

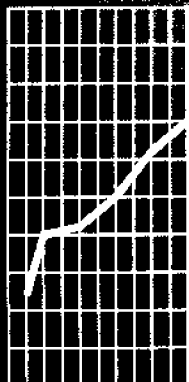


1995-96

EMBARGO: 11.30 AM (CANBERRA TIME) TUES 16 DEC 1997

Manufacturing Industry

Western 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.

The data contained in this publication relate to the operations of manufacturing establishments. Presented are details on employment, turnover, wages and salaries, IGP and direct exports. 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).

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.

SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
IGP	Industry Gross Product
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%
**	data subject to sampling variability of greater than 50%
..	not applicable
—	nil or rounded to zero

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 for Western Australia 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 and *Manufacturing Industry, Australia, 1995-96* (Cat. no. 8221.0), which was released on 10 October 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 4 and 5.

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 37.

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

Detailed manufacturing industry statistics for each State are to be released in a series of publications (Cat. nos 8221.1 to 8221.6), which are being released progressively. 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 5. 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.

M. A. Konrath
Acting Regional Director
Western Australia

SUMMARY OF FINDINGS

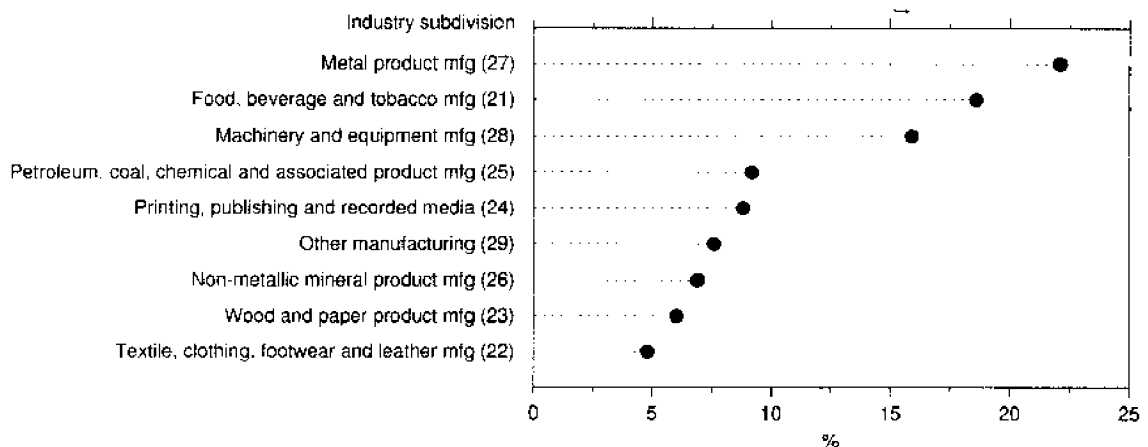
OVERVIEW

Turnover for the year 1995-96 by manufacturing establishments operating in Western Australia was \$15,069m. This represents a 2.2% increase, in current price terms, from the \$14,742m turnover recorded for the year 1994-95. Manufacturing employment at the end of June 1996 was 68,800, some 2.8% lower than 12 months earlier. This is the first annual decrease since the decrease from June 1991 to June 1992.

EMPLOYMENT (TABLES 1 AND 2)

The 1995-96 manufacturing survey estimated that 68,800 persons were employed at the end of June 1996. As in previous years, Metal product manufacturing (22.1%) was the major contributor to employment at the end of June 1996. However, Food, beverage and tobacco manufacturing (18.6%) is now again the second largest contributor, ahead of Machinery and equipment manufacturing (15.9%), which was the second largest contributor at the end of June 1995. Textile, clothing, footwear and leather manufacturing (4.8%) and Wood and paper product manufacturing (6.0%) remain the smallest contributors.

Distribution of employment — June 1996



Manufacturing employment decreased by 2.8% between June 1995 and June 1996. Six of the nine industry subdivisions recorded decreases in the level of employment over this period. Textile, clothing, footwear and leather manufacturing (down 17.8% from 4,000 persons to 3,300 persons) and Machinery and equipment manufacturing (down 12.2% from 12,500 persons to 10,900 persons) recorded the largest percentage decreases. Employment increases were recorded in Petroleum, coal, chemical and associated product manufacturing (up 7.3% from 5,900 persons to 6,400 persons), Metal product manufacturing (up 5.1% from 14,500 persons to 15,200 persons) and Food, beverage and tobacco manufacturing (up 3.1% from 12,400 persons to 12,800 persons).

SUMMARY OF FINDINGS *continued*

EMPLOYMENT (TABLES 1 AND 2) *continued*

The percentage of Australian manufacturing employment in Western Australia at the end of June 1996 was 7.6%. This represents a decrease of 0.1 percentage points on the proportion reported at the end of June 1995. The proportion to total manufacturing employment by the other States and Territories at the end of June 1996 was: New South Wales 32.8%, Victoria 32.3%, Queensland 14.8%, South Australia 9.4%, Tasmania 2.4%, the Northern Territory 0.4% and the Australian Capital Territory 0.4%.

The Western Australian industry subdivisions which made a significant contribution to national manufacturing employment at the end of June 1996 at the industry subdivision level were Non-metallic mineral product manufacturing (13.4%), Metal product manufacturing (10.5%) and Other manufacturing (10.3%).

Longer-term trends (June 1991 to June 1996)

Employment in the Western Australian manufacturing industry increased by 3,100 persons (up 4.7% from 65,700 persons to 68,800 persons) over the period June 1991 to June 1996. Six of the nine industry subdivisions recorded increases in employment over this period, with two industry subdivisions recording decreases in employment and one industry subdivision the same level of employment at June 1991 and June 1996. The largest percentage increases were recorded by Petroleum, coal, chemical and associated product manufacturing (up 15.1% from 5,500 persons to 6,400 persons) and Non-metallic mineral product manufacturing (up 10.4% from 4,300 persons to 4,800 persons). The decreases were recorded by Wood and paper product manufacturing (down 4.3% from 4,300 persons to 4,100 persons) and Textile, clothing, footwear and leather manufacturing (down 3.7% from 3,400 persons to 3,300 persons). Employment in Printing, publishing and recorded media has fluctuated between June 1991 and June 1996, but was at the same level for both June 1991 and June 1996 (at 6,100 persons).

Western Australia, with an increase of 4.7%, was one of only three States or Territories to record an increase in manufacturing employment over the period June 1991 to June 1996. The largest increase in percentage terms was recorded in the Northern Territory (up 14.1% from 3,100 persons to 3,500 persons), with employment also increasing in Queensland (up 2.7% from 130,200 persons to 133,800 persons). During this period, decreases were recorded in Tasmania (down 12.2% from 25,100 persons to 22,100 persons), New South Wales (down 11.4% from 335,300 persons to 297,100 persons), South Australia (down 10.9% from 95,600 persons to 85,200 persons), Victoria (down 9.2% from 322,300 persons to 292,600 persons) and the Australian Capital Territory (down 3.1% from 4,000 persons to 3,900 persons).

The percentage of Australian manufacturing employment in Western Australia has increased since June 1991 (increasing by 0.9 percentage points to 7.6%), as has that for Queensland (up 1.5 percentage points to 14.8%) and the Northern Territory (up 0.1 percentage points to 0.4%). New South Wales decreased its proportion of employment over this period (down 1.4 percentage points to 32.8%), as did Victoria (down 0.6 percentage points to 32.3%), South Australia (down 0.3 percentage points to 9.4%) and Tasmania (down 0.1 percentage points to 2.4%). The Australian Capital Territory maintained its proportion of Australian manufacturing employment over the period (at 0.4%).

SUMMARY OF FINDINGS *continued*

TURNOVER (TABLES 1 AND 2)

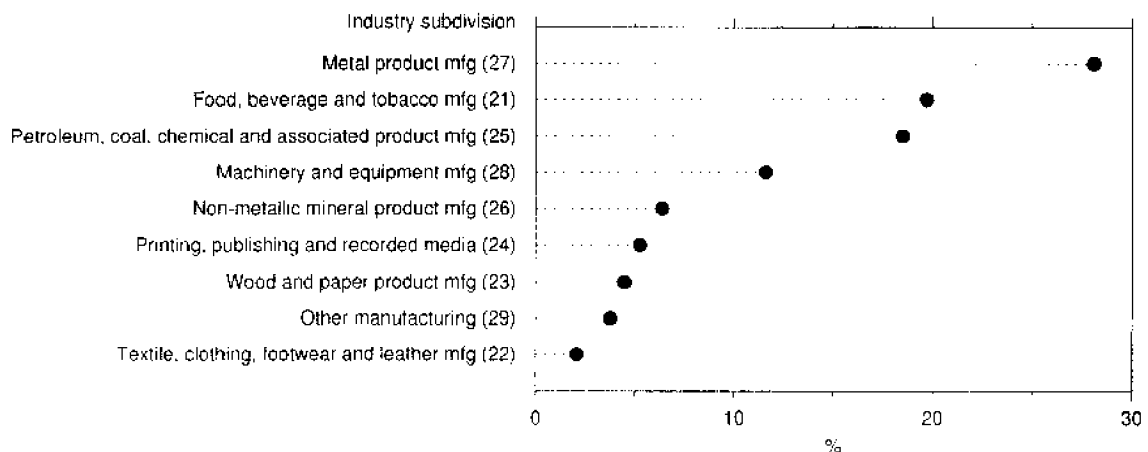
Turnover for the year 1995-96 by manufacturing establishments operating in Western Australia was \$15,096m. This represents a 2.2% increase, in current price terms, from \$14,742m turnover recorded for the year 1994-95. Metal product manufacturing remains the manufacturing industry subdivision with the largest contribution to turnover.

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

- Metal product manufacturing (28.1%), where the industry group Basic non-ferrous metal manufacturing (ANZSIC group 272 at 18.5%) and the industry class Structural steel fabricating (ANZSIC class 2741 at 2.8%) were the most substantial.
- Food, beverage and tobacco manufacturing (19.7%), where the industry classes (of those available for publication) Meat processing (ANZSIC class 2111 at 3.4%), Soft drink, cordial and syrup manufacturing (ANZSIC class 2181 at 1.6%) and Beer and malt manufacturing (ANZSIC class 2182 at 1.6%) were the most substantial.
- Petroleum, coal, chemical and associated product manufacturing (18.5%), where the industry class (of those available for publication) Inorganic industrial chemical manufacturing n.e.c. (ANZSIC class 2535 at 3.5%) was the most substantial.
- Machinery and equipment manufacturing (11.6%), where the industry classes Shipbuilding (ANZSIC class 2821 at 1.9%) and Mining and construction machinery manufacturing (ANZSIC class 2862 at 1.4%) were the most substantial.

Industry classes making a notable contribution to total turnover and not included in the subdivisions listed above included Newspaper printing or publishing (ANZSIC class 2421 at 2.7%), Printing (ANZSIC class 2412 at 1.8%), Wooden furniture and upholstered seat manufacturing (ANZSIC class 2921 at 1.6%) and Cement and lime manufacturing (ANZSIC class 2631 at 1.4%).

Distribution of turnover



SUMMARY OF FINDINGS *continued*

TURNOVER (TABLES 1 AND 2) *continued*

The percentage contribution by Western Australia to total Australian manufacturing turnover in 1995-96 was 7.6%. This represents a decrease of 0.1 percentage points on the contribution reported in 1994-95. The percentage contribution to turnover by the other States and Territories in 1995-96 was: New South Wales 33.3%, Victoria 32.3%, Queensland 14.6%, South Australia 9.1%, Tasmania 2.4%, the Northern Territory 0.5% and the Australian Capital Territory 0.3%.

The Western Australian industry subdivisions which made a significant contribution to national manufacturing turnover in 1995-96 at the industry subdivision level were Non-metallic mineral product manufacturing (11.8%), Metal product manufacturing (11.3%) and Other manufacturing (10.4%).

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

Turnover for the manufacturing industry in Western Australia increased, in current price terms, by 13.9% over the period 1990-91 to 1995-96. All industry subdivisions recorded increases in turnover. The industry subdivisions with the largest percentage increases were Machinery and equipment manufacturing (up 49.5% from \$1,172m to \$1,752m), Printing, publishing and recorded media (up 37.7% from \$576m to \$794m), Non-metallic mineral product manufacturing (up 34.8% from \$720m to \$972m) and Other manufacturing (up 31.5% from \$433m to \$569m). The smallest percentage increase, in current price terms, was recorded in Metal product manufacturing (up 0.2% from \$4,221m to \$4,230m).

Western Australia was one of two States to decrease their share of Australian turnover between 1990-91 and 1995-96, with a decrease of 0.1 percentage points (to 7.6% of Australian turnover). The other State to decrease its share was New South Wales (down 1.0 percentage points to 33.3%). The three States to record an increase in their share were Queensland (up 0.9 percentage points to 14.6%), Victoria (up 0.1 percentage points to 32.3%) and South Australia (up 0.1 percentage points to 9.1%). 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 AND 2)

Industry gross product (see the Glossary for its definition) for the year 1995-96 by manufacturing establishments operating in Western Australia was \$4,188m. This represents a 14.9% increase, in current price terms, from \$3,645m industry gross product recorded for the year 1992-93.

SUMMARY OF FINDINGS *continued*

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

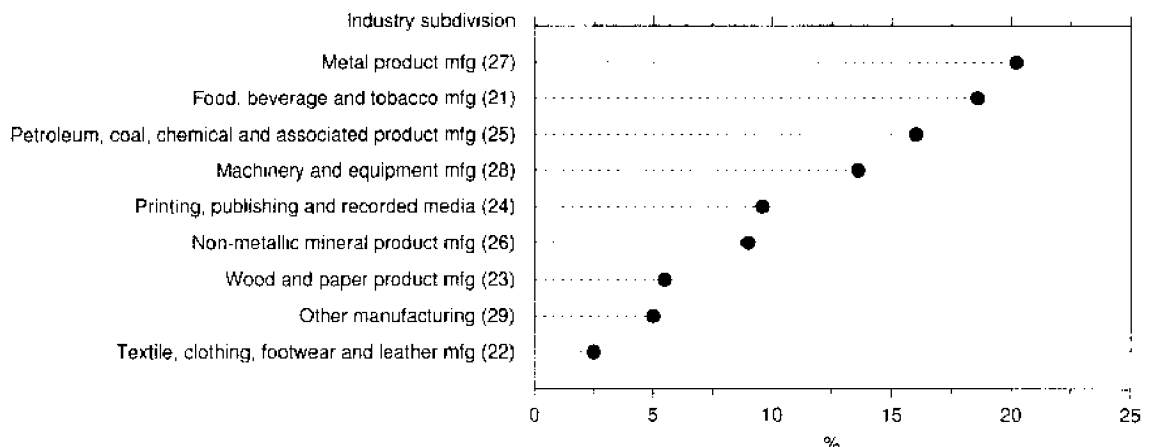
For 1995-96, Metal product manufacturing, Food, beverage and tobacco manufacturing, Petroleum, coal, chemical and associated product manufacturing and Machinery and equipment manufacturing were the industry subdivisions with the largest contribution to industry gross product in the manufacturing industry.

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

- Metal product manufacturing (20.2%), where the industry group Basic non-ferrous metal manufacturing (ANZSIC group 272 at 9.2%) and the industry classes Structural steel fabricating (ANZSIC class 2741 at 3.1%) and Fabricated metal product manufacturing n.e.c. (ANZSIC class 2769 at 1.8%) were the most substantial.
- Food, beverage and tobacco manufacturing (18.6%), where the industry classes Meat processing (ANZSIC class 2111 at 2.7%), Beer and malt manufacturing (ANZSIC class 2182 at 2.5%) and Soft drink, cordial and syrup manufacturing (ANZSIC class 2181 at 1.7%) were the most substantial.
- Petroleum, coal, chemical and associated product manufacturing (16.0%), where the industry class (of those available for publication) Inorganic industrial chemical manufacturing n.e.c. (ANZSIC class 2535 at 3.2%) was the most substantial.
- Machinery and equipment manufacturing (13.6%), where the industry classes Shipbuilding (ANZSIC class 2821 at 1.8%) and Lifting and material handling equipment manufacturing (ANZSIC class 2865 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 Newspaper printing or publishing (ANZSIC class 2421 at 5.6%), Printing (ANZSIC class 2412 at 2.9%), Wooden furniture and upholstered seat manufacturing (ANZSIC class 2921 at 2.4%), Cement and lime manufacturing (ANZSIC class 2631 at 1.7%) and Concrete product manufacturing n.e.c. (ANZSIC class 2635 at 1.7%).

Distribution of industry gross product



SUMMARY OF FINDINGS *continued*

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

The percentage contribution by Western Australia to total Australian manufacturing industry gross product in 1995-96 was 6.8%. The percentage contribution to industry gross product by the other States and Territories in 1995-96 was: New South Wales 34.2%, Victoria 31.8%, Queensland 13.8%, South Australia 9.6%, Tasmania 2.9%, the Northern Territory 0.5% and the Australian Capital Territory 0.4%.

The Western Australian industry subdivisions which made a significant contribution to national manufacturing industry gross product in 1995-96 at the industry subdivision level were Non-metallic mineral product manufacturing (13.1%) and Other manufacturing (10.1%).

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

Industry gross product for the manufacturing industry increased, in current price terms, by 14.9% over the period 1992-93 to 1995-96. All industry subdivisions recorded increases in industry gross product. The industry subdivisions with the largest percentage increases were Other manufacturing (up 44.4% from \$145m to \$209m), Printing, publishing and recorded media (up 37.1% from \$293m to \$402m) and Machinery and equipment manufacturing (up 20.0% from \$475m to \$570m). The smallest percentage increase, in current price terms, was recorded in Metal product manufacturing (up 1.2% from \$837m to \$847m).

Western Australia was one of three States to decrease their share of Australian industry gross product between 1992-93 and 1995-96, with a decrease of 0.4 percentage points (to 6.8% of Australian industry gross product). The other States to decrease their share were New South Wales (down 1.9 percentage points to 34.2%) and Victoria (down 0.5 percentage points to 31.8%). The three States to record an increase in their share were South Australia (up 1.5 percentage points to 9.6%), Queensland (up 0.9 percentage points to 13.8%) and Tasmania (up 0.5 percentage points to 2.9%). 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 Western Australia's manufacturing industry was 0.14; that is, on average, 14 cents in wages and salaries is paid for each \$1.00 of turnover. This ratio has been the same for each year from 1990-91 to 1995-96 (inclusive).

The wages and salaries to turnover ratio decreased in six of the nine industry subdivisions, increased in two and remained the same in one of them between 1990-91 and 1995-96. The largest falls were recorded by Machinery and equipment manufacturing (0.24 to 0.18), Textile, clothing, footwear and leather manufacturing (0.27 to 0.23), Printing, publishing and recorded media (0.26 to 0.23) and Other manufacturing (0.24 to 0.21). Although the wages and salaries to turnover ratio increased in Petroleum, coal, chemical and associated product manufacturing (0.07 to 0.09) over the period, it is still the lowest of all the subdivisions. Over the period, the ratio also increased in Metal product manufacturing (0.11 to 0.13). The ratio for Food, beverage and tobacco manufacturing (at 0.12) was the same for each year from 1990-91 to 1995-96 (inclusive).

SUMMARY OF FINDINGS *continued*

TURNOVER PER PERSON EMPLOYED (TABLES 1 AND 2)

Turnover per person employed for total manufacturing in 1995-96 was \$218,900, which is 5.2% higher than the figure recorded for 1994-95. Although decreasing for the third consecutive year, Petroleum, coal, chemical and associated product manufacturing yet again recorded a substantially higher value of turnover per person employed (\$439,300) than other subdivisions in the manufacturing industry. Textile, clothing, footwear and leather manufacturing recorded the lowest value for this ratio (\$97,000). 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.

INDUSTRY GROSS PRODUCT PER PERSON EMPLOYED (TABLE 2)

Industry gross product per person employed for total manufacturing in 1995-96 was \$60,800, which is 8.5% higher than the figure recorded in 1992-93. The industries (of those available for publication) with the highest industry gross product per person employed in 1995-96 were Beer and malt manufacturing (ANZSIC class 2182) (\$258,000), Petroleum and coal product manufacturing n.e.c. (ANZSIC class 2520) (\$206,100), Cement and lime manufacturing (ANZSIC class 2631) (\$149,100) and Prefabricated building manufacturing n.e.c. (ANZSIC class 2919) (\$147,400). The industries (of those available for publication) with the lowest industry gross product per person employed in 1995-96 were Men's and boys' wear manufacturing (ANZSIC class 2241) (\$24,100), Made-up textile product manufacturing (ANZSIC class 2221) (\$25,000) and Rubber tyre manufacturing (ANZSIC class 2551) (\$25,500).

EMPLOYMENT SIZE (TABLE 3)

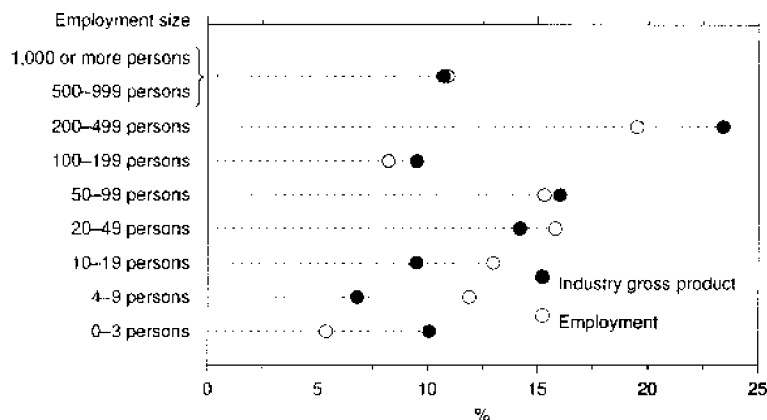
Note: In interpreting comments by employment size, reference should be made to paragraphs 17 and 18 of the Explanatory Notes. This particularly affects the largest and smallest size categories.

Establishments employing 100 or more persons accounted for 38.5% of employment at the end of June 1996 and 43.5% of industry gross product for 1995-96. Establishments employing 20-99 persons accounted for 31.1% of employment and 30.2% of industry gross product. Small establishments (i.e. those employing 0-19 persons) accounted for 30.3% of employment and 26.4% of industry gross product. Manufacturing establishments employing 500 or more persons at the end of June 1996 employed 10.9% of all persons working in the manufacturing industry in Western Australia and contributed 10.7% to industry gross product.

SUMMARY OF FINDINGS *continued*

EMPLOYMENT SIZE (TABLE 3) *continued*

Distribution of industry gross product and employment (a)

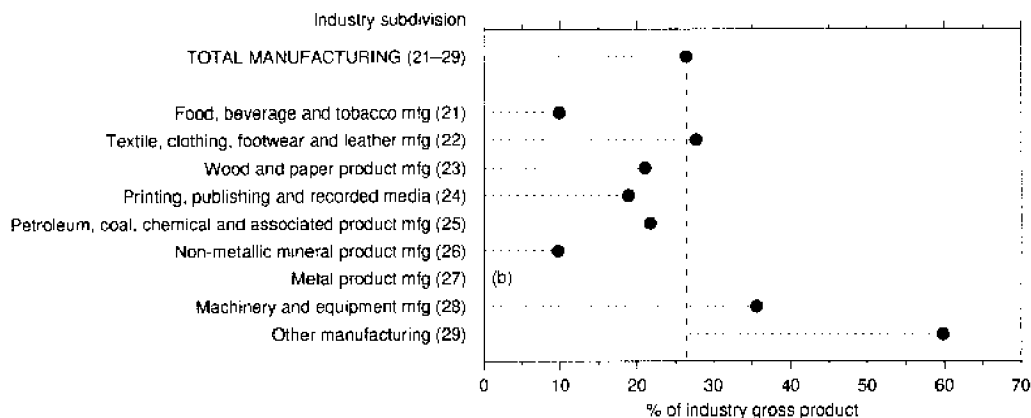


(a) See the note at the start of this section.

For four of the eight industry subdivisions for which meaningful data can be calculated, 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 Non-metallic mineral product manufacturing (60.2%), Printing, publishing and recorded media (60.0%), Wood and paper product manufacturing (57.4%) and Food, beverage and tobacco manufacturing (55.4%).

Small establishments (employing 0-19 persons) made relatively significant contributions to industry gross product for Other manufacturing (59.8%) and Machinery and equipment manufacturing (35.6%).

Distribution of industry gross product, 0-19 persons (a)



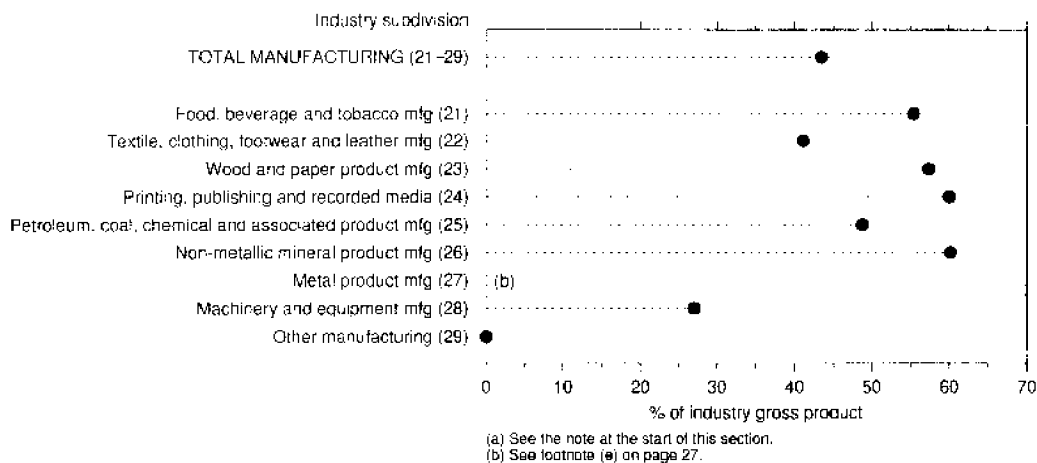
(a) See the note at the start of this section.

(b) See footnote (e) on page 27.

SUMMARY OF FINDINGS *continued*

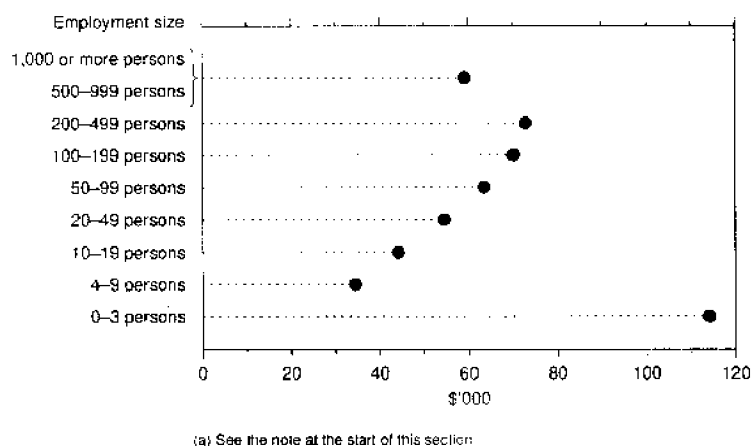
EMPLOYMENT SIZE (TABLE 3) *continued*

Distribution of industry gross product, 100 or more persons (a)



Small establishments (employing 0-19 persons) recorded an average industry gross product per person employed of \$52,700. Establishments employing 100 or more persons recorded an average industry gross product per person employed of \$68,400, with establishments employing 200 to 499 persons having a ratio of \$72,800.

Industry gross product per person employed (a)



SUMMARY OF FINDINGS *continued*

EXPORTS BY MANUFACTURERS (TABLES 4 AND 5)

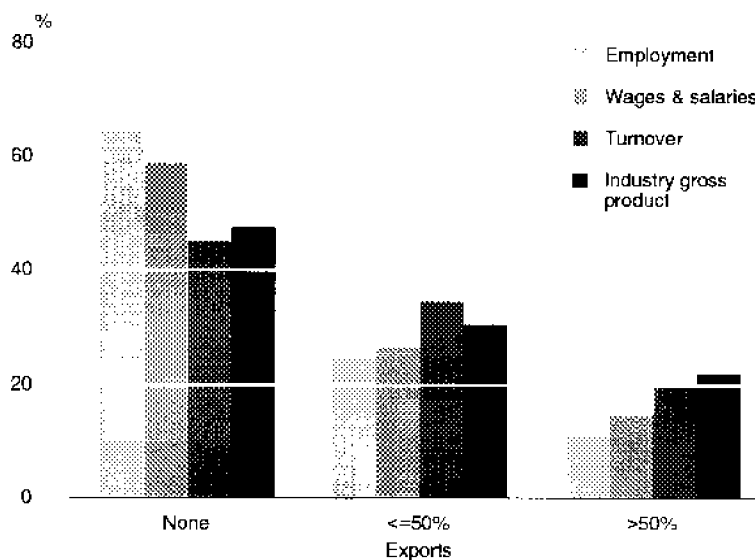
For 1995-96, the percentage of the sales of goods produced in the manufacturing industry which were subsequently exported by the manufacturer or its agent was 23.2%. The Metal product manufacturing industry subdivision recorded the highest percentage contribution (40.8%), followed by Wood and paper product manufacturing (21.8%) and Machinery and equipment manufacturing (21.3%). The industry subdivisions to record the smallest percentage contribution were Printing, publishing and recorded media (0.6%) and Non-metallic mineral product manufacturing (3.0%).

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 (27.6%), while establishments employing 0-49 persons recorded 19.1% and establishments employing 50-99 persons recorded 17.0%.

Tables 4 and 5 do not include all exports of goods manufactured in Western Australia. Rather, they show the extent to which Western Australian manufacturers are directly involved in the export process. Further information about the data in tables 4 and 5 is contained in paragraphs 19-22 of the Explanatory Notes.

Establishments that export contributed over one-third to manufacturing activity in Western Australia with a proportion of employment (35.5%), wages and salaries (41.3%), turnover (55.0%) and industry gross product (52.6%) in the manufacturing industry. Establishments that export more than 50% of their sales of goods produced accounted for 10.9% of employment, 14.6% of wages and salaries, 20.4% of turnover and 22.0% of industry gross product in the manufacturing industry.

Distribution of selected variables, by proportion of goods exported



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	12.8	358.4	2 962.9	778.7	0.12	231.1
		1994-95r	12.4	340.4	2 810.6	..	0.12	226.0
		1993-94	10.9	312.5	2 673.8	..	0.12	244.3
		1992-93	11.6	327.6	2 621.4	658.5	0.12	226.0
		1991-92	11.6	316.5	2 606.4	..	0.12	224.9
		1990-91	12.6	311.3	2 556.3	..	0.12	204.6
22	Textile, clothing, footwear and leather mfg	1995-96	3.3	72.7	317.4	106.3	0.23	97.0
		1994-95r	4.0	90.2	348.3	..	0.26	87.6
		1993-94	3.4	78.2	296.7	..	0.26	87.3
		1992-93	3.2	70.4	269.9	101.0	0.26	83.7
		1991-92	3.2	70.4	261.4	..	0.27	82.2
		1990-91	3.4	72.6	269.9	..	0.27	79.4
23	Wood and paper product mfg	1995-96	4.1	118.0	676.6	228.9	0.17	164.3
		1994-95	4.5	125.3	698.2	..	0.18	154.4
		1993-94	4.5	126.5	691.6	..	0.18	152.8
		1992-93	4.6	117.4	641.5	212.1	0.18	140.8
		1991-92	4.2	105.4	590.8	..	0.18	141.6
		1990-91	4.3	110.0	582.8	..	0.19	135.3
24	Printing, publishing and recorded media	1995-96	6.1	181.3	793.7	402.0	0.23	131.0
		1994-95r	6.2	180.8	743.5	..	0.24	120.0
		1993-94	6.0	169.4	645.0	..	0.26	107.4
		1992-93	5.5	151.9	603.9	293.3	0.25	109.5
		1991-92	5.7	145.9	584.3	..	0.25	101.7
		1990-91	6.1	151.2	576.4	..	0.26	94.5
25	Petroleum, coal, chemical and associated product mfg	1995-96	6.4	238.1	2 795.1	668.4	0.09	439.3
		1994-95r	5.9	219.4	2 762.8	..	0.08	465.8
		1993-94	5.3	195.2	2 738.7	..	0.07	512.9
		1992-93	5.2	185.6	2 742.2	599.8	0.07	523.6
		1991-92	5.5	184.8	2 803.9	..	0.07	510.0
		1990-91	5.5	186.7	2 699.6	..	0.07	488.1
26	Non-metallic mineral product mfg	1995-96	4.8	157.7	971.5	377.5	0.16	203.8
		1994-95r	5.1	169.4	1 076.9	..	0.16	209.2
		1993-94	4.8	153.7	983.9	..	0.16	205.3
		1992-93	4.8	135.6	889.5	324.3	0.15	186.0
		1991-92	4.7	137.4	775.4	..	0.18	165.7
		1990-91	4.3	132.3	720.5	..	0.18	166.8

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-16 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	15.2	560.5	4 230.4	847.3	0.13	277.4
		1994-95r	14.5	513.2	4 016.6	..	0.13	276.8
		1993-94	14.0	487.8	3 664.6	..	0.13	261.6
		1992-93	14.4	493.8	3 899.7	836.9	0.13	271.6
		1991-92	13.7	465.4	3 579.8	..	0.13	261.9
		1990-91	14.0	445.3	4 221.0	..	0.11	301.4
28	Machinery and equipment mfg	1995-96	10.9	323.8	1 752.3	569.7	0.18	160.1
		1994-95	12.5	355.6	1 687.4	..	0.21	135.4
		1993-94	10.8	298.2	1 551.9	..	0.19	143.9
		1992-93	10.5	282.9	1 380.3	474.7	0.20	131.3
		1991-92	10.1	280.7	1 209.2	..	0.23	120.0
		1990-91	10.4	281.2	1 172.4	..	0.24	112.2
29	Other manufacturing	1995-96	5.3	122.1	569.1	209.0	0.21	108.3
		1994-95r	5.7	126.6	597.8	..	0.21	105.4
		1993-94	5.6	116.5	531.6	..	0.22	95.6
		1992-93	5.2	107.4	462.3	144.8	0.23	88.3
		1991-92	5.2	105.2	439.2	..	0.24	84.7
		1990-91	5.1	104.7	432.8	..	0.24	84.4
21-29	Total manufacturing	1995-96	68.8	2 132.7	15 069.1	4 187.8	0.14	218.9
		1994-95r	70.9	2 120.7	14 742.2	..	0.14	208.1
		1993-94	65.4	1 938.1	13 777.8	..	0.14	210.8
		1992-93	65.0	1 872.5	13 510.9	3 645.4	0.14	207.8
		1991-92	63.8	1 811.6	12 850.4	..	0.14	201.4
		1990-91	65.7	1 795.2	13 231.6	..	0.14	201.3

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-16 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	2 533	70.1	518.2	113.4	204.6	44.8
2112	Poultry processing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2113	Bacon, ham and smallgoods mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
211	Total	4 328	114.5	824.7	211.5	190.6	48.9
Dairy product mfg							
2121	Milk and cream processing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2122	Ice cream mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2129	Dairy product mfg n.e.c.	*339	n.p.	n.p.	n.p.	n.p.	n.p.
212	Total	983	41.4	357.0	70.7	363.2	71.9
213	Fruit and vegetable processing	*546	n.p.	n.p.	n.p.	n.p.	n.p.
214	Oil and fat mfg	93	n.p.	n.p.	n.p.	n.p.	n.p.
Flour mill and cereal food mfg							
2151	Flour mill product mfg	187	6.3	85.6	20.4	457.8	109.1
2152	Cereal food and baking mix mfg	297	7.3	70.0	20.3	235.8	68.3
215	Total	484	13.5	155.6	40.7	321.6	84.1
Bakery product mfg							
2161	Bread mfg	1 109	27.5	135.0	48.8	121.8	44.0
2162	Cake and pastry mfg	763	17.6	72.7	28.8	95.3	37.7
2163	Biscuit mfg	—	—	—	—	—	—
216	Total	1 872	45.1	207.7	77.6	111.0	41.4
Other food mfg							
2171	Sugar mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2172	Confectionery mfg	74	1.0	6.3	2.6	84.7	35.6
2173	Seafood processing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2174	Prepared animal and bird feed mfg	303	8.8	154.3	22.6	509.3	74.6
2179	Food mfg n.e.c.	1 094	30.2	161.8	55.1	147.9	50.3
217	Total	2 692	63.3	702.0	132.7	260.8	49.3
Beverage and malt mfg							
2181	Soft drink, cordial and syrup mfg	875	29.8	243.0	69.6	277.7	79.5
2182	Beer and malt mfg	409	20.7	246.0	105.5	601.5	258.0
2183	Wine mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2184	Spirit mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
218	Total	1 823	64.9	579.6	211.6	317.9	116.0
219	Tobacco product mfg	—	—	—	—	—	—
21	Total food, beverage and tobacco mfg	12 821	358.4	2 962.9	778.7	231.1	60.7

(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
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG							
Textile fibre, yarn and woven fabric mfg							
2211	Wool scouring	99	n.p.	n.p.	n.p.	n.p.	n.p.
2212	Synthetic fibre textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2213	Cotton textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2214	Wool textile mfg	—	—	—	—	—	—
2215	Textile finishing	17	n.p.	n.p.	n.p.	n.p.	n.p.
221	<i>Total</i>	449	14.4	51.2	22.9	114.1	51.0
Textile product mfg							
2221	Made-up textile product mfg	990	23.1	108.6	24.7	109.7	25.0
2222	Textile floor covering mfg	—	—	—	—	—	—
2223	Rope, cordage and twine mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2229	Textile product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
222	<i>Total</i>	1 141	26.2	119.7	28.8	104.9	25.2
Knitting mills							
2231	Hosiery mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2232	Cardigan and pullover mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2239	Knitting mill product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
223	<i>Total</i>	148	3.4	13.0	7.0	87.7	47.0
Clothing mfg							
2241	Men's and boys' wear mfg	243	5.2	12.9	5.9	52.9	24.1
2242	Women's and girls' wear mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2243	Sleepwear, underwear and infant clothing mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2249	Clothing mfg n.e.c.	376	6.2	29.0	11.8	77.0	31.3
224	<i>Total</i>	981	17.0	60.5	25.0	61.7	25.5
225	<i>Footwear mfg</i>	223	4.2	19.2	6.5	86.3	29.1
Leather and leather product mfg							
2261	Leather tanning and fur dressing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2262	Leather and leather substitute product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
226	<i>Total</i>	329	7.6	53.8	16.2	163.4	49.2
22	Total textile, clothing, footwear and leather mfg	3 271	72.7	317.4	106.3	97.0	32.5
WOOD AND PAPER PRODUCT MFG							
Log sawmilling and timber dressing							
2311	Log sawmilling	913	n.p.	n.p.	n.p.	n.p.	n.p.
2312	Wood chipping	150	n.p.	n.p.	n.p.	n.p.	n.p.
2313	Timber resawing and dressing	621	16.7	113.2	38.4	182.3	61.8
231	<i>Total</i>	1 684	46.2	290.6	102.1	172.6	60.6
Other wood product mfg							
2321	Plywood and veneer mfg	—	—	—	—	—	—
2322	Fabricated wood mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2323	Wooden structural component mfg	738	14.3	61.5	19.8	83.4	26.8
2329	Wood product mfg n.e.c.	589	10.9	46.1	21.2	78.3	36.0
232	<i>Total</i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.

(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	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2332 Solid paperboard container mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2333 Corrugated paperboard container mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2334 Paper bag and sack mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2339 Paper product mfg n.e.c.	32	0.5	*2.6	*0.9	81.6	29.3
233 Total	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
23 Total wood and paper product mfg	4 119	118.0	676.6	228.9	164.3	55.6
PRINTING, PUBLISHING AND RECORDED MEDIA						
Printing and services to printing						
2411 Paper stationery mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2412 Printing	2 382	67.1	275.2	119.8	115.5	50.3
2413 Services to printing	457	13.8	42.8	18.5	93.6	40.5
241 Total	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Publishing						
2421 Newspaper printing or publishing	2 530	82.1	404.9	232.5	160.1	91.9
2422 Other periodical publishing	261	6.5	23.7	7.6	90.8	29.1
2423 Book and other publishing	*89	1.4	*9.1	5.5	*101.8	*61.6
242 Total	2 880	90.1	437.7	245.6	152.0	85.3
243 Recorded media manufacturing and publishing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
24 Total printing, publishing and recorded media	6 060	181.3	793.7	402.0	131.0	66.3
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG						
251 Petroleum refining	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
252 Petroleum and coal product mfg n.e.c.	66	3.2	80.1	13.6	1 214.3	206.1
Basic chemical mfg						
2531 Fertiliser mfg	633	n.p.	n.p.	n.p.	n.p.	n.p.
2532 Industrial gas mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2533 Synthetic resin mfg	*190	*5.9	*61.5	**11.3	**323.8	*59.3
2534 Organic industrial chemical mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2535 Inorganic industrial chemical mfg n.e.c.	1 099	50.1	522.6	132.0	475.5	120.1
253 Total	2 211	94.2	933.0	273.3	422.0	123.6
Other chemical product mfg						
2541 Explosive mfg	208	n.p.	n.p.	n.p.	n.p.	n.p.
2542 Paint mfg	278	n.p.	n.p.	n.p.	n.p.	n.p.
2543 Medicinal and pharmaceutical product mfg	351	n.p.	n.p.	n.p.	n.p.	n.p.
2544 Pesticide mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2545 Soap and other detergent mfg	153	4.2	27.0	8.2	176.7	53.3
2546 Cosmetic and toiletry preparation mfg	81	1.4	8.7	2.7	107.9	33.9
2547 Ink mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2549 Chemical product mfg n.e.c.	*138	2.8	15.2	4.8	**110.4	**34.9
254 Total	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.

(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	137	3.1	17.0	3.5	124.0	25.5
2559	Rubber product mfg n.e.c.	194	4.9	28.6	9.5	147.5	48.9
255	<i>Total</i>	332	8.0	45.6	13.0	137.4	39.1
Plastic product mfg							
2561	Plastic blow moulded product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2562	Plastic extruded product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2563	Plastic bag and film mfg	348	10.5	66.5	22.1	191.1	63.5
2564	Plastic product, rigid fibre reinforced, mfg	277	6.6	41.9	14.0	151.1	50.4
2565	Plastic foam product mfg	92	2.5	19.3	5.4	209.3	58.4
2566	Plastic injection moulded product mfg	738	18.5	85.4	31.6	115.7	42.9
256	<i>Total</i>	1 790	48.8	294.1	91.9	164.3	51.4
25	Total petroleum, coal, chemical and associated product mfg	6 363	238.1	2 795.1	668.4	439.3	105.0
NON-METALLIC MINERAL PRODUCT MFG							
261	Glass and glass product mfg	360	13.1	67.6	33.0	187.7	91.8
Ceramic mfg							
2621	Clay brick mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2622	Ceramic product mfg	133	3.2	14.8	6.2	110.9	46.3
2623	Ceramic tile and pipe mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2629	Ceramic product mfg n.e.c.	206	n.p.	n.p.	n.p.	n.p.	n.p.
262	<i>Total</i>	1 481	48.5	202.4	109.6	136.7	74.0
Cement, lime, plaster and concrete product mfg							
2631	Cement and lime mfg	480	19.2	209.3	71.6	436.1	149.1
2632	Plaster product mfg	254	7.1	45.9	16.6	180.9	65.2
2633	Concrete slurry mfg	*607	20.7	193.9	41.3	**319.4	**68.1
2634	Concrete pipe and box culvert mfg	214	8.8	43.8	16.7	204.9	78.0
2635	Concrete product mfg n.e.c.	1 153	34.7	166.8	70.5	144.7	61.1
263	<i>Total</i>	2 709	90.6	659.8	216.6	243.6	80.0
264	Non-metallic mineral product mfg n.e.c.	217	5.6	41.8	18.2	192.4	83.9
26	Total non-metallic mineral product mfg	4 767	157.7	971.5	377.5	203.8	79.2
METAL PRODUCT MFG							
Iron and steel mfg							
2711	Basic iron and steel mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2712	Iron and steel casting and forging	707	25.5	105.5	39.1	149.2	55.3
2713	Steel pipe and tube mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
271	<i>Total</i>	1 021	36.0	241.5	65.5	236.6	64.1
Basic non-ferrous metal mfg							
2721	Alumina production	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2722	Aluminium smelting	—	—	—	—	—	—
2723	Copper, silver, lead and zinc smelting, refining	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2729	Basic non-ferrous metal mfg n.e.c.	950	43.5	1 025.2	30.6	1 079.2	32.2
272	<i>Total</i>	5 224	261.4	2 782.1	383.3	532.6	73.4

(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)
code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
Non-ferrous basic metal product mfg							
2731	Aluminium rolling, drawing, extruding	64	n.p.	n.p.	n.p.	n.p.	n.p.
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	-	-	-	-	-	-
2733	Non-ferrous metal casting	81	2.8	9.6	3.6	118.1	44.7
273	Total	145	n.p.	n.p.	n.p.	n.p.	n.p.
Structural metal product mfg							
2741	Structural steel fabricating	2 572	88.1	427.1	130.0	166.1	50.5
2742	Architectural aluminium product mfg	1 054	28.2	126.2	38.4	119.7	36.5
2749	Structural metal product mfg n.e.c.	586	12.7	72.6	24.1	123.9	41.0
274	Total	4 211	129.0	625.9	192.5	148.6	45.7
Sheet metal product mfg							
2751	Metal container mfg	363	n.p.	n.p.	n.p.	n.p.	n.p.
2759	Sheet metal product mfg n.e.c.	1 061	27.2	112.7	39.8	106.3	37.5
275	Total	1 424	n.p.	n.p.	n.p.	n.p.	n.p.
Fabricated metal product mfg							
2761	Hand tool and general hardware mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2762	Spring and wire product mfg	349	8.3	50.2	15.1	143.8	43.4
2763	Nut, bolt, screw and rivet mfg	70	1.7	6.0	2.3	85.9	32.5
2764	Metal coating and finishing	956	20.0	69.1	31.2	72.3	32.7
2765	Non-ferrous pipe fitting mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2769	Fabricated metal product mfg n.e.c.	1 692	51.2	177.1	77.1	104.7	45.5
276	Total	3 223	85.2	317.0	131.7	98.4	40.9
27	Total metal product mfg	15 248	560.5	4 230.4	847.3	277.4	55.6
MACHINERY AND EQUIPMENT MFG							
Motor vehicle and part mfg							
2811	Motor vehicle mfg	320	n.p.	n.p.	n.p.	n.p.	n.p.
2812	Motor vehicle body mfg	815	20.7	122.7	41.5	150.5	50.9
2813	Automotive electrical and instrument mfg	22	n.p.	n.p.	n.p.	n.p.	n.p.
2819	Automotive component mfg n.e.c.	721	n.p.	n.p.	n.p.	n.p.	n.p.
281	Total	1 878	56.5	221.6	57.9	118.0	30.8
Other transport equipment mfg							
2821	Shipbuilding	749	23.4	284.7	77.2	380.1	103.1
2822	Boatbuilding	377	7.8	55.6	12.7	147.5	33.6
2823	Railway equipment mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2824	Aircraft mfg	408	13.3	42.3	27.9	103.7	68.3
2829	Transport equipment mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
282	Total	1 936	59.8	436.4	138.1	225.4	71.3
Photographic and scientific equipment mfg							
2831	Photographic and optical good mfg	61	1.3	3.4	1.6	56.3	26.7
2832	Medical and surgical equipment mfg	324	8.5	20.3	8.9	62.6	27.5
2839	Professional and scientific equipment mfg n.e.c.	169	5.5	17.6	9.1	104.2	53.8
283	Total	554	15.3	41.3	19.6	74.6	35.4

(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	320	n.p.	n.p.	n.p.	n.p.	n.p.
2842	Telecommunication, broadcasting and transceiving equipment mfg	78	n.p.	n.p.	n.p.	n.p.	n.p.
2849	Electronic equipment mfg n.e.c.	535	15.3	74.7	39.9	139.7	74.6
284	<i>Total</i>	933	29.2	171.0	67.9	183.3	72.8
Electrical equipment and appliance mfg							
2851	Household appliance mfg	583	17.5	92.1	25.0	158.0	42.9
2852	Electric cable and wire mfg	52	n.p.	n.p.	n.p.	n.p.	n.p.
2853	Battery mfg	—	—	—	—	—	—
2854	Electric light and sign mfg	145	n.p.	n.p.	n.p.	n.p.	n.p.
2859	Electrical equipment mfg n.e.c.	556	19.0	82.0	29.9	147.6	53.8
285	<i>Total</i>	1 337	41.1	194.5	62.3	145.5	46.6
Industrial machinery and equipment mfg							
2861	Agricultural machinery mfg	496	11.5	71.4	22.2	143.9	44.7
2862	Mining and construction machinery mfg	1 070	30.6	210.7	54.2	196.9	50.7
2863	Food processing machinery mfg	43	1.1	4.7	1.8	110.3	42.8
2864	Machine tool and part mfg	312	8.2	24.5	11.2	78.6	35.8
2865	Lifting and material handling equipment mfg	796	23.8	147.2	58.1	184.9	72.9
2866	Pump and compressor mfg	*199	*5.7	*25.8	*11.5	**129.7	*57.6
2867	Commercial space heating and cooling equipment mfg	473	15.7	85.2	21.5	180.1	45.4
2869	Industrial machinery and equipment mfg n.e.c.	913	25.4	117.9	43.6	129.1	47.7
286	<i>Total</i>	4 303	122.0	687.4	224.0	159.8	52.1
28	Total machinery and equipment mfg	10 942	323.8	1 752.3	569.7	160.1	52.1
OTHER MANUFACTURING							
Prefabricated building mfg							
2911	Prefabricated metal building mfg	265	6.5	56.3	14.8	212.5	55.8
2919	Prefabricated building mfg n.e.c.	124	4.1	31.7	18.3	255.4	147.4
291	<i>Total</i>	389	10.6	88.0	33.1	226.2	85.0
Furniture mfg							
2921	Wooden furniture and upholstered seat mfg	2 801	59.2	245.6	98.9	87.7	35.3
2922	Sheet metal furniture mfg	269	6.7	35.6	10.3	132.2	38.3
2923	Mattress mfg (except rubber)	*161	3.7	24.2	6.4	*150.0	39.9
2929	Furniture mfg n.e.c.	889	23.5	*108.0	32.6	**121.5	**36.7
292	<i>Total</i>	4 120	93.2	413.3	148.3	100.3	36.0
Miscellaneous manufacturing							
2941	Jewellery and silverware mfg	205	n.p.	n.p.	n.p.	n.p.	n.p.
2942	Toy and sporting good mfg	116	2.1	9.0	3.5	77.3	30.1
2949	Manufacturing n.e.c.	425	n.p.	n.p.	n.p.	n.p.	n.p.
294	<i>Total</i>	747	18.3	67.8	27.7	90.8	37.0
29	Total other manufacturing	5 256	122.1	569.1	209.0	108.3	39.8
21-29	TOTAL MANUFACTURING	68 845	2 132.7	15 069.1	4 187.8	218.9	60.8

(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.

MANUFACTURING ESTABLISHMENTS(a). Summary of Operations by Employment Size

Employment size group	Employment at end of June(b)		Wages and salaries(c)		Turnover(d)		Industry gross product(d)	
	no.	%	\$m	%	\$m	%	\$m	%
FOOD, BEVERAGE AND TOBACCO MANUFACTURING								
0-3 persons	157	1.2	5.6	1.6	31.6	1.1	14.4	1.8
4-9 persons	694	5.4	10.1	2.8	75.4	2.5	20.0	2.6
10-19 persons	1 027	8.0	21.2	5.9	201.4	6.8	42.0	5.4
20-49 persons	1 852	14.4	43.1	12.1	324.0	10.9	80.5	10.3
50-99 persons	2 521	19.7	74.1	20.7	814.2	27.5	190.3	24.5
Total less than 100 persons	6 251	48.8	154.1	43.1	1 446.6	48.9	347.0	44.6
100-199 persons	1 085	8.5	33.0	9.2	327.5	11.1	78.4	10.1
200-499 persons	5 485	42.8	170.5	47.7	1 185.9	40.1	352.0	45.3
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	6 570	51.2	203.6	56.9	1 513.4	51.1	430.4	55.4
Total	12 821	100.0	357.7	100.0	2 960.0	100.0	777.4	100.0
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING								
0-3 persons	230	7.0	2.5	3.5	11.8	3.8	4.7	4.5
4-9 persons	566	17.3	8.1	11.4	32.7	10.4	13.2	12.6
10-19 persons	453	13.8	8.5	11.9	29.2	9.3	11.0	10.6
20-49 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
50-99 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total less than 100 persons	2 202	67.3	42.9	59.8	162.3	51.7	61.4	58.9
100-199 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	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	1 069	32.7	28.8	40.2	151.6	48.3	42.9	41.1
Total	3 271	100.0	71.7	100.0	313.9	100.0	104.3	100.0
WOOD AND PAPER PRODUCT MANUFACTURING								
0-3 persons	365	8.9	5.0	4.2	25.6	3.8	9.7	4.3
4-9 persons	694	16.8	15.7	13.3	59.0	8.7	22.0	9.6
10-19 persons	441	10.7	9.6	8.1	43.6	6.4	16.4	7.1
20-49 persons	310	7.5	8.2	6.9	40.1	5.9	14.6	6.4
50-99 persons	471	11.4	15.1	12.8	133.6	19.7	34.7	15.2
Total less than 100 persons	2 280	55.4	53.5	45.3	301.9	44.6	97.4	42.6
100-199 persons	416	10.1	18.4	15.6	85.5	12.6	29.2	12.8
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	1 839	44.6	64.5	54.7	374.5	55.4	131.4	57.4
Total	4 119	100.0	118.0	100.0	676.4	100.0	228.8	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) 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 17 of the Explanatory Notes.

Employment size group	Employment at end of June(b)		Wages and salaries(c)(d)		Turnover(d)		Industry gross product(d)	
	no.	%	\$m	%	\$m	%	\$m	%
PRINTING, PUBLISHING AND RECORDED MEDIA								
0-3 persons	345	5.7	6.2	3.5	30.9	3.9	13.6	3.4
4-9 persons	894	14.8	18.9	10.5	95.9	12.2	35.7	8.9
10-19 persons	601	9.9	14.9	8.3	52.7	6.7	26.2	6.6
20-49 persons	1 233	20.3	39.6	22.1	134.8	17.1	66.0	16.5
50-99 persons	402	6.6	13.9	7.8	46.0	5.8	18.3	4.6
<i>Total less than 100 persons</i>	3 475	57.3	93.5	52.2	360.4	45.8	159.9	40.0
100-199 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	2 585	42.7	85.7	47.8	426.7	54.2	239.3	60.0
Total	6 060	100.0	179.2	100.0	787.1	100.0	399.2	100.0
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING								
0-3 persons	202	3.2	3.1	1.3	207.9	7.4	100.1	15.0
4-9 persons	515	8.1	10.8	4.5	54.6	2.0	17.4	2.6
10-19 persons	530	8.3	14.4	6.1	80.5	2.9	27.5	4.1
20-49 persons	1 443	22.7	43.0	18.1	415.9	14.9	119.8	17.9
50-99 persons	699	11.0	28.1	11.8	294.8	10.6	77.5	11.6
<i>Total less than 100 persons</i>	3 389	53.3	99.3	41.8	1 053.8	37.7	342.3	51.2
100-199 persons	543	8.5	24.1	10.1	167.9	6.0	46.3	6.9
200-499 persons	2 430	38.2	114.3	48.1	1 571.5	56.3	280.0	41.9
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	2 973	46.7	138.4	58.2	1 739.4	62.3	326.2	48.8
Total	6 363	100.0	237.7	100.0	2 793.2	100.0	668.5	100.0
NON-METALLIC MINERAL PRODUCT MANUFACTURING								
0-3 persons	157	3.3	2.1	1.3	10.6	1.1	4.0	1.1
4-9 persons	397	8.3	8.6	5.5	43.4	4.5	14.6	3.9
10-19 persons	310	6.5	7.6	4.8	45.8	4.7	17.9	4.8
20-49 persons	805	16.9	24.1	15.3	119.6	12.3	31.5	8.3
50-99 persons	911	19.1	35.5	22.5	302.8	31.2	82.0	21.7
<i>Total less than 100 persons</i>	2 581	54.1	77.9	49.4	522.2	53.8	150.1	39.8
100-199 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
200-499 persons	1 109	23.3	36.3	23.0	255.2	26.3	112.4	29.8
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>	2 186	45.9	79.8	50.6	449.2	46.2	227.4	60.2
Total	4 767	100.0	157.7	100.0	971.4	100.0	377.5	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) 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 17 of the Explanatory Notes.

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

Employment size group	Employment at end of June(b)		Wages and salaries(c)(d)		Turnover(d)		Industry gross product(d)	
	no	%	\$m	%	\$m	%	\$m	%
METAL PRODUCT MANUFACTURING(e)								
0-3 persons	536	3.5	8.0	1.4	390.1	9.3	216.7	...
4-9 persons	1 467	9.6	34.9	6.3	156.5	3.7	57.3	...
10-19 persons	2 307	15.1	62.7	11.3	230.6	5.5	88.7	...
20-49 persons	2 094	13.7	62.8	11.3	364.0	8.7	106.7	...
50-99 persons	2 080	13.6	68.8	12.4	389.9	9.3	108.7	...
Total less than 100 persons	8 484	55.6	237.1	42.8	1 531.2	36.6	578.1	...
100-199 persons	1 244	8.2	42.7	7.7	276.6	6.6	77.1	...
200-499 persons	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.	...
1 000 or more persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	...
Total 100 or more persons	6 764	44.4	316.3	57.2	2 653.2	63.4	263.0	...
Total	15 248	100.0	553.4	100.0	4 184.4	100.0	841.0	100.0
MACHINERY AND EQUIPMENT MANUFACTURING								
0-3 persons	936	8.6	16.2	5.1	100.8	5.8	39.0	6.9
4-9 persons	1 478	13.5	34.2	10.7	155.9	8.9	50.6	8.9
10-19 persons	2 039	18.6	54.9	17.1	303.7	17.4	112.9	19.8
20-49 persons	2 050	18.7	66.8	20.8	329.3	18.9	122.9	21.6
50-99 persons	1 885	17.2	59.8	18.7	308.2	17.7	90.3	15.8
Total less than 100 persons	8 389	76.7	231.9	72.3	1 197.9	68.6	415.7	73.0
100-199 persons	1 337	12.2	36.6	11.4	324.7	18.6	75.3	13.2
200-499 persons	1 216	11.1	52.1	16.3	222.9	12.8	78.8	13.8
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	2 553	23.3	88.7	27.7	547.6	31.4	154.0	27.0
Total	10 942	100.0	320.7	100.0	1 745.5	100.0	569.7	100.0
OTHER MANUFACTURING								
0-3 persons	774	14.7	10.9	9.0	51.1	9.0	20.3	9.7
4-9 persons	1 507	28.7	30.2	24.8	131.0	23.0	51.6	24.7
10-19 persons	1 268	24.1	29.6	24.3	139.2	24.5	52.9	25.3
20-49 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
50-99 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total less than 100 persons	5 256	100.0	121.9	100.0	568.4	100.0	208.7	100.0
100-199 persons	—	—	—	—	—	—	—	—
200-499 persons	—	—	—	—	—	—	—	—
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
Total 100 or more persons	—	—	—	—	—	—	—	—
Total	5 256	100.0	121.9	100.0	568.4	100.0	208.7	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) 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 17 of the Explanatory Notes.

(e) The effect of unincorporated joint ventures on data classified by employment size is explained in paragraph 18 of the Explanatory Notes. As a result of these effects, no meaningful ratios can be calculated for the industry gross product data item.

Employment size group	Employment at end of June(b)		Wages and salaries(c)(d)		Turnover(d)		Industry gross product(a)	
	no.	%	\$m	%	\$m	%	\$m	%
TOTAL MANUFACTURING(e)								
0-3 persons	3 703	5.4	59.7	2.8	860.4	5.7	422.6	10.1
4-9 persons	8 213	11.9	171.5	8.1	804.5	5.4	282.3	6.8
10-19 persons	8 977	13.0	223.2	10.5	1 126.8	7.5	395.5	9.5
20-49 persons	10 898	15.8	322.5	15.2	1 895.8	12.6	593.6	14.2
50-99 persons	10 516	15.3	335.1	15.8	2 457.0	16.4	666.5	16.0
<i>Total less than 100 persons</i>	<i>42 307</i>	<i>61.5</i>	<i>1 112.0</i>	<i>52.5</i>	<i>7 144.6</i>	<i>47.6</i>	<i>2 360.5</i>	<i>56.5</i>
100-199 persons	5 629	8.2	190.6	9.0	1 372.6	9.2	394.7	9.5
200-499 persons	13 405	19.5	487.4	23.0	4 496.0	30.0	975.9	23.4
500-999 persons	n.p.	n.p.	n.d.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	n.p.	n.p.	n.d.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<i>26 538</i>	<i>38.5</i>	<i>1 005.8</i>	<i>47.5</i>	<i>7 855.6</i>	<i>52.4</i>	<i>1 814.7</i>	<i>43.5</i>
TOTAL	68 845	100.0	2 117.8	100.0	15 000.3	100.0	4 175.2	100.0

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) 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 17 of the Explanatory Notes.

(e) The effect of unincorporated joint ventures on data classified by employment size is explained in paragraph 18 of the Explanatory Notes.

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

INDUSTRY SUBDIVISION		<i>Sales and transfers out of goods produced by this establishment</i>	<i>Amount exported by this business or its agent</i>	<i>Exports as a proportion of sales of goods produced</i>
ANZSIC code	Description	\$m	\$m	%
0-49 PERSONS				
21	Food, beverage and tobacco mfg	n.p.	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.
23	Wood and paper product mfg	154.5	2.8	1.8
24	Printing, publishing and recorded media	n.p.	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	714.1	210.8	29.5
26	Non-metallic mineral product mfg	n.p.	n.p.	n.p.
27	Metal product mfg	1 022.0	380.2	37.2
28	Machinery and equipment mfg	704.1	68.3	9.7
29	Other manufacturing	437.0	42.8	9.8
21-29	Total manufacturing	4 202.6	800.8	19.1
50-99 PERSONS				
21	Food, beverage and tobacco mfg	n.p.	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	50.8	7.4	14.6
23	Wood and paper product mfg	n.p.	n.p.	n.p.
24	Printing, publishing and recorded media	n.p.	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	289.8	5.4	1.8
26	Non-metallic mineral product mfg	n.p.	n.p.	n.p.
27	Metal product mfg	350.6	22.8	6.5
28	Machinery and equipment mfg	230.1	45.1	19.6
29	Other manufacturing	88.6	6.1	6.8
21-29	Total manufacturing	2 249.6	381.4	17.0
100 OR MORE PERSONS				
21	Food, beverage and tobacco mfg	1 460.3	232.6	15.9
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.
23	Wood and paper product mfg	n.p.	n.p.	n.p.
24	Printing, publishing and recorded media	124.8	—	—
25	Petroleum, coal, chemical and associated product mfg	1 712.7	321.6	18.8
26	Non-metallic mineral product mfg	436.8	15.5	3.5
27	Metal product mfg	2 597.7	1 217.1	46.9
28	Machinery and equipment mfg	520.7	195.9	37.6
29	Other manufacturing	—	—	—
21-29	Total manufacturing	7 367.8	2 030.9	27.6
TOTAL				
21	Food, beverage and tobacco mfg	2 850.6	512.4	18.0
22	Textile, clothing, footwear and leather mfg	284.2	12.0	4.2
23	Wood and paper product mfg	652.1	142.5	21.8
24	Printing, publishing and recorded media	430.4	2.6	0.6
25	Petroleum, coal, chemical and associated product mfg	2 716.6	537.8	19.8
26	Non-metallic mineral product mfg	935.3	27.8	3.0
27	Metal product mfg	3 970.3	1 620.0	40.8
28	Machinery and equipment mfg	1 454.8	309.3	21.3
29	Other manufacturing	525.6	48.9	9.3
21-29	Total manufacturing	13 820.0	3 213.1	23.2

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraphs 19-22 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 17 of the Explanatory Notes. Also, see paragraph 18 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	56.8	53.5	45.7	51.2
22	Textile, clothing, footwear and leather mfg	68.3	62.8	66.1	60.0
23	Wood and paper product mfg	51.2	44.1	33.1	37.5
24	Printing, publishing and recorded media	92.7	92.2	93.8	94.5
25	Petroleum, coal, chemical and associated product mfg	53.6	47.8	27.4	26.2
26	Non-metallic mineral product mfg	62.5	60.2	69.9	60.2
27	Metal product mfg	61.9	53.5	34.6	18.5
28	Machinery and equipment mfg	64.4	59.8	52.4	58.6
29	Other manufacturing	80.9	76.1	74.8	79.9
21-29	Total manufacturing	64.5	58.7	45.0	47.5
ESTABLISHMENTS WITH EXPORTS UP TO AND INCLUDING 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	n.p.	n.p.	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.	n.p.
23	Wood and paper product mfg	40.2	46.4	51.5	51.7
24	Printing, publishing and recorded media	7.3	7.8	6.2	5.5
25	Petroleum, coal, chemical and associated product mfg	34.3	38.5	57.5	48.1
26	Non-metallic mineral product mfg	n.p.	n.p.	n.p.	n.p.
27	Metal product mfg	13.7	13.3	22.3	12.4
28	Machinery and equipment mfg	28.9	34.1	33.9	33.7
29	Other manufacturing	17.2	19.1	19.3	17.2
21-29	Total manufacturing	24.6	26.7	34.6	30.6
ESTABLISHMENTS WITH EXPORTS OF MORE THAN 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	n.p.	n.p.	n.p.	n.p.
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.	n.p.
23	Wood and paper product mfg	8.6	9.6	15.3	10.8
24	Printing, publishing and recorded media	—	—	—	—
25	Petroleum, coal, chemical and associated product mfg	12.0	13.7	15.1	25.7
26	Non-metallic mineral product mfg	n.p.	n.p.	n.p.	n.p.
27	Metal product mfg	24.4	33.2	43.1	69.1
28	Machinery and equipment mfg	6.7	6.1	13.7	7.7
29	Other manufacturing	1.9	4.9	5.9	2.9
21-29	Total manufacturing	10.9	14.6	20.4	22.0

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraphs 19-22 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

EXPLANATORY NOTES

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INTRODUCTION

1 This publication presents final statistics for Western Australia 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*

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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 for Western Australia is an increase of 0.3% while the effect on employment is an increase of 2.2%. Most industries were affected to a similar degree. The exceptions are Machinery and equipment manufacturing (0.8% and 3.7% respectively) and Other manufacturing (0.9% and 4.2% 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*

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.

EMPLOYMENT SIZE DATA

17 Summary of operations data at the industry subdivision level classified by employment size are presented in table 3. Similarly, exports of goods produced data at the industry subdivision level classified by broad employment size are presented in table 4. 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*

18 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

19 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 4 and 5. 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.

20 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 4 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. The data in table 4 exclude those manufacturing establishments which operated during 1995-96 but were not operating at 30 June 1996.

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

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

EXPLANATORY NOTES *continued*

USE OF ANZSIC

23 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 28). Similarly, ASIC-based data are not available from 1992-93.

INFORMATION PAPER

24 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

25 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 are being released progressively.

26 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, 1995-96* (Cat. no. 8221.0), released on 10 October 1997
- *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

BACK DATA AND UNPUBLISHED STATISTICS

27 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*

28 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

29 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.

30 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

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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 data presented in this publication are mostly 3% or less for industry subdivisions and most are 7% or less for industry classes.

Relative standard errors at the industry subdivision level for Western 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	2.8	2.4	1.8	2.3
22	Textile, clothing, footwear and leather mfg	3.3	2.9	2.2	2.5
23	Wood and paper product mfg	4.4	3.3	2.1	2.4
24	Printing, publishing and recorded media	4.6	5.1	4.1	3.8
25	Petroleum, coal, chemical and associated product mfg	3.6	2.5	1.5	2.5
26	Non-metallic mineral product mfg	3.7	3.3	1.8	1.1
27	Metal product mfg	2.2	1.7	0.9	2.0
28	Machinery and equipment mfg	2.9	2.6	3.5	3.5
29	Other manufacturing	4.7	5.6	5.2	4.6
21-29 Total manufacturing		1.1	1.0	0.7	1.0

(a) Includes working proprietors.

(b) Excludes the drawings of working proprietors.

GLOSSARY

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 4) For an individual establishment, this represents the percentage of the total sales and transfers out of goods for sale produced by the establishment (or for it on commission) which are exported (outside Australia) by the business or its agent. In table 4, the ratio is calculated by dividing the total value of goods exported by the total value of sales and transfers out of goods for sale produced by all establishments, not just the aggregated value for those units which exported.

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 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.

The formula used to calculate IGP is as follows—definitions of the relevant component items also appear in this Glossary.

$$\begin{aligned}
 \text{Calculation of IGP} &= \text{Turnover} \\
 &+ \text{Change in stocks} \\
 &- \text{Purchases, transfers in and selected expenses} \\
 &= \text{Establishment value added} \\
 &- \text{Fringe benefits tax} \\
 &- \text{Payroll tax} \\
 &- \text{Other operating expenses} \\
 &= \text{Industry Gross Product}
 \end{aligned}$$

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.

Industry subdivision	<p>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:</p> <ul style="list-style-type: none"> 21 Food, beverage and tobacco mfg 22 Textile, clothing, footwear and leather mfg 23 Wood and paper product mfg 24 Printing, publishing and recorded media 25 Petroleum, coal, chemical and associated product mfg 26 Non-metallic mineral product mfg 27 Metal product mfg 28 Machinery and equipment mfg 29 Other manufacturing
Management unit	<p>The management unit is the highest-level unit within a business, having regard to industry homogeneity, for which accounts are maintained; in nearly all cases, it coincides with the legal entity owning the business (that is, company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.</p>
Manufacturing establishment	<p>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.</p>
Manufacturing management unit	<p>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.</p>
Opening stocks	<p>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.</p>
Other operating expenses	<p>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.</p>
Own account capital work	<p>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.</p>
Purchases	<p>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.</p>

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*

- 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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