

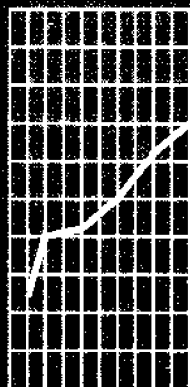


1995-96

EMBARGO: 11.30 AM (CANBERRA TIME) FRI 10 OCT 1997

Manufacturing Industry

Australia



NOTES

ABOUT THIS ISSUE

This issue sees the introduction of the data item Industry Gross Product (IGP). IGP replaces the data item value added which was only available every third year and which was last published for 1992-93. Because of changes to the collection strategy of the annual manufacturing collection to support an improved National Accounts model, IGP will now be available for each year of the collection at the industry class level.

From this issue, the data contained in this publication will relate to the operations of manufacturing establishments only. You will get in-depth data - details on employment, turnover, wages and salaries, IGP and direct exports - as well as State information. If you need additional information, analysis and commentary about manufacturing, you will find it valuable to order a copy of the new ABS publication *Manufacturing, Australia* (Cat. no. 8225.0). Data for the total manufacturing industry as well as other major industries are contained in *Business Operations and Industry Performance, Australia* (Cat. no. 8140.0).

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NEW PUBLICATION — *Manufacturing, Australia, 1997* (Cat. No. 8225.0)

The first issue of *Manufacturing, Australia* (Cat. no. 8225.0) will be released in March 1998. It is a new compendium publication about manufacturing businesses, which will cover topics such as industry performance, employment and output levels, export activity, cost structures and profits.

The publication will highlight the range of ABS data about manufacturing which is available and will draw on the latest information. Feature articles from non ABS sources will also be included.

In general, data will be presented by broad level of manufacturing industry with most tables presenting data for total manufacturing and its nine major subdivisions. Selected data will be presented in terms of constant prices as well as current prices. You will have access to historical as well as the most recent data and there will be analysis of and commentary on major trends. Order your copy of *Manufacturing, Australia, 1997* (Cat. no. 8225.0) by phoning 1300 366 323.

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SYMBOLS AND OTHER USAGES

ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
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 sampling variability of between 25% and 50%
..	not applicable
—	nil or rounded to zero

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INQUIRIES

For information about other ABS statistics and services, please refer to the back of this publication.

For further information about statistics in this publication and the availability of related unpublished statistics, contact John Ridley on Sydney (02) 9268 4541.

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PREFACE

THE 1995-96 MANUFACTURING INDUSTRY SURVEY

This publication contains detailed industry statistics compiled from a survey of manufacturing establishments (see paragraph 5 of the Explanatory Notes) conducted in respect of 1995-96, with some comparative statistics for earlier years. It expands and updates the information which was published in *Manufacturing Industry, Australia, Preliminary, 1995-96* (Cat. no. 8201.0), released on 21 April 1997.

For the 1995-96 manufacturing collection, a sample of approximately 20,000 manufacturing establishments was approached to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. Information related to exports emanating from the manufacturing sector is shown in tables 5 and 6.

Approximately 5,900 of the 20,000 establishments were asked to provide additional information related to detailed structural and performance data. They were also asked to supply value of sales for commodities produced.

All data in this publication, with the exception of IGP estimates, have been compiled from the larger sample. Estimates of IGP were compiled using data from both samples.

Guidelines to the quality of estimates from the sample surveys as measured by the standard (sampling) error are shown on page 40.

DATA AS CONTAINED IN THIS PUBLICATION

The data contained in this publication have been adjusted for deficiencies in the number of businesses recorded on the ABS business register. The nature of these adjustments and the reasons for making them are described in paragraphs 10 and 11 of the Explanatory Notes.

As noted above, about 5,900 establishments included in the 1995-96 collection were asked to supply value of sales for commodities produced. Similarly, about 7,500 establishments included in the 1994-95 collection (and 18,000 establishments included in the 1993-94 collection) were asked to supply this information. This has meant that the industry code for the responding units included in any of these commodity samples has been able to be determined on an objective industry coding basis, compared to the more subjective industry coding which has occurred for non-responding units to these collections and for all units in each of the 1990-91 to 1992-93 (inclusive) collections. More information on this subject is in paragraph 15 of the Explanatory Notes.

For these reasons, comparison of industry data (particularly at class level) published in the 1993-94 and later issues of this publication with data published in the 1992-93 and earlier issues of this publication should be undertaken with caution.

PREFACE *continued*

DATA TO BE RELEASED IN OTHER PUBLICATIONS

More detailed manufacturing industry statistics for each State will be released shortly in a series of publications (Cat. nos. 8221.1 to 8221.6). The publication for New South Wales (Cat. no. 8221.1) also contains selected data for the Australian Capital Territory.

Commodity data will be released in *Manufacturing Production, Australia: Principal Commodities Produced, 1995-96* (Cat. no. 8365.0), to be released early in 1998.

Management unit and other ABS data, as well as data from other sources, will be released in the new compendium publication *Manufacturing, Australia, 1997* (Cat. no. 8225.0), to be released in March 1998. Management unit data are also included in *Business Operations and Industry Performance, Australia* (Cat. no. 8140.0).

UNPUBLISHED DATA

A considerable amount of data from the annual manufacturing collection is available in unpublished form. More detailed information to satisfy individual user requirements may be available on request. In general, unpublished data for 1995-96 consist of finer industry dissections of the data presented in tables 3 to 6. Further details can be obtained by referring to the *Information Paper: Availability of Statistics Related to Manufacturing, 1997* (Cat. no. 8205.0) or by contacting the New South Wales Office of the ABS — see page 2 for contact details.

W. McLennan
Australian Statistician

SUMMARY OF FINDINGS

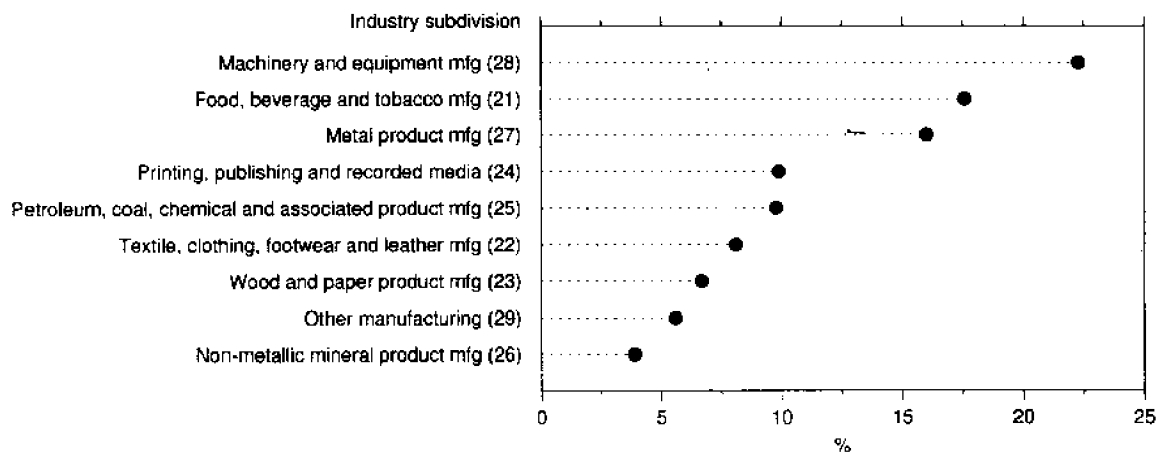
OVERVIEW

Turnover for the year 1995–96 by manufacturing establishments operating in Australia was \$197,504m. This represents a 3.2% increase, in current price terms, from the \$191,430m turnover recorded for the year 1994–95. Manufacturing employment at the end of June 1996 was 907,700, some 1.8% lower than 12 months earlier.

EMPLOYMENT (TABLES 1, 2 AND 3)

The 1995–96 manufacturing survey estimated that 907,700 persons were employed at the end of June 1996. As in previous years, Machinery and equipment manufacturing (22.3%), Food, beverage and tobacco manufacturing (17.6%) and Metal product manufacturing (16.0%) were the major contributors to employment at the end of June 1996. Non-metallic mineral product manufacturing (3.9%) and Other manufacturing (5.6%) remain the smallest contributors.

Distribution of employment—June 1996



Manufacturing employment decreased by 1.8% between June 1995 and June 1996. Eight of the nine industry subdivisions recorded decreases in the level of employment over this period. The largest percentage decreases were recorded by Non-metallic mineral product manufacturing (down 7.3% from 38,400 persons to 35,600 persons), Other manufacturing (down 4.6% from 53,300 persons to 50,900 persons), Textile, clothing, footwear and leather manufacturing (down 3.5% from 76,500 persons to 73,900 persons) and Wood and paper product manufacturing (down 3.3% from 63,100 persons to 61,000 persons). Employment in Metal product manufacturing remained unchanged (at 145,000 persons).

SUMMARY OF FINDINGS *continued*

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EMPLOYMENT (TABLES 1, 2 AND 3) *continued*

As in previous years, New South Wales and Victoria were the States in which manufacturing employment was concentrated at the end of June 1996. New South Wales accounted for 32.8% of Australian manufacturing employment, with the corresponding figure for Victoria being 32.2%. This represents an increase of 0.6 percentage points for Victoria, but a decrease of 0.3 percentage points for New South Wales on the percentages that they recorded 12 months earlier. Queensland's proportion of total Australian manufacturing employment also decreased substantially over this period, down by 0.3 percentage points to 14.7%.

Longer-term trends (June 1991 to June 1996)

Employment in the Australian manufacturing industry decreased by 73,700 persons (down 7.5% from 981,400 persons to 907,700 persons) over the period June 1991 to June 1996. Eight industry subdivisions recorded decreases and one recorded an increase in employment over this period. The largest percentage decreases were recorded by Textile, clothing, footwear and leather manufacturing (down 18.8% from 91,000 persons to 73,900 persons), Non-metallic mineral product manufacturing (down 13.7% from 41,300 persons to 35,600 persons) and Metal product manufacturing (down 11.4% from 163,700 persons to 145,000 persons). The only increase was recorded by Printing, publishing and recorded media (up 2.0% from 88,400 persons to 90,200 persons).

Between June 1991 and June 1996, five of the States and Territories recorded decreases in employment and three recorded increases. The largest percentage decreases were recorded in Tasmania (down 11.8% from 25,100 persons to 22,200 persons), New South Wales (down 11.2% from 335,300 persons to 297,900 persons) and South Australia (down 10.5% from 95,600 persons to 85,500 persons). Decreases were also recorded in Victoria (down 9.4% from 322,300 persons to 292,100 persons) and the Australian Capital Territory (down 3.1% from 4,000 persons to 3,900 persons). The largest percentage increase was recorded in the Northern Territory (up 14.1% from 3,100 persons to 3,500 persons). Increases were also recorded in Western Australia (up 4.5% from 65,700 persons to 68,700 persons) and Queensland (up 2.8% from 130,200 persons to 133,900 persons).

The percentage of Australian manufacturing employment in New South Wales has declined since June 1991 (decreasing by 1.3 percentage points to 32.8%), as has that for Victoria (down 0.7 percentage points to 32.2%), South Australia (down 0.3 percentage points to 9.4%) and Tasmania (down 0.1 percentage points to 2.4%). Queensland increased its proportion of employment over this period (up 1.5 percentage points to 14.7%), as did Western Australia (up 0.9 percentage points to 7.6%) and the Northern Territory (up 0.1 percentage points to 0.4%). The Australian Capital Territory maintained its proportion of Australian manufacturing employment over the period (at 0.4%).

SUMMARY OF FINDINGS *continued*

TURNOVER (TABLES 1, 2 AND 3)

Turnover for the year 1995-96 by manufacturing establishments operating in Australia was \$197,504m. This represents a 3.2% increase, in current price terms, from \$191,430m turnover recorded for the year 1994-95. As *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (Cat. no. 6412.0) shows price increases of 2.5% during 1995-96, real growth from 1994-95 to 1995-96 is implied.

Food, beverage and tobacco manufacturing and Machinery and equipment manufacturing remain the manufacturing industry subdivisions with the largest contribution to turnover.

The four industry subdivisions contributing the largest proportions to total manufacturing turnover and the most notable industry classes within those subdivisions (as a percentage of total manufacturing turnover) were:

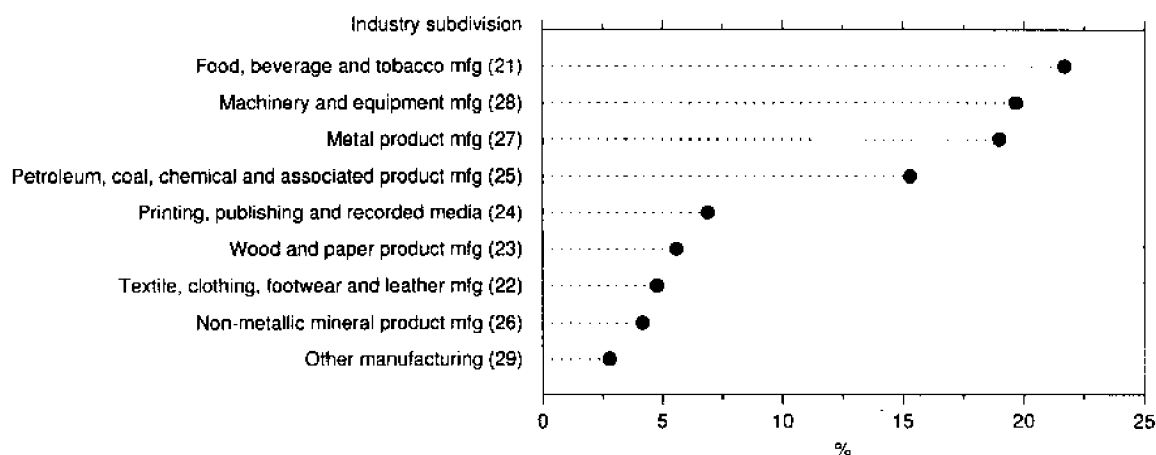
- Food, beverage and tobacco manufacturing (21.7%), where the industry classes Meat processing (ANZSIC class 2111 at 3.0%), Dairy product manufacturing n.e.c. (ANZSIC class 2129 at 1.6%) and Fruit and vegetable processing (ANZSIC class 2130 at 1.5%) were the most substantial.
- Machinery and equipment manufacturing (19.7%), where the industry classes Motor vehicle manufacturing (ANZSIC class 2811 at 4.8%) and Automotive component manufacturing n.e.c. (ANZSIC class 2819 at 1.6%) were the most substantial.
- Metal product manufacturing (19.0%), where the industry classes Basic iron and steel manufacturing (ANZSIC class 2711 at 4.6%), Aluminium smelting (ANZSIC class 2722 at 2.0%) and Alumina production (ANZSIC class 2721 at 1.6%) were the most substantial.
- Petroleum, coal, chemical and associated product manufacturing (15.3%), where the industry classes Petroleum refining (ANZSIC class 2510 at 3.3%) and Medicinal and pharmaceutical product manufacturing (ANZSIC class 2543 at 1.9%) were the most substantial.

Industry classes making a notable contribution to total turnover and not included in the subdivisions listed above included Printing (ANZSIC class 2412 at 2.5%) and Newspaper printing or publishing (ANZSIC class 2421 at 2.0%).

SUMMARY OF FINDINGS *continued*

TURNOVER (TABLES 1, 2 AND 3) *continued*

Distribution of turnover



Longer-term trends (1990-91 to 1995-96)

Turnover for the manufacturing industry increased, in current price terms, by 15.1% over the period 1990-91 to 1995-96, though employment decreased by 7.5% over the same period. Eight industry subdivisions recorded increases and one recorded a decrease in turnover. The industry subdivisions with the largest percentage increases were Printing, publishing and recorded media (up 27.4% from \$10,734m to \$13,680m), Food, beverage and tobacco manufacturing (up 22.4% from \$34,997m to \$42,821m) and Machinery and equipment manufacturing (up 21.2% from \$32,028m to \$38,824m). The only decrease, in current price terms, was recorded in Textile, clothing, footwear and leather manufacturing (down 2.7% from \$9,787m to \$9,528m).

Three of the States increased their share of Australian turnover between 1990-91 and 1995-96. Queensland increased its contribution by 0.9 percentage points (to 14.6% of Australian turnover), followed by Victoria (up 0.1 percentage points to 32.2%) and South Australia (up 0.1 percentage points to 9.1%). The two States to record a decrease were New South Wales (down 1.0 percentage points to 33.3%) and Western Australia (down 0.1 percentage points to 7.6%). Tasmania (at 2.4%), the Northern Territory (at 0.5%) and the Australian Capital Territory (at 0.3%) maintained their share of Australian turnover over the period.

INDUSTRY GROSS PRODUCT (TABLES 1, 2 AND 3)

Industry gross product (see the Glossary for its definition) for the year 1995-96 by manufacturing establishments operating in Australia was \$61,580m. This represents a 20.5% increase, in current price terms, from \$51,102m industry gross product recorded for the year 1992-93.

SUMMARY OF FINDINGS *continued*

INDUSTRY GROSS PRODUCT (TABLES 1, 2 AND 3) *continued*

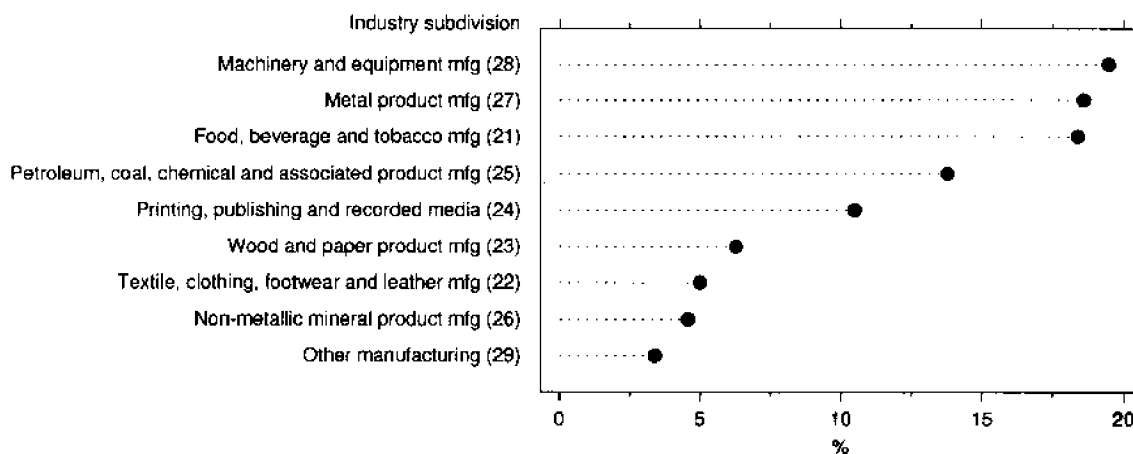
For 1995-96, Machinery and equipment manufacturing, Metal product manufacturing, Food, beverage and tobacco manufacturing and Petroleum, coal, chemical and associated product manufacturing were the industry subdivisions with the largest contribution to industry gross product in the manufacturing industry.

The contribution of these industry subdivisions to total manufacturing industry gross product and the most notable industry classes within those subdivisions (as a percentage of total manufacturing industry gross product) were:

- Machinery and equipment manufacturing (19.5%), where the industry classes Motor vehicle manufacturing (ANZSIC class 2811 at 3.4%) and Automotive component manufacturing n.e.c. (ANZSIC class 2819 at 1.9%) were the most substantial.
- Metal product manufacturing (18.6%), where the industry classes Basic iron and steel manufacturing (ANZSIC class 2711 at 4.6%), Aluminium smelting (ANZSIC class 2722 at 2.6%) and Alumina production (ANZSIC class 2721 at 1.7%) were the most substantial.
- Food, beverage and tobacco manufacturing (18.4%), where the industry classes Meat processing (ANZSIC class 2111 at 1.9%), Fruit and vegetable processing (ANZSIC class 2130 at 1.4%) and Beer and malt manufacturing (ANZSIC class 2182 at 1.4%) were the most substantial.
- Petroleum, coal, chemical and associated product manufacturing (13.8%), where the industry classes Medicinal and pharmaceutical product manufacturing (ANZSIC class 2543 at 1.9%) and Petroleum refining (ANZSIC class 2510 at 1.4%) were the most substantial.

Industry classes making a notable contribution to industry gross product and not included in the subdivisions listed above included Printing (ANZSIC class 2412 at 3.5%) and Newspaper printing or publishing (ANZSIC class 2421 at 3.3%).

Distribution of industry gross product



SUMMARY OF FINDINGS *continued*

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INDUSTRY GROSS PRODUCT (TABLES 1, 2 AND 3) *continued*

Longer-term trends (1992-93 to 1995-96)

Industry gross product for the manufacturing industry increased, in current price terms, by 20.5% over the period 1992-93 to 1995-96. All nine industry subdivisions recorded increases. The industry subdivisions with the largest percentage increases were Machinery and equipment manufacturing (up 27.8% from \$9,420m to \$12,037m), Printing, publishing and recorded media (up 27.3% from \$5,061m to \$6,444m) and Metal product manufacturing (up 25.4% from \$9,131m to \$11,454m). The smallest increase, in current price terms, was recorded in Textile, clothing, footwear and leather manufacturing (up 2.4% from \$2,986m to \$3,056m).

Three of the States increased their share of Australian industry gross product between 1992-93 and 1995-96. South Australia increased its contribution by 1.5 percentage points (to 9.7% of Australian industry gross product), followed by Queensland (up 0.8 percentage points to 13.7%) and Tasmania (up 0.5 percentage points to 2.9%). The three States to record a decrease were New South Wales (down 2.0 percentage points to 34.1%), Victoria (down 0.4 percentage points to 32.0%) and Western Australia (down 0.4 percentage points to 6.7%). The Northern Territory (at 0.5%) and the Australian Capital Territory (at 0.4%) maintained their share of Australian industry gross product over the period.

RATIO OF WAGES AND SALARIES TO TURNOVER (TABLE 1)

In 1995-96, the ratio of wages and salaries to turnover for Australia's manufacturing industry was 0.15; that is, on average, 15 cents in wages and salaries is paid for each \$1.00 of turnover. This ratio is the same as that measured in 1993-94 and 1994-95, but a decrease on the 0.17 recorded in 1990-91.

The wages and salaries to turnover ratio decreased in eight of the nine industry subdivisions between 1990-91 and 1995-96, with the largest fall being recorded by Machinery and equipment manufacturing (down from 0.21 to 0.17). The ratio for Petroleum, coal, chemical and associated product manufacturing (at 0.11) has been the same for each of these six years and is the lowest of all the subdivisions.

TURNOVER PER PERSON EMPLOYED (TABLES 1, 2 AND 3)

Turnover per person employed for total manufacturing in 1995-96 was \$217,600, which is 5.1% higher than the figure recorded for 1994-95. Petroleum, coal, chemical and associated product manufacturing has continued to comprise a substantially larger share of turnover than of employment, which resulted in this subdivision again recording a substantially higher value of turnover per person employed (\$339,500) than other subdivisions in the manufacturing industry. Other manufacturing recorded the lowest value for this ratio (\$107,900). Various factors affect the magnitude of turnover per person employed. In general, industries which are labour intensive will record lower values of turnover per person employed than will those industries which are capital intensive.

SUMMARY OF FINDINGS *continued*

INDUSTRY GROSS PRODUCT PER PERSON EMPLOYED (TABLES 2 AND 3)

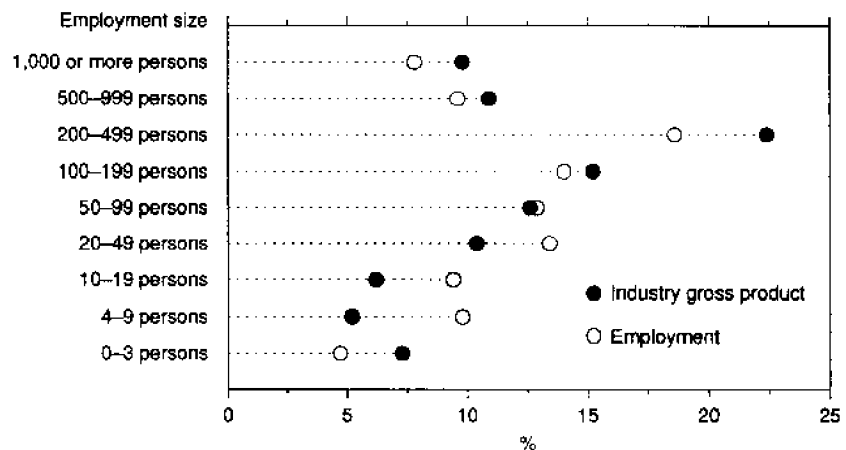
Industry gross product per person employed for total manufacturing in 1995-96 was \$67,800, which is 21.3% higher than the figure recorded in 1992-93. The industries with the highest industry gross product per person employed in 1995-96 were Aluminium smelting (ANZSIC class 2722) (\$298,200), Petroleum refining (ANZSIC class 2510) (\$247,000), Beer and malt manufacturing (ANZSIC class 2182) (\$233,100), Wood chipping (ANZSIC class 2312) (\$228,000) and Organic industrial chemical manufacturing n.e.c. (ANZSIC class 2534) (\$197,300). The industries with the lowest industry gross product per person employed in 1995-96 were Leather and leather substitute product manufacturing (ANZSIC class 2262) (\$18,900), Boatbuilding (ANZSIC class 2822) (\$26,400), Clothing manufacturing n.e.c. (ANZSIC class 2249) (\$28,300) and Cardigan and pullover manufacturing (ANZSIC class 2232) (\$29,800).

EMPLOYMENT SIZE (TABLE 4)

Note: In interpreting comments by employment size, reference should be made to paragraphs 18 and 19 of the Explanatory Notes. This particularly affects the smallest size categories.

Establishments employing 100 or more persons accounted for 50.0% of employment at the end of June 1996 and 58.3% of industry gross product for 1995-96. Establishments employing 20-99 persons accounted for 26.2% of employment and 22.9% of industry gross product. Small establishments (i.e. those employing 0-19 persons) accounted for 23.8% of employment and 18.7% of industry gross product. Manufacturing establishments employing 1,000 or more persons at the end of June 1996 employed 7.8% of all persons working in the manufacturing industry in Australia and contributed 9.8% to industry gross product.

Distribution of industry gross product and employment



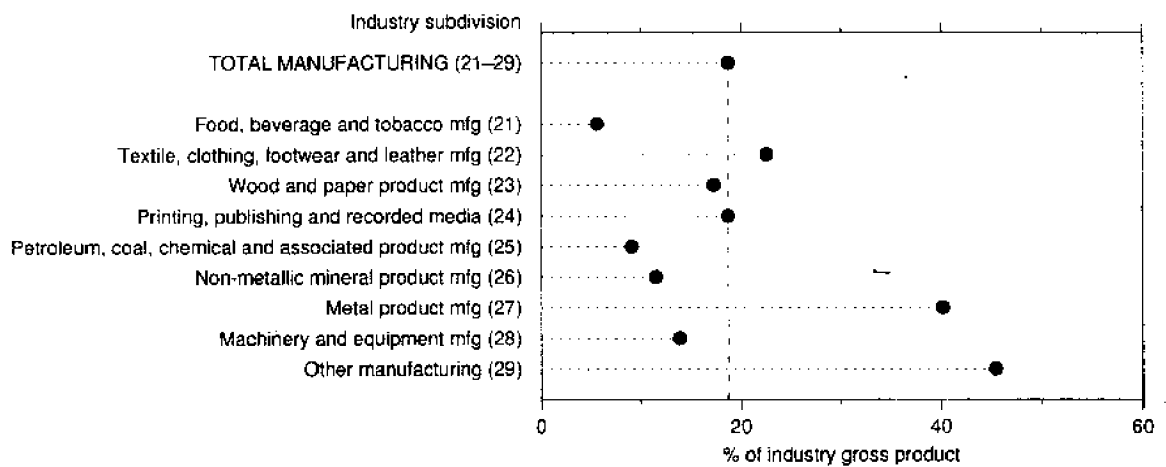
SUMMARY OF FINDINGS *continued*

EMPLOYMENT SIZE (TABLE 4) *continued*

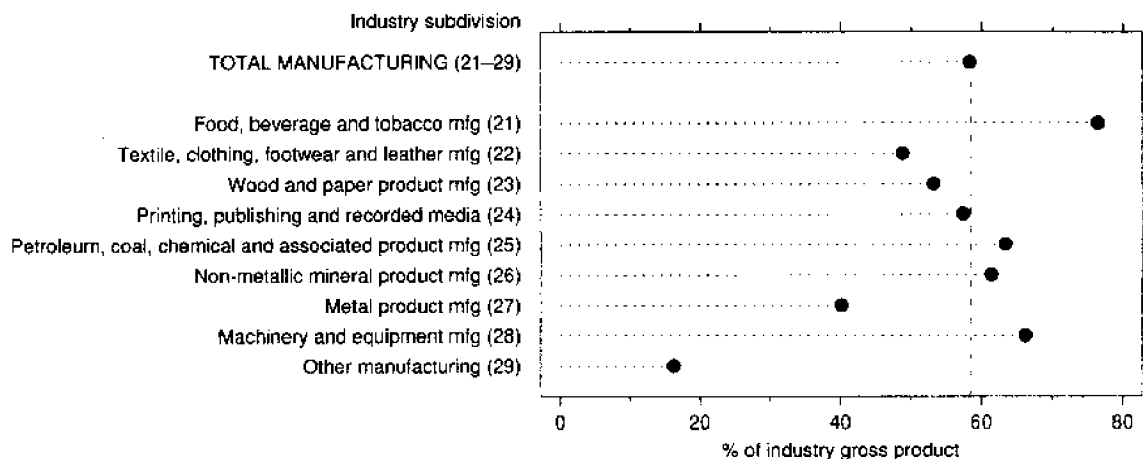
For six of the nine industry subdivisions, more than 50% of industry gross product was contributed by establishments employing 100 or more persons. The industries where these establishments contributed most to industry gross product were Food, beverage and tobacco manufacturing (76.4%), Machinery and equipment manufacturing (66.2%) and Petroleum, coal, chemical and associated product manufacturing (63.4%).

Small establishments (employing 0–19 persons) made relatively significant contributions to industry gross product for Other manufacturing (45.4%), Metal product manufacturing (40.1%) and Textile, clothing, footwear and leather manufacturing (22.6%).

Distribution of industry gross product, 0–19 persons



Distribution of industry gross product, 100 or more persons

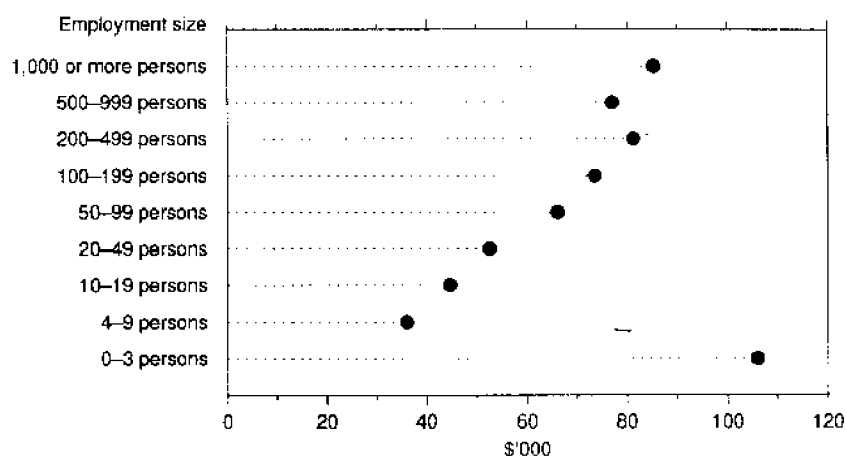


SUMMARY OF FINDINGS *continued*

EMPLOYMENT SIZE (TABLE 4) *continued*

Small establishments (employing 0–19 persons) had a lower ratio of industry gross product per person employed at the end of June 1996 (\$53,100) than establishments in the larger size categories (except for those establishments employing 20–49 persons). Establishments employing 100 or more persons recorded an average industry gross product per person employed of \$79,000, with establishments employing 1,000 or more persons having a ratio of \$85,400.

Industry gross product per person employed



EXPORTS BY MANUFACTURERS (TABLES 5 AND 6)

For 1995–96, the percentage of the sales of goods produced in the manufacturing industry which were subsequently exported by the manufacturer or its agent was 15.1%. The Metal product manufacturing industry subdivision recorded the highest percentage contribution (28.0%), followed by Food, beverage and tobacco manufacturing (17.7%). The industry subdivisions to record the smallest percentage contribution were Non-metallic mineral product manufacturing (3.3%), Other manufacturing (3.3%) and Printing, publishing and recorded media (4.4%).

The percentage of the sales of goods produced in the manufacturing industry which were subsequently exported varied according to employment size. Establishments employing 100 or more persons recorded the highest contribution (16.2%), while establishments employing 0–49 persons recorded 14.4% and establishments employing 50–99 persons recorded 11.1%.

Tables 5 and 6 do not include all exports of goods manufactured in Australia. Rather, they show the extent to which Australian manufacturers are directly involved in the export process. Further information about the data in tables 5 and 6 is contained in paragraphs 20 to 23 of the Explanatory Notes.

SUMMARY OF FINDINGS *continued*

EXPORTS BY MANUFACTURERS (TABLES 5 AND 6) *continued*

Establishments that export made up a significant proportion of employment (41.5%), wages and salaries (45.8%), turnover (54.9%) and industry gross product (54.5%) in the manufacturing industry. Establishments that export more than 50% of their sales of goods produced accounted for 5.3% of employment, 5.7% of wages and salaries, 10.0% of turnover and 11.2% of industry gross product in the manufacturing industry.

Distribution of selected variables, by proportion of goods exported



1

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

INDUSTRY SUBDIVISION			Employment at end of June(c)	Wages and salaries(d)(e)	Turnover(e)	Industry gross product(e)	Ratio of wages and salaries to turnover(e)	Turnover per person employed(e)(f)
ANZSIC code	Description		'000	\$m	\$m	\$m	Ratio	\$'000
21	Food, beverage and tobacco mfg	1995-96	159.9	5 093.8	42 821.4	11 325.7	0.12	267.8
		1994-95r	163.3	5 042.5	41 247.1	..	0.12	252.6
		1993-94	164.2	4 969.2	40 039.3	..	0.12	243.9
		1992-93	162.8	4 819.0	37 489.9	9 667.5	0.13	230.3
		1991-92	162.3	4 560.2	35 574.2	..	0.13	219.2
		1990-91	169.2	4 566.0	34 997.2	..	0.13	206.8
22	Textile, clothing, footwear and leather mfg	1995-96	73.9	1 810.4	9 527.6	3 056.5	0.19	129.0
		1994-95r	76.5	1 915.7	9 478.9	..	0.20	123.8
		1993-94r	75.6	1 804.1	9 333.0	..	0.19	123.5
		1992-93	79.3	1 903.5	9 081.7	2 986.1	0.21	114.6
		1991-92	82.4	1 980.8	9 367.1	..	0.21	113.7
		1990-91	91.0	2 073.1	9 787.1	..	0.21	107.6
23	Wood and paper product mfg	1995-96	61.0	1 869.7	11 141.1	3 853.4	0.17	182.7
		1994-95r	63.1	1 951.2	11 308.1	..	0.17	179.3
		1993-94r	61.4	1 778.3	10 644.6	..	0.17	173.2
		1992-93	60.0	1 772.9	10 066.9	3 284.7	0.18	167.7
		1991-92	60.6	1 743.5	9 404.3	..	0.19	155.2
		1990-91	62.4	1 755.3	9 463.4	..	0.19	151.7
24	Printing, publishing and recorded media	1995-96	90.2	3 053.1	13 679.7	6 444.0	0.22	151.7
		1994-95r	92.2	3 051.5	13 288.1	..	0.23	144.1
		1993-94	88.0	2 790.3	12 151.7	..	0.23	138.1
		1992-93	87.5	2 745.9	11 548.0	5 060.8	0.24	132.0
		1991-92	85.5	2 568.0	10 575.5	..	0.24	123.7
		1990-91	88.4	2 599.3	10 733.7	..	0.24	121.4
25	Petroleum, coal, chemical and associated product mfg	1995-96	89.1	3 408.4	30 250.8	8 506.1	0.11	339.5
		1994-95r	89.7	3 388.5	29 730.9	..	0.11	331.3
		1993-94r	88.2	3 223.0	29 109.4	..	0.11	330.0
		1992-93	89.2	3 144.6	28 318.4	7 114.8	0.11	317.5
		1991-92	90.5	3 116.7	28 142.9	..	0.11	310.9
		1990-91	93.9	3 141.1	28 192.7	..	0.11	300.1
26	Non-metallic mineral product mfg	1995-96	35.6	1 231.4	8 247.7	2 833.6	0.15	231.7
		1994-95r	38.4	1 318.1	8 785.9	..	0.15	228.6
		1993-94	38.3	1 293.7	8 633.0	..	0.15	225.5
		1992-93	39.6	1 300.1	8 333.2	2 689.9	0.16	210.6
		1991-92	39.5	1 268.9	7 673.3	..	0.17	194.2
		1990-91	41.3	1 321.1	7 729.4	..	0.17	187.3

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-17 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.

INDUSTRY SUBDIVISION		Employment at end of June(c)	Wages and salaries(d)(e)	Turnover(e)	Industry gross product(e)	Ratio of wages and salaries to turnover(e)	Turnover per person employed(e)(f)	
ANZSIC code	Description	'000	\$m	\$m	\$m	Ratio	\$'000	
27	Metal product mfg	1995-96	145.0	5 105.5	37 517.6	11 453.8	0.14	258.8
		1994-95r	145.0	5 069.8	34 596.1	..	0.15	238.6
		1993-94	145.2	4 830.6	33 305.8	..	0.15	229.4
		1992-93	148.0	4 829.7	32 368.3	9 130.8	0.15	218.7
		1991-92	150.7	4 904.9	31 793.6	..	0.15	210.9
		1990-91	163.7	5 098.4	33 607.2	..	0.15	205.3
28	Machinery and equipment mfg	1995-96	202.2	6 761.3	38 824.3	12 036.9	0.17	192.0
		1994-95r	202.6	6 681.0	37 332.0	..	0.18	184.3
		1993-94r	196.3	6 205.6	34 952.0	..	0.18	178.1
		1992-93	194.9	6 118.4	31 355.0	9 420.1	0.20	160.9
		1991-92	197.5	6 001.2	30 413.1	..	0.20	154.0
		1990-91	216.7	6 613.1	32 028.5	..	0.21	147.8
29	Other manufacturing	1995-96	50.9	1 222.3	5 493.3	2 070.1	0.22	107.9
		1994-95r	53.3	1 234.8	5 662.5	..	0.22	106.2
		1993-94r	54.0	1 199.8	5 517.5	..	0.22	102.2
		1992-93	52.4	1 174.9	5 076.5	1 747.2	0.23	97.0
		1991-92	52.5	1 150.1	4 973.4	..	0.23	94.8
		1990-91	54.7	1 202.9	5 090.0	..	0.24	93.0
21-29 Total manufacturing		1995-96	907.7	29 555.9	197 503.6	61 580.1	0.15	217.6
		1994-95r	924.3	29 653.1	191 429.6	..	0.15	207.1
		1993-94r	911.1	28 094.5	183 686.3	..	0.15	201.6
		1992-93	913.6	27 809.0	173 637.9	51 101.9	0.16	190.1
		1991-92	921.5	27 294.3	167 917.3	..	0.16	182.2
		1990-91	981.4	28 370.5	171 629.1	..	0.17	174.9

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-17 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.

INDUSTRY CLASS		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
FOOD, BEVERAGE AND TOBACCO MFG							
Meat and meat product mfg							
2111	Meat processing	27 467	789.2	5 916.7	1 160.9	215.4	42.3
2112	Poultry processing	10 190	292.4	1 843.8	360.9	180.9	35.4
2113	Bacon, ham and smallgoods mfg	6 599	181.2	1 197.7	328.0	181.5	49.7
211	<i>Total</i>	44 255	1 262.8	8 958.2	1 849.7	202.4	41.8
Dairy product mfg							
2121	Milk and cream processing	6 689	252.2	2 720.3	596.5	406.7	89.2
2122	Ice cream mfg	1 886	67.6	610.7	201.5	323.8	106.9
2129	Dairy product mfg n.e.c.	7 827	261.3	3 208.0	756.0	409.9	96.6
212	<i>Total</i>	16 402	581.1	6 538.9	1 554.0	398.7	94.7
213	<i>Fruit and vegetable processing</i>	11 196	383.5	3 003.2	853.3	268.2	76.2
214	<i>Oil and fat mfg</i>	1 563	65.0	702.3	146.3	449.4	93.6
Flour mill and cereal food mfg							
2151	Flour mill product mfg	2 401	94.7	1 375.8	282.5	573.1	117.7
2152	Cereal food and baking mix mfg	5 652	177.5	1 861.9	533.5	329.4	94.4
215	<i>Total</i>	8 053	272.1	3 237.7	816.0	402.0	101.3
Bakery product mfg							
2161	Bread mfg	12 656	324.9	1 358.3	457.8	107.3	36.2
2162	Cake and pastry mfg	8 365	210.9	921.0	346.2	110.1	41.4
2163	Biscuit mfg	4 612	142.8	824.3	377.1	178.7	81.8
216	<i>Total</i>	25 633	678.6	3 103.5	1 181.2	121.1	46.1
Other food mfg							
2171	Sugar mfg	6 694	244.7	2 534.1	605.1	378.6	90.4
2172	Confectionery mfg	6 764	240.9	1 257.5	519.8	185.9	76.8
2173	Seafood processing	4 209	93.1	1 058.3	237.5	251.4	56.4
2174	Prepared animal and bird feed mfg	3 876	147.4	2 324.6	477.3	599.8	123.1
2179	Food mfg n.e.c.	13 123	432.5	2 755.2	825.7	209.9	62.9
217	<i>Total</i>	34 667	1 158.6	9 929.7	2 665.3	286.4	76.9
Beverage and malt mfg							
2181	Soft drink, cordial and syrup mfg	5 963	196.7	2 047.6	571.3	343.4	95.8
2182	Beer and malt mfg	3 598	198.3	2 506.3	838.8	696.6	233.1
2183	Wine mfg	6 648	190.7	1 801.2	610.4	270.9	91.8
2184	Spirit mfg	338	10.9	113.7	24.1	336.0	71.1
218	<i>Total</i>	16 548	596.6	6 468.8	2 044.4	390.9	123.5
219	<i>Tobacco product mfg</i>	1 612	95.4	879.2	215.4	545.4	133.6
21	Total food, beverage and tobacco mfg	159 929	5 093.8	42 821.4	11 325.7	267.8	70.8

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the
end of June. Includes working proprietors.

INDUSTRY CLASS		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
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	1 564	61.1	413.1	105.8	264.1	67.7
2212	Synthetic fibre textile mfg	4 053	141.1	673.0	224.4	166.1	55.4
2213	Cotton textile mfg	3 134	97.9	498.6	156.3	159.1	49.9
2214	Wool textile mfg	2 532	70.0	284.3	86.1	112.3	34.0
2215	Textile finishing	1 972	62.1	286.3	117.8	145.2	59.7
221	<i>Total</i>	13 255	432.2	2 155.3	690.3	162.6	52.1
Textile product mfg							
2221	Made-up textile product mfg	5 707	123.2	625.2	178.1	109.5	31.2
2222	Textile floor covering mfg	2 725	86.5	570.8	210.0	209.5	77.1
2223	Rope, cordage and twine mfg	573	18.0	81.4	32.4	142.1	56.5
2229	Textile product mfg n.e.c.	2 353	55.5	244.8	104.6	104.0	44.5
222	<i>Total</i>	11 359	283.2	1 522.2	525.1	134.0	46.2
Knitting mills							
2231	Hosiery mfg	2 467	64.3	256.2	101.1	103.8	41.0
2232	Cardigan and pullover mfg	1 619	33.4	135.0	48.2	83.4	29.8
2239	Knitting mill product mfg n.e.c.	2 003	64.2	536.2	119.9	267.7	59.9
223	<i>Total</i>	6 089	161.9	927.4	269.3	152.3	44.2
Clothing mfg							
2241	Men's and boys' wear mfg	8 674	199.3	781.0	306.7	90.0	35.4
2242	Women's and girls' wear mfg	11 098	228.6	1 529.3	453.7	137.8	40.9
2243	Sleepwear, underwear and infant clothing mfg	4 718	109.5	522.2	183.2	110.7	38.8
2249	Clothing mfg n.e.c.	9 076	148.5	659.3	257.0	72.6	28.3
224	<i>Total</i>	33 566	685.8	3 491.8	1 200.6	104.0	35.8
225	<i>Footwear mfg</i>	5 518	136.8	565.4	188.4	102.5	34.2
Leather and leather product mfg							
2261	Leather tanning and fur dressing	2 892	86.2	760.8	160.6	263.1	55.5
2262	Leather and leather substitute product mfg	1 175	24.4	104.7	22.2	89.1	18.9
226	<i>Total</i>	4 067	110.5	865.5	182.8	212.8	44.9
22	Total textile, clothing, footwear and leather mfg	73 853	1 810.4	9 527.6	3 056.5	129.0	41.4
WOOD AND PAPER PRODUCT MFG							
Log sawmilling and timber dressing							
2311	Log sawmilling	7 571	191.0	798.5	359.8	105.5	47.5
2312	Wood chipping	854	32.7	454.8	194.8	532.3	228.0
2313	Timber resawing and dressing	6 169	185.9	994.7	424.2	161.3	68.8
231	<i>Total</i>	14 594	409.5	2 248.0	978.8	154.0	67.1
Other wood product mfg							
2321	Plywood and veneer mfg	1 583	45.1	239.4	111.0	151.2	70.1
2322	Fabricated wood mfg	4 219	154.6	881.8	231.4	209.0	54.9
2323	Wooden structural component mfg	15 922	370.5	1 764.2	510.7	110.8	32.1
2329	Wood product mfg n.e.c.	6 748	135.7	582.9	259.8	86.4	38.5
232	<i>Total</i>	28 471	705.9	3 468.3	1 112.8	121.8	39.1

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY CLASS		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
Paper and paper product mfg							
2331	Pulp, paper and paperboard mfg	5 786	268.7	2 462.2	881.6	425.5	152.3
2332	Solid paperboard container mfg	2 374	85.7	481.3	189.3	202.7	79.7
2333	Corrugated paperboard container mfg	5 542	239.7	1 498.3	417.7	270.4	75.4
2334	Paper bag and sack mfg	928	34.3	209.5	62.1	225.7	66.9
2339	Paper product mfg n.e.c.	3 268	125.9	773.4	211.2	236.7	64.6
233	<i>Total</i>	17 899	754.3	5 424.8	1 761.8	303.1	98.4
23	Total wood and paper product mfg	60 964	1 869.7	11 141.1	3 853.4	182.7	63.2
PRINTING, PUBLISHING AND RECORDED MEDIA							
Printing and services to printing							
2411	Paper stationery mfg	6 726	197.7	987.1	347.3	146.8	51.6
2412	Printing	38 956	1 187.2	4 961.9	2 162.9	134.3	58.5
2413	Services to printing	6 353	199.5	555.4	256.7	87.4	40.4
241	<i>Total</i>	50 035	1 584.4	6 504.3	2 766.9	130.0	55.3
Publishing							
2421	Newspaper printing or publishing	25 725	958.9	3 928.6	2 016.2	152.7	78.4
2422	Other periodical publishing	5 514	197.1	1 152.3	364.2	209.0	66.1
2423	Book and other publishing	6 987	243.3	1 483.2	940.4	212.3	134.6
242	<i>Total</i>	38 225	1 399.3	6 564.0	3 320.8	171.7	86.9
243	Recorded media manufacturing and publishing	1 904	69.4	611.3	356.4	321.1	187.2
24	Total printing, publishing and recorded media	90 164	3 053.1	13 679.7	6 444.0	151.7	71.5
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG							
251	Petroleum refining	3 564	209.8	6 459.8	880.2	1 812.5	247.0
252	Petroleum and coal product mfg n.e.c.	538	24.1	355.0	69.7	659.8	129.5
Basic chemical mfg							
2531	Fertiliser mfg	1 694	n.p.	n.p.	n.p.	n.p.	n.p.
2532	Industrial gas mfg	1 316	n.p.	n.p.	n.p.	n.p.	n.p.
2533	Synthetic resin mfg	4 391	228.8	2 093.1	627.3	476.6	142.9
2534	Organic industrial chemical mfg n.e.c.	1 954	106.9	1 256.6	385.5	643.2	197.3
2535	Inorganic industrial chemical mfg n.e.c.	3 667	175.8	1 476.8	495.1	402.8	135.0
253	<i>Total</i>	13 022	638.8	5 930.2	1 954.6	455.4	150.1
Other chemical product mfg							
2541	Explosive mfg	1 778	86.8	757.9	242.5	426.2	136.4
2542	Paint mfg	5 131	196.4	1 505.7	497.8	293.5	97.0
2543	Medicinal and pharmaceutical product mfg	11 362	457.9	3 780.4	1 167.8	332.7	102.8
2544	Pesticide mfg	1 527	69.7	979.0	236.2	641.0	154.6
2545	Soap and other detergent mfg	3 560	123.8	1 214.6	308.0	341.2	86.5
2546	Cosmetic and toiletry preparation mfg	3 785	135.9	964.4	323.3	254.8	85.4
2547	Ink mfg	511	17.3	134.4	27.3	262.8	53.5
2549	Chemical product mfg n.e.c.	2 841	106.9	731.9	200.1	257.6	70.4
254	<i>Total</i>	30 495	1 194.5	10 068.3	3 003.0	330.2	98.5

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY CLASS		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
Rubber product mfg							
2551	Rubber tyre mfg	3 666	181.3	905.6	340.5	247.0	92.9
2559	Rubber product mfg n.e.c.	4 056	122.5	599.6	214.4	147.9	52.9
255	Total	7 722	303.8	1 505.3	554.9	194.9	71.9
Plastic product mfg							
2561	Plastic blow moulded product mfg	3 288	101.3	681.6	223.1	207.3	67.9
2562	Plastic extruded product mfg	3 567	111.9	815.5	240.8	228.7	67.5
2563	Plastic bag and film mfg	6 557	248.0	1 566.7	548.8	238.9	83.7
2564	Plastic product, rigid fibre reinforced, mfg	3 179	74.9	361.4	124.1	113.7	39.0
2565	Plastic foam product mfg	1 537	48.2	356.5	115.8	232.0	75.4
2566	Plastic injection moulded product mfg	15 643	453.1	2 150.6	791.2	137.5	50.6
256	Total	33 771	1 037.3	5 932.3	2 043.8	175.7	60.5
25	Total petroleum, coal, chemical and associated product mfg	89 112	3 408.4	30 250.8	8 506.1	339.5	95.5
NON-METALLIC MINERAL PRODUCT MFG							
261	Glass and glass product mfg	5 261	201.2	1 164.1	504.9	221.3	96.0
Ceramic mfg							
2621	Clay brick mfg	4 170	155.9	699.7	342.8	167.8	82.2
2622	Ceramic product mfg	1 177	44.2	222.6	59.5	189.1	50.5
2623	Ceramic tile and pipe mfg	1 028	33.7	143.1	70.3	139.2	68.4
2629	Ceramic product mfg n.e.c.	2 078	53.0	183.6	88.0	88.4	42.3
262	Total	8 453	286.7	1 249.0	560.5	147.8	66.3
Cement, lime, plaster and concrete product mfg							
2631	Cement and lime mfg	2 506	100.1	1 094.9	457.3	436.9	182.5
2632	Plaster product mfg	1 989	68.0	569.6	216.8	286.3	109.0
2633	Concrete slurry mfg	4 373	152.0	1 792.2	189.8	409.8	43.4
2634	Concrete pipe and box culvert mfg	1 505	54.8	277.1	106.9	184.1	71.0
2635	Concrete product mfg n.e.c.	7 278	227.0	1 296.5	521.9	178.1	71.7
263	Total	17 652	601.9	5 030.3	1 492.5	285.0	84.6
264	Non-metallic mineral product mfg n.e.c.	4 238	141.6	804.3	275.6	189.8	65.0
26	Total non-metallic mineral product mfg	35 604	1 231.4	8 247.7	2 833.6	231.7	79.6
METAL PRODUCT MFG							
Iron and steel mfg							
2711	Basic iron and steel mfg	20 877	1 101.7	9 143.6	2 812.4	438.0	134.7
2712	Iron and steel casting and forging	6 173	202.4	858.4	317.5	139.1	51.4
2713	Steel pipe and tube mfg	2 505	96.3	820.2	160.9	327.4	64.2
271	Total	29 555	1 400.3	10 822.2	3 290.8	366.2	111.3
Basic non-ferrous metal mfg							
2721	Alumina production	6 174	308.6	3 182.5	1 029.3	515.5	166.7
2722	Aluminium smelting	5 460	225.2	3 874.7	1 627.8	709.7	298.2
2723	Copper, silver, lead and zinc smelting, refining	3 187	160.1	2 801.7	363.6	879.0	114.1
2729	Basic non-ferrous metal mfg n.e.c.	1 981	81.8	1 669.1	217.1	842.4	109.6
272	Total	16 802	775.7	11 528.1	3 237.9	686.1	192.7

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY CLASS		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
Non-ferrous basic metal product mfg							
2731	Aluminium rolling, drawing, extruding	4 248	168.6	1 398.2	376.1	329.1	88.5
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	1 770	66.2	951.1	123.8	537.3	69.9
2733	Non-ferrous metal casting	1 442	44.5	178.2	61.7	123.5	42.8
273	<i>Total</i>	7 461	279.3	2 527.4	561.6	338.8	75.3
Structural metal product mfg							
2741	Structural steel fabricating	17 327	543.9	2 669.2	853.2	154.1	49.2
2742	Architectural aluminium product mfg	12 447	349.5	1 729.2	524.5	138.9	42.1
2749	Structural metal product mfg n.e.c.	5 023	125.8	679.3	227.4	135.2	45.3
274	<i>Total</i>	34 797	1 019.2	5 077.7	1 605.0	145.9	46.1
Sheet metal product mfg							
2751	Metal container mfg	4 524	158.7	1 140.3	321.7	252.1	71.1
2759	Sheet metal product mfg n.e.c.	13 504	385.9	1 787.2	623.9	132.3	46.2
275	<i>Total</i>	18 028	544.6	2 927.5	945.6	162.4	52.5
Fabricated metal product mfg							
2761	Hand tool and general hardware mfg	2 121	56.2	220.3	100.6	103.9	47.4
2762	Spring and wire product mfg	5 338	183.5	1 093.9	347.4	204.9	65.1
2763	Nut, bolt, screw and rivet mfg	2 127	66.8	318.5	129.2	149.8	60.7
2764	Metal coating and finishing	6 941	173.7	595.8	269.5	85.8	38.8
2765	Non-ferrous pipe fitting mfg	2 618	73.8	312.9	113.7	119.5	43.4
2769	Fabricated metal product mfg n.e.c.	19 208	532.2	2 093.3	852.6	109.0	44.4
276	<i>Total</i>	38 352	1 086.3	4 634.7	1 812.9	120.8	47.3
27	Total metal product mfg	144 994	5 105.5	37 517.6	11 453.8	258.8	79.0
MACHINERY AND EQUIPMENT MFG							
Motor vehicle and part mfg							
2811	Motor vehicle mfg	21 022	810.3	9 537.9	2 112.2	453.7	100.5
2812	Motor vehicle body mfg	7 265	194.5	918.9	354.6	126.5	48.8
2813	Automotive electrical and instrument mfg	5 145	163.4	901.4	273.3	175.2	53.1
2819	Automotive component mfg n.e.c.	21 384	669.8	3 168.8	1 141.3	148.2	53.4
281	<i>Total</i>	54 817	1 837.9	14 527.0	3 881.3	265.0	70.8
Other transport equipment mfg							
2821	Shipbuilding	6 672	281.7	1 627.6	568.1	243.9	85.1
2822	Boatbuilding	3 023	64.2	333.4	79.8	110.3	26.4
2823	Railway equipment mfg	5 076	163.3	657.2	218.8	129.5	43.1
2824	Aircraft mfg	11 806	519.3	1 351.2	541.6	114.4	45.9
2829	Transport equipment mfg n.e.c.	599	14.4	62.7	25.5	104.7	42.6
282	<i>Total</i>	27 176	1 042.9	4 032.0	1 433.8	148.4	52.8
Photographic and scientific equipment mfg							
2831	Photographic and optical good mfg	2 873	95.6	656.8	255.7	228.6	89.0
2832	Medical and surgical equipment mfg	4 751	127.0	436.8	177.9	91.9	37.4
2839	Professional and scientific equipment mfg n.e.c.	3 575	146.0	502.0	203.4	140.4	56.9
283	<i>Total</i>	11 199	368.6	1 595.7	637.0	142.5	56.9

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY CLASS		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
Electronic equipment mfg							
2841	Computer and business machine mfg	3 134	119.2	1 374.4	271.3	438.5	86.6
2842	Telecommunication, broadcasting and transceiving equipment mfg	6 888	274.2	2 053.6	683.9	298.1	99.3
2849	Electronic equipment mfg n.e.c.	9 811	314.5	1 573.8	582.1	160.4	59.3
284	<i>Total</i>	19 833	707.9	5 001.8	1 537.2	252.2	77.5
Electrical equipment and appliance mfg							
2851	Household appliance mfg	12 698	405.9	2 222.4	648.5	175.0	51.1
2852	Electric cable and wire mfg	4 404	184.1	1 451.6	377.5	329.6	85.7
2853	Battery mfg	725	37.1	284.4	64.3	392.5	88.7
2854	Electric light and sign mfg	4 465	114.2	442.1	148.5	99.0	33.3
2859	Electrical equipment mfg n.e.c.	15 032	466.7	2 123.7	760.1	141.3	50.6
285	<i>Total</i>	37 323	1 208.0	6 524.2	1 998.8	174.8	53.6
Industrial machinery and equipment mfg							
2861	Agricultural machinery mfg	6 687	166.0	850.4	335.3	127.2	50.1
2862	Mining and construction machinery mfg	6 872	219.3	1 227.6	379.2	178.6	55.2
2863	Food processing machinery mfg	2 297	80.4	332.9	118.8	144.9	51.7
2864	Machine tool and part mfg	7 508	233.6	759.5	349.1	101.2	46.5
2865	Lifting and material handling equipment mfg	8 483	270.0	1 293.6	396.7	152.5	46.8
2866	Pump and compressor mfg	3 067	101.6	492.0	163.7	160.4	59.9
2867	Commercial space heating and cooling equipment mfg	2 622	91.5	422.6	116.8	161.2	44.6
2869	Industrial machinery and equipment mfg n.e.c.	14 289	433.6	1 765.1	669.1	123.5	46.8
286	<i>Total</i>	51 826	1 596.0	7 143.7	2 548.7	137.8	49.2
28	Total machinery and equipment mfg	202 174	6 761.3	38 824.3	12 036.9	192.0	59.5
OTHER MANUFACTURING							
Prefabricated building mfg							
2911	Prefabricated metal building mfg	1 399	35.4	277.1	63.2	198.1	45.2
2919	Prefabricated building mfg n.e.c.	1 054	37.3	232.6	130.8	220.7	124.1
291	<i>Total</i>	2 453	72.7	509.7	194.0	207.8	79.1
Furniture mfg							
2921	Wooden furniture and upholstered seat mfg	26 295	582.3	2 385.3	952.6	90.7	36.2
2922	Sheet metal furniture mfg	3 015	86.2	393.6	139.7	130.6	46.3
2923	Mattress mfg (except rubber)	2 410	65.2	384.3	126.2	159.5	52.4
2929	Furniture mfg n.e.c.	5 883	164.5	699.3	227.6	118.9	38.7
292	<i>Total</i>	37 604	898.2	3 862.6	1 446.1	102.7	38.5
Miscellaneous manufacturing							
2941	Jewellery and silverware mfg	3 060	67.5	299.0	100.6	97.7	32.9
2942	Toy and sporting good mfg	2 182	45.5	241.2	81.9	110.5	37.5
2949	Manufacturing n.e.c.	5 603	138.4	580.9	247.5	103.7	44.2
294	<i>Total</i>	10 845	251.4	1 121.0	430.0	103.4	39.6
29	Total other manufacturing	50 902	1 222.3	5 493.3	2 070.1	107.9	40.7
21-29	TOTAL MANUFACTURING	907 694	29 555.9	197 503.6	61 580.1	217.6	67.8

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY SUBDIVISION		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	000	\$m	\$m	\$m	\$000	\$000
NEW SOUTH WALES							
21	Food, beverage and tobacco mfg	47.5	1 583.3	12 998.7	3 281.7	273.5	69.0
22	Textile, clothing, footwear and leather mfg	22.7	568.5	3 103.0	1 001.1	136.9	44.2
23	Wood and paper product mfg	19.6	583.1	3 495.2	1 224.4	178.1	62.4
24	Printing, publishing and recorded media	34.4	1 282.1	6 070.9	2 824.8	176.6	82.2
25	Petroleum, coal, chemical and associated product mfg	32.3	1 256.2	11 395.9	3 087.4	352.7	95.6
26	Non-metallic mineral product mfg	11.1	383.2	2 607.7	865.4	234.4	77.8
27	Metal product mfg	51.8	2 019.3	13 857.2	4 409.0	267.4	85.1
28	Machinery and equipment mfg	63.2	2 206.1	10 423.8	3 640.6	164.8	57.6
29	Other manufacturing	15.2	375.9	1 777.4	668.5	116.6	43.8
21-29	Total manufacturing	297.9	10 257.6	65 730.0	21 002.7	220.6	70.5
VICTORIA							
21	Food, beverage and tobacco mfg	43.0	1 480.2	12 800.4	3 478.9	297.5	80.9
22	Textile, clothing, footwear and leather mfg	36.0	892.3	4 487.4	1 478.9	124.7	41.1
23	Wood and paper product mfg	17.1	553.3	3 267.3	940.2	191.0	55.0
24	Printing, publishing and recorded media	29.5	1 007.7	4 376.1	2 042.9	148.2	69.2
25	Petroleum, coal, chemical and associated product mfg	34.1	1 350.3	10 723.9	3 252.5	314.8	95.5
26	Non-metallic mineral product mfg	9.4	337.3	2 117.4	791.4	224.2	83.8
27	Metal product mfg	36.5	1 184.9	8 385.6	2 686.2	229.5	73.5
28	Machinery and equipment mfg	71.2	2 422.4	15 844.3	4 401.2	222.4	61.8
29	Other manufacturing	15.2	370.5	1 647.6	610.1	108.7	40.2
21-29	Total manufacturing	292.1	9 598.8	63 650.1	19 682.3	217.9	67.4
QUEENSLAND							
21	Food, beverage and tobacco mfg	33.2	1 022.4	8 675.4	2 068.4	261.5	62.3
22	Textile, clothing, footwear and leather mfg	5.2	106.0	568.1	167.7	109.6	32.4
23	Wood and paper product mfg	10.2	283.0	1 557.6	556.3	152.6	54.5
24	Printing, publishing and recorded media	11.0	311.3	1 342.6	636.8	121.5	57.6
25	Petroleum, coal, chemical and associated product mfg	9.7	326.7	3 896.6	927.6	402.8	95.9
26	Non-metallic mineral product mfg	6.8	232.8	1 687.7	486.5	249.0	71.8
27	Metal product mfg	25.1	781.8	6 811.8	2 131.8	271.0	84.8
28	Machinery and equipment mfg	23.5	684.8	3 348.7	1 116.6	142.5	47.5
29	Other manufacturing	9.1	217.3	912.4	361.6	99.7	39.5
21-29	Total manufacturing	133.9	3 966.1	28 800.7	8 453.4	215.2	63.2

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY SUBDIVISION		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	'000	\$m	\$m	\$m	\$'000	\$'000
SOUTH AUSTRALIA							
21	Food, beverage and tobacco mfg	16.7	459.2	3 841.5	1 249.7	230.2	74.9
22	Textile, clothing, footwear and leather mfg	4.8	120.3	816.2	226.8	169.2	47.0
23	Wood and paper product mfg	5.7	184.7	968.3	357.0	171.0	63.1
24	Printing, publishing and recorded media	5.0	144.7	685.5	330.3	136.9	66.0
25	Petroleum, coal, chemical and associated product mfg	5.9	203.5	1 203.9	502.0	203.9	85.0
26	Non-metallic mineral product mfg	2.4	83.5	500.9	170.6	213.1	72.6
27	Metal product mfg	11.3	392.2	2 582.9	798.4	228.6	70.7
28	Machinery and equipment mfg	29.3	1 006.3	6 954.6	2 142.6	237.3	73.1
29	Other manufacturing	4.5	105.5	457.3	170.4	101.5	37.8
21-29	Total manufacturing	85.5	2 700.0	18 011.1	5 947.7	210.5	69.5
WESTERN AUSTRALIA							
21	Food, beverage and tobacco mfg	12.8	358.4	2 962.2	776.0	231.0	60.5
22	Textile, clothing, footwear and leather mfg	3.3	72.7	317.4	105.9	96.9	32.3
23	Wood and paper product mfg	4.1	118.0	676.6	229.0	164.3	55.6
24	Printing, publishing and recorded media	6.1	181.3	793.7	402.0	131.0	66.3
25	Petroleum, coal, chemical and associated product mfg	6.4	238.1	2 794.4	675.0	439.3	106.1
26	Non-metallic mineral product mfg	4.8	157.7	971.4	366.2	204.2	77.0
27	Metal product mfg	15.2	560.5	4 230.4	847.7	277.4	55.6
28	Machinery and equipment mfg	10.8	318.8	1 735.2	542.3	160.6	50.2
29	Other manufacturing	5.3	122.1	569.1	209.0	108.3	39.8
21-29	Total manufacturing	68.7	2 127.6	15 050.6	4 153.0	219.1	60.5
TASMANIA							
21	Food, beverage and tobacco mfg	5.5	157.9	1 346.0	422.6	243.3	76.4
22	Textile, clothing, footwear and leather mfg	1.8	47.9	222.5	70.5	126.8	40.2
23	Wood and paper product mfg	3.8	133.6	1 110.7	525.4	294.3	139.2
24	Printing, publishing and recorded media	1.9	56.3	165.2	87.6	86.8	46.0
25	Petroleum, coal, chemical and associated product mfg	0.7	30.4	211.0	55.7	303.3	80.1
26	Non-metallic mineral product mfg	0.9	29.7	256.3	121.7	284.1	134.9
27	Metal product mfg	3.4	111.5	1 032.7	350.6	306.7	104.1
28	Machinery and equipment mfg	3.2	97.7	407.4	142.8	125.9	44.1
29	Other manufacturing	1.0	17.3	62.4	25.9	62.3	25.9
21-29	Total manufacturing	22.2	682.3	4 814.2	1 802.8	217.2	81.3

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

INDUSTRY SUBDIVISION		Employment at end of June(b)	Wages and salaries(c)	Turnover	Industry gross product	Turnover per person employed(d)	Industry gross product per person employed(e)
ANZSIC code	Description	'000	\$m	\$m	\$m	\$'000	\$'000
.....							
NORTHERN TERRITORY							
21	Food, beverage and tobacco mfg	0.7	18.2	123.6	27.7	178.3	39.9
22	Textile, clothing, footwear and leather mfg	0.1	0.9	3.6	1.3	56.3	21.2
23	Wood and paper product mfg	0.2	5.1	22.4	7.6	124.4	42.5
24	Printing, publishing and recorded media	0.5	10.2	35.6	22.5	66.9	42.3
25	Petroleum, coal, chemical and associated product mfg	0.1	2.6	22.3	4.8	275.2	59.4
26	Non-metallic mineral product mfg	0.1	3.3	58.5	16.8	567.7	160.4
27	Metal product mfg	1.3	47.6	577.0	218.2	435.5	164.7
28	Machinery and equipment mfg	0.4	10.2	45.6	18.2	120.7	48.1
29	Other manufacturing	0.2	3.2	11.5	3.9	66.5	22.5
21-29	Total manufacturing	3.5	101.3	900.1	321.1	254.9	90.9
.....							
AUSTRALIAN CAPITAL TERRITORY							
21	Food, beverage and tobacco mfg	0.5	14.3	73.5	20.6	160.9	45.1
22	Textile, clothing, footwear and leather mfg	0.1	1.7	9.4	4.4	94.7	44.1
23	Wood and paper product mfg	0.3	9.0	42.9	13.5	143.7	45.3
24	Printing, publishing and recorded media	1.7	59.5	210.1	97.1	121.9	56.3
25	Petroleum, coal, chemical and associated product mfg	—	0.7	2.8	1.0	104.3	35.7
26	Non-metallic mineral product mfg	0.1	3.9	47.9	15.0	341.2	106.9
27	Metal product mfg	*0.3	*7.7	*40.0	*12.0	155.5	46.6
28	Machinery and equipment mfg	0.5	15.0	64.6	32.7	136.6	69.0
29	Other manufacturing	0.4	10.5	55.6	20.8	135.0	50.4
21-29	Total manufacturing	3.9	122.2	546.9	217.0	140.7	55.8
.....							
AUSTRALIA							
21	Food, beverage and tobacco mfg	159.9	5 093.8	42 821.4	11 325.7	267.8	70.8
22	Textile, clothing, footwear and leather mfg	73.9	1 810.4	9 527.6	3 056.5	129.0	41.4
23	Wood and paper product mfg	61.0	1 869.7	11 141.1	3 853.4	182.7	63.2
24	Printing, publishing and recorded media	90.2	3 053.1	13 679.7	6 444.0	151.7	71.5
25	Petroleum, coal, chemical and associated product mfg	89.1	3 408.4	30 250.8	8 506.1	339.5	95.5
26	Non-metallic mineral product mfg	35.6	1 231.4	8 247.7	2 833.6	231.7	79.6
27	Metal product mfg	145.0	5 105.5	37 517.6	11 453.8	258.8	79.0
28	Machinery and equipment mfg	202.2	6 761.3	38 824.3	12 036.9	192.0	59.5
29	Other manufacturing	50.9	1 222.3	5 493.3	2 070.1	107.9	40.7
21-29	Total manufacturing	907.7	29 555.9	197 503.6	61 580.1	217.6	67.8

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

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

(e) Industry gross product divided by the number of persons employed at the end of June. Includes working proprietors.

4

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations by Employment Size(b)

Employment size group	Employment at end of June(c).....		Wages and salaries(d)(e).....		Turnover(e).....		Industry gross product(e).....	
	'000	%	\$m	%	\$m	%	\$m	%
FOOD, BEVERAGE AND TOBACCO MANUFACTURING								
0-3 persons	1.6	1.0	27.0	0.5	191.5	0.5	63.3	0.6
4-9 persons	7.4	4.7	113.5	2.2	831.7	2.0	220.1	2.0
10-19 persons	7.8	4.9	178.2	3.5	1 505.0	3.5	348.7	3.1
20-49 persons	13.8	8.6	363.7	7.2	3 461.3	8.1	823.0	7.3
50-99 persons	18.6	11.7	550.6	10.9	5 376.9	12.7	1 208.1	10.7
<i>Total less than 100 persons</i>	49.4	30.9	1 233.1	24.4	11 366.4	26.7	2 663.2	23.6
100-199 persons	21.9	13.7	700.9	13.9	6 421.0	15.1	1 623.2	14.4
200-499 persons	50.1	31.3	1 730.9	34.2	15 047.7	35.4	4 215.7	37.4
500-999 persons	31.1	19.5	1 087.7	21.5	7 109.5	16.7	2 099.4	18.6
1 000 or more persons	7.4	4.6	304.8	6.0	2 552.7	6.0	679.5	6.0
<i>Total 100 or more persons</i>	110.6	69.1	3 824.3	75.6	31 130.9	73.3	8 617.8	76.4
Total	159.9	100.0	5 057.4	100.0	42 497.2	100.0	11 281.1	100.0
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING								
0-3 persons	6.3	8.6	69.4	3.8	436.2	4.6	152.1	5.0
4-9 persons	8.7	11.8	142.1	7.9	688.6	7.2	252.5	8.3
10-19 persons	8.0	10.8	167.6	9.3	839.2	8.8	284.3	9.3
20-49 persons	10.3	13.9	233.6	13.0	1 329.6	14.0	384.2	12.6
50-99 persons	10.0	13.6	278.2	15.4	1 561.6	16.4	487.2	16.0
<i>Total less than 100 persons</i>	43.3	58.6	891.0	49.4	4 855.3	51.1	1 560.2	51.2
100-199 persons	11.1	15.1	333.6	18.5	1 910.6	20.1	591.4	19.4
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	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	30.5	41.4	912.2	50.6	4 652.7	48.9	1 486.1	48.8
Total	73.9	100.0	1 803.2	100.0	9 508.0	100.0	3 046.3	100.0
WOOD AND PAPER PRODUCT MANUFACTURING								
0-3 persons	4.3	7.1	64.4	3.5	337.6	3.0	120.1	3.1
4-9 persons	9.0	14.7	195.8	10.5	767.5	6.9	269.1	7.0
10-19 persons	7.4	12.2	178.1	9.6	778.7	7.0	277.5	7.2
20-49 persons	9.3	15.2	250.1	13.4	1 356.9	12.2	486.9	12.7
50-99 persons	7.3	11.9	233.3	12.5	1 676.9	15.1	644.4	16.8
<i>Total less than 100 persons</i>	37.2	61.0	921.7	49.5	4 917.6	44.2	1 798.0	46.8
100-199 persons	8.7	14.3	321.7	17.3	1 961.0	17.6	684.6	17.8
200-499 persons	10.6	17.4	407.9	21.9	2 707.1	24.3	951.1	24.7
500-999 persons	4.5	7.3	212.6	11.4	1 538.7	13.8	410.3	10.7
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	23.8	39.0	942.2	50.5	6 206.9	55.8	2 046.0	53.2
Total	61.0	100.0	1 863.9	100.0	11 124.5	100.0	3 843.9	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 19 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 1995-96 but were not operating at 30 June 1996. See paragraph 18 of the Explanatory Notes.

Employment size group	Employment at end of June(c).....		Wages and salaries(d)(e).....		Turnover(e).....		Industry gross product(e).....	
	'000	%	\$m	%	\$m	%	\$m	%
PRINTING, PUBLISHING AND RECORDED MEDIA								
0-3 persons	4.5	5.0	78.5	2.6	364.0	2.7	151.5	2.4
4-9 persons	11.0	12.2	257.2	8.5	1 059.9	7.8	475.2	7.4
10-19 persons	9.2	10.2	284.2	9.4	1 145.8	8.4	568.9	8.9
20-49 persons	13.8	15.3	430.4	14.2	1 718.1	12.7	741.8	11.6
50-99 persons	11.1	12.3	371.0	12.3	1 629.0	12.0	792.6	12.4
Total less than 100 persons	49.6	55.0	1 421.4	47.1	5 916.8	43.6	2 730.1	42.6
100-199 persons	9.9	11.0	354.2	11.7	1 686.5	12.4	650.6	10.2
200-499 persons	14.6	16.2	523.2	17.3	2 139.3	15.8	1 002.0	15.6
500-999 persons	6.0	6.6	212.2	7.0	1 501.6	11.1	862.4	13.5
1 000 or more persons	10.1	11.2	510.1	16.9	2 335.1	17.2	1 159.2	18.1
Total 100 or more persons	40.6	45.0	1 599.6	52.9	7 662.5	56.4	3 674.2	57.4
Total	90.2	100.0	3 021.0	100.0	13 579.3	100.0	6 404.3	100.0
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING								
0-3 persons	1.9	2.2	33.6	1.0	408.1	1.4	161.1	1.9
4-9 persons	5.1	5.7	124.4	3.7	795.0	2.6	234.2	2.8
10-19 persons	6.5	7.3	187.8	5.6	1 280.2	4.3	379.9	4.5
20-49 persons	14.5	16.3	454.2	13.5	3 349.7	11.1	948.4	11.2
50-99 persons	15.2	17.0	589.2	17.5	4 588.6	15.3	1 379.5	16.3
Total less than 100 persons	43.3	48.5	1 389.1	41.2	10 421.7	34.7	3 103.1	36.6
100-199 persons	19.2	21.5	745.1	22.1	6 012.9	20.0	1 975.5	23.3
200-499 persons	23.0	25.8	1 049.7	31.1	10 397.7	34.6	2 785.0	32.8
500-999 persons	3.7	4.2	188.1	5.6	3 238.2	10.8	615.6	7.3
1 000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	45.9	51.5	1 982.9	58.8	19 648.8	65.3	5 376.1	63.4
Total	89.1	100.0	3 372.0	100.0	30 070.5	100.0	8 479.3	100.0
NON-METALLIC MINERAL PRODUCT MANUFACTURING								
0-3 persons	1.9	5.2	26.3	2.1	124.5	1.5	43.5	1.5
4-9 persons	3.0	8.3	63.2	5.1	367.9	4.5	112.7	4.0
10-19 persons	3.8	10.6	101.3	8.3	559.0	6.8	169.6	6.0
20-49 persons	4.9	13.7	162.3	13.2	1 032.6	12.5	306.7	10.8
50-99 persons	5.6	15.8	199.7	16.3	1 533.4	18.6	459.4	16.2
Total less than 100 persons	19.1	53.6	552.8	45.0	3 617.4	43.9	1 091.9	38.6
100-199 persons	7.4	20.8	294.8	24.0	2 281.1	27.7	796.5	28.1
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	16.5	46.4	675.1	55.0	4 621.5	56.1	1 739.3	61.4
Total	35.6	100.0	1 227.9	100.0	8 238.9	100.0	2 831.2	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 19 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 1995-96 but were not operating at 30 June 1996. See paragraph 18 of the Explanatory Notes.

4 MANUFACTURING ESTABLISHMENTS(a), Summary of Operations by Employment Size(b) *continued*

Employment size group	Employment at end of June(c).....		Wages and salaries(d)(e).....		Turnover(e).....		Industry gross product(e).....	
	'000	%	\$m	%	\$m	%	\$m	%
METAL PRODUCT MANUFACTURING								
0-3 persons	6.8	4.7	111.5	2.2	5 130.5	13.8	3 316.4	28.8
4-9 persons	16.0	11.1	381.0	7.5	1 633.5	4.4	633.2	5.5
10-19 persons	15.6	10.8	431.5	8.5	1 855.6	5.0	669.6	5.8
20-49 persons	21.7	15.0	661.5	13.0	3 372.6	9.1	1 062.4	9.2
50-99 persons	20.2	13.9	656.5	12.9	4 042.7	10.8	1 193.2	10.4
Total less than 100 persons	80.3	55.4	2 242.0	44.2	16 034.9	43.0	6 874.8	59.8
100-199 persons	17.5	12.1	630.5	12.4	4 722.6	12.7	1 293.8	11.2
200-499 persons	14.5	10.0	589.4	11.6	5 689.8	15.3	1 073.0	9.3
500-999 persons	11.0	7.6	439.4	8.7	3 247.3	8.7	608.1	5.3
1 000 or more persons	21.7	15.0	1 168.0	23.0	7 571.3	20.3	1 655.6	14.4
Total 100 or more persons	64.7	44.6	2 827.3	55.8	21 230.9	57.0	4 630.4	40.2
Total	145.0	100.0	5 069.3	100.0	37 265.8	100.0	11 505.2	100.0
MACHINERY AND EQUIPMENT MANUFACTURING								
0-3 persons	7.8	3.8	132.2	2.0	668.6	1.7	260.5	2.2
4-9 persons	17.3	8.5	412.5	6.2	1 658.9	4.3	624.9	5.2
10-19 persons	17.4	8.6	496.5	7.4	2 205.7	5.7	776.6	6.5
20-49 persons	23.1	11.4	720.5	10.7	3 362.4	8.7	1 196.8	10.0
50-99 persons	21.8	10.8	711.0	10.6	3 854.6	10.0	1 197.2	10.0
Total less than 100 persons	87.3	43.2	2 472.6	36.9	11 750.2	30.4	4 055.9	33.8
100-199 persons	26.5	13.1	874.1	13.0	4 900.5	12.7	1 479.9	12.3
200-499 persons	32.2	15.9	1 187.4	17.7	6 554.8	17.0	2 117.5	17.7
500-999 persons	24.6	12.2	925.0	13.8	5 393.7	14.0	1 791.7	14.9
1 000 or more persons	31.5	15.6	1 243.5	18.6	9 993.0	25.9	2 545.1	21.2
Total 100 or more persons	114.8	56.8	4 230.1	63.1	26 842.1	69.6	7 934.1	66.2
Total	202.2	100.0	6 702.7	100.0	38 592.3	100.0	11 990.1	100.0
OTHER MANUFACTURING								
0-3 persons	7.1	14.0	97.9	8.1	518.2	9.5	210.3	10.2
4-9 persons	11.5	22.7	238.9	19.7	993.7	18.3	393.5	19.2
10-19 persons	9.4	18.5	215.2	17.8	830.6	15.3	328.0	16.0
20-49 persons	9.8	19.2	268.2	22.2	1 171.1	21.6	426.0	20.7
50-99 persons	7.0	13.7	202.2	16.7	960.3	17.7	361.6	17.6
Total less than 100 persons	44.8	88.1	1 022.4	84.5	4 473.9	82.3	1 719.5	83.7
100-199 persons	4.8	9.5	144.4	11.9	767.6	14.1	264.7	12.9
200-499 persons	1.3	2.5	43.4	3.6	191.4	3.5	70.4	3.4
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	6.1	11.9	187.8	15.5	959.0	17.7	335.1	16.3
Total	50.9	100.0	1 210.2	100.0	5 433.0	100.0	2 054.6	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 19 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 1995-96 but were not operating at 30 June 1996. See paragraph 18 of the Explanatory Notes.

4

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations by Employment Size(b) *continued*

Employment size group	Employment at end of June(c).....		Wages and salaries(d)(e).....		Turnover(e).....		Industry gross product(e).....	
	'000	%	\$m	%	\$m	%	\$m	%
TOTAL MANUFACTURING								
0-3 persons	42.2	4.7	640.8	2.2	8 179.2	4.2	4 478.6	7.3
4-9 persons	89.0	9.8	1 928.6	6.6	8 796.7	4.5	3 215.6	5.2
10-19 persons	85.1	9.4	2 240.4	7.6	10 999.8	5.6	3 803.1	6.2
20-49 persons	121.2	13.4	3 544.5	12.1	20 154.3	10.3	6 376.3	10.4
50-99 persons	116.7	12.9	3 791.7	12.9	25 224.0	12.8	7 723.2	12.6
<i>Total less than 100 persons</i>	<i>454.3</i>	<i>50.0</i>	<i>12 146.0</i>	<i>41.4</i>	<i>73 354.1</i>	<i>37.4</i>	<i>25 596.8</i>	<i>41.7</i>
100-199 persons	127.1	14.0	4 399.3	15.0	30 663.9	15.6	9 360.2	15.2
200-499 persons	168.8	18.6	6 311.6	21.5	46 965.6	23.9	13 734.9	22.4
500-999 persons	86.8	9.6	3 244.3	11.1	22 873.7	11.7	6 704.8	10.9
1 000 or more persons	70.7	7.8	3 226.4	11.0	22 452.0	11.4	6 039.4	9.8
<i>Total 100 or more persons</i>	<i>453.4</i>	<i>50.0</i>	<i>17 181.6</i>	<i>58.6</i>	<i>122 955.3</i>	<i>62.6</i>	<i>35 839.2</i>	<i>58.3</i>
TOTAL	907.7	100.0	29 327.7	100.0	196 309.3	100.0	61 436.0	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 19 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 1995-96 but were not operating at 30 June 1996. See paragraph 18 of the Explanatory Notes.

5 MANUFACTURING ESTABLISHMENTS(a), Exports of Goods Produced(b) by Broad Employment Size(c)

INDUSTRY SUBDIVISION		Sales and transfers out of goods produced by this establishment	Amount exported by this business or its agent	Exports as a proportion of sales of goods produced
ANZSIC code	Description	\$m	\$m	%
.....				
0-49 PERSONS				
21	Food, beverage and tobacco mfg	5 729.7	918.7	16.0
22	Textile, clothing, footwear and leather mfg	2 807.7	165.2	5.9
23	Wood and paper product mfg	3 114.7	64.6	2.1
24	Printing, publishing and recorded media	3 623.3	133.7	3.7
25	Petroleum, coal, chemical and associated product mfg	5 510.7	495.6	9.0
26	Non-metallic mineral product mfg	1 975.1	38.6	2.0
27	Metal product mfg	10 967.4	3 800.9	34.7
28	Machinery and equipment mfg	6 564.6	584.4	8.9
29	Other manufacturing	3 258.4	89.1	2.7
21-29	Total manufacturing	43 551.7	6 290.9	14.4
.....				
50-99 PERSONS				
21	Food, beverage and tobacco mfg	5 179.7	758.4	14.6
22	Textile, clothing, footwear and leather mfg	1 435.1	196.0	13.7
23	Wood and paper product mfg	1 623.9	368.1	22.7
24	Printing, publishing and recorded media	1 398.0	226.5	16.2
25	Petroleum, coal, chemical and associated product mfg	4 312.9	354.3	8.2
26	Non-metallic mineral product mfg	1 484.0	30.3	2.0
27	Metal product mfg	3 723.4	267.7	7.2
28	Machinery and equipment mfg	3 417.5	380.5	11.1
29	Other manufacturing	897.3	32.9	3.7
21-29	Total manufacturing	23 471.7	2 614.9	11.1
.....				
100 OR MORE PERSONS				
21	Food, beverage and tobacco mfg	30 317.0	5 632.1	18.6
22	Textile, clothing, footwear and leather mfg	4 330.9	720.6	16.6
23	Wood and paper product mfg	6 095.0	264.0	4.3
24	Printing, publishing and recorded media	4 267.1	46.7	1.1
25	Petroleum, coal, chemical and associated product mfg	19 183.0	1 994.5	10.4
26	Non-metallic mineral product mfg	4 491.6	197.4	4.4
27	Metal product mfg	20 841.3	5 878.9	28.2
28	Machinery and equipment mfg	24 895.9	3 845.8	15.4
29	Other manufacturing	907.9	46.0	5.1
21-29	Total manufacturing	115 329.7	18 625.9	16.2
.....				
TOTAL				
21	Food, beverage and tobacco mfg	41 226.5	7 309.2	17.7
22	Textile, clothing, footwear and leather mfg	8 573.7	1 081.9	12.6
23	Wood and paper product mfg	10 833.6	696.6	6.4
24	Printing, publishing and recorded media	9 288.4	407.0	4.4
25	Petroleum, coal, chemical and associated product mfg	29 006.6	2 844.4	9.8
26	Non-metallic mineral product mfg	7 950.7	266.3	3.3
27	Metal product mfg	35 532.1	9 947.5	28.0
28	Machinery and equipment mfg	34 878.1	4 810.8	13.8
29	Other manufacturing	5 063.6	168.0	3.3
21-29	Total manufacturing	182 353.2	27 531.6	15.1
.....				

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraphs 20-23 of the Explanatory Notes.

(c) This table excludes those manufacturing establishments which operated during 1995-96 but were not operating at 30 June 1996. See paragraph 18 of the Explanatory Notes. Also, see paragraph 19 of the Explanatory Notes.

INDUSTRY SUBDIVISION		Employment at end of June(c)	Wages and salaries(d)	Turnover	Industry gross product
ANZSIC code	Description	%	%	%	%
ESTABLISHMENTS THAT DO NOT EXPORT					
21	Food, beverage and tobacco mfg	49.9	47.0	44.1	44.5
22	Textile, clothing, footwear and leather mfg	58.1	50.7	45.4	49.8
23	Wood and paper product mfg	73.0	67.2	60.0	59.5
24	Printing, publishing and recorded media	87.8	88.4	85.3	85.7
25	Petroleum, coal, chemical and associated product mfg	43.2	39.1	36.4	31.0
26	Non-metallic mineral product mfg	66.5	63.8	71.4	66.6
27	Metal product mfg	58.4	50.5	34.3	23.1
28	Machinery and equipment mfg	47.8	45.9	35.1	40.1
29	Other manufacturing	81.1	77.6	75.1	75.3
21-29	Total manufacturing	58.5	54.2	45.1	45.5
ESTABLISHMENTS WITH EXPORTS UP TO AND INCLUDING 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	37.3	40.9	41.7	45.5
22	Textile, clothing, footwear and leather mfg	37.9	43.7	44.5	43.3
23	Wood and paper product mfg	25.5	31.1	36.4	36.3
24	Printing, publishing and recorded media	11.8	11.3	12.5	10.8
25	Petroleum, coal, chemical and associated product mfg	54.7	58.6	60.8	65.2
26	Non-metallic mineral product mfg	32.4	34.9	26.9	32.3
27	Metal product mfg	35.9	42.2	44.6	42.1
28	Machinery and equipment mfg	45.8	47.4	57.3	52.9
29	Other manufacturing	18.3	21.6	23.8	24.0
21-29	Total manufacturing	36.2	40.1	44.9	43.3
ESTABLISHMENTS WITH EXPORTS OF MORE THAN 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	12.8	12.1	14.2	10.0
22	Textile, clothing, footwear and leather mfg	4.0	5.6	10.1	6.9
23	Wood and paper product mfg	1.5	1.8	3.7	4.2
24	Printing, publishing and recorded media	0.3	0.4	2.2	3.5
25	Petroleum, coal, chemical and associated product mfg	2.1	2.3	2.8	3.8
26	Non-metallic mineral product mfg	1.1	1.4	1.7	1.1
27	Metal product mfg	5.7	7.4	21.2	34.7
28	Machinery and equipment mfg	6.4	6.7	7.6	7.0
29	Other manufacturing	0.6	0.9	1.1	0.7
21-29	Total manufacturing	5.3	5.7	10.0	11.2

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraphs 20-23 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

EXPLANATORY NOTES

.....

INTRODUCTION

- 1** This publication presents final statistics compiled from a survey of manufacturing establishments for 1995-96, 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** The manufacturing collection is conducted on an annual basis. For the 1995-96 collection, a variety of samples was selected to produce data on a range of variables.
- 3** A sample of approximately 20,000 manufacturing establishments was requested to provide data on employment, wages and salaries, turnover, purchases and exporting activity. All data in this publication, with the exception of IGP estimates, have been compiled from this sample. Estimates of IGP were compiled using data from both this sample and a sub-sample of approximately 5,900 establishments which were asked to provide detailed structural and performance data. These 5,900 establishments were also asked to supply value of sales for commodities produced. (These commodity data will be released in the publication *Manufacturing Production, Australia: Principal Commodities Produced, 1995-96* (Cat. no. 8365.0).) A sample of approximately 4,100 manufacturing management units was asked the detailed information required to derive operating profit before tax. A separate sample of 4,500 manufacturing management units was asked for information related to waste-management and environmental protection. Selected data from these other samples will be included in the new compendium publication *Manufacturing, Australia, 1997* (Cat. no. 8225.0), to be released in March 1998.
- 4** Manufacturing, as specified in Division C of the Australian and New Zealand Standard Industrial Classification (ANZSIC), broadly relates to the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand.

SCOPE AND COVERAGE

- 5** The main unit for which statistics are reported in the 1995-96 manufacturing collection is the establishment. A manufacturing establishment is one predominantly engaged in manufacturing activities, but the data collected for it cover all activities of the establishment (including non-manufacturing activities). Conversely, there are some establishments predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities and which are excluded.
- 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 1995-96 manufacturing collection, 'significant' was defined as \$7.2 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 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 units now in use, see the Glossary.

RELIABILITY OF ESTIMATES

9 For information on this subject, see the sections Technical Note and Standard Errors.

DATA ADJUSTED

10 As was done for the 1993-94 and 1994-95 issues of this publication, data have been adjusted to allow for lags in processing new businesses to the ABS business register, and the omission of some businesses from the business register. First, adjustments have been made to allow for new businesses which had commenced operations but for which details had not been processed to the ABS business register in time for inclusion in the annual manufacturing industry survey. Adjustments of this type will continue to be applied in future periods. Second, some adjustments have been made for businesses which had been in existence for several years, but, for various reasons, were not previously added to the ABS business register. The ABS is remedying these omissions and all of the omitted businesses will be included in estimates from the 1996-97 census.

11 The majority of businesses affected and to which both types of adjustments apply are small in size. The effect of the adjustments applied on 1995-96 turnover is an increase of 0.2% while the effect on employment is an increase of 1.5%. Data relating to most States and Territories and most industries were affected to a similar degree. The exceptions are Textile, clothing, footwear and leather manufacturing (for which the adjustments are 0.6% and 3.3% respectively) and Other manufacturing (0.5% and 3.1% respectively).

12 For further information on the adjustments for new businesses and the omissions, please refer to *Information Paper: Improvements to ABS Economic Statistics, 1997* (Cat. no. 1357.0) released on 22 August 1997.

COMPARABILITY WITH PREVIOUS STATISTICS

13 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 are 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.

EXPLANATORY NOTES *continued*

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COMPARABILITY WITH PREVIOUS STATISTICS *continued*

14 Commencing with the 1994-95 manufacturing collection, multi-establishment management units have been 'collapsed' for reporting purposes into single establishment management units, unless they had significant activity in more than one industry and/or State or Territory. The effect of this process is that most manufacturing businesses which previously reported for more than one establishment were asked to combine operations by those establishments into a single reporting unit. The effect of this on manufacturing statistics as contained in this publication has been minimal. (In 1995-96, across Australia, approximately 1,700 manufacturing establishments were no longer separately identified and counted as a result of this process. There were about 1,500 of them in 1994-95.)

15 As explained above, about 5,900 establishments included in the 1995-96 collection were asked to supply value of sales for commodities produced. Also, as explained in the previous issue of this publication, this procedure was similarly followed in respect of the 7,500 establishments included in the commodity sample as part of the 1994-95 collection and the 18,000 establishments included in the commodity sample for 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 each of the 1990-91 to 1992-93 (inclusive) manufacturing collections. 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.

16 For the 1995-96 collection, provisions for employee entitlements have been excluded from wages and salaries. Previously, these provisions were included in wages and salaries.

17 The combining of railway workshop locations (primary to ANZSIC class 2823) with rail transport locations (primary to ANZSIC class 6200) to form establishments primary to Division 1: Transport and storage (that is, out of scope of this collection) has affected time series statistics for years up to the 1990-91 census for subdivision 28. However, from the 1992-93 collection, some of these railway workshop locations have once again been classified as separate manufacturing establishments (primary to ANZSIC class 2823). No further changes have occurred since that time.

EMPLOYMENT SIZE DATA

18 Summary of operations data at the industry subdivision level classified by employment size are presented in table 4. Similarly, exports of goods produced data at the industry subdivision level classified by broad employment size are presented in table 5. The statistics in these two tables relate only to those manufacturing establishments operating at 30 June 1996. As such, the figures presented may differ slightly from those presented in the other tables from the manufacturing collection. These other tables include data for those manufacturing establishments which operated at any time during 1995-96.

EMPLOYMENT SIZE DATA *continued*

19 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).

EXPORTS BY MANUFACTURERS

20 Data relating to the amount of sales and transfers out of goods produced which were subsequently exported by the manufacturer or its agent are presented in tables 5 and 6. This is the third time that these data have been obtained by the annual manufacturing collection, the first occasion being the 1992-93 collection. It is expected that these data will now be collected annually.

21 All establishments selected in the manufacturing survey 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 1995-96 but were not operating at 30 June 1996.

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.

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.

EXPLANATORY NOTES *continued*

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USE OF ANZSIC

24 The 1992-93 manufacturing survey introduced the Australian and New Zealand Standard Industrial Classification (ANZSIC) into the annual manufacturing collection. This classification replaced the Australian Standard Industrial Classification (ASIC) previously used. All time series statistics contained in this publication are ANZSIC-based. Corresponding ANZSIC-based data for years prior to 1989-90 are not available, except for constant prices data (see paragraph 29). Similarly, ASIC-based data are not available from 1992-93.

INFORMATION PAPER

25 The *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0) outlines the vast amount of data available about the manufacturing industry in both published and unpublished form available from the annual manufacturing industry collection and other ABS collections. An update of this publication is currently being prepared.

RELATED PUBLICATIONS

26 A series of publications (Cat. nos 8221.1 to 8221.6) will be produced for each State. The publication for New South Wales (Cat. no. 8221.1) also contains selected data for the Australian Capital Territory. These publications will all be released shortly.

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

- *Business Operations and Industry Performance, Australia* (Cat. no. 8140.0)
- *Environment Protection Expenditure, Australia, 1992-93 and 1993-94* (Cat. no. 4603.0), released on 20 March 1997
- *Indexes of Industrial Production, Australia* (Cat. no. 8125.0)
- *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0), released on 21 March 1996
- *Information Paper: Availability of Statistics Related to Manufacturing, 1997* (Cat. no. 8205.0), expected to be released shortly
- *Information Paper: Improvements to ABS Economic Statistics, 1997* (Cat. no. 1357.0), released on 22 August 1997
- *Labour Force, Australia* (Cat. no. 6203.0)
- *Manufacturing, Australia, 1997* (Cat. no. 8225.0), to be released in March 1998
- *Manufacturing Industry, Australia, Preliminary, 1996-97* (Cat. no. 8201.0), to be released in March 1998
- *Manufacturing Production, Australia: Principal Commodities Produced, 1993-94* (Cat. no. 8365.0), released on 6 August 1997
- *Manufacturing Production, Australia: Principal Commodities Produced, 1995-96* (Cat. no. 8365.0), to be released early in 1998
- *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (Cat. no. 6412.0)

BACK DATA AND UNPUBLISHED STATISTICS

28 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. A charge is made for providing such information. The Information Paper referred to above provides more details.

EXPLANATORY NOTES *continued*

BACK DATA AND UNPUBLISHED STATISTICS *continued*

29 In particular, constant price estimates of gross product at factor cost on an ANZSIC basis are available back to 1984-85. However constant price estimates on a true ANZSIC basis are only available from 1989-90. Nevertheless, an exercise has been undertaken to convert estimates for earlier years onto an ANZSIC basis using the relationships that applied between ASIC and ANZSIC in the years 1990-91 and 1991-92. These estimates are available at both the Australian and State and Territory levels back to 1984-85. It should be noted that the relationships that applied in 1990-91 and 1991-92 are less likely to apply the earlier the reference year. Also, annual constant price estimates of gross product at factor cost for the period 1989-90 to 1995-96 (inclusive) by ANZSIC class are available as unpublished data. All of these data can be purchased from the ABS in Canberra by contacting Paul Curran on (02) 6252 6801.

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 and the omission of some businesses from the 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.

TECHNICAL NOTE DATA RELIABILITY

SAMPLE ERROR

The 1995-96 manufacturing survey was designed primarily to deliver industry class estimates for Australia and States for the data items employment, wages and salaries, turnover and industry gross product. For the two Territories, the sample was designed to deliver industry subdivision data only.

All 1995-96 data contained in this publication have, therefore, 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. One measure of the likely difference 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.

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 1995-96 employment, wages and salaries, turnover and industry gross product Australian data presented in this publication are mostly 1% or less for industry subdivisions and most are 3% or less for industry classes. The relative standard errors for the industry subdivision estimates for the States are nearly all 3% or less (with most industry class estimates 5% or less), whilst those for industry subdivision estimates for the Territories are mainly 8% or less.

Relative standard errors at the industry subdivision level for Australia 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

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 count or a sample.

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. In addition, the ABS has undertaken a program of upgrading the business register. This on-going upgrade has resulted in improvements in the quality of the statistical series whose population frames are drawn from the register.

STANDARD ERRORS SELECTED DATA ITEMS

INDUSTRY SUBDIVISION		Employment at end of June(a)	Wages and salaries(b)	Turnover	Industry gross product
ANZSIC code	Description	%	%	%	%
21	Food, beverage and tobacco mfg	0.7	0.5	0.4	0.4
22	Textile, clothing, footwear and leather mfg	1.2	1.0	1.3	1.0
23	Wood and paper product mfg	1.6	1.2	0.9	1.0
24	Printing, publishing and recorded media	2.5	2.3	1.5	1.6
25	Petroleum, coal, chemical and associated product mfg	0.8	0.5	0.3	0.4
26	Non-metallic mineral product mfg	1.4	1.0	0.7	0.8
27	Metal product mfg	0.8	0.9	0.4	0.6
28	Machinery and equipment mfg	0.6	0.6	0.5	0.6
29	Other manufacturing	2.1	2.0	1.7	1.8
21-29 Total manufacturing		0.4	0.3	0.2	0.3

(a) Includes working proprietors.

(b) Excludes the drawings of working proprietors.

G L O S S A R Y

ABS	Australian Bureau of Statistics
Amount of goods produced by this establishment (or for it on commission) that are exported by this business or its agent	This represents the sales value of goods produced by an establishment (or for it on commission), including the value of manufactured goods transferred to other establishments of the business for sale, that are exported (outside Australia) by the business or its agent.
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
Capital work done for own use	The value of work done by the employees or proprietors of an establishment for the business' own use, or for rental or lease. This item includes the capitalised value of the cost of the materials and the wages and salaries involved.
Change in stocks	The value of total closing stocks minus total opening stocks.
Closing stocks	The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the end of the financial year.
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 enabling value added to be calculated. In general, an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.
Establishments that do not export	Establishments that reported no exports (either by their business 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 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 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 of goods produced (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 (outside Australia) by the business or 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.
Income from services	Income received from service activities. This income includes: repair, maintenance and service income and fees; income from work done on a commission basis; delivery and/or installation charges separately invoiced to customers; advertising income; and management fees/charges from related and unrelated businesses. Excluded are rent, leasing and hiring income, interest income and royalties income.
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	<p>Industry Gross Product (IGP) is very similar to the national accounting measure gross product at factor cost which is the official statistical measure of production. IGP for an industry is a measure of the value which is added by the industry's production processes to the raw materials and services which are input to those processes. Another way of describing IGP is the value of an industry's output minus the value of intermediate inputs.</p> <p>The formula used to calculate IGP is as follows—definitions of the relevant component items also appear in this Glossary.</p> $ \begin{aligned} \text{Calculation of IGP} &= \text{Turnover} \\ &+ \text{Change in stocks} \\ &- \text{Purchases, transfers in and selected expenses} \\ &= \text{Establishment value added} \\ &- \text{Fringe benefits tax} \\ &- \text{Payroll tax} \\ &- \text{Other operating expenses} \\ &= \text{Industry Gross Product} \end{aligned} $
Industry gross product per person employed	Industry gross product of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.
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.

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- 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
- 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 stocks** The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the beginning of the financial year.
- Other operating expenses** Includes operating expenses such as management fees and charges paid to related and unrelated businesses, office supplies and printing costs, rates, telephone and postage charges, travelling and entertainment expenses, accounting and legal services, advertising costs and land tax. Excludes income tax and extraordinary expenses.
- Own account capital work** The value of work done by the employees or proprietors of an establishment for the business' own use, or for rental or lease. This item includes the capitalised value of the cost of the materials and the wages and salaries involved.
- Purchases** Purchase of materials, components, containers, packaging, fuels, electricity and water, and of goods for resale. The purchase of parts and fuel for motor vehicles is excluded.

GLOSSARY *continued*

Purchases, transfers in and selected expenses Purchase of materials, components, containers, packaging, fuels, electricity 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 resale, plus commission expenses (including sales commission expenses), repair and maintenance expenses, outward freight and cartage expenses, motor vehicle running expenses, and rent, leasing and hiring expenses. 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.

Sales and transfers out of goods produced by the establishment Includes sales of goods produced by the establishment (or for it on commission), sales or transfers to related businesses, progress payments billed for long-term contracts, and delivery and/or installation charges not separately invoiced to customers. Also included are goods transferred out to other establishments of the same business for sale. Transfers out 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. Excluded are export freight charges, sales of fixed tangible assets, and sales tax, excise and duties received (on behalf of the Government).

Service income Income received from service activities. This income includes: repair, maintenance and service income and fees; income from work done on a commission basis; delivery and/or installation charges separately invoiced to customers; advertising income; and management fees/charges from related and unrelated businesses. Excluded are rent, leasing and hiring income, interest income and royalties income.

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

Note: 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, that is, 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.

Value added Turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses.

G L O S S A R Y *continued*

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- 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, provisions 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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