TERRITORY

EMBARGO: 11:30AM (CANBERRA TIME) THURS 14 OCT 1999

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 For further information about these and related statistics, contact John Ridley on Sydney 02 9268 4541, or Client Services in any ABS office as shown on the back cover of this publication.

NOTES

| ANNUAL MANUFACTURING INDUSTRY COLLECTION | The 1997–98 collection was conducted as a sample survey of approximately 19,000 manufacturing establishments, 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 | This issue includes estimates for 'Industry value added' (IVA) which measures the value added by an industry to the intermediate inputs used by the industry. Under new international standards, this measure replaces 'Industry gross product' (IGP) in manufacturing industry statistics as the measure of the industry's contribution to gross domestic product. Tables 1 and 7 for New South Wales and the Australian Capital Territory (respectively) present estimates for 1997–98 for both IGP and IVA. It should also be noted that IVA is not the same variable as 'Value added' which was published for manufacturing establishments until 1992–93. |
| | Estimates for turnover in this publication have also been affected (but only to a minor extent) by the new international standards. Tables 2 and 8 for New South Wales and the Australian Capital Territory (respectively) present percentage differences between estimates for turnover calculated on the basis of the most recent international standards and corresponding estimates calculated on the basis of the standards which applied previously, and percentage differences between IVA and IGP. |
| | See paragraphs 11–14 of the Explanatory Notes and the Glossary for details of the composition of the relevant variables described above and for explanations of the differences between the new and previous standards as they apply to estimates in this publication. |
| DATA TO BE RELEASED IN OTHER PUBLICATIONS | Detailed manufacturing industry statistics for each State are being released progressively in a series of publications <i>Manufacturing Industry, [State], 1997–98</i> (Cat. nos 8221.1–8221.6). |
| | Commodity data will be released in <i>Manufacturing Production, Commodities Produced, Australia, 1997–98</i> (Cat. no. 8365.0), to be released in December 1999. |
| | Management unit data and a wide range of manufacturing related Australian Bureau of Statistics (ABS) data, as well as data from other sources, will be presented in the compendium publication <i>Manufacturing</i> , <i>Australia</i> , <i>1999</i> (Cat. no. 8225.0), to be released in December 1999. |
| | |

Gregory W. Bray Reg ional Director

NEW SOUTH WALES

OVERVIEW

Turnover for the year 1997–98 by manufacturing establishments operating in New South Wales was \$68,273m, which resulted in an industry value added (IVA) for the year of \$22,186m. For turnover, this represents a 0.3% increase in current price terms from the \$68,043m recorded for 1996–97. These manufacturing establishments employed 303,600 persons at the end of June 1998 and paid \$11,416m in wages and salaries in 1997–98.

The percentage of Australian manufacturing employment in New South Wales at the end of June 1998 was 31.8%, a decrease of 1.0 percentage points on that reported at the end of June 1997. The New South Wales industry subdivisions which made a significant contribution to national manufacturing employment at the end of June 1998 at the industry subdivision level were Printing, publishing and recorded media (40.8%), Metal product manufacturing (34.4%) and Petroleum, coal, chemical and associated product manufacturing (34.3%).

The percentage contribution by New South Wales to total Australian manufacturing turnover and IVA in 1997–98 was 32.1% and 32.3% (respectively). For turnover, this represents a decrease of 0.6 percentage points on the contribution reported in 1996–97. The New South Wales industry subdivisions which made a significant contribution to national manufacturing turnover and IVA in 1997–98 at the industry subdivision level were also Printing, publishing and recorded media (45.4% and 43.8% respectively), Petroleum, coal, chemical and associated product manufacturing (35.6% and 33.9% respectively) and Metal product manufacturing (35.4% and 36.3% respectively).

STATE COMPARISON

For the second consecutive year, for 1997–98, the contribution to Australian turnover by New South Wales manufacturers (\$68,273m) fell below that of manufacturers located in Victoria (\$69,517m). 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. Also, for the first time since June 1990, employment in manufacturing in New South Wales (303,600 persons) was lower at the end of June 1998 than employment in manufacturing in Victoria (314,800 persons).

INDUSTRY VALUE ADDED

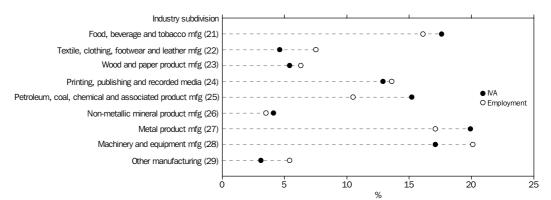
IVA (see the Glossary for its definition) for 1997–98 was \$22,186m. The industry subdivisions with the largest contribution to total manufacturing IVA and the most notable industry classes within those subdivisions (as a percentage of New South Wales' total manufacturing IVA) were:

- Metal product manufacturing (19.9%), where the industry classes Basic iron and steel manufacturing (ANZSIC Class 2711 at 7.2%), Aluminium smelting (ANZSIC Class 2722 at 2.1%) and Structural steel fabricating (ANZSIC Class 2741 at 1.8%) were the most substantial.
- Food, beverage and tobacco manufacturing (17.6%), where the industry classes Meat processing (ANZSIC Class 2111 at 1.8%) and Food manufacturing n.e.c. (ANZSIC Class 2179 at 1.7%) were the most substantial.

INDUSTRY VALUE ADDED continued

- Machinery and equipment manufacturing (17.1%), where the industry classes Electronic equipment manufacturing n.e.c. (ANZSIC Class 2849 at 2.1%) and Aircraft manufacturing (ANZSIC Class 2824 at 1.9%) were the most substantial.
- Petroleum, coal, chemical and associated product manufacturing (15.2%), where the industry classes Medicinal and pharmaceutical product manufacturing (ANZSIC Class 2543 at 3.3%) and Petroleum refining (ANZSIC Class 2510 at 2.1%) were the most substantial.

DISTRIBUTION OF IVA AND EMPLOYMENT

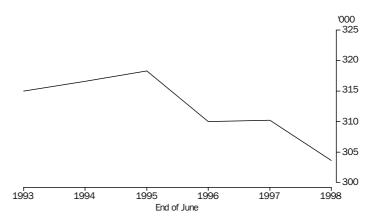


Industry classes making a notable contribution to industry value added and not included in the subdivisions listed above included Newspaper printing or publishing (ANZSIC Class 2421 at 4.3%) and Printing (ANZSIC Class 2412 at 3.7%).

EMPLOYMENT AND WAGES

The New South Wales manufacturing industry employed 303,600 persons at the end of June 1998 and paid \$11,416m in wages and salaries in 1997–98. This represents an average of \$37,600 paid in annual wages and salaries per person employed at the end of June 1998, an increase of 3.0% on the \$36,500 recorded twelve months earlier.

EMPLOYMENT



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EMPLOYMENT AND WAGES continued

New South Wales manufacturing employment slowly increased from June 1993 (315,000 persons) to June 1995 (318,300 persons), after which it has decreased. Employment in the New South Wales manufacturing industry decreased by 2.1% or 6,600 persons between June 1997 (310,200 persons) and June 1998 (303,600 persons). Over the five years from June 1993 to June 1998, employment decreased by 3.6% or 11,300 persons.

Between June 1997 and June 1998, employment decreased in six of the nine manufacturing industry subdivisions and increased in three. Machinery and equipment manufacturing recorded the largest decrease in absolute terms (4,000 persons), accounting for just over 60% of the decrease. The industry subdivisions with the largest percentage decreases were Non-metallic mineral product manufacturing (down 7.3%), Machinery and equipment manufacturing (down 6.1%) and Textile, clothing, footwear and leather manufacturing (down 5.9%). The largest percentage and absolute increase was recorded by Printing, publishing and recorded media (up 4.6% from 39,300 persons to 41,100 persons).

Average wages and salaries paid per person employed at the end of June rose in eight of the nine manufacturing industry subdivisions and fell in the other between 1996–97 and 1997–98.

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 7.0%—\$37,000 to \$39,600), where 8 (out of 11) industry classes recorded an increase, with the largest being:
 - Glass and glass product manufacturing (ANZSIC Class 2610) (up 19.2%—\$44,300 to \$52,800); and
 - Non-metallic mineral product manufacturing n.e.c. (ANZSIC Class 2640) (up 16.6%—\$30,600 to \$35,700).
- Other manufacturing (up 6.0%—\$25,200 to \$26,700), where 7 (out of 9) industry classes recorded an increase, with the largest being:
 - Toy and sporting good manufacturing (ANZSIC Class 2942) (up 32.2%—\$22,600 to \$29,800).
- Machinery and equipment manufacturing (up 5.6%—\$37,800 to \$39,900), where 18 (out of 27) industry classes recorded an increase, with the largest being:
 - Shipbuilding (ANZSIC Class 2821) (up 38.2%—\$41,000 to \$56,600);
 - Commercial space heating and cooling equipment manufacturing (ANZSIC Class 2867) (up 34.2%—\$29,700 to \$39,900); and
 - Telecommunication, broadcasting and transceiving equipment manufacturing (ANZSIC Class 2842) (up 25.1%—\$42,800 to \$53,600).

The industry subdivision to record a decrease between 1996–97 and 1997–98 in wages and salaries paid per person employed at the end of June was Textile, clothing, footwear and leather manufacturing (down 1.6%—\$26,200 to \$25,800), where 11 (out of 19) industry classes recorded a decrease. The industry class which most influenced the

EMPLOYMENT AND WAGES continued

subdivision movement was Women's and girls' wear manufacturing (ANZSIC Class 2242), where both employment and wages and salaries decreased (16.7% and 27.5% respectively). This caused wages and salaries paid per person employed at the end of June to decrease by 13.0% (\$23,800 to \$20,700). Employment in this ANZSIC class also fell from 22.5% of the subdivision total to 19.9%, while wages and salaries fell from 20.4% to 16.0%.

Industry classes belonging to other industry subdivisions and which had the largest percentage increases between 1996-97 and 1997-98 in wages and salaries paid per person employed at the end of June were Oil and fat manufacturing (ANZSIC Class 2140) (up 32.3%—\$47,600 to \$63,000), Paper product manufacturing n.e.c. (ANZSIC Class 2339) (up 26.8%-\$32,900 to \$41,700), Plastic blow moulded product manufacturing (ANZSIC Class 2561) (up 26.8%-\$37,000 to \$46,900), Ice cream manufacturing (ANZSIC Class 2122) (up 26.4%-\$40,600 to \$51,300) and Biscuit manufacturing (ANZSIC Class 2163) (up 26.1%-\$30,300 to \$38,100).

TURNOVER

Note: Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. The effect on the data following the adoption of the new international standards is shown in table 2. These factors need to be taken into consideration in interpreting the following commentary.

Turnover rose, in current pricing terms, by \$229m to \$68,273m for 1997-98. This represents a 0.3% increase on the \$68,043m recorded for 1996-97.

For the first time 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, replacing Metal product manufacturing which is now the second largest.

Five of the nine manufacturing industry subdivisions recorded an increase in turnover between 1996-97 and 1997-98. The largest increase in both dollar (\$755m) and percentage (up 5.7%) terms was recorded by Food, beverage and tobacco manufacturing. A large percentage increase was also recorded by Non-metallic mineral product manufacturing (up 3.2%). Textile, clothing, footwear and leather manufacturing (down 3.9%), Metal product manufacturing (down 2.6%) and Machinery and equipment manufacturing (down 2.5%) were the industry subdivisions to record the largest percentage decreases in turnover.

The industry classes (where publishable) with the largest percentage increases between 1996-97 and 1997-98 were:

- Furniture manufacturing n.e.c. (ANZSIC Class 2929) (up 54.5% or \$111m);
- Oil and fat manufacturing (ANZSIC Class 2140) (up 53.3% or \$144m);
- Timber resawing and dressing (ANZSIC Class 2313) (up 47.2% or \$98m); and
- Made-up textile product manufacturing (ANZSIC Class 2221) (up 45.0% or \$86m).

TURNOVER continued

The industry classes with the largest dollar increases between 1996–97 and 1997–98 were:

- Medicinal and pharmaceutical product manufacturing (ANZSIC Class 2543) (up \$295m or 13.2%); and
- Cereal food and baking mix manufacturing (ANZSIC Class 2152) (up \$183m or 16.9%).

The industry classes (where publishable) with the largest percentage decreases between 1996–97 and 1997–98 were:

- Transport equipment manufacturing n.e.c. (ANZSIC Class 2829) (down 42.4% or \$5m);
- Women's and girls' wear manufacturing (ANZSIC Class 2242) (down 27.6% or \$245m); and
- Inorganic industrial chemical manufacturing n.e.c. (ANZSIC Class 2535) (down 25.9% or \$119m).

The industry classes with the largest dollar decreases between 1996–97 and 1997–98 were:

- Basic iron and steel manufacturing (ANZSIC Class 2711) (down \$576m or 11.1%);
- Women's and girls' wear manufacturing (ANZSIC Class 2242) (down \$245m or 27.6%); and
- Fabricated metal product manufacturing n.e.c. (ANZSIC Class 2769) (down \$205m or 19.4%).

For 1997–98, New South Wales manufacturers directly exported \$8,407m of the goods that they produced. This represents a 6.7% increase on the \$7,881m recorded for 1996–97. The percentage of the total sales and transfers out of goods for sale produced that were exported has also increased (from 12.7% for 1996–97 to 13.5% for 1997–98).

Manufacturers' direct exports increased in seven industry subdivisions and decreased in the other two between 1996–97 and 1997–98. Food, beverage and tobacco manufacturing's increase of \$374m (up 21.0%—from \$1,776m to \$2,150m) was, by far, the most significant contributor to the overall increase, contributing 71% of the total increase. Other industry subdivisions to record significant percentage increases in direct exports between 1996–97 and 1997–98 were Other manufacturing (up 38.5%—from \$70m to \$97m), Printing, publishing and recorded media (up 16.0%—from \$300m to \$349m) and Textile, clothing, footwear and leather manufacturing (up 13.5%—from \$361m to \$410m). A significant decrease was recorded by Metal product manufacturing (down 4.2%—from \$2,778m to \$2,661m).

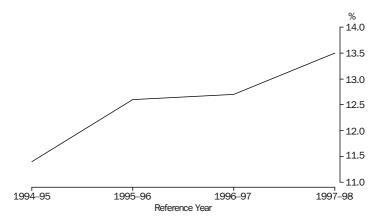
Commencing with the 1994–95 manufacturing collection, data on exports have been consistently collected as part of the annual manufacturing collection. Exports as a proportion of sales and transfers out of goods for sale produced has increased annually, rising from 11.4% for 1994–95 to 13.5% for 1997–98.

EXPORTS

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EXPORTS continued





AUSTRALIAN CAPITAL TERRITORY

Turnover for the year 1997–98 by manufacturing establishments operating in the Australian Capital Territory was \$590.1m, which resulted in an industry value added (IVA) for the year of \$214.8m. For turnover, this represents a 6.2% increase in current price terms from the \$555.7m recorded for 1996–97. Manufacturing employment at the end of June 1998 was 3,870 persons, an increase of 7.6% from the 3,595 persons recorded 12 months earlier. The percentage contribution by the Australian Capital Territory to total Australian manufacturing turnover and IVA in 1997–98 was 0.3% and to employment at the end of June 1998 was 0.4%.

In the Australian Capital Territory, Printing, publishing and recorded media was the largest contributor, by far, to total manufacturing employment at the end of June 1998 (38.6%), annual turnover (32.7%) and annual IVA (41.3%). Other large contributors were Food, beverage and tobacco manufacturing (11.1%, 20.2% and 14.1% respectively) and Machinery and equipment manufacturing (19.4%, 18.3% and 20.9% respectively). The smallest contributor was Petroleum, coal, chemical and associated product manufacturing (0.7%, 0.5% and 0.6% respectively).

Seven of the nine industry subdivisions recorded an increase in the level of employment between June 1997 and June 1998, with the remaining two recording a decrease. Although overall turnover increased by 6.2% from 1996–97 to 1997–98, only four industry subdivisions recorded an increase in the level of turnover between 1996–97 and 1997–98, while five recorded decreases.

Food, beverage and tobacco manufacturing recorded the largest percentage increase for both employment (up 31.5%—327 persons to 430 persons) and turnover (up 84.3%— \$64.8m to \$119.3m). However, Machinery and equipment manufacturing recorded the largest absolute increase in employment (up 158 persons—592 persons to 750 persons).

Printing, publishing and recorded media recorded the largest decrease in employment in absolute terms (down 27 persons—1,522 persons to 1,495 persons) and the largest percentage and absolute decrease in turnover (down 10.1%—\$214.5m to \$192.8m).

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations(b)-NSW

Ratio of Turnover Employment Industry Industry wages and per person at end Wages and gross value salaries to employed INDUSTRY SUBDIVISION of June(c) salaries(d)(e) product(e) added(e) Turnover(e) turnover(e) (e)(f) ANZSIC code Description '000 \$m \$m \$m \$m ratio \$'000 (g)14 098.4 21 1997 - 98(h)3 798.4 Food, beverage and tobacco mfg 49.0 1 825.5 (h)3 909.7 0.13 287.9 1996-97r 48.3 1 731.7 13 343.5 3 153.9 0.13 276.3 . . 1995-96 47.9 12 989.0 (i)1 597.0 3 281.9 0.12 271.0 . . 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 1992-93 1 563.6 11 785.3 3 237.5 50.4 0.13 233.9 . . (g)3 129.0 22 Textile, clothing, footwear and leather mfg 1997-98 (h)986.9 22.7 584.9 (h)1 014.3 0.19 137.9 1996-97r 24.1 631.6 3 257.2 1 039.9 0.19 135.0 . . 1995-96 24.1 (i)596.1 3 257.0 1 046.3 0.18 135.2 . . 1994-95 25.8 630.8 3 2 4 1.2 0.19 125.6 1993-94 24.1 546.8 3 003.2 0.18 124.9 . . 1992 - 9324.8 589.0 2 863.7 911.0 0.21 115.7 . . 23 1997-98 638.7 (g)3 464.5 (h)1 166.5 180.3 Wood and paper product mfg 19.2 (h)1 207.9 0.18 1996-97r 19.1 628.0 3 410.4 1 166.4 0.18 178.5 . . 1995-96 20.7 (i)612.5 3 590.7 1 282.6 0.17 173.5 . . 1994-95 20.7 627.0 3 604.7 0.17 174.2 1993-94 3 427.9 20.0 554.0 0.16 171.8 1992-93 1 047.2 19.2 548.4 3 230.7 168.0 0.17 . . 24 Printing, publishing and recorded media 1997-98 41.1 1 556.9 (g)6 869.1 (h)2 993.4 0.23 167.0 (h)2 867.3 1996-97r 39.3 1 461.0 6 764.5 3 006.1 0.22 172.0 . . 1995-96 36.7 (i)1 363.3 6 341.2 2 899.2 0.21 172.8 . . 1994 - 9537.8 1 318.9 6 055.5 0.22 160.0 1993-94 5 595.5 37.0 1 218.7 0.22 151.3 . . 1992-93 5 284.0 2 158.2 36.3 1 179.0 0.22 145.7 . . 25 Petroleum, coal, chemical and associated 1997-98 product mfg 31.8 1 364.4 (g)11 886.4 (h)3 271.3 (h)3 382.4 0.11 374.3 1996-97r 32.2 1 336.6 11 925.4 3 179.0 0.11 370.4 . . 1995-96 (i)1 310.5 11 557.9 33.9 3 232.0 0.11 341.2 . . 1994-95 32.2 1 250.7 11 420.9 0.11 354.2 . . 1993-94 11 375.9 33.7 1 240.6 0.11 337.1 . . 1992-93 34.1 1 189.2 10 878.1 2 735.7 0.11 319.4 . . 26 Non-metallic mineral product mfg 1997-98 10.6 420.2 (g)2 782.9 (h)867.2 (h)902.8 0 15 262.3 1996-97r 11.4 423.6 2 697.5 834.2 0.16 235.7 . . 1995-96 (i)385.5 11.3 2 635.3 888.9 0.15 232.5 . . 12.2 1994-95 424.2 2 897.6 0.15 236.9 1993-94 405.6 2 769.0 0.15 234.9 11.8 . . 1992 - 9312.7 437.2 2 770.3 918.6 . . 0.16 217.9

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 11–18 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

- (e) Value data are at current prices and, therefore, do not discount the impact of price changes.
- (f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(g) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. The effect on the data following the adoption of the new international standards is shown in table 2. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

- (h) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. Industry gross product is also shown for 1997–98. The effect on the data following the adoption of the new international standards is shown in table 2. For more details, see paragraphs 13 and 14 of the Explanatory Notes.
- For 1995–96, excludes provision expenses for employee entitlements. See paragraph 18 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations(b)-NSW continued

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Ratio of Turnover Employment Industry Industrv wages and per person at end Wages and value salaries to employed gross INDUSTRY SUBDIVISION of June(c) salaries(d)(e) Turnover(e) product(e) added(e) turnover(e) (e)(f) ANZSIC Description '000 \$m \$'000 code \$m \$m \$m ratio . (g)13 584.6 27 Metal product mfg 1997 - 9851.9 2 157.8 (h)4 278.8 (h)4 420.5 0.16 261.8 1996-97r 53.8 2 226.8 13 947.6 4 086.9 0.16 259.2 . . 1995-96 52.3 (i)2 047.5 13 972.5 4 315.3 0.15 267.0 . . 1994 - 9556.7 2 163.7 13 667.4 0.16 241.2 1993-94 57.5 2 045.4 13 260.3 0.15 230.6 . . 1992-93 58.7 2 008.0 12 244.3 3 734.8 . . 0.16 208.5 28 Machinery and equipment mfg 1997 - 9861.0 2 432.1 (g)10 472.2 (h)3 625.2 (h)3 788.3 0.23 171.7 1996-97r 65.0 2 452.7 10 739.1 3 759.2 0.23 165.3 . . 1995-96 66.6 (i)2 311.7 10 733.9 0.22 161.1 3 770.8 . . 1994 - 9567.2 2 217.2 10 458.8 0.21 155.7 1993-94 64.3 2 084.6 9 788.2 0.21 152.2 1992-93 2 069.0 3 253.4 62.1 9 208.1 . . 0.22 148.2 29 Other manufacturing 1997-98 (g)1 985.8 16.3 435.5 (h)673.0 (h)693.2 0.22 121.6 1996-97r 16.9 425.9 1 958.2 694.1 0.22 115.7 . . 1995–96 16.4 (i)402.5 1 887.7 693.4 0.21 114.9 . . 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 . . 1992-93 16.7413.2 1 832.6 618.7 . . 0.23 110.0 21–29 Total manufacturing 1997-98 303.6 11 415.9 (g)68 272.9 (h)21 660.7 (h)22 186.4 224.9 0.17 1996-97r 310.2 11 317.9 68 043.4 20 919.6 0.17 219.4 . . 1995-96 310.0 (i)10 626.5 66 965.2 21 410.3 0.16 216.0 . . 1994-95 65 930.3 318.3 10 600.4 0.16 207.1 1993-94 316.6 10 139.8 63 581.6 0.16 200.8 . . 1992-93 315.0 9 996.6 60 097.2 18 615.2 190.8 0.17

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 11-18 of the Explanatory Notes.

- (c) Includes working proprietors.
- (d) Excludes the drawings of working proprietors.
- (e) Value data are at current prices and, therefore, do not discount the impact of price changes.
- (f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(g) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. The effect on the data following the adoption of the new international standards is shown in table 2. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

- (h) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. Industry gross product is also shown for 1997–98. The effect on the data following the adoption of the new international standards is shown in table 2. For more details, see paragraphs 13 and 14 of the Explanatory Notes.
- For 1995–96, excludes provision expenses for employee entitlements. See paragraph 18 of the Explanatory Notes.

| INDUSTRY SUBDIVISION | | Difference between IVA estimates and IGP estimates |
|---|---------------|---|
| ANZSIC | | |
| code Description | % | % |
| | | |
| 21 Food, beverage and tobacco mfg | _ | 2.9 |
| 22 Textile, clothing, footwear and leather mfg | _ | 2.8 |
| 23 Wood and paper product mfg | _ | 3.6 |
| 24 Printing, publishing and recorded media | 0.1 | -4.2 |
| 25 Petroleum, coal, chemical and associated product mfg | 0.3 | 3.4 |
| 26 Non-metallic mineral product mfg | 0.1 | 4.1 |
| 27 Metal product mfg | 0.1 | 3.3 |
| 28 Machinery and equipment mfg | 0.1 | 4.5 |
| 29 Other manufacturing | 0.1 | 3.0 |
| 21–29 Total manufacturing | 0.1 | 2.4 |
| | • • • • • • • | • • • • • • • • • • |

(a) This table presents percentage differences between estimates for turnover calculated on the basis of the most recent international standards and corresponding estimates calculated on the basis of the standards which applied previously, and percentage differences between IVA and IGP (the previous measure of an industry's contribution to GDP). Paragraphs 11–14 of the Explanatory Notes provide details of the changes to the international standards.

(b) Industry group and industry class estimates have been affected similarly, with one exception. IVA for Book and other publishing (ANZSIC Class 2423) is 51.2% lower than IGP for 1997–98.

| INDUST | RY CLASS | Employment at end of June(b) | Wages and salaries(c) | Turnover(d) | Industry value added(e) | Turnover per person employed(f) | Industry value added per person employed(g) |
|----------------|---------------------------------------|------------------------------------|--------------------------|------------------|-------------------------------|---------------------------------------|--|
| ANZSIC code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| | | | | | | | • • • • • • • • |
| | FOOD, BEVERAGE AND TOBACCO MFG | | | | | | |
| | Meat and meat product mfg | | | | | | |
| 2111 | Meat processing | 8 502 | 284.4 | 1 681.2 | 397.8 | 197.7 | 46.8 |
| 2112 2113 | Poultry processing | 6 556 | 201.1 | 1 075.9 | 275.4 112.6 | 164.1 | 42.0 |
| 2113 | Bacon, ham and smallgood mfg Total | 1 415 16 474 | 45.3 530.8 | 369.1 3 126.1 | 785.8 | 260.9 189.8 | 79.6 47.7 |
| 211 | Total | 10 47 4 | 550.8 | 5 120.1 | 785.8 | 109.0 | 47.7 |
| | Dairy product mfg | | | | | | |
| 2121 | Milk and cream processing | 1 898 | 76.6 | 752.1 | 155.6 | 396.3 | 82.0 |
| 2122 | Ice cream mfg | 1 054 | 54.1 | 274.3 | 106.2 | 260.2 | 100.7 |
| 2129 | Dairy product mfg n.e.c. | 1 050 | 38.2 | 355.5 | 71.9 | 338.5 | 68.5 |
| 212 | Total | 4 002 | 168.9 | 1 381.9 | 333.7 | 345.3 | 83.4 |
| 213 | Fruit and vegetable processing | 2 391 | 88.0 | 677.1 | 125.1 | 283.1 | 52.3 |
| 214 | Oil and fat mfg | 720 | 45.4 | 415.0 | 105.4 | 576.0 | 146.3 |
| | Flour mill and cereal food mfg | | | | | | |
| 2151 | Flour mill product mfg | 1 218 | 55.0 | 648.8 | 151.5 | 532.8 | 124.4 |
| 2152 | Cereal food and baking mix mfg | 2 042 | 79.1 | 1 266.6 | 315.4 | 620.3 | 154.5 |
| 215 | Total | 3 260 | 134.1 | 1 915.4 | 466.9 | 587.6 | 143.2 |
| | Bakery product mfg | | | | | | |
| 2161 | Bread mfg | 2 864 | 114.3 | 402.9 | 126.8 | 140.7 | 44.3 |
| 2162 | Cake and pastry mfg | 2 451 | 67.7 | 289.1 | 89.9 | 117.9 | 36.7 |
| 2163 | Biscuit mfg | 1 213 | 46.3 | 268.8 | 166.4 | 221.6 | 137.2 |
| 216 | Total | 6 528 | 228.3 | 960.7 | 383.1 | 147.2 | 58.7 |
| | Other fred wife | | | | | | |
| 2171 | Other food mfg Sugar mfg | 484 | n n | nn | nn | n n | n n |
| 2171 | Confectionery mfg | 484 1 615 | n.p. 69.8 | n.p. 364.8 | n.p. 120.8 | n.p. 225.8 | n.p. 74.8 |
| 2173 | Seafood processing | 637 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2174 | Prepared animal and bird feed mfg | 1 473 | 70.9 | 972.9 | 196.3 | 660.5 | 133.3 |
| 2179 | Food mfg n.e.c. | 5 786 | 201.4 | 1 213.4 | 387.4 | 209.7 | 67.0 |
| 217 | Total | 9 995 | 389.3 | 2 940.8 | 776.4 | 294.2 | 77.7 |
| | Beverage and malt mfg | | | | | | |
| 2181 | Soft drink, cordial and syrup mfg | 2 095 | 80.4 | 803.6 | 194.8 | 383.5 | 92.9 |
| 2182 | Beer and malt mfg | 861 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2183 | Wine mfg | 1 706 | 55.7 | 450.0 | 140.2 | 263.8 | 82.2 |
| 2184 | Spirit mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 218 | Total | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 219 | Tobacco product mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 21 | Total food, beverage and tobacco mfg | 48 972 | 1 825.5 | 14 098.4 | 3 909.7 | 287.9 | 79.8 |
| •••• | | • • • • • • • • • • • • • • • | • • • • • • • • | • • • • • • • • | | • • • • • • • • • | •••• |

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

(e) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes. (f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(g) Industry value added divided by the number of persons employed at the end of June. Includes working proprietors.

| INDUST | RY CLASS | Employment at end of June(b) | Wages and salaries(c) | Turnover(d) | Industry value added(e) | Turnover per person employed(f) | Industry value added per person employed(g) |
|--------------|---|------------------------------------|--------------------------|-----------------|-------------------------------|---------------------------------------|--|
| ANZSIC | | | | | | | |
| code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| • • • • • | TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG | • • • • • • • • • | | • • • • • • • • | • • • • • • • | | •••• |
| | Textile fibre, yarn and woven fabric mfg | | | | | | |
| 2211 | Wool scouring | 707 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2212 | Synthetic fibre textile mfg | 832 | 29.1 | 155.8 | 56.7 | 187.2 | 68.1 |
| 2213 2214 | Cotton textile mfg Wool textile mfg | 776 | 28.5 | 124.8 | 44.7 | 160.9 | 57.6 |
| 2214 | Textile finishing | 588 *658 | n.p. 16.4 | n.p. 89.6 | n.p. 30.7 | n.p. *136.2 | n.p. *46.7 |
| 2213 | Total | 3 561 | 125.7 | 598.2 | 214.8 | 168.0 | 60.3 |
| | Textile product mfg | | | | | | |
| 2221 | Made-up textile product mfg | 2 265 | 52.9 | 277.6 | 89.3 | 122.6 | 39.4 |
| 2222 | Textile floor covering mfg | 237 | 9.5 | 52.7 | 15.9 | 222.6 | 67.3 |
| 2223 | Rope, cordage and twine mfg | *88 | 2.2 | 17.5 | 5.5 | 199.6 | 62.8 |
| 2229 | Textile product mfg n.e.c. | 559 | 13.6 | 55.9 | 19.9 | 100.1 | 35.6 |
| 222 | Total | 3 147 | 78.3 | 403.7 | 130.7 | 128.3 | 41.5 |
| | Knitting mills | | | | | | |
| 2231 | Hosiery mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2232 | Cardigan and pullover mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2239 223 | Knitting mill product mfg n.e.c. Total | 737 1 746 | 23.0 47.4 | 199.5 313.9 | 45.6 81.9 | 270.7 179.8 | 61.9 46.9 |
| 225 | Total | 1740 | 47.4 | 515.9 | 01.9 | 179.0 | 40.9 |
| 2241 | Clothing mfg | 0.075 | <u> </u> | 000 F | 00.4 | 400.0 | 20.7 |
| 2241 | Men's and boys' wear mfg Women's and girls' wear mfg | 2 075 4 515 | 62.6 93.4 | 282.5 642.6 | 82.4 208.7 | 136.2 142.3 | 39.7 46.2 |
| 2242 | Sleepwear, underwear and infant clothing mfg | 4 515 1 362 | 93.4 42.5 | 224.1 | 208.7 53.1 | 142.5 | 38.9 |
| 2249 | Clothing mfg n.e.c. | 4 036 | 80.1 | 355.2 | 154.8 | 88.0 | 38.4 |
| 224 | Total | 11 988 | 278.6 | 1 504.3 | 499.0 | 125.5 | 41.6 |
| 225 | Footwear mfg | 1 490 | 33.2 | 112.2 | 46.0 | 75.3 | 30.9 |
| | Leather and leather product mfg | | | | | | |
| 2261 | Leather tanning and fur dressing | 561 | 17.5 | 174.0 | 34.8 | 310.3 | 62.1 |
| 2262 | Leather and leather substitute product mfg | 201 | 4.3 | 22.7 | 7.2 | 112.9 | 35.6 |
| 226 | Total | 761 | 21.8 | 196.7 | 42.0 | 258.3 | 55.1 |
| 22 | Total textile, clothing, footwear and leather mfg | 22 695 | 584.9 | 3 129.0 | 1 014.3 | 137.9 | 44.7 |
| | WOOD AND PAPER PRODUCT MFG | | | | | | |
| | Log sawmilling and timber dressing | | | | | | |
| 2311 | Log sawmilling | 1 767 | 49.5 | 183.2 | 81.7 | 103.7 | 46.3 |
| 2312 | Wood chipping | 240 | 8.3 | 72.0 | 34.8 | 300.2 | 145.3 |
| 2313 231 | Timber resawing and dressing Total | 1 697 3 703 | 58.5 116.3 | 305.6 560.9 | 86.8 203.4 | 180.1 151.5 | 51.2 54.9 |
| | Other wood product mfg | | | | | | |
| 2321 | Plywood and veneer mfg | 391 | 10.5 | 55.3 | 18.1 | 141.3 | 46.3 |
| 2322 | Fabricated wood mfg | 1 141 | 47.1 | 288.5 | 87.3 | 252.9 | 76.5 |
| 2323 | Wooden structural component mfg | 6 906 | 173.4 | 837.6 | 259.1 | 121.3 | 37.5 |
| 2329 | Wood product mfg n.e.c. | 1 810 | 38.7 | 176.8 | 62.5 | 97.6 | 34.5 |
| 232 | Total | 10 248 | 269.8 | 1 358.2 | 427.0 | 132.5 | 41.7 |

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see

paragraphs 11 and 12 of the Explanatory Notes. (e) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross

domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

(f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(g) Industry value added divided by the number of persons employed at the end of June. Includes working proprietors.

| | | Employment at end | Wages and | | Industry value | Turnover per person | Industry value added per person |
|--------------|---|----------------------|---------------|------------------|-------------------|------------------------|---------------------------------------|
| INDUST | RY CLASS | of June(b) | salaries(c) | Turnover(d) | added(e) | employed(f) | employed(g) |
| ANZSIC | | | | | | | |
| code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| • • • • • | | •••••• | • • • • • • • | • • • • • • • • | • • • • • • • | • • • • • • • • • | •••• |
| 0004 | Paper and paper product mfg | | | | | | |
| 2331 | Pulp, paper and paperboard mfg | 1 456 | 74.0 | 568.5 | 205.6 | 390.3 | 141.2 |
| 2332 2333 | Solid paperboard container mfg Corrugated paperboard container mfg | 966 1 646 | 50.5 79.2 | 237.3 415.3 | 100.3 164.5 | 245.6 252.3 | 103.8 99.9 |
| 2334 | Paper bag and sack mfg | 236 | 9.0 | 415.3 | 104.5 | 202.3 | 53.3 |
| 2339 | Paper product mfg n.e.c. | 959 | 40.0 | 276.7 | 94.6 | 288.4 | 98.7 |
| 233 | Total | 5 263 | 252.6 | 1 545.5 | 577.5 | 293.6 | 109.7 |
| 23 | Total wood and paper product mfg | 19 215 | 638.7 | 3 464.5 | 1 207.9 | 180.3 | 62.9 |
| | PRINTING, PUBLISHING AND RECORDED MEDIA | | | | | | |
| | Printing and services to printing | | | | | | |
| 2411 | Paper stationery mfg | 2 748 | 89.4 | 345.3 | 140.2 | 125.6 | 51.0 |
| 2412 | Printing | 14 910 | 487.8 | 2 016.1 | 817.4 | 135.2 | 54.8 |
| 2413 | Services to printing | 2 729 | 103.9 | 305.7 | 156.0 | 112.0 | 57.2 |
| 241 | Total | 20 387 | 681.1 | 2 667.1 | 1 113.6 | 130.8 | 54.6 |
| | Publishing | | | | | | |
| 2421 | Newspaper printing or publishing | 11 769 | 519.7 | 2 082.8 | 953.8 | 177.0 | 81.0 |
| 2422 | Other periodical publishing | 4 704 | 185.9 | 857.8 | 299.4 | 182.3 | 63.6 |
| 2423 | Book and other publishing | 2 952 | 111.9 | 737.5 | 192.6 | 249.8 | 65.2 |
| 242 | Total | 19 425 | 817.5 | 3 678.1 | 1 445.8 | 189.3 | 74.4 |
| 243 | Recorded media manufacturing and publishing | 1 331 | 58.3 | 523.9 | 307.9 | 393.5 | 231.3 |
| 24 | Total printing, publishing and recorded media | 41 144 | 1 556.9 | 6 869.1 | 2 867.3 | 167.0 | 69.7 |
| | PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG | | | | | | |
| 251 | Petroleum refining | 1 252 | 90.8 | 2 866.4 | 465.0 | 2 289.5 | 371.4 |
| 252 | Petroleum and coal product mfg n.e.c. | 98 | 5.1 | 79.4 | 17.0 | 811.2 | 173.7 |
| | Basic chemical mfg | | | | | | |
| 2531 | Fertiliser mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2532 | Industrial gas mfg | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2533 | Synthetic resin mfg | 905 | 48.1 | 543.9 | 149.7 | 600.7 | 165.4 |
| 2534 | Organic industrial chemical mfg n.e.c. | 384 | 26.9 | 430.4 | 81.5 | 1 120.6 | 212.1 |
| 2535 253 | Inorganic industrial chemical mfg n.e.c. Total | 794 2 773 | 48.2 156.5 | 340.1 1 547.2 | 163.8 525.2 | 428.2 558.0 | 206.2 189.4 |
| 200 | Total | 2113 | 150.5 | 1 347.2 | 525.2 | 556.0 | 109.4 |
| 0544 | Other chemical product mfg | | | | | | |
| 2541 | Explosive mfg | 717 | 34.4 | 201.7 | 79.8 | 281.4 | 111.3 |
| 2542 2543 | Paint mfg Medicinal and pharmaceutical product mfg | 1 977 6 067 | 79.9 279.7 | 537.9 2 533.1 | 180.9 727.5 | 272.0 417.5 | 91.5 119.9 |
| 2543 2544 | Pesticide mfg | 556 | 279.7 26.9 | 2 533.1 377.0 | 101.0 | 417.5 678.4 | 119.9 |
| 2545 | Soap and other detergent mfg | 1 641 | 20.9 76.0 | 579.3 | 169.4 | 353.1 | 103.2 |
| 2546 | Cosmetic and toiletry preparation mfg | 2 365 | 107.6 | 615.4 | 163.1 | 260.2 | 69.0 |
| 2547 | Ink mfg | 230 | 9.3 | 67.9 | 33.8 | 295.1 | 147.0 |
| 2549 | Chemical product mfg n.e.c. | 1 634 | 67.3 | 377.4 | 117.0 | 231.0 | 71.6 |
| 254 | Total | 15 187 | 680.9 | 5 289.8 | 1 572.5 | 348.3 | 103.5 |

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

(e) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes. (f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(g) Industry value added divided by the number of persons employed at the end of June. Includes working proprietors.

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| | | Frankaumaant | | | Industry | Turnovar | Industry |
|--------------|--|----------------------|-----------------|-----------------|-------------------|------------------------|---------------------------|
| | | Employment at end | Wages and | | Industry value | Turnover per person | value added per person |
| INDUST | RY CLASS | of June(b) | salaries(c) | Turnover(d) | added(e) | employed(f) | employed(g) |
| | | | | | | | |
| ANZSIC | Description | | ¢ | ¢ | ¢ | ¢1000 | ¢1000 |
| code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| • • • • • | • | ••••• | • • • • • • • • | • • • • • • • • | • • • • • • • | | •••• |
| | Rubber product mfg | | | | | | |
| 2551 | Rubber tyre mfg | 410 | 10.0 | 74.7 | 23.8 | 182.3 | 58.2 |
| 2559 | Rubber product mfg n.e.c. | 1 248 | 37.4 | 130.3 | 53.0 | 104.4 | 42.5 |
| 255 | Total | 1 658 | 47.4 | 205.0 | 76.9 | 123.7 | 46.4 |
| | Plastic product mfg | | | | | | |
| 2561 | Plastic blow moulded product mfg | 1 159 | 54.3 | 270.2 | 100.5 | 233.2 | 86.7 |
| 2562 | Plastic extruded product mfg | 1 373 | 53.3 | 280.6 | 98.5 | 204.4 | 71.7 |
| 2563 | Plastic bag and film mfg | 1 656 | 59.9 | 357.6 | 128.8 | 215.9 | 77.8 |
| 2564 | Plastic product, rigid fibre reinforced, mfg | 1 173 | 34.9 | 157.3 | 59.5 | 134.1 | 50.7 |
| 2565 | Plastic foam product mfg | 682 | 25.3 | 143.2 | 53.2 | 210.0 | 78.1 |
| 2566 | Plastic injection moulded product mfg | 4 748 | 155.9 | 689.7 | 285.2 | 145.3 | 60.1 |
| 256 | Total | 10 791 | 383.7 | 1 898.6 | 725.8 | 175.9 | 67.3 |
| ~- | | | | | | | |
| 25 | Total petroleum, coal, chemical and associated | 04 750 | | 44 000 4 | | | 400 5 |
| | product mfg | 31 758 | 1 364.4 | 11 886.4 | 3 382.4 | 374.3 | 106.5 |
| | NON-METALLIC MINERAL PRODUCT MFG | | | | | | |
| 261 | Glass and glass product mfg | 1 230 | 65.0 | 291.0 | 100.8 | 236.6 | 82.0 |
| 201 | | 1200 | 00.0 | 201.0 | 100.0 | 200.0 | 02.0 |
| | Ceramic mfg | | | | | | |
| 2621 | Clay brick mfg | 1 057 | 41.5 | 231.8 | 87.7 | 219.3 | 82.9 |
| 2622 | Ceramic product mfg | 714 | 32.9 | 141.2 | 37.7 | 197.7 | 52.8 |
| 2623 | Ceramic tile and pipe mfg | 137 | 5.0 | 36.4 | 20.2 | 266.5 | 147.4 |
| 2629 | Ceramic product mfg n.e.c. | 664 | 21.0 | 97.6 | 46.1 | 147.0 | 69.5 |
| 262 | Total | 2 571 | 100.3 | 507.0 | 191.7 | 197.1 | 74.5 |
| | | | | | | | |
| 0004 | Cement, lime, plaster and concrete product mfg | 500 | | | | | |
| 2631 2632 | Cement and lime mfg | 530 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2632 | Plaster product mfg Concrete slurry mfg | 468 2 014 | 22.6 64.8 | 171.5 790.2 | 75.6 131.8 | 366.7 392.5 | 161.6 65.5 |
| 2634 | Concrete pipe and box culvert mfg | 401 | n.p. | n.p. | n.p. | | n.p. |
| 2635 | Concrete product mfg n.e.c. | 1 430 | 47.9 | 302.6 | 128.3 | n.p. 211.6 | 89.7 |
| 263 | Total | 4 842 | 184.7 | 1 576.9 | 456.5 | 325.7 | 94.3 |
| | | | | | | | |
| 264 | Non-metallic mineral product mfg n.e.c. | 1 965 | 70.2 | 408.1 | 153.8 | 207.7 | 78.3 |
| | | | | | | | |
| 26 | Total non-metallic mineral product mfg | 10 608 | 420.2 | 2 782.9 | 902.8 | 262.3 | 85.1 |
| | | | | | | | |
| | METAL PRODUCT MFG | | | | | | |
| 2711 | Iron and steel mfg | 12 341 | 751.0 | 4 627.8 | 1 605.0 | 375.0 | 130.1 |
| 2711 | Basic iron and steel mfg Iron and steel casting and forging | 12 341 | 751.8 | | | | |
| 2712 | Steel pipe and tube mfg | 1 005 | n.p. n.p. | n.p. n.p. | n.p. n.p. | n.p. n.p. | n.p. n.p. |
| 2713 | Total | 14 973 | 875.1 | 5 363.5 | 1 845.3 | 358.2 | 123.2 |
| | | 14 913 | 575.1 | 5 505.5 | 1 040.0 | 556.2 | 120.2 |
| | Basic non-ferrous metal mfg | | | | | | |
| 2721 | Alumina production | _ | _ | _ | _ | _ | _ |
| 2722 | Aluminium smelting | 1 936 | 101.4 | 1 447.8 | 463.7 | 747.7 | 239.5 |
| 2723 | Copper, silver, lead and zinc | | | | | | |
| | smelting, refining | 566 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 2729 | Basic non-ferrous metal mfg n.e.c. | 38 | n.p. | n.p. | n.p. | n.p. | n.p. |
| 272 | Total | 2 539 | 132.2 | 1 700.4 | 517.3 | 669.6 | 203.7 |
| | | | | | | | |

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

- (e) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.
- (f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.
- (g) Industry value added divided by the number of persons employed at the end of June. Includes working proprietors.

| | RY CLASS | Employment at end of June(b) | Wages and salaries(c) | Turnover(d) | Industry value added(e) | Turnover per person employed(f) | Industry value added per person employed(g) |
|----------------|--|------------------------------------|--------------------------|-------------------|-------------------------------|---------------------------------------|--|
| | | of Julie(b) | Salaries(C) | rumover(u) | auueu(e) | empioyeu(i) | employed(g) |
| ANZSIC code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| | | | | • • • • • • • • • | | | • • • • • • • • |
| | Non-ferrous basic metal product mfg | | | | | | |
| 2731 | Aluminium rolling, drawing, extruding | 1 571 | 76.3 | 614.5 | 114.1 | 391.0 | 72.6 |
| 2732 | Non-ferrous metal rolling, drawing, extruding n.e.c. | 1 167 | 51.8 | 747.3 | 115.7 | 640.5 | 99.1 |
| 2733 273 | Non-ferrous metal casting Total | 273 3 011 | 8.4 136.5 | 27.7 1 389.5 | 12.1 241.9 | 101.5 <i>461.4</i> | 44.5 80.3 |
| | | | | | | | |
| 0744 | Structural metal product mfg | | | | | | |
| 2741 | Structural steel fabricating | 6 356 | 206.6 | 1 244.1 | 392.2 | 195.7 | 61.7 |
| 2742 2749 | Architectural aluminium product mfg Structural metal product mfg n.e.c. | 4 091 2 352 | 109.9 63.9 | 660.0 330.2 | 213.8 128.7 | 161.3 140.4 | 52.3 54.7 |
| 274 | Total | 12 799 | 380.3 | 2 234.3 | 734.8 | 174.6 | 57.4 |
| | | | | | | | |
| 2751 | Sheet metal product mfg | 1 407 | F7 0 | 329.6 | 109.5 | 004.0 | 77.0 |
| 2751 | Metal container mfg Sheet metal product mfg n.e.c. | 1 407 4 463 | 57.3 150.3 | 329.6 657.5 | 258.3 | 234.2 147.3 | 77.8 57.9 |
| 275 | Total | 4 403 5 870 | 207.6 | 987.0 | 367.8 | 168.1 | 62.6 |
| | | | | | | | |
| 0704 | Fabricated metal product mfg | 000 | 10.0 | 70.4 | 07.0 | 110.0 | |
| 2761 2762 | Hand tool and general hardware mfg Spring and wire product mfg | 660 | 19.9 | 73.1 | 27.3 | 110.8 | 41.4 |
| 2762 | Nut, bolt, screw and rivet mfg | 2 360 510 | 93.3 17.4 | 533.5 94.3 | 205.2 34.5 | 226.0 185.0 | 87.0 67.6 |
| 2764 | Metal coating and finishing | 1 791 | 56.5 | 206.9 | 91.7 | 115.5 | 51.2 |
| 2765 | Non-ferrous pipe fitting mfg | 969 | 33.8 | 146.2 | 60.1 | 150.9 | 62.1 |
| 2769 | Fabricated metal product mfg n.e.c. | 6 409 | 205.1 | 856.0 | 294.6 | 133.6 | 46.0 |
| 276 | Total | 12 698 | 426.0 | 1 910.0 | 713.5 | 150.4 | 56.2 |
| 27 | Total metal product mfg | 51 890 | 2 157.8 | 13 584.6 | 4 420.5 | 261.8 | 85.2 |
| | MACHINERY AND EQUIPMENT MFG | | | | | | |
| | Motor vehicle and part mfg | | | | | | |
| 2811 | Motor vehicle mfg | _ | _ | _ | _ | | _ |
| 2812 | Motor vehicle body mfg | 1 543 | 40.0 | 180.8 | 58.3 | 117.2 | 37.8 |
| 2813 | Automotive electrical and instrument mfg | 856 | 30.5 | 105.1 | 32.5 | 122.7 | 38.0 |
| 2819 | Automotive component mfg n.e.c. | 3 157 | 117.0 | 536.9 | 199.2 | 170.1 | 63.1 |
| 281 | Total | 5 557 | 187.6 | 822.8 | 290.1 | 148.1 | 52.2 |
| | Other transport equipment mfg | | | | | | |
| 2821 | Shipbuilding | 1 490 | 84.3 | 344.6 | 134.0 | 231.3 | 90.0 |
| 2822 | Boatbuilding | 904 | 20.2 | 86.4 | 27.8 | 95.6 | 30.7 |
| 2823 | Railway equipment mfg | 1 625 | 71.1 | 337.7 | 119.9 | 207.8 | 73.8 |
| 2824 | Aircraft mfg | 5 645 | 298.2 | 815.3 | 419.6 | 144.4 | 74.3 |
| 2829 | Transport equipment mfg n.e.c. | 62 | 1.4 | 6.4 | 1.9 | 104.2 | 30.4 |
| 282 | Total | 9 725 | 475.1 | 1 590.4 | 703.3 | 163.5 | 72.3 |
| | Photographic and scientific equipment mfg | | | | | | |
| 2831 | Photographic and optical good mfg | 314 | 9.8 | 42.7 | 17.5 | 136.1 | 55.7 |
| 2832 | Medical and surgical equipment mfg | 1 996 | 66.1 | 300.6 | 109.0 | 150.6 | 54.6 |
| 2839 | Professional and scientific equipment mfg n.e.c. | 1 498 | 56.4 | 202.1 | 80.8 | 134.9 | 53.9 |
| 283 | Total | 3 808 | 132.3 | 545.4 | 207.3 | 143.2 | 54.4 |
| • • • • • | | | • • • • • • • • | • • • • • • • • | | | • • • • • • • • |

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(g) Industry value added divided by the number of persons employed at the end of June. Includes working proprietors.

(d) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

(e) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

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| | | | | | | | Industry |
|--------------|--|--------------|--------------|--------------|--------------|--------------|--------------|
| | | Employment | | | Industry | Turnover | value added |
| INDUST | RY CLASS | at end | Wages and | Turneyard | value | per person | per person |
| | | of June(b) | salaries(c) | Turnover(d) | added(e) | employed(f) | employed(g) |
| ANZSIC | | | | | | | |
| code | Description | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| | | | | | | | |
| | Electronic equipment mfg | | | | | | |
| 2841 | Computer and business machine mfg | 1 310 | 49.5 | 514.1 | 90.9 | 392.6 | 69.4 |
| 2842 | Telecommunication, broadcasting and transceiving | | | | | | |
| | equipment mfg | 2 571 | 137.8 | 605.9 | 254.2 | 235.6 | 98.9 |
| 2849 | Electronic equipment mfg n.e.c. | 6 699 | 278.3 | 1 226.6 | 458.5 | 183.1 | 68.4 |
| 284 | Total | 10 580 | 465.6 | 2 346.6 | 803.6 | 221.8 | 76.0 |
| | | | | | | | |
| 0054 | Electrical equipment and appliance mfg | 5 070 | 477.0 | 000.0 | 000 7 | 100.0 | 54.0 |
| 2851 2852 | Household appliance mfg | 5 079 | 177.6 | 862.6 | 263.7 | 169.8 | 51.9 |
| 2852 | Electric cable and wire mfg Battery mfg | 2 086 233 | 104.2 | 586.2 | 183.7 | 281.0 | 88.1 |
| 2853 | Electric light and sign mfg | 233 | n.p. n.p. | n.p. n.p. | n.p. n.p. | n.p. n.p. | n.p. n.p. |
| 2859 | Electrical equipment mfg n.e.c. | 5 396 | 201.2 | 814.4 | 316.1 | 150.9 | 58.6 |
| 285 | Total | 15 232 | 557.5 | 2 617.5 | 883.5 | 171.8 | 58.0 |
| | | | | | | | |
| | Industrial machinery and equipment mfg | | | | | | |
| 2861 | Agricultural machinery mfg | 1 051 | 34.4 | 156.1 | 49.5 | 148.6 | 47.1 |
| 2862 | Mining and construction machinery mfg | 2 086 | 88.6 | 503.5 | 114.1 | 241.4 | 54.7 |
| 2863 | Food processing machinery mfg | *448 | *13.9 | 65.6 | 21.5 | 146.5 | 48.1 |
| 2864 | Machine tool and part mfg | 2 459 | 81.9 | 245.5 | 116.3 | 99.8 | 47.3 |
| 2865 | Lifting and material handling equipment mfg | 3 681 | 159.9 | 651.3 | 226.2 | 176.9 | 61.4 |
| 2866 2867 | Pump and compressor mfg Commercial space heating and | 1 020 | 48.1 | 216.7 | 87.5 | 212.3 | 85.7 |
| 2001 | cooling equipment mfg | 968 | 38.6 | 186.8 | 52.0 | 193.0 | 53.7 |
| 2869 | Industrial machinery and equipment mfg n.e.c. | 4 391 | 148.6 | 524.0 | 233.5 | 119.3 | 53.2 |
| 286 | Total | 16 103 | 614.0 | 2 549.4 | 900.6 | 158.3 | 55.9 |
| | | | | | | | |
| 28 | Total machinery and equipment mfg | 61 006 | 2 432.1 | 10 472.2 | 3 788.3 | 171.7 | 62.1 |
| | | | | | | | |
| | OTHER MANUFACTURING | | | | | | |
| 2911 | Prefabricated building mfg Prefabricated metal building mfg | 428 | 12.3 | 98.2 | 20.5 | 229.3 | 47.8 |
| 2911 | Prefabricated building mfg n.e.c. | 428 | 3.2 | 98.2 15.6 | 20.5 4.4 | 120.9 | 33.8 |
| 291 | Total | 557 | 15.5 | 113.8 | 24.8 | 204.2 | 44.6 |
| 201 | | | 2010 | 11010 | 2.10 | 20 112 | |
| | Furniture mfg | | | | | | |
| 2921 | Wooden furniture and upholstered seat mfg | 6 692 | 163.4 | 645.8 | 228.8 | 96.5 | 34.2 |
| 2922 | Sheet metal furniture mfg | 1 654 | 54.3 | 243.8 | 86.0 | 147.4 | 52.0 |
| 2923 | Mattress mfg (except rubber) | 778 | 23.0 | 120.5 | 48.2 | 154.8 | 61.9 |
| 2929 | Furniture mfg n.e.c. | 2 370 | 63.9 | 315.1 | 100.4 | 133.0 | 42.4 |
| 292 | Total | 11 494 | 304.6 | 1 325.1 | 463.4 | 115.3 | 40.3 |
| | Miscellaneous manufacturing | | | | | | |
| 2941 | Miscellaneous manufacturing Jewellery and silverware mfg | 1 014 | 22.5 | 119.5 | 40.7 | 117.8 | 40.2 |
| 2942 | Toy and sporting good mfg | 963 | *28.7 | 107.7 | *36.8 | **111.8 | 38.2 |
| 2949 | Manufacturing n.e.c. | 2 301 | 64.1 | 319.6 | 127.3 | 138.9 | 55.3 |
| 294 | Total | 4 279 | 115.4 | 546.9 | 204.9 | 127.8 | 47.9 |
| | | | | | | | |
| 29 | Total other manufacturing | 16 329 | 435.5 | 1 985.8 | 693.2 | 121.6 | 42.4 |
| | | | | | | | |
| 21–29 | TOTAL MANUFACTURING | 303 617 | 11 415.9 | 68 272.9 | 22 186.4 | 224.9 | 73.1 |
| | | | | | | | |

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

(e) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

(f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(g) Industry value added divided by the number of persons employed at the end of June. Includes working proprietors. Employment size(b): NSW

| | Employment at Wages and end of June(c) salaries(d)(e) | | Turnover(e)(f) | | Industry value added(e)(g) | | | | | |
|--|---|-----------------|-----------------------|----------|-------------------------------|---------------|---------|-------------|--|--|
| Employment size group | no. | % % | \$m | % | \$m | % | \$m | % | | |
| | | | | | | | | | | |
| FOOD, BEVERAGE AND TOBACCO MANUFACTURING | | | | | | | | | | |
| 0–4 persons | 1 297 | 2.6 | 19.5 | 1.1 | 111.7 | 0.8 | 30.3 | 0.8 | | |
| 5–9 persons | 2 054 | 4.2 | 39.6 | 2.2 | 245.2 | 1.8 | 68.2 | 1.8 | | |
| 10–19 persons | 2 236 | 4.6 | 60.7 | 3.3 | 494.4 | 3.5 | 89.6 | 2.3 | | |
| 20–49 persons | 4 538 | 9.3 | 145.7 | 8.0 | 1 281.0 | 9.2 | 298.8 | 7.7 | | |
| 50–99 persons | 4 146 | 8.5 | 136.3 | 7.5 | 1 217.1 | 8.7 | 298.5 | 7.7 | | |
| Total less than 100 persons | 14 272 | 29.1 | 401.9 | 22.2 | 3 349.4 | 23.9 | 785.4 | 20.2 | | |
| 100–199 persons | 5 801 | 11.8 | 224.3 | 12.4 | 1 802.0 | 12.9 | 488.8 | 12.6 | | |
| 200–499 persons | 13 945 | 28.5 | 616.8 | 34.0 | 5 857.4 | 41.9 | 1 704.2 | 43.8 | | |
| 500–999 persons | 9 676 | 19.8 | 376.8 | 20.8 | 2 007.3 | 14.3 | 628.3 | 16.2 | | |
| 1 000 or more persons | 5 277 | 10.8 | 194.6 | 10.7 | 979.9 | 7.0 | 280.4 | 7.2 | | |
| Total 100 or more persons | 34 699 | 70.9 | 1 412.6 | 77.8 | 10 646.6 | 76.1 | 3 101.7 | 79.8 | | |
| Total | 48 972 | 100.0 | 1 814.5 | 100.0 | 13 996.0 | 100.0 | 3 887.1 | 100.0 | | |
| ••••• | | • • • • • • • • | • • • • • • • • • • • | | | • • • • • • • | | • • • • • • | | |
| | TEXTILE, | CLOTHING | , FOOTWEAR AN | ND LEATH | ER MANUFACTU | RING | | | | |
| 0–4 persons | 3 322 | 14.6 | 38.7 | 6.8 | 260.2 | 8.4 | 110.9 | 11.0 | | |
| 5–9 persons | 3 774 | 16.6 | 70.1 | 12.3 | 358.4 | 11.6 | 136.3 | 13.6 | | |
| 10–19 persons | 1 967 | 8.7 | 41.9 | 7.3 | 203.5 | 6.6 | 75.0 | 7.5 | | |
| 20–49 persons | 3 726 | 16.4 | 97.8 | 17.1 | 563.9 | 18.2 | 177.1 | 17.6 | | |
| 50–99 persons | 3 270 | 14.4 | 106.0 | 18.5 | 682.9 | 22.0 | 182.0 | 18.1 | | |
| Total less than 100 persons | 16 058 | 70.8 | 354.6 | 62.0 | 2 068.8 | 66.7 | 681.3 | 67.8 | | |
| 100–199 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | | |
| 200–499 persons | 2 618 | 11.5 | 90.4 | 15.8 | 370.5 | 11.9 | 136.6 | 13.6 | | |
| 500–999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | | |
| 1 000 or more persons | | | p . | | p. | | p. | | | |
| Total 100 or more persons | 6 636 | 29.2 | 217.4 | 38.0 | 1 032.5 | 33.3 | 323.1 | 32.2 | | |
| Total | 22 695 | 100.0 | 572.0 | 100.0 | 3 101.4 | 100.0 | 1 004.4 | 100.0 | | |
| • | | | | | | • • • • • • • | | | | |
| | | WOOD AND | D PAPER PRODU | JCT MANU | FACTURING | | | | | |
| 0-4 persons | 2 528 | 13.2 | 49.4 | 7.8 | 248.8 | 7.2 | 76.7 | 6.4 | | |
| 5–9 persons | 2 069 | 10.8 | 46.4 | 7.3 | 225.3 | 6.5 | 58.9 | 4.9 | | |
| 10–19 persons | 2 328 | 12.1 | 59.9 | 9.5 | 247.6 | 7.2 | 93.9 | 7.8 | | |
| 20–49 persons | 3 280 | 17.1 | 89.5 | 14.1 | 473.8 | 13.8 | 164.1 | 13.6 | | |
| 50–99 persons | 2 189 | 11.4 | 77.5 | 12.2 | 431.7 | 12.5 | 153.0 | 12.7 | | |
| Total less than 100 persons | 12 394 | 64.5 | 322.7 | 51.0 | 1 627.3 | 47.3 | 546.5 | 45.4 | | |
| 100–199 persons | 2 666 | 13.9 | 103.3 | 16.3 | 642.3 | 18.7 | 229.7 | 19.1 | | |
| 200–499 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | | |
| 500–999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | | |
| 1 000 or more persons | _ | | _ | _ | _ | _ | _ | _ | | |
| Total 100 or more persons | 6 821 | 35.5 | 310.5 | 49.0 | 1 815.2 | 52.7 | 656.7 | 54.6 | | |
| Total | 19 215 | 100.0 | 633.2 | 100.0 | 3 442.4 | 100.0 | 1 203.2 | 100.0 | | |

(a) See paragraph 5 of the Explanatory Notes.

(b) 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 20 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1997–98 but were not operating at 30 June 1998. See paragraph 19 of the Explanatory Notes.

- (f) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.
- (g) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

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Employment size(b): NSW continued

| | Employmer | nt at | Wages and | | | | Industry value | |
|---|-----------------|--------------|-----------------|--------------|---------------------------|--------------|-------------------------|--------------|
| | end of June | e(c) | salaries(d)(e). | | Turnover(e)(f) | | added(e)(g) | |
| Employment size group | no. | % | \$m | % | \$m | % | \$m | % |
| • | • • • • • • • • | •••• | ••••• | • • • • • • | • • • • • • • • • • • • • | ••••• | • • • • • • • • • • • • | • • • • • |
| | F | PRINTING, | PUBLISHING A | ND REC | ORDED MEDIA | | | |
| 0–4 persons | 3 657 | 8.9 | 67.2 | 4.3 | 283.7 | 4.1 | 143.1 | 5.0 |
| 5–9 persons | 3 797 | 9.2 | 90.3 | 5.8 | 350.4 | 5.1 | 151.3 | 5.3 |
| 10–19 persons | 4 137 | 10.1 | 131.1 | 8.4 | 460.9 | 6.7 | 184.0 | 6.4 |
| 20–49 persons | 5 160 | 12.5 | 199.4 | 12.8 | 613.1 | 8.9 | 250.3 | 8.7 |
| 50–99 persons | 5 232 | 12.7 | 211.7 | 13.6 | 1 054.4 | 15.4 | 509.9 | 17.8 |
| Total less than 100 persons | 21 984 | 53.4 | 699.7 | 45.0 | 2 762.5 | 40.2 | 1 238.6 | 43.2 |
| | | | | | | | | |
| 100–199 persons | 5 667 | 13.8 | 210.5 | 13.5 | 927.6 | 13.5 | 334.1 | 11.7 |
| 200–499 persons | 5 751 | 14.0 | 239.2 | 15.4 | 1 035.1 | 15.1 | 467.1 | 16.3 |
| 500–999 persons | 2 722 | 6.6 | 117.3 | 7.5 | 793.5 | 11.6 | 241.7 | 8.4 |
| 1 000 or more persons | 5 020 | 12.2 | 289.0 | 18.6 | 1 346.2 | 19.6 | 584.5 | 20.4 |
| Total 100 or more persons | 19 160 | 46.6 | 856.0 | 55.0 | 4 102.3 | 59.8 | 1 627.3 | 56.8 |
| Total | 41 144 | 100.0 | 1 555.8 | 100.0 | 6 864.9 | 100.0 | 2 865.9 | 100.0 |
| | | | | | | | | |
| PETRO | LEUM, CC | DAL, CHEN | IICAL AND ASS | OCIATED | PRODUCT MANU | JFACTURI | NG | |
| 0–4 persons | 1 143 | 3.6 | 22.6 | 1.7 | 134.2 | 1.1 | 47.1 | 1.4 |
| 5–9 persons | 1 579 | 5.0 | 44.2 | 3.3 | 235.1 | 2.0 | 83.4 | 2.5 |
| 10–19 persons | 2 635 | 8.3 | 77.1 | 5.7 | 417.9 | 3.6 | 141.7 | 4.2 |
| 20–49 persons | 4 256 | 13.4 | 157.0 | 11.7 | 1 296.5 | 11.0 | 466.9 | 13.8 |
| 50–99 persons | 6 211 | 19.6 | 276.7 | 20.6 | 1 840.9 | 15.6 | 558.3 | 16.6 |
| Total less than 100 persons | 15 824 | 49.8 | 577.5 | 43.0 | 3 924.7 | 33.4 | 1 297.4 | 38.5 |
| 100–199 persons | 7 504 | 22 G | 22E E | 25.0 | 2 204 7 | 20.2 | 786.6 | <u></u> |
| 200–499 persons | 7 504 8 430 | 23.6 26.5 | 335.5 429.4 | 25.0 32.0 | 2 384.7 5 457.1 | 20.3 46.4 | 1 287.2 | 23.3 38.2 |
| 500–999 persons | o 430 — | 20.5 | 429.4 | 52.0 | 5 457.1 | 40.4 | 1 201.2 | 30.2 |
| 1 000 or more persons | _ | _ | _ | _ | _ | _ | _ | |
| Total 100 or more persons | 15 934 | 50.2 | 764.9 | 57.0 | 7 841.8 | 66.6 | 2 073.8 | 61.5 |
| | 10 00 1 | 00.2 | 10110 | 0110 | 1011.0 | 00.0 | 2 010.0 | 01.0 |
| Total | 31 758 | 100.0 | 1 342.4 | 100.0 | 11 766.5 | 100.0 | 3 371.1 | 100.0 |
| ••••• | • • • • • • • • | ••••• | ••••• | • • • • • • | • • • • • • • • • • • • • | ••••• | • • • • • • • • • • • • | • • • • • |
| | NON | N-METALLI | C MINERAL PR | ODUCT N | MANUFACTURING | | | |
| 0–4 persons | 606 | 5.7 | 14.3 | 3.4 | 56.6 | 2.0 | 20.2 | 2.2 |
| 5–9 persons | 1 000 | 9.4 | 24.0 | 5.8 | 112.0 | 4.0 | 37.2 | 4.1 |
| 10–19 persons | 638 | 6.0 | 21.9 | 5.2 | 142.1 | 5.1 | 35.8 | 4.0 |
| 20–49 persons | 1 319 | 12.4 | 45.4 | 10.9 | 301.7 | 10.9 | 108.1 | 12.0 |
| 50–99 persons | 1 332 | 12.6 | 53.6 | 12.8 | 315.6 | 11.4 | 109.1 | 12.1 |
| Total less than 100 persons | 4 895 | 46.1 | 159.3 | 38.1 | 928.0 | 33.4 | 310.4 | 34.4 |
| 100–199 persons | 2 270 | 21.0 | 150 4 | 25.0 | 4 000 7 | 14.0 | 200.0 | 10.1 |
| 200–199 persons | 3 370 | 31.8 22.1 | 150.1 | 35.9 | 1 222.7 | 44.0 22 5 | 388.9 | 43.1 22 5 |
| 500–999 persons | 2 343 | 22.1 | 108.3 | 25.9 | 625.5 | 22.5 | 202.7 | 22.5 |
| 1 000 or more persons | _ | _ | _ | _ | _ | _ | _ | _ |
| Total 100 or more persons | | 53.9 | 258.4 | 61.9 | 1 848.2 | 66.6 | 591.7 | |
| | 20 | | 200.1 | - 1.0 | 20.012 | - 5.0 | 001.1 | |
| Total | 10 608 | 100.0 | 417.7 | 100.0 | 2 776.2 | 100.0 | 902.1 | 100.0 |

(a) See paragraph 5 of the Explanatory Notes.

(b) 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 20 of the Explanatory Notes.

- (c) Includes working proprietors.
- (d) Excludes the drawings of working proprietors.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1997–98 but were not operating at 30 June 1998. See paragraph 19 of the Explanatory Notes.

- (f) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.
- (g) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

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Employment size(b): NSW continued

| | Employmer end of June | | Wages and salaries(d)(e) | | Turnover(e)(f) | | Industry value added(e)(g) | |
|-----------------------------|--------------------------|---------|--------------------------|--------------|----------------|-------|-------------------------------|-----------|
| Employment size group | no. | % | \$m | % | \$m | % | \$m | % |
| | | | | | | | | |
| | | MET | AL PRODUCT M | ANUFACT | TURING | | | |
| 0–4 persons | 3 345 | 6.4 | 66.7 | 3.1 | 1 274.5 | 9.4 | 812.9 | 18.4 |
| 5–9 persons | 4 944 | 9.5 | 132.8 | 6.2 | 572.0 | 4.2 | 221.3 | 5.0 |
| 10–19 persons | 4 793 | 9.2 | 140.0 | 6.5 | 684.2 | 5.0 | 229.1 | 5.2 |
| 20–49 persons | 8 884 | 17.1 | 289.9 | 13.5 | 1 577.6 | 11.6 | 488.6 | 11.1 |
| 50–99 persons | 5 903 | 11.4 | 241.3 | 11.2 | 1 436.5 | 10.6 | 474.9 | 10.7 |
| Total less than 100 persons | 27 868 | 53.7 | 870.7 | 40.5 | 5 544.9 | 40.9 | 2 226.7 | 50.4 |
| 100–199 persons | 5 828 | 11.2 | 242.9 | 11.3 | 1 965.9 | 14.5 | 466.8 | 10.6 |
| 200–499 persons | 5 316 | 10.2 | 248.1 | 11.5 | 1 768.5 | 13.0 | 539.3 | 12.2 |
| 500–999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 1 000 or more persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| Total 100 or more persons | 24 022 | 46.3 | 1 280.5 | 59.5 | 8 008.4 | 59.1 | 2 192.1 | 49.6 |
| Total | 51 890 | 100.0 | 2 151.2 | 100.0 | 13 553.2 | 100.0 | 4 418.8 | 100.0 |
| | | | | | | | | |
| | Ν | MACHINE | RY AND EQUIPM | ENT MAN | IUFACTURING | | | |
| 0-4 persons | 3 822 | 6.3 | 71.5 | 3.0 | 291.4 | 2.8 | 107.3 | 2.8 |
| 5–9 persons | 4 800 | 7.9 | 128.4 | 5.3 | 532.3 | 5.1 | 196.9 | 5.2 |
| 10–19 persons | 5 289 | 8.7 | 182.0 | 7.5 | 689.8 | 6.6 | 256.3 | 6.8 |
| 20–49 persons | 6 213 | 10.2 | 213.2 | 8.8 | 927.8 | 8.9 | 352.3 | 9.3 |
| 50–99 persons | 6 504 | 10.7 | 250.4 | 10.3 | 1 227.9 | 11.8 | 414.1 | 11.0 |
| Total less than 100 persons | 26 627 | 43.6 | 845.4 | 34.9 | 3 669.3 | 35.1 | 1 326.9 | 35.1 |
| 100–199 persons | 7 814 | 12.8 | 325.9 | 13.5 | 1 724.2 | 16.5 | 483.5 | 12.8 |
| 200–499 persons | 11 507 | 18.9 | 523.4 | 21.6 | 2 276.9 | 21.8 | 790.4 | 20.9 |
| 500–999 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 1 000 or more persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| Total 100 or more persons | 34 379 | 56.4 | 1 577.3 | 65.1 | 6 778.6 | 64.9 | 2 453.3 | 64.9 |
| Total | 61 006 | 100.0 | 2 422.7 | 100.0 | 10 447.8 | 100.0 | 3 780.2 | 100.0 |
| lotal | 01 000 | 100.0 | 2 722.1 | 100.0 | 10 447.0 | 100.0 | 5 760.2 | 100.0 |
| | | | OTHER MANUF | ACTURIN | IG | ••••• | | • • • • • |
| 0-4 persons | 3 061 | 18.7 | 51.6 | 12.0 | 276.2 | 14.0 | 84.5 | 12.3 |
| 5–9 persons | 3 148 | 19.3 | 82.7 | 19.2 | 342.3 | 17.4 | 119.5 | 17.4 |
| 10–19 persons | 3 090 | 18.9 | 85.6 | 19.9 | 374.2 | 19.0 | 139.4 | 20.3 |
| 20–49 persons | 3 386 | 20.7 | 89.8 | 20.8 | 369.6 | 18.8 | 125.4 | 18.2 |
| 50–99 persons | 1 493 | 9.1 | 49.0 | 20.8 11.4 | 240.9 | 12.2 | | 12.9 |
| | | | | | | | 88.8 557 5 | |
| Total less than 100 persons | 14 177 | 86.8 | 358.7 | 83.2 | 1 603.2 | 81.5 | 557.5 | 81.1 |
| 100–199 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 200–499 persons | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. | n.p. |
| 500–999 persons | | | | | · | | | |
| 1 000 or more persons | _ | _ | _ | _ | _ | _ | _ | _ |
| Total 100 or more persons | 2 153 | 13.2 | 72.3 | 16.8 | 363.3 | 18.5 | 129.9 | 18.9 |
| Total | 16 329 | 100.0 | 431.0 | 100.0 | 1 966.5 | 100.0 | 687.4 | 100.0 |

(a) See paragraph 5 of the Explanatory Notes.

(b) 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 20 of the Explanatory Notes.

- (c) Includes working proprietors.
- (d) Excludes the drawings of working proprietors.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1997–98 but were not operating at 30 June 1998. See paragraph 19 of the Explanatory Notes.

- (f) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.
- (g) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

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Employment size(b): NSW continued

| | Employmen end of June | | Wages and salaries(d)(e) | | Turnover(e)(f). | | Industry value added(e)(g) | |
|---|--------------------------|-------|--------------------------|----------|-------------------------|-------|-------------------------------|-------|
| Employment size group | no. | % | \$m | % | \$m | % | \$m | % |
| • | • • • • • • • • | ••••• | | ••••• | • • • • • • • • • • • • | •••• | ••••• | •••• |
| | | | TOTAL MANUF | ACTURING | i | | | |
| 0-4 persons | 22 781 | 7.5 | 401.5 | 3.5 | 2 937.4 | 4.3 | 1 433.0 | 6.5 |
| 5–9 persons | 27 164 | 8.9 | 658.5 | 5.8 | 2 973.2 | 4.4 | 1 073.0 | 4.9 |
| 10–19 persons | 27 113 | 8.9 | 800.2 | 7.1 | 3 714.7 | 5.5 | 1 244.8 | 5.6 |
| 20–49 persons | 40 761 | 13.4 | 1 327.8 | 11.7 | 7 405.0 | 10.9 | 2 431.4 | 11.0 |
| 50–99 persons | 36 280 | 11.9 | 1 402.5 | 12.4 | 8 447.8 | 12.4 | 2 788.5 | 12.6 |
| Total less than 100 persons | 154 099 | 50.8 | 4 590.4 | 40.5 | 25 478.0 | 37.5 | 8 970.7 | 40.6 |
| 100, 100 | | | | | | | | |
| 100–199 persons | 42 967 | 14.2 | 1 729.8 | 15.3 | 11 410.3 | 16.8 | 3 403.6 | 15.4 |
| 200–499 persons | 53 403 | 17.6 | 2 421.5 | 21.4 | 18 354.2 | 27.0 | 5 500.5 | 24.9 |
| 500–999 persons | 24 130 | 7.9 | 1 021.7 | 9.0 | 5 990.7 | 8.8 | 1 876.8 | 8.5 |
| 1 000 or more persons | 29 018 | 9.6 | 1 576.9 | 13.9 | 6 681.7 | 9.8 | 2 368.7 | 10.7 |
| Total 100 or more persons | 149 518 | 49.2 | 6 749.9 | 59.5 | 42 436.9 | 62.5 | 13 149.7 | 59.4 |
| Total | 303 617 | 100.0 | 11 340.3 | 100.0 | 67 914.9 | 100.0 | 22 120.4 | 100.0 |

(a) See paragraph 5 of the Explanatory Notes.

(b) 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 20 of the Explanatory Notes.

(c) Includes working proprietors.

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(d) Excludes the drawings of working proprietors.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1997–98 but were not operating at 30 June 1998. See paragraph 19 of the Explanatory Notes.

- (f) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.
- (g) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a), Exported Goods Produced(b)-

Broad employment size(c): NSW

| | | Sales and transfers out of goods for sale produced by this | Amount exported by this business unit | Exports as a proportion sales and transfers out goods for sale produced |
|----------|--|--|--|---|
| NDUST | TRY SUBDIVISION | establishment | or by its agent | this establishme |
| NZSIC | | | | |
| ode | Description | \$m | \$m | |
| | Description | ψΠ | ψΠ | |
| | | PERSONS | | |
| 21 | Food, beverage and tobacco mfg | 2 044.9 | 161.0 | 7 |
| 22 | Textile, clothing, footwear and leather mfg | 1 213.4 | 46.9 | 3 |
| 23 | Wood and paper product mfg | 1 135.4 | 19.2 | 1 |
| 24 | Printing, publishing and recorded media | 1 458.6 | 55.1 | 3 |
| 25 | Petroleum, coal, chemical and associated product mfg | 2 012.9 | 151.0 | 1 |
| 26 | Non-metallic mineral product mfg | 586.4 | 8.0 | 1 |
| 27 28 | Metal product mfg | 3 877.6 | 965.1 | 24 |
| 20 29 | Machinery and equipment mfg Other manufacturing | 2 078.6 | 199.7 | g |
| 29 | Other manufacturing | 1 254.0 | 57.0 | 4 |
| 1–29 |) Total manufacturing | 15 661.8 | 1 662.9 | 10 |
| • • • | 50-99 | PERSONS | • • • • • • • • • • • • • • • | |
| 1 | Food, beverage and tobacco mfg | 1 173.0 | 119.1 | 10 |
| 22 | Textile, clothing, footwear and leather mfg | 620.6 | 132.0 | 22 |
| 23 | Wood and paper product mfg | 417.4 | 57.0 | 13 |
| 24 | Printing, publishing and recorded media | 966.8 | 242.1 | 25 |
| 25 | Petroleum, coal, chemical and associated product mfg | 1 760.7 | 84.2 | 2 |
| 26 | Non-metallic mineral product mfg | 301.5 | 6.9 | 2 |
| 27 | Metal product mfg | 1 314.2 | 126.2 | ç |
| 28 | Machinery and equipment mfg | 1 103.3 | 216.4 | 19 |
| 29 | Other manufacturing | 226.1 | 11.2 | 5 |
| 21–29 | 9 Total manufacturing | 7 883.5 | 995.0 | 12 |
| • • • • | 100 OR M | IORE PERSONS | • • • • • • • • • • • • • • | |
| 21 | Food, beverage and tobacco mfg | 10 381.2 | 1 869.4 | 18 |
| 22 | Textile, clothing, footwear and leather mfg | 931.4 | 230.9 | 24 |
| 23 | Wood and paper product mfg | 1 767.4 | 64.4 | - |
| 24 | Printing, publishing and recorded media | 2 347.8 | 51.4 | 2 |
| 25 | Petroleum, coal, chemical and associated product mfg | 7 712.3 | 959.1 | 12 |
| 26 | Non-metallic mineral product mfg | 1 763.6 | 49.2 | 2 |
| 27 | Metal product mfg | 7 843.5 | 1 569.9 | 20 |
| 28 | Machinery and equipment mfg | 5 656.6 | 925.1 | 16 |
| 29 | Other manufacturing | 332.2 | 29.2 | ٤ |
| 21–29 | 9 Total manufacturing | 38 736.1 | 5 748.5 | 14 |
| • • • • | | ΓΟΤΑL | • • • • • • • • • • • • • • • | |
| 21 | Food, beverage and tobacco mfg | 13 599.1 | 2 149.6 | 15 |
| 22 | Textile, clothing, footwear and leather mfg | 2 765.4 | 409.8 | 14 |
| 23 | Wood and paper product mfg | 3 320.1 | 140.6 | 4 |
| 24 | Printing, publishing and recorded media | 4 773.1 | 348.5 | 7 |
| 25 | Petroleum, coal, chemical and associated product mfg | 11 485.9 | 1 194.4 | 10 |
| 26 | Non-metallic mineral product mfg | 2 651.5 | 64.0 | 2 |
| 27 | Metal product mfg | 13 035.3 | 2 661.1 | 20 |
| 28 | Machinery and equipment mfg | 8 838.5 | 1 341.2 | 15 |
| 29 | Other manufacturing | 1 812.3 | 97.4 | 5 |
| | | | | |

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraphs 21–23 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 20 of the Explanatory Notes. Also, this table excludes those manufacturing establishments which operated during 1997–98 but were not operating at 30 June 1998. See paragraph 19 of the Explanatory Notes.

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| INDUS | TRY SUBDIVISION | Employment at end of June(c) | Wages and salaries(d) | Turnover(e) | Industry value added(f) |
|---------|--|---------------------------------|-----------------------|-------------|----------------------------|
| ANZSIO | | | | | |
| code | Description | % | % | % | % |
| • • • • | | | •••••••••• | ••••• | • • • • • • • • • • |
| | ESTABLISHMENTS THAT | DO NOT EXPOR | | | |
| 21 | Food, beverage and tobacco mfg | 45.6 | 41.9 | 36.4 | 34.8 |
| 22 | Textile, clothing, footwear and leather mfg | 62.8 | 53.3 | 49.5 | 53.6 |
| 23 | Wood and paper product mfg | 72.6 | 67.7 | 64.3 | 66.0 |
| 24 | Printing, publishing and recorded media | 77.7 | 75.1 | 67.7 | 69.1 |
| 25 | Petroleum, coal, chemical and associated product mfg | 32.5 | 29.7 | 22.0 | 25.3 |
| 26 | Non-metallic mineral product mfg | 66.5 | 64.4 | 67.6 | 64.2 |
| 27 | Metal product mfg | 47.1 | 34.4 | 29.1 | 29.8 |
| 28 | Machinery and equipment mfg | 46.3 | 44.7 | 40.1 | 41.8 |
| 29 | Other manufacturing | 74.7 | 68.3 | 68.2 | 66.8 |
| 21-2 | 9 Total manufacturing | 54.3 | 48.0 | 40.4 | 42.7 |
| • • • • | | ••••• | • • • • • • • • • | ••••• | |
| ESTA | BLISHMENTS WITH EXPORTS UP TO AND INCLUDING | 3 50% OF SALES | OF GOODS | THAT THEY | PRODUCED |
| 21 | Food, beverage and tobacco mfg | 44.6 | 48.9 | 51.9 | 57.2 |
| 22 | Textile, clothing, footwear and leather mfg | 30.1 | 36.7 | 36.4 | 34.1 |
| 23 | Wood and paper product mfg | 26.8 | 31.6 | 34.2 | 31.8 |
| 24 | Printing, publishing and recorded media | 21.5 | 24.1 | 27.8 | 23.1 |
| 25 | Petroleum, coal, chemical and associated product mfg | 66.9 | 69.9 | 77.7 | 74.3 |
| 26 | Non-metallic mineral product mfg | 33.5 | 35.6 | 32.4 | 35.8 |
| 27 | Metal product mfg | 48.4 | 60.2 | 61.7 | 60.3 |
| 28 | Machinery and equipment mfg | 46.2 | 46.7 | 50.7 | 48.4 |
| 29 | Other manufacturing | 22.3 | 26.5 | 27.7 | 27.7 |
| 21-2 | 9 Total manufacturing | 41.0 | 46.8 | 52.6 | 50.3 |
| •••• | | | | | |
| E | STABLISHMENTS WITH EXPORTS OF MORE THAN 50 | % OF SALES OF | GOODS TH | AT THEY PRO | DUCED |
| 21 | Food, beverage and tobacco mfg | 9.8 | 9.2 | 11.7 | 8.0 |
| 22 | Textile, clothing, footwear and leather mfg | 7.1 | 10.0 | 14.1 | 12.3 |
| 23 | Wood and paper product mfg | 0.6 | 0.7 | 1.4 | 2.1 |
| 24 | Printing, publishing and recorded media | 0.9 | 0.8 | 4.5 | 7.9 |
| 25 | Petroleum, coal, chemical and associated product mfg | 0.6 | 0.4 | 0.3 | 0.4 |
| 26 | Non-metallic mineral product mfg | _ | _ | _ | _ |
| 27 | Metal product mfg | 4.5 | 5.5 | 9.3 | 9.9 |
| 28 | Machinery and equipment mfg | 7.5 | 8.5 | 9.2 | 9.8 |
| 29 | Other manufacturing | 3.0 | 5.2 | 4.1 | 5.5 |
| 21-2 | 9 Total manufacturing | 4.8 | 5.2 | 7.0 | 7.0 |
| • • • • | | • • • • • • • • • • • | | ••••• | |
| (a) Se | e paragraph 5 of the Explanatory Notes. | | | | |
| (1-) 0- | | | | | |

(b) See paragraphs 21–23 of the Explanatory Notes.

(c) Includes working proprietors.

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(d) Excludes the drawings of working proprietors.

(e) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

(f) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

ABS • MANUFACTURING INDUSTRY, NSW AND ACT • 8221.1 • 1997-98 23

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations(b)-ACT

| INDUS | TRY SUBDIVISION | | Employment at end of June(c) | Wages and salaries(d)(e) | Turnover(e) | Industry gross product(e) | Industry value added(e) | Ratio of wages and salaries to turnover(e) | Turnover per person employed (e)(f) |
|---------|---|-----------------|------------------------------------|--------------------------|----------------|---------------------------------|-------------------------------|---|--|
| ANZSIO | | | | | | | | | |
| code | Description | | no. | \$m | \$m | \$m | \$m | ratio | \$'000 |
| | | | | | | | | | |
| • • • • | | • • • • • • • • | • • • • • • • • | • • • • • • • • • • | | | ••••• | | • • • • • • • • |
| 21 | Food, beverage and tobacco mfg | 1997–98 | 430 | 14.2 | (g)119.3 | (h)29.3 | (h)30.4 | 0.12 | 277.3 |
| | | 1996-97 | 327 | 10.9 | 64.8 | 19.2 | | 0.17 | r198.1 |
| | | 1995-96 | 470 | (i)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 |
| | | 1992-93 | 626 | 16.1 | 76.6 | 23.4 | | 0.20 | 122.3 |
| | | 1002 00 | 020 | 1011 | | 2011 | | 0.22 | 100 |
| 22 | Textile, clothing, footwear and leather mfg | 1997–98 | 159 | 2.1 | (g)11.2 | (h)5.2 | (h)5.4 | 0.19 | 70.4 |
| | | 1996–97 | 123 | 1.7 | r8.2 | 3.7 | | 0.21 | r66.8 |
| | | 1995–96 | 107 | (i) 1. 8 | 9.9 | 4.7 | | 0.18 | 93.0 |
| | | 1994–95 | 92 | 1.9 | 6.9 | | | 0.27 | 74.4 |
| | | 1993–94 | 105 | 1.8 | 6.0 | | | 0.30 | 57.3 |
| | | 1992–93 | 86 | 1.5 | 6.0 | 1.8 | | 0.25 | 70.3 |
| | | | | | | | | | |
| 23 | Wood and paper product mfg | 1997–98 | 265 | 7.4 | (g)40.6 | (h)12.2 | (h)12.8 | 0.18 | 153.5 |
| | | 1996–97 | 255 | 8.8 | 43.9 | 11.7 | | 0.20 | 172.0 |
| | | 1995–96 | 301 | (i)9.0 | 43.0 | 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 |
| | | 1992–93 | 382 | 11.2 | 44.0 | 16.9 | | 0.25 | 115.2 |
| 24 | Printing, publishing and recorded media | 1997–98 | 1 495 | 49.5 | (g)192.8 | (b) OF F | (h)88.7 | 0.26 | 129.0 |
| 24 | Phinting, publishing and recorded media | 1997-98 | | | Ų, | (h)85.5 | . , | | |
| | | 1996-97 | 1 522 | 50.6 | 214.5 | 119.7 | | 0.24 | 140.9 |
| | | | 1 769 | (i)60.6 | 214.0 | 99.1 | | 0.28 | 121.0 |
| | | 1994-95 | 1 940 | 64.1 | 217.8 | •• | | 0.29 | 112.3 |
| | | 1993-94 | 1 849 | 55.1 | 203.2 | | | 0.27 | 109.9 |
| | | 1992–93 | 1 767 | 55.0 | 203.8 | 85.9 | | 0.27 | 115.3 |
| 25 | Petroleum, coal, chemical and associated | | | | | | | | |
| 20 | product mfg | 1997–98 | 28 | 0.8 | (g)2.8 | (h)1.2 | (h)1.2 | 0.27 | 100.2 |
| | product mig | 1996-97 | 28 | 0.8 | (g)2.8 r2.6 | 1.0 | (1)1.2 | 0.27 | r97.9 |
| | | 1995–96 | 30 | (i)0.8 | 3.1 | 1.0 | | 0.25 | 104.9 |
| | | 1994–95 | *55 | 1.2 | *6.7 | | | 0.19 | 121.6 |
| | | 1993–94 | 38 | 0.9 | 4.5 | | | 0.19 | 121.0 |
| | | 1992-93 | 23 | 0.9 | 2.6 | 0.8 | | 0.21 | 117.2 |
| | | 1992-93 | 23 | 0.5 | 2.0 | 0.8 | •• | 0.20 | 113.0 |
| 26 | Non-metallic mineral product mfg | 1997–98 | 137 | 3.4 | (g)40.7 | (h)9.1 | (h)9.3 | 0.08 | 296.6 |
| - | 0 | 1996-97 | 136 | 3.8 | 45.1 | 7.0 | | 0.08 | 331.3 |
| | | 1995-96 | 140 | (i)3.9 | 47.9 | 15.4 | | 0.08 | 341.2 |
| | | 1994–95 | 166 | 3.9 | 59.1 | | | 0.07 | 356.1 |
| | | 1993–94 | 209 | 7.9 | 80.3 | | | 0.10 | 384.0 |
| | | 1992-93 | 203 | 7.9 | 79.5 | 16.9 | | 0.10 | 325.9 |
| | | | | | | 20.0 | | 0.20 | 520.0 |

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 11-18 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

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

(f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors. (g) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. The effect on the data following the adoption of the new international standards is shown in table 8. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

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(h) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. Industry gross product is also shown for 1997–98. The effect on the data following the adoption of the new international standards is shown in table 8. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

(i) For 1995–96, excludes provision expenses for employee entitlements. See paragraph 18 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations(b)-ACT continued

| | TRY SUBDIVISION | | Employment at end of June(c) | Wages and salaries(d)(e) | Turnover(e) | Industry gross product(e) | Industry value added(e) | Ratio of wages and salaries to turnover(e) | Turnover per person employed (e)(f) |
|----------------|-----------------------------|----------|------------------------------------|-----------------------------|------------------|---------------------------------|-------------------------------|---|--|
| ANZSIC code | Description | | no. | \$m | \$m | \$m | \$m | ratio | \$'000 |
| | | | | | | | | | |
| •••• | | | ••••• | | ••••• | ••••• | | | |
| 27 | Metal product mfg | 1997–98 | 269 | 7.8 | (g)31.6 | (h)10.8 | (h)11.2 | 0.25 | 117.2 |
| | | 1996–97 | 285 | 8.4 | r33.7 | 10.5 | | 0.25 | r118.4 |
| | | 1995–96 | *259 | (i)*7.8 | 40.9 | *12.1 | | 0.19 | 158.0 |
| | | 1994–95 | 252 | 6.5 | 28.4 | | | 0.23 | 112.6 |
| | | 1993–94 | 254 | 6.6 | 28.5 | | | 0.23 | 112.3 |
| | | 1992–93 | 166 | 4.3 | 23.8 | 6.9 | | 0.18 | 143.4 |
| | | | | | | | | | |
| 28 | Machinery and equipment mfg | 1997–98 | 750 | 24.8 | (g)108.1 | (h)42.3 | (h)45.0 | 0.23 | 144.2 |
| | | 1996–97r | 592 | 18.6 | 99.6 | 38.0 | | 0.19 | 168.1 |
| | | 1995–96 | 467 | (i)12.7 | 59.6 | 30.4 | | 0.21 | 127.8 |
| | | 1994–95 | 547 | 18.1 | 64.9 | | | 0.28 | 118.5 |
| | | 1993–94 | 581 | 17.0 | 60.2 | | | 0.28 | 103.6 |
| | | 1992–93 | 527 | 17.0 | 53.7 | 20.3 | | 0.32 | 101.9 |
| 29 | Other menufacturing | 1997–98 | 007 | 10.0 | () 40.0 | (1)40.0 | (1)10.0 | 0.04 | 407.0 |
| 29 | Other manufacturing | 1997-98 | 337 | 10.2 | (g)43.0 | (h)10.2 | (h)10.8 | 0.24 | 127.6 |
| | | 1996-97 | 328 | 9.6 | 43.4 | 13.9 | | 0.22 | 132.3 |
| | | 1995-96 | 416 | (i)10.5 | 55.7 | 20.8 | | 0.19 | 133.8 |
| | | | 370 | 9.8 | 48.9 | • • | • • | 0.20 | 131.9 |
| | | 1993-94 | 388 | 10.1 | 52.0 | | | 0.19 | 134.1 |
| | | 1992–93 | 387 | 10.4 | 47.8 | 11.7 | •• | 0.22 | 123.4 |
| 21-29 |) Total manufacturing | 1997–98 | 3 870 | 120.2 | (g) 590.1 | (h)205.8 | (h)214.8 | 0.20 | 152.5 |
| ~ ~ ~ ~ | | 1996–97r | | 113.1 | 555.7 | 224.9 | (1)214.0 | 0.20 | 154.6 |
| | | 1995-96 | 3 959 | (i)121.5 | 548.3 | 216.8 | | 0.22 | 138.5 |
| | | 1994-95 | 4 334 | 131.7 | 559.5 | | | 0.24 | 129.1 |
| | | 1993-94 | 4 397 | 125.8 | 557.2 | | | 0.23 | 126.7 |
| | | 1992-93 | 4 207 | 124.0 | 537.8 | 184.5 | | 0.23 | 127.8 |
| | | 00 | 01 | | | | | 0.20 | |

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 11–18 of the Explanatory Notes.

- (c) Includes working proprietors.
- (d) Excludes the drawings of working proprietors.
- (e) Value data are at current prices and, therefore, do not discount the impact of price changes.
- (f) Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

(g) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. The effect on the data following the adoption of the new international standards is shown in table 8. For more details, see paragraphs 11 and 12 of the Explanatory Notes.

- (h) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. Industry gross product is also shown for 1997–98. The effect on the data following the adoption of the new international standards is shown in table 8. For more details, see paragraphs 13 and 14 of the Explanatory Notes.
- For 1995–96, excludes provision expenses for employee entitlements. See paragraph 18 of the Explanatory Notes.

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| | | Difference |
|---|---------------|-------------------|
| | Effect on | between IVA |
| | estimates | estimates and |
| INDUSTRY SUBDIVISION | of turnover | IGP estimates |
| ANZSIC | | |
| code Description | % | % |
| | | • • • • • • • • • |
| 21 Food, beverage and tobacco mfg | _ | 3.6 |
| 22 Textile, clothing, footwear and leather mfg | — | 3.1 |
| 23 Wood and paper product mfg | _ | 4.9 |
| 24 Printing, publishing and recorded media | _ | 3.8 |
| 25 Petroleum, coal, chemical and associated product mfg | _ | 1.4 |
| 26 Non-metallic mineral product mfg | _ | 2.9 |
| 27 Metal product mfg | _ | 3.8 |
| 28 Machinery and equipment mfg | 0.8 | 6.4 |
| 29 Other manufacturing | — | 5.5 |
| 21–29 Total manufacturing | 0.2 | 4.4 |
| ••••••••••••••••• | • • • • • • • | • • • • • • • • • |

(a) This table presents percentage differences between estimates for turnover calculated on the basis of the most recent international standards and corresponding estimates calculated on the basis of the standards which applied previously, and percentage differences between IVA and IGP (the previous measure of an industry's contribution to GDP). Paragraphs 11–14 of the Explanatory Notes provide details of the changes to the international standards.

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 1997–98, 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 1997–98 collection, a sample of approximately 19,000 establishments were asked to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. Data on industry value added (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 three years.

4 Estimates of IVA were compiled using data from the 19,000 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. (These commodity data will be published in the publication *Manufacturing Production, Commodities Produced, Australia, 1997–98* (Cat. no. 8365.0).) 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, 1999* (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 1997–98 manufacturing collection, 'significant' was defined as turnover of \$7.3 million or more.

EXPLANATORY NOTES continued

SCOPE AND COVERAGE continued

| | 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 with the Australian Taxation Office. Though a substantial number, these businesses would contribute only marginally to aggregate data were they to be included. In addition, the Australian Bureau of Statistics (ABS) 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 the Technical Note. |
| DATA ADJUSTED | |
| | 10 Data in this issue have been 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 1997–98 turnover for New South Wales is an increase of 0.3% while the effect on employment is an increase of 1.2%. The corresponding figures for the Australian Capital Territory are 0.4% and 1.8%. All industry subdivisions were affected to a similar degree. |

COMPARABILITY WITH PREVIOUS STATISTICS

11 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)plusIncome from intellectual property royaltiesequalsTurnover (new standards)

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

13 Commencing with estimates for 1997–98, under new international standards, contribution to gross domestic product (GDP) by manufacturing industries will be 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.

COMPARABILITY WITH PREVIOUS STATISTICS continued

- **14** 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

15 Commencing with the 1993–94 manufacturing collection, manufacturers not employing staff at 30 June of the reference year (such as sole proprietorships or family partnerships) which had registered as group employers with the Australian Taxation Office have been included in the manufacturing collection. Data in respect of these 'non-employers' were excluded from the scope of the manufacturing collection for the 1988–89 to 1992–93 (inclusive) reference years. However, the inclusion of these types of businesses has only had a marginal affect on statistical aggregates.

16 Commencing with the 1994–95 manufacturing collection, multiestablishment 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.

17 As explained above, about 7,000 establishments included in the 1997–98 collection were asked to supply value of sales for commodities produced. A similar sampling procedure has been followed since the 1993–94 collection. The availability of this fine level commodity/activity data for these units has enabled ABS survey processing staff to better identify those establishments which were actually in the scope of the manufacturing collection and those which should not be included in the manufacturing collection, because (for example) they were actually wholesalers or retailers. These fine level commodity/activity data have also enabled an objective industry code to be determined for the responding units in the samples, compared to the more subjective industry coding which occurred for all units in the 1992–93 manufacturing collection. The industry code for the units not responding or not included in any of these commodity samples has continued to be a subjectively determined code.

18 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.

EMPLOYMENT SIZE DATA

19 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 4. 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 5. The statistics in these two tables relate only to those manufacturing establishments operating at 30 June 1998. As such, the figures presented represent a slightly different population from those presented in the other tables from the manufacturing establishments which operated at any time during 1997–98.

20 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 4 and 5, 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

21 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 5 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. The data in table 5 exclude those manufacturing establishments which operated during 1997–98 but were not operating at 30 June 1998.

22 The statistics presented in table 5 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 5 and 6 only include exports directly undertaken by the manufacturer or by its agent.

EXPORTS BY MANUFACTURERS continued

| | 23 The data in table 5 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 5 and 6. 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 5 and 6 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. |
| REGIONAL DATA | |
| | 24 The ABS conducts a manufacturing census one year in five, from which |
| | detailed regional data are available (with the last census being conducted in |
| | respect of 1996-97). In other years, an annual manufacturing survey is conducted. |
| | Due to sampling constraints, regional data have not been available from annual |
| | manufacturing surveys. However, investigations currently underway indicate that |
| | it may be possible to produce reliable estimates in sample survey years for Sydney |
| | Statistical Division and Balance of New South Wales. Estimates for these areas for |
| | 1997–98 are expected to be available early next year, on request, for a charge. |
| ACKNOWLEDGMENT | |
| | 25 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 | |
| | 26 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 | |
| | 27 A series of publications <i>Manufacturing Industry</i> , [State], 1997–98 |
| | (Cat. nos 8221.1–8221.6) will be produced for each State. These publications are |
| | being released progressively. |
| | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
| | |

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RELATED PUBLICATIONS continued

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

- Business Operations and Industry Performance, Australia, 1997–98 (Cat. no. 8140.0), to be released in December 1999—Annual publication
- Business Operations and Industry Performance, Australia, Preliminary, 1997–98 (Cat. no. 8142.0), released on 27 May 1999—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, 1999 (Cat. no. 8225.0), to be released in December 1999—Annual publication
- Manufacturing Industry, Australia, Preliminary, 1998–99 (Cat. no. 8201.0), to be released in March 2000—Annual publication
- Manufacturing Production, Commodities Produced, Australia, 1997–98 (Cat. no. 8365.0), to be released in December 1999—Annual publication

BACK DATA AND UNPUBLISHED STATISTICS

29 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 26 and 28 also provides more details.

ROUNDING

30 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.

31 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.

SYMBOLS AND OTHER USAGES

| ABS | Australian Bureau of Statistics |
|--------|--|
| ANZSIC | Australian and New Zealand Standard Industrial Classification |
| GDP | Gross Domestic Product |
| IGP | Industry Gross Product |
| IVA | Industry Value Added |
| mfg | manufacturing |
| n.e.c. | not elsewhere classified |
| n.p. | not available for publication but included in totals where applicable |
| r | figure or series revised since previous issue |
| * | data subject to standard errors greater than or equal to 25% of the estimate, but less than 50% of the estimate |
| ** | data subject to standard errors greater than or equal to 50% of the estimate, but less than 100% of the estimate |
| • • | not applicable |
| | |

— nil or rounded to zero

SAMPLE ERROR

1 The 1997–98 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 1997–98 (and 1992–93, 1994–95 and 1995–96) 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 two chances in three 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 1997–98 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 page 35) 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 5% or less (see page 35).

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 the section Standard Errors. 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.

NEW SOUTH WALES

| INDUSTRY SUBDIVISION | Employment at end of June(a) | Wages and salaries(b) | Turnover(c) | Industry value added(d) | Amount exported by this business unit or by its agent |
|---|------------------------------------|-----------------------------|-------------|-------------------------------|--|
| ANZSIC | | | | | |
| code Description | % | % | % | % | % |
| | | | | | |
| 21 Food, beverage and tobacco mfg | 1.1 | 0.9 | 0.7 | 0.6 | 1.2 |
| 22 Textile, clothing, footwear and leather mfg | 3.3 | 2.2 | 1.7 | 2.6 | 1.9 |
| 23 Wood and paper product mfg | 3.6 | 2.6 | 2.2 | 2.0 | 2.8 |
| 24 Printing, publishing and recorded media | 3.6 | 2.5 | 1.6 | 1.7 | 6.4 |
| 25 Petroleum, coal, chemical and associated product mfg | g 1.6 | 1.0 | 0.5 | 0.7 | 0.8 |
| 26 Non-metallic mineral product mfg | 2.3 | 1.5 | 1.0 | 1.1 | 4.2 |
| 27 Metal product mfg | 2.0 | 1.4 | 1.0 | 1.0 | 1.1 |
| 28 Machinery and equipment mfg | 1.7 | 1.1 | 1.4 | 1.2 | 1.4 |
| 29 Other manufacturing | 4.7 | 4.3 | 4.0 | 4.4 | 17.7 |
| 21–29 Total manufacturing | 0.8 | 0.6 | 0.4 | 0.4 | 0.6 |

(a) Includes working proprietors.

(b) Excludes the drawings of working proprietors.

(c) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes. (d) Commencing with the 1997–98 manufacturing collection, industry value added replaces industry gross product as the measure of an industry's contribution to gross domestic product. For more details, see paragraphs 13 and 14 of the Explanatory Notes.

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AUSTRALIAN CAPITAL TERRITORY

| IND | USTRY SUBDIVISION | Employment at end of June(a) | Wages and salaries(b) | Turnover(c) | Industry value added(d) |
|--|--|------------------------------------|-----------------------------|--|-------------------------------|
| ANZ | | 0/ | 0/ | 0/ | 0/ |
| cod | e Description | % | % | % | % |
| • • | | | • • • • • • • | • • • • • • • | • • • • • • • |
| 21 | Food, beverage and tobacco mfg | 5.5 | 2.7 | 2.5 | 1.6 |
| 22 | Textile, clothing, footwear and leather mfg | 10.1 | 4.7 | 3.5 | 2.9 |
| 23 | Wood and paper product mfg | 3.8 | 2.7 | 3.4 | 5.4 |
| 24 | Printing, publishing and recorded media | 6.0 | 5.2 | 4.2 | 6.8 |
| 25 | Petroleum, coal, chemical and associated product mfg | _ | _ | _ | _ |
| 26 | Non-metallic mineral product mfg | 4.6 | 6.7 | 4.2 | 3.1 |
| 27 | Metal product mfg | 11.2 | 8.4 | 6.4 | 7.1 |
| 28 | Machinery and equipment mfg | 13.3 | 14.0 | 8.8 | 9.3 |
| 29 | Other manufacturing | 12.0 | 5.8 | 9.8 | 13.3 |
| 21- | -29 Total manufacturing | 3.4 | 3.4 | 2.1 | 3.4 |
| • • | | | | | |
| (a) Includes working proprietors. (d) Commencing with the 1997–98 | | | | | |
| (b) Excludes the drawings of working proprietors. | | | ufacturing c | ollection, ind | ustry value |
| (c) Commencing with the 1997–98 manufacturing collection, new international standards apply to the calculation of turnover. For more details, see paragraphs 11 and 12 of the Explanatory Notes. | | the to g deta | measure of ross domest | industry gross an industry's ic product. Fo agraphs 13 au Notes. | contribution or more |

| ABS | Australian Bureau of Statistics | | |
|---|---|--|--|
| Amount exported by this business unit or by 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 | C Australian and New Zealand Standard Industrial Classification | | |
| Capitalised work done for own use | 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. | | |
| 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 | 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. | | |
| | 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. | | |
| | 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. | | |
| 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 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 for sale produced by this establishment (Table 5) | 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 5, 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, Jobstart 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. |

GLOSSARY continued

| Industry gross product (IGP) continued | - | | |
|---|--|--|--|
| | 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 | | |
| 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 | | |
| | 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: | | |
| | 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) | 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. | | |
| | The derivation of IVA is as follows: | | |
| | Turnover (new standards) | | |
| | plus Closing inventories | | |
| | less Opening inventories | | |
| | less Intermediate input expenses (for details, see the entry for operating expenses) | | |
| | equals IVA | | |
| | 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 | | |

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).

GLOSSARY continued

| Industry value added (IVA) per person employed | IVA of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year. | | |
|---|--|--|--|
| Intermediate inputs | 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: | | |
| | Intermediate input expenses (for details, see the entry for operating expenses) plus Opening inventories | | |
| | less Closing inventories | | |
| Location | 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. | | |
| Management unit | The management unit is the highest-level unit within a business, having regard to industry homogeneity, for which accounts are maintained; in nearly all cases, it coincides with the legal entity owning the business (that is, company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it. | | |
| 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 | 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 abnormal 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. | | |

Operating expenses continued

Remaining expenses are categorised as follows:

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Intermediate input expenses

Intermediate input expenses cover the major expenses incurred by manufacturers in producing and distributing goods and services produced (except labour costs), namely:

- 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

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.

Excluded from this category are selected labour costs and other operating expenses as defined below:

Selected labour costs

Wages and salaries including provision expenses for employee entitlements Employer contributions to superannuation funds Workers' compensation costs Payroll tax and Fringe benefits tax

Other operating expenses

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, 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.

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GLOSSARY continued

| 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. |
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| 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 1997–98 collection, a business may have reported data for the year ended 31 December 1997. |
| 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. 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 for sale produced by this establishment (Table 5) | 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 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. |
| Statistical division | A general purpose spatial unit and is the largest and most stable spatial unit within each State and Territory in the Main Structure of the <i>Australian Standard Geographical Classification</i> (Cat. no. 1216.0). |

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| 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. |

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RRP \$17.50