



# MANUFACTURING INDUSTRY

QUEENSLAND

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## CONTENTS

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

### TABLES

#### MANUFACTURING ESTABLISHMENTS

<b>1</b> Summary of operations—1991–92 to 1996–97 .....	8
<b>2</b> Summary of operations—industry class .....	10
<b>3</b> Percentage change in Industry Gross Product— 1992–93 to 1996–97 .....	16
<b>4</b> Summary of operations—employment size .....	17
<b>5</b> Exported goods produced—broad employment size .....	21
<b>6</b> Summary of operations—proportion of exports .....	22

#### MANUFACTURING LOCATIONS

<b>7</b> Summary of operations—statistical divisions .....	23
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### ADDITIONAL INFORMATION

Explanatory notes .....	27
Technical note .....	34
Glossary .....	35
Statistical division map .....	40

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

## NOTES

### ANNUAL MANUFACTURING INDUSTRY COLLECTION

The 1996–97 collection was a census of manufacturing businesses. It is the first census of the manufacturing sector since 1993–94. All manufacturing businesses were requested to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. Samples of businesses provided additional information related to detailed structural and performance data, environmental protection expenditure and the value of sales for commodities produced.

### ABOUT THIS ISSUE

Data in this publication have been adjusted for all known deficiencies in the number of businesses recorded on the Australian Bureau of Statistics (ABS) business register. The nature of these various adjustments and the reasons for making them are described in paragraphs 10–12 of the Explanatory Notes. Because of these adjustments, comparison of data in this publication with data previously published should be undertaken with caution. Other adjusted data for earlier periods are available on request.

This publication presents data relating to the operations of both manufacturing establishments and manufacturing locations. Details on employment, wages and salaries, turnover, Industry Gross Product (IGP) and direct exports are presented as appropriate. This publication also contains a table showing industry subdivision data by statistical division and a map displaying the boundaries of each Queensland statistical division.

### DATA TO BE RELEASED IN OTHER PUBLICATIONS

More detailed manufacturing industry statistics for each State are being released progressively in a series of publications *Manufacturing Industry, [State], 1996–97* (Cat. nos 8221.1–8221.6). The publication for New South Wales (Cat. no. 8221.1) also contains selected data for the Australian Capital Territory. For 1996–97, all of these publications contain a table showing industry subdivision data by statistical division.

Commodity data will be released in *Manufacturing Production, Commodities Produced, Australia, 1996–97* (Cat. no. 8365.0), to be released in December 1998.

Management unit data and a wide range of manufacturing related ABS data, as well as data from other sources, will be presented in the compendium publication *Manufacturing, Australia, 1998* (Cat. no. 8225.0), to be released in December 1998.

### 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
mfg	manufacturing
n.e.c.	not elsewhere classified
n.p.	not available for publication but included in totals where applicable
..	not applicable
—	nil or rounded to zero

Brian Doyle  
Regional Director

# MAIN FEATURES

## OVERVIEW

Turnover for the year 1996–97 by manufacturing establishments operating in Queensland was \$30,141m, which resulted in an Industry Gross Product (IGP) for the year of \$8,470m. These establishments employed 141,100 persons at the end of June 1997 and paid \$4,479m in wages and salaries in 1996–97.

The percentage of Australian manufacturing employment in Queensland at the end of June 1997 was 14.9%, an increase of 0.2 percentage points on that reported at the end of June 1996. The Queensland industry subdivisions which made a significant contribution to national manufacturing employment at the end of June 1997 at the industry subdivision level were Food, beverage and tobacco manufacturing (20.9%), Non-metallic mineral product manufacturing (20.4%), Other manufacturing (18.2%) and Wood and paper product manufacturing (17.6%).

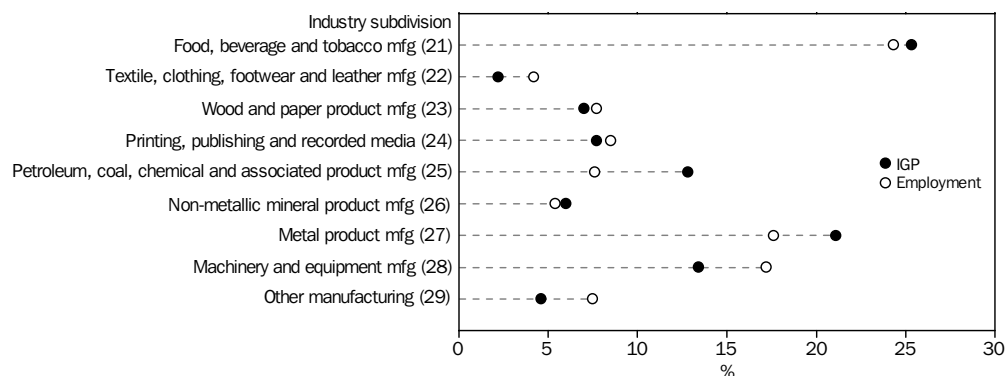
In 1996–97, Queensland contributed 14.5% of total Australian manufacturing turnover and 13.3% of IGP. This represents a decrease of 0.2 percentage points for turnover and a decrease of 0.6 percentage points for IGP on the contribution reported in 1995–96. The Queensland industry subdivisions which made a significant contribution to national manufacturing turnover and IGP in 1996–97 at the industry subdivision level were Non-metallic mineral product manufacturing (21.2% and 19.1% respectively), Food, beverage and tobacco manufacturing (19.7% and 18.7% respectively), Metal product manufacturing (17.0% and 16.1% respectively) and Other manufacturing (16.8% and 17.3% respectively).

## INDUSTRY GROSS PRODUCT

IGP (see the Glossary for its definition) is very similar to the national accounting measure gross product at factor cost, which is the official statistical measure of production. IGP for 1996–97 was \$8,470m. This represents a 3.7% decrease, in current price terms, on the \$8,795m recorded for 1995–96 and a 27.3% increase, in current price terms, on the \$6,652m recorded for 1992–93.

IGP per person employed at the end of June followed this trend, with a 5.3% decrease (to \$60,000) for 1996–97 over the \$63,400 recorded for 1995–96 and a 23.2% increase over the \$48,700 recorded for 1992–93.

## DISTRIBUTION OF IGP AND EMPLOYMENT



## MAIN FEATURES *continued*

### INDUSTRY GROSS PRODUCT *continued*

Total manufacturing IGP decreased by 3.7%, in current price terms, between 1995–96 and 1996–97. Six industry subdivisions recorded an increase while three recorded a decrease. Metal product manufacturing (down 17.2%—\$2,155m to \$1,785m) recorded the largest percentage decrease in IGP between 1995–96 and 1996–97 and also recorded the largest dollar decrease. The other decreases were recorded by Machinery and equipment manufacturing (down 6.7%—\$1,217m to \$1,135m) and Petroleum, coal, chemical and associated product manufacturing (down 6.3%—\$1,153m to \$1,081m). Whilst six industry subdivisions recorded an increase in IGP, they were all small in dollar terms. The largest increase in IGP between 1995–96 and 1996–97 in both percentage and dollar terms was recorded by Food, beverage and tobacco manufacturing (up 6.1%—\$2,022m to \$2,146m). The next largest percentage increases were recorded by Non-metallic mineral product manufacturing (up 5.7%—\$478m to \$505m) and Textile, clothing, footwear and leather manufacturing (up 4.7%—\$180m to \$189m).

Between 1992–93 and 1996–97, seven industry subdivisions recorded an increase, in current price terms, in IGP. The industry subdivisions which recorded the largest percentage increases were Petroleum, coal, chemical and associated product manufacturing (up 77.4%—\$610m to \$1,081m), Metal product manufacturing (up 39.6%—\$1,278m to \$1,785m) and Machinery and equipment manufacturing (up 35.7%—\$836m to \$1,135m). The two subdivisions to record a decrease were Non-metallic mineral product manufacturing (down 7.2%—\$545m to \$505m) and Textile, clothing, footwear and leather manufacturing (down 6.9%—\$203m to \$189m).

### EMPLOYMENT AND WAGES

The Queensland manufacturing industry employed 141,100 persons at the end of June 1997 and paid \$4,479m in wages and salaries in 1996–97. This represents an average of \$31,700 paid in annual wages and salaries per person employed at the end of June 1997.

#### EMPLOYMENT



### EMPLOYMENT AND WAGES *continued*

Employment in the Queensland manufacturing industry has increased by 8.6% (from 129,900 persons to 141,100 persons) over the five years to June 1997, with a peak of 143,700 persons employed in June 1995. There was a 1.7% rise in employment between June 1996 (138,700 persons) and June 1997. Between June 1996 and June 1997, employment increased in seven of the nine manufacturing industry subdivisions and decreased in the other two subdivisions. The industry subdivisions with the largest percentage increases, Non-metallic mineral product manufacturing (up 10.6%) and Other manufacturing (up 7.9%), were both recovering from large employment decreases the previous year. The industry subdivisions where employment decreased were Metal product manufacturing (down 3.7%) and Petroleum, coal, chemical and associated product manufacturing (down 1.9%).

Average wages and salaries paid per person employed at the end of June rose in eight of the nine manufacturing industry subdivisions between 1995–96 and 1996–97. Generally, the industry subdivisions recording the largest percentage increases in employment corresponded with the subdivisions recording the smallest percentage increases in average wages and salaries paid. The converse also generally applied. The main exception was the Printing, publishing and recorded media subdivision which had the fourth largest percentage increase in employment (up 5.7%) and the second largest percentage increase in wages and salaries paid per person employed (up 9.4%). The industry subdivision to record the decrease between 1995–96 and 1996–97 in average wages and salaries paid per person employed at the end of June was Other manufacturing, reflecting that employment (up 7.9%) increased more than total wages and salaries paid (up 6.3%).

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

- Petroleum, coal, chemical and associated product manufacturing (up 12.3%—\$34,100 to \$38,300), where 20 (out of 23) industry classes recorded an increase, with the largest being:
  - ◆ Plastic extruded product manufacturing (ANZSIC Class 2562) (up 65.1%—\$25,300 to \$41,800); and
  - ◆ Cosmetic and toiletry preparation manufacturing (ANZSIC Class 2546) (up 47.6%—\$21,100 to \$31,100).
- Printing, publishing and recorded media (up 9.4%—\$27,500 to \$30,000), where 5 (out of 7) industry classes recorded an increase. The main influences on the subdivision result were Newspaper printing or publishing (ANZSIC Class 2421) and Printing (ANZSIC Class 2412), where the increases in wages and salaries paid per person employed were 11.0% (\$31,700 to \$35,100) and 10.1% (\$23,700 to \$26,100) (respectively). Between them, these two ANZSIC classes accounted for 80% of employment in the subdivision.

The industry subdivision to record the decrease between 1995–96 and 1996–97 in wages and salaries paid per person employed at the end of June was:

### EMPLOYMENT AND WAGES *continued*

- Other manufacturing (down 1.4%—\$23,700 to \$23,300), although five (out of nine) industry classes recorded an increase. The main influence on the subdivision result was Wooden furniture and upholstered seat manufacturing (ANZSIC Class 2921), which contributed more than half of the employment in this subdivision, where wages and salaries paid per person employed decreased by 1.7% (\$22,700 to \$22,300).

The industry classes which had the largest percentage increases between 1995–96 and 1996–97 in wages and salaries per person employed were Textile product manufacturing n.e.c. (ANZSIC Class 2229) (up 83.4%—\$12,700 to \$23,300), Plastic extruded product manufacturing (ANZSIC Class 2562) (up 65.1%—\$25,300 to \$41,800), Book and other publishing (ANZSIC Class 2423) (up 58.9%—\$19,600 to \$31,100), Cosmetic and toiletry preparation manufacturing (ANZSIC Class 2546) (up 47.6%—\$21,100 to \$31,100) and Other periodical publishing (ANZSIC Class 2422) (up 43.5%—\$17,300 to \$24,900).

### TURNOVER

Turnover rose, in current price terms, by \$462m to \$30,141m for 1996–97. This represents a 1.6% increase on the \$29,679m recorded for 1995–96.

Six of the nine manufacturing industry subdivisions recorded an increase in turnover between 1995–96 and 1996–97. Food, beverage and tobacco manufacturing and Metal product manufacturing remain the largest contributors to total Queensland manufacturing turnover. The largest percentage increases between 1995–96 and 1996–97 were recorded by Other manufacturing (up 13.0%) and Non-metallic mineral product manufacturing (up 11.0%). The largest increase in dollar terms was recorded by Petroleum, coal, chemical and associated product manufacturing (up \$390m). Metal product manufacturing (down 6.9% or \$477m) was the industry subdivision to record the largest fall in turnover.

At the industry class level, there were considerable fluctuations in turnover between 1995–96 and 1996–97. Six industry classes recorded increases in turnover of more than 100 per cent, the largest of which were:

- Textile product manufacturing n.e.c. (ANZSIC Class 2229) (up 222.3% or \$14m);
- Other periodical publishing (ANZSIC Class 2422) (up 166.4% or \$30m); and
- Transport equipment manufacturing n.e.c. (ANZSIC Class 2829) (up 140.7% or \$5m).

The industry classes with the largest dollar increases between 1995–96 and 1996–97 were:

- Petroleum refining (ANZSIC Class 2510) (up \$290m or 20.1%);
- Structural steel fabricating (ANZSIC Class 2741) (up \$122m or 19.6%); and
- Mining and construction machinery manufacturing (ANZSIC Class 2862) (up \$114m or 38.2%).

The industry classes (where publishable) with the largest percentage decreases between 1995–96 and 1996–97 were:

- Plastic blow moulded product manufacturing (ANZSIC Class 2561) (down 50.5% or \$108m);

## MAIN FEATURES *continued*

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### TURNOVER *continued*

- Footwear manufacturing (ANZSIC Class 2250) (down 38.5% or \$4m); and
- Spring and wire product manufacturing (ANZSIC Class 2762) (down 37.5% or \$54m).

The industries with the largest dollar decreases between 1995–96 and 1996–97 were:

- Basic non-ferrous metal manufacturing (ANZSIC Group 272) (down \$755m or 21.5%), of which Copper, silver, lead and zinc smelting, refining (ANZSIC Class 2723) contributed the largest decrease (down \$272m or 19.8%); and
- Plastic blow moulded product manufacturing (ANZSIC Class 2561) (down \$108m or 50.5%).

Over the four year period from 1992–93 to 1996–97, the industry class which advanced the most number of places (when ranked by turnover) was Soap and other detergent manufacturing (ANZSIC Class 2545) which progressed from the 106th rank position (out of 153 ANZSIC classes) to the 44th rank position. Mining and construction machinery manufacturing (ANZSIC Class 2862) also made a significant movement, advancing from the 65th rank position to the 20th rank position.

### EXPORTS

For 1996–97, Queensland manufacturers directly exported \$4,546m of the goods that they produced. This represents a 7.9% decrease on the \$4,937m recorded for 1995–96. The percentage of the total sales and transfers out of goods produced that were exported also decreased (from 18.0% for 1995–96 to 16.3% for 1996–97).

Between 1995–96 and 1996–97, manufacturers' direct exports increased in six of the nine industry subdivisions. The industry subdivision to record the largest dollar increase in direct exports between 1995–96 and 1996–97 was Petroleum, coal, chemical and associated product manufacturing (up \$113m or 109.1%—\$104m to \$217m). However, the overall decrease for Queensland was mainly a result of the Metal product manufacturing subdivision's decrease of 24.6% or \$571m (from \$2,320m to \$1,749m).

### REGIONAL ACTIVITY

As in previous census years, Brisbane Statistical Division was, by far, the major manufacturing statistical division within Queensland in 1996–97, although less dominant than the capital city statistical divisions in the other mainland States. Brisbane Statistical Division contributed 49.1% of all locations at 30 June 1997, 56.9% of employment at the end of June 1997 and 56.7% of turnover for 1996–97. Other statistical divisions to contribute significantly were Moreton (21.9% of locations, 12.0% of employment and 7.6% of turnover) and Fitzroy (8.2% of turnover).

Brisbane Statistical Division was also the leading contributor, by far, in all of the nine industry subdivisions. Moreton Statistical Division was an important contributor across several industry subdivisions, with the largest contribution being 20.9% for Textile, clothing, footwear and leather manufacturing. Fitzroy Statistical Division was a significant contributor to Metal product manufacturing, with 22.1% of Queensland's turnover for that industry subdivision. Wide Bay-Burnett Statistical Division (14.9%) contributed particularly to Wood and paper product manufacturing and Darling Downs Statistical Division (14.8%) to Food, beverage and tobacco manufacturing.

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	1996-97	34.3	1 133.1	8 871.8	2 145.9	0.13	258.6
		1995-96	33.5	(g)1 032.5	8 750.8	2 021.9	0.12	261.1
		1994-95	34.5	1 045.4	8 645.8	..	0.12	250.8
		1993-94	35.9	1 003.4	8 401.2	..	0.12	234.3
		1992-93	34.2	952.2	7 622.5	1 728.1	0.12	222.7
		1991-92	32.6	844.8	6 942.4	..	0.12	212.9
22	Textile, clothing, footwear and leather mfg	1996-97	5.9	125.1	593.1	188.6	0.21	99.9
		1995-96	5.6	(g)113.4	602.4	180.2	0.19	108.0
		1994-95	5.9	115.9	643.2	..	0.18	108.9
		1993-94	6.1	120.9	568.3	..	0.21	93.4
		1992-93	6.7	136.5	594.2	202.6	0.23	89.2
		1991-92	6.8	131.3	553.5	..	0.24	81.9
23	Wood and paper product mfg	1996-97	10.8	319.3	1 708.7	590.3	0.19	158.0
		1995-96	10.7	(g)294.1	1 604.9	573.1	0.18	150.6
		1994-95	12.2	328.0	1 787.7	..	0.18	146.7
		1993-94	12.2	302.9	1 688.4	..	0.18	137.9
		1992-93	11.2	283.6	1 568.5	556.4	0.18	139.8
		1991-92	11.3	269.6	1 533.9	..	0.18	135.9
24	Printing, publishing and recorded media	1996-97	12.0	359.4	1 436.1	648.2	0.25	120.0
		1995-96	11.3	(g)310.9	1 330.5	636.3	0.23	117.6
		1994-95	12.8	383.0	1 488.3	..	0.26	116.3
		1993-94	11.8	335.2	1 282.9	..	0.26	108.8
		1992-93	11.4	322.1	1 221.5	560.6	0.26	107.1
		1991-92	11.1	271.0	1 045.9	..	0.26	93.9
25	Petroleum, coal, chemical and associated product mfg	1996-97	10.8	411.9	4 747.6	1 080.9	0.09	441.3
		1995-96	11.0	(g)373.8	4 357.9	1 153.4	0.09	397.6
		1994-95	9.9	336.0	3 787.8	..	0.09	384.3
		1993-94	9.5	301.6	3 566.0	..	0.08	373.6
		1992-93	8.6	271.3	3 488.0	609.5	0.08	406.2
		1991-92	8.1	250.6	3 449.9	..	0.07	428.1
26	Non-metallic mineral product mfg	1996-97	7.6	269.8	1 829.0	505.3	0.15	241.6
		1995-96	6.8	(g)233.1	1 648.1	477.9	0.14	240.8
		1994-95	7.8	260.5	1 960.1	..	0.13	250.7
		1993-94	8.0	255.7	1 875.1	..	0.14	235.2
		1992-93	8.3	238.2	1 706.5	544.6	0.14	206.2
		1991-92	8.0	220.3	1 676.2	..	0.13	208.4

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-18 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

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

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

(g) For 1995-96, excludes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.



# 1

## MANUFACTURING ESTABLISHMENTS(a), Summary of Operations(b) *continued*

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	1996-97	24.9	837.1	6 437.1	1 784.6	0.13	258.5
		1995-96	25.9	(g)802.5	6 913.9	2 155.1	0.12	267.4
		1994-95	25.0	758.6	5 697.5	..	0.13	227.6
		1993-94	24.8	695.2	5 604.8	..	0.12	226.2
		1992-93	23.7	666.0	5 483.5	1 278.1	0.12	231.4
		1991-92	23.3	653.4	4 973.0	..	0.13	213.3
28	Machinery and equipment mfg	1996-97	24.3	777.1	3 431.0	1 135.1	0.23	141.3
		1995-96	24.2	(g)713.5	3 508.3	1 217.0	0.20	145.0
		1994-95	24.1	667.2	3 225.7	..	0.21	133.9
		1993-94	23.1	629.9	2 784.8	..	0.23	120.3
		1992-93	21.2	571.5	2 443.1	836.2	0.23	115.2
		1991-92	18.3	459.5	2 345.0	..	0.20	128.4
29	Other manufacturing	1996-97	10.6	246.4	1 086.7	390.8	0.23	102.9
		1995-96	9.8	(g)231.7	962.1	380.4	0.24	98.3
		1994-95	11.6	247.1	1 088.8	..	0.23	94.2
		1993-94	11.7	236.8	1 069.4	..	0.22	91.7
		1992-93	11.2	220.9	935.4	336.0	0.24	83.6
		1991-92	10.4	201.3	830.2	..	0.24	79.6
<b>21-29 Total manufacturing</b>		<b>1996-97</b>	<b>141.1</b>	<b>4 479.2</b>	<b>30 141.1</b>	<b>8 469.8</b>	<b>0.15</b>	<b>213.6</b>
		<b>1995-96</b>	<b>138.7</b>	<b>(g)4 105.4</b>	<b>29 679.0</b>	<b>8 795.2</b>	<b>0.14</b>	<b>214.0</b>
		<b>1994-95</b>	<b>143.7</b>	<b>4 141.6</b>	<b>28 324.9</b>	<b>..</b>	<b>0.15</b>	<b>197.1</b>
		<b>1993-94</b>	<b>143.1</b>	<b>3 881.6</b>	<b>26 840.9</b>	<b>..</b>	<b>0.14</b>	<b>187.6</b>
		<b>1992-93</b>	<b>136.5</b>	<b>3 662.2</b>	<b>25 063.2</b>	<b>6 652.0</b>	<b>0.15</b>	<b>183.6</b>
		<b>1991-92</b>	<b>129.9</b>	<b>3 301.7</b>	<b>23 349.8</b>	<b>..</b>	<b>0.14</b>	<b>179.8</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) For factors affecting comparability of data over the time periods shown, see paragraphs 13-18 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors.

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

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

(g) For 1995-96, excludes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

# 2

## MANUFACTURING ESTABLISHMENTS(a), Summary of Operations—Industry class

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
<b>FOOD, BEVERAGE AND TOBACCO MFG</b>							
<b>Meat and meat product mfg</b>							
2111	Meat processing	8 677	277.3	2 075.6	439.2	239.2	50.6
2112	Poultry processing	1 542	49.0	303.1	81.6	196.6	52.9
2113	Bacon, ham and smallgood mfg	1 553	42.2	276.0	69.7	177.8	44.9
211	<i>Total</i>	11 771	368.5	2 654.7	590.4	225.5	50.2
<b>Dairy product mfg</b>							
2121	Milk and cream processing	1 485	53.0	574.2	74.8	386.6	50.3
2122	Ice cream mfg	276	n.p.	n.p.	n.p.	n.p.	n.p.
2129	Dairy product mfg n.e.c.	563	n.p.	n.p.	n.p.	n.p.	n.p.
212	<i>Total</i>	2 325	76.7	839.1	120.5	360.9	51.8
213	<b>Fruit and vegetable processing</b>	1 899	70.0	451.9	152.1	238.0	80.1
214	<b>Oil and fat mfg</b>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Flour mill and cereal food mfg</b>							
2151	Flour mill product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2152	Cereal food and baking mix mfg	828	23.1	168.1	56.5	202.8	68.3
215	<i>Total</i>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>Bakery product mfg</b>							
2161	Bread mfg	2 039	59.9	257.1	79.6	126.1	39.0
2162	Cake and pastry mfg	1 516	33.2	132.6	47.6	87.5	31.4
2163	Biscuit mfg	1 333	34.1	188.1	65.9	141.1	49.5
216	<i>Total</i>	4 888	127.1	577.8	193.2	118.2	39.5
<b>Other food mfg</b>							
2171	Sugar mfg	5 747	235.8	2 055.2	438.4	357.6	76.3
2172	Confectionery mfg	152	3.0	12.4	3.7	81.7	24.6
2173	Seafood processing	301	4.3	55.8	7.2	185.3	23.9
2174	Prepared animal and bird feed mfg	733	21.9	357.2	49.2	487.2	67.1
2179	Food mfg n.e.c.	3 223	88.5	523.3	186.3	162.4	57.8
217	<i>Total</i>	10 157	353.5	3 004.0	684.8	295.7	67.4
<b>Beverage and malt mfg</b>							
2181	Soft drink, cordial and syrup mfg	987	n.p.	n.p.	n.p.	n.p.	n.p.
2182	Beer and malt mfg	658	n.p.	n.p.	n.p.	n.p.	n.p.
2183	Wine mfg	32	0.6	2.1	0.7	65.6	20.8
2184	Spirit mfg	59	1.4	18.7	2.8	316.4	47.7
218	<i>Total</i>	1 737	85.5	879.0	292.9	506.2	168.7
219	<b>Tobacco product mfg</b>	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<b>21</b>	<b>Total food, beverage and tobacco mfg</b>	<b>34 312</b>	<b>1 133.1</b>	<b>8 871.8</b>	<b>2 145.9</b>	<b>258.6</b>	<b>62.5</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

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(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
<b>TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG</b>							
<b>Textile fibre, yarn and woven fabric mfg</b>							
2211	Wool scouring	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2212	Synthetic fibre textile mfg	155	3.7	22.0	8.7	141.5	56.2
2213	Cotton textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2214	Wool textile mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2215	Textile finishing	52	n.p.	n.p.	n.p.	n.p.	n.p.
221	<i>Total</i>	437	11.5	69.6	20.6	159.4	47.1
<b>Textile product mfg</b>							
2221	Made-up textile product mfg	646	13.0	58.2	19.1	90.0	29.5
2222	Textile floor covering mfg	171	4.9	43.6	9.4	255.6	55.3
2223	Rope, cordage and twine mfg	37	0.4	1.6	0.5	43.0	14.7
2229	Textile product mfg n.e.c.	210	4.9	20.5	7.2	97.7	34.2
222	<i>Total</i>	1 064	23.2	123.9	36.3	116.4	34.1
<b>Knitting mills</b>							
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>	261	6.1	32.4	12.8	124.1	48.9
<b>Clothing mfg</b>							
2241	Men's and boys' wear mfg	977	23.4	78.5	30.3	80.3	31.0
2242	Women's and girls' wear mfg	901	16.0	64.1	26.8	71.1	29.7
2243	Sleepwear, underwear and infant clothing mfg	114	1.2	6.3	2.0	55.8	17.4
2249	Clothing mfg n.e.c.	1 534	26.9	90.9	31.2	59.3	20.4
224	<i>Total</i>	3 525	67.5	239.9	90.2	68.0	25.6
225	<b>Footwear mfg</b>	85	1.8	6.8	3.1	79.7	35.9
<b>Leather and leather product mfg</b>							
2261	Leather tanning and fur dressing	470	13.7	113.8	23.5	242.3	50.0
2262	Leather and leather substitute product mfg	95	1.4	6.7	2.2	70.3	23.4
226	<i>Total</i>	565	15.1	120.5	25.7	213.3	45.5
<b>22</b>	<b>Total textile, clothing, footwear and leather mfg</b>	<b>5 937</b>	<b>125.1</b>	<b>593.1</b>	<b>188.6</b>	<b>99.9</b>	<b>31.8</b>
<b>WOOD AND PAPER PRODUCT MFG</b>							
<b>Log sawmilling and timber dressing</b>							
2311	Log sawmilling	1 926	47.7	215.4	82.7	111.8	42.9
2312	Wood chipping	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2313	Timber resawing and dressing	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
231	<i>Total</i>	2 993	81.6	410.8	135.7	137.2	45.3
<b>Other wood product mfg</b>							
2321	Plywood and veneer mfg	371	11.3	46.8	25.5	126.3	68.9
2322	Fabricated wood mfg	820	35.6	175.3	62.9	213.7	76.6
2323	Wooden structural component mfg	3 281	80.4	362.9	114.1	110.6	34.8
2329	Wood product mfg n.e.c.	1 223	23.1	96.5	31.1	78.9	25.4
232	<i>Total</i>	5 694	150.4	681.5	233.6	119.7	41.0

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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
<b>Paper and paper product mfg</b>							
2331	Pulp, paper and paperboard mfg	347	n.p.	n.p.	n.p.	n.p.	n.p.
2332	Solid paperboard container mfg	234	8.0	38.8	12.8	165.9	54.7
2333	Corrugated paperboard container mfg	943	n.p.	n.p.	n.p.	n.p.	n.p.
2334	Paper bag and sack mfg	92	n.p.	n.p.	n.p.	n.p.	n.p.
2339	Paper product mfg n.e.c.	508	n.p.	n.p.	n.p.	n.p.	n.p.
233	<i>Total</i>	2 124	87.2	616.5	221.0	290.3	104.0
<b>23</b>	<b>Total wood and paper product mfg</b>	<b>10 812</b>	<b>319.3</b>	<b>1 708.7</b>	<b>590.3</b>	<b>158.0</b>	<b>54.6</b>
<b>PRINTING, PUBLISHING AND RECORDED MEDIA</b>							
<b>Printing and services to printing</b>							
2411	Paper stationery mfg	712	19.2	91.2	31.0	128.0	43.5
2412	Printing	4 638	121.2	479.9	179.8	103.5	38.8
2413	Services to printing	775	20.2	72.0	33.2	92.9	42.9
241	<i>Total</i>	6 125	160.6	643.2	244.0	105.0	39.8
<b>Publishing</b>							
2421	Newspaper printing or publishing	4 954	174.1	687.5	358.8	138.8	72.4
2422	Other periodical publishing	431	10.7	47.6	18.4	110.5	42.7
2423	Book and other publishing	353	11.0	46.9	20.6	133.0	58.3
242	<i>Total</i>	5 738	195.8	782.0	397.7	136.3	69.3
243	<b>Recorded media manufacturing and publishing</b>	102	3.1	10.9	6.5	106.9	64.0
<b>24</b>	<b>Total printing, publishing and recorded media</b>	<b>11 964</b>	<b>359.4</b>	<b>1 436.1</b>	<b>648.2</b>	<b>120.0</b>	<b>54.2</b>
<b>PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG</b>							
251	<b>Petroleum refining</b>	558	37.1	1 735.4	150.9	3 110.2	270.5
252	<b>Petroleum and coal product mfg n.e.c.</b>	54	2.3	47.1	2.7	867.7	50.2
<b>Basic chemical mfg</b>							
2531	Fertiliser mfg	506	n.p.	n.p.	n.p.	n.p.	n.p.
2532	Industrial gas mfg	280	n.p.	n.p.	n.p.	n.p.	n.p.
2533	Synthetic resin mfg	263	8.5	60.0	13.2	227.9	50.0
2534	Organic industrial chemical mfg n.e.c.	325	n.p.	n.p.	n.p.	n.p.	n.p.
2535	Inorganic industrial chemical mfg n.e.c.	405	15.6	156.8	90.7	387.6	224.3
253	<i>Total</i>	1 779	84.0	834.5	229.2	469.1	128.8
<b>Other chemical product mfg</b>							
2541	Explosive mfg	641	32.0	342.8	151.5	535.0	236.3
2542	Paint mfg	950	37.2	295.8	101.6	311.5	107.0
2543	Medicinal and pharmaceutical product mfg	931	29.8	161.3	54.2	173.2	58.1
2544	Pesticide mfg	223	10.8	213.9	40.6	959.5	182.2
2545	Soap and other detergent mfg	537	19.9	207.7	64.0	386.9	119.3
2546	Cosmetic and toiletry preparation mfg	103	3.2	14.2	4.1	138.0	40.3
2547	Ink mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2549	Chemical product mfg n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
254	<i>Total</i>	3 644	143.1	1 307.9	440.2	358.9	120.8

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ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
<b>Rubber product mfg</b>							
2551	Rubber tyre mfg	286	7.8	62.7	24.8	219.6	86.8
2559	Rubber product mfg n.e.c.	413	13.2	50.2	20.6	121.4	49.9
255	<i>Total</i>	699	21.0	112.9	45.4	161.5	65.0
<b>Plastic product mfg</b>							
2561	Plastic blow moulded product mfg	404	15.1	105.5	35.9	261.4	88.9
2562	Plastic extruded product mfg	582	24.4	197.8	46.1	339.5	79.1
2563	Plastic bag and film mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2564	Plastic product, rigid fibre reinforced, mfg	466	9.9	48.2	15.4	103.4	33.1
2565	Plastic foam product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2566	Plastic injection moulded product mfg	1 924	51.6	230.3	78.6	119.7	40.9
256	<i>Total</i>	4 025	124.3	709.7	212.4	176.4	52.8
<b>25</b>	<b>Total petroleum, coal, chemical and associated product mfg</b>	<b>10 759</b>	<b>411.9</b>	<b>4 747.6</b>	<b>1 080.9</b>	<b>441.3</b>	<b>100.5</b>
<b>NON-METALLIC MINERAL PRODUCT MFG</b>							
261	<b>Glass and glass product mfg</b>	716	22.9	153.1	64.2	213.8	89.6
<b>Ceramic mfg</b>							
2621	Clay brick mfg	783	26.1	116.2	46.8	148.4	59.8
2622	Ceramic product mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
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.	229	4.4	14.6	6.9	63.7	30.0
262	<i>Total</i>	1 226	35.7	162.3	64.4	132.4	52.6
<b>Cement, lime, plaster and concrete product mfg</b>							
2631	Cement and lime mfg	382	n.p.	n.p.	n.p.	n.p.	n.p.
2632	Plaster product mfg	385	14.0	102.1	22.3	265.5	58.1
2633	Concrete slurry mfg	1 585	70.0	587.5	89.9	370.7	56.7
2634	Concrete pipe and box culvert mfg	374	n.p.	n.p.	n.p.	n.p.	n.p.
2635	Concrete product mfg n.e.c.	2 277	76.6	443.1	117.0	194.6	51.4
263	<i>Total</i>	5 002	189.9	1 404.5	339.8	280.8	67.9
264	<b>Non-metallic mineral product mfg n.e.c.</b>	627	21.3	109.2	36.9	174.3	58.9
<b>26</b>	<b>Total non-metallic mineral product mfg</b>	<b>7 570</b>	<b>269.8</b>	<b>1 829.0</b>	<b>505.3</b>	<b>241.6</b>	<b>66.8</b>
<b>METAL PRODUCT MFG</b>							
<b>Iron and steel mfg</b>							
2711	Basic iron and steel mfg	1 025	40.0	468.2	97.8	456.8	95.5
2712	Iron and steel casting and forging	1 037	34.3	131.8	51.5	127.2	49.7
2713	Steel pipe and tube mfg	482	23.5	249.1	45.8	517.2	95.1
271	<i>Total</i>	2 543	97.8	849.0	195.2	333.9	76.7
<b>Basic non-ferrous metal mfg</b>							
2721	Alumina production	1 128	67.1	794.2	339.0	704.1	300.5
2722	Aluminium smelting	1 165	50.9	541.1	163.9	464.5	140.7
2723	Copper, silver, lead and zinc smelting, refining	728	44.9	1 105.3	73.0	1 519.2	100.4
2729	Basic non-ferrous metal mfg n.e.c.	447	17.3	317.9	73.1	711.4	163.6
272	<i>Total</i>	3 468	180.2	2 758.6	649.1	795.4	187.2

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ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
<b>Non-ferrous basic metal product mfg</b>							
2731	Aluminium rolling, drawing, extruding	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2733	Non-ferrous metal casting	148	4.0	15.5	3.5	104.7	23.9
273	<i>Total</i>	844	27.2	191.3	51.2	226.8	60.7
<b>Structural metal product mfg</b>							
2741	Structural steel fabricating	4 133	137.4	741.5	243.6	179.4	58.9
2742	Architectural aluminium product mfg	3 907	113.7	516.2	159.7	132.1	40.9
2749	Structural metal product mfg n.e.c.	1 005	24.5	139.6	37.1	138.9	36.9
274	<i>Total</i>	9 045	275.7	1 397.3	440.3	154.5	48.7
<b>Sheet metal product mfg</b>							
2751	Metal container mfg	612	22.1	169.9	41.6	277.5	68.0
2759	Sheet metal product mfg n.e.c.	2 393	75.0	396.2	140.3	165.6	58.6
275	<i>Total</i>	3 005	97.1	566.1	181.9	188.4	60.5
<b>Fabricated metal product mfg</b>							
2761	Hand tool and general hardware mfg	100	2.1	7.0	3.4	70.1	33.9
2762	Spring and wire product mfg	567	17.5	89.6	28.8	157.9	50.8
2763	Nut, bolt, screw and rivet mfg	106	3.4	11.8	4.4	110.7	41.3
2764	Metal coating and finishing	1 046	27.5	89.4	41.8	85.4	39.9
2765	Non-ferrous pipe fitting mfg	545	17.4	73.7	34.0	135.3	62.4
2769	Fabricated metal product mfg n.e.c.	3 630	91.2	403.2	154.6	111.1	42.6
276	<i>Total</i>	5 995	159.1	674.8	267.0	112.5	44.5
<b>27</b>	<b>Total metal product mfg</b>	<b>24 899</b>	<b>837.1</b>	<b>6 437.1</b>	<b>1 784.6</b>	<b>258.5</b>	<b>71.7</b>
<b>MACHINERY AND EQUIPMENT MFG</b>							
<b>Motor vehicle and part mfg</b>							
2811	Motor vehicle mfg	945	32.0	304.3	40.4	321.9	42.7
2812	Motor vehicle body mfg	1 450	40.2	164.2	52.1	113.3	35.9
2813	Automotive electrical and instrument mfg	245	7.4	35.7	13.3	145.7	54.1
2819	Automotive component mfg n.e.c.	1 611	42.6	146.6	60.9	91.0	37.8
281	<i>Total</i>	4 251	122.1	650.9	166.6	153.1	39.2
<b>Other transport equipment mfg</b>							
2821	Shipbuilding	645	23.7	117.6	32.3	182.2	50.0
2822	Boatbuilding	1 213	27.9	140.9	41.0	116.2	33.8
2823	Railway equipment mfg	2 421	88.0	255.5	96.6	105.5	39.9
2824	Aircraft mfg	955	35.5	127.1	46.4	133.1	48.6
2829	Transport equipment mfg n.e.c.	88	1.8	8.2	1.9	93.1	21.8
282	<i>Total</i>	5 322	176.9	649.3	218.2	122.0	41.0
<b>Photographic and scientific equipment mfg</b>							
2831	Photographic and optical good mfg	136	3.8	17.7	9.0	130.4	65.9
2832	Medical and surgical equipment mfg	841	24.0	81.3	30.7	96.7	36.5
2839	Professional and scientific equipment mfg n.e.c.	158	4.5	14.9	6.2	94.1	39.0
283	<i>Total</i>	1 135	32.3	113.9	45.9	100.4	40.4

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ANZSIC code	Description	no.	\$m	\$m	\$m	\$'000	\$'000
<b>Electronic equipment mfg</b>							
2841	Computer and business machine mfg	161	6.7	28.4	10.0	177.0	62.2
2842	Telecommunication, broadcasting and transceiving equipment mfg	391	12.3	56.7	20.0	145.0	51.1
2849	Electronic equipment mfg n.e.c.	540	15.5	73.6	25.0	136.2	46.4
284	<i>Total</i>	1 092	34.6	158.7	55.0	145.4	50.4
<b>Electrical equipment and appliance mfg</b>							
2851	Household appliance mfg	883	28.2	132.7	51.8	150.4	58.7
2852	Electric cable and wire mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2853	Battery mfg	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2854	Electric light and sign mfg	503	n.p.	n.p.	n.p.	n.p.	n.p.
2859	Electrical equipment mfg n.e.c.	1 539	52.5	209.6	79.4	136.2	51.6
285	<i>Total</i>	3 022	97.2	449.6	178.5	148.8	59.1
<b>Industrial machinery and equipment mfg</b>							
2861	Agricultural machinery mfg	3 022	92.1	402.4	139.1	133.2	46.0
2862	Mining and construction machinery mfg	2 427	91.2	413.0	135.5	170.2	55.8
2863	Food processing machinery mfg	614	25.3	114.6	34.2	186.7	55.6
2864	Machine tool and part mfg	540	16.5	48.5	23.1	89.8	42.8
2865	Lifting and material handling equipment mfg	908	29.6	167.6	51.7	184.6	57.0
2866	Pump and compressor mfg	257	n.p.	n.p.	n.p.	n.p.	n.p.
2867	Commercial space heating and cooling equipment mfg	88	n.p.	n.p.	n.p.	n.p.	n.p.
2869	Industrial machinery and equipment mfg n.e.c.	1 602	49.3	212.1	70.3	132.4	43.9
286	<i>Total</i>	9 459	314.1	1 408.5	470.8	148.9	49.8
<b>28</b>	<b>Total machinery and equipment mfg</b>	<b>24 282</b>	<b>777.1</b>	<b>3 431.0</b>	<b>1 135.1</b>	<b>141.3</b>	<b>46.7</b>
<b>OTHER MANUFACTURING</b>							
<b>Prefabricated building mfg</b>							
2911	Prefabricated metal building mfg	757	24.0	158.5	60.0	209.4	79.3
2919	Prefabricated building mfg n.e.c.	106	3.0	15.9	5.4	149.8	50.9
291	<i>Total</i>	863	27.1	174.3	65.4	202.1	75.8
<b>Furniture mfg</b>							
2921	Wooden furniture and upholstered seat mfg	5 993	133.6	537.1	182.5	89.6	30.5
2922	Sheet metal furniture mfg	192	3.7	17.3	5.3	90.1	27.8
2923	Mattress mfg (except rubber)	500	13.5	73.7	15.8	147.4	31.6
2929	Furniture mfg n.e.c.	1 158	28.9	130.9	61.7	113.1	53.3
292	<i>Total</i>	7 843	179.6	759.1	265.3	96.8	33.8
<b>Miscellaneous manufacturing</b>							
2941	Jewellery and silverware mfg	445	9.1	34.3	13.5	77.1	30.3
2942	Toy and sporting good mfg	401	8.2	36.3	12.4	90.7	30.9
2949	Manufacturing n.e.c.	1 005	22.4	82.6	34.2	82.2	34.0
294	<i>Total</i>	1 851	39.7	153.3	60.1	82.8	32.5
<b>29</b>	<b>Total other manufacturing</b>	<b>10 557</b>	<b>246.4</b>	<b>1 086.7</b>	<b>390.8</b>	<b>102.9</b>	<b>37.0</b>
<b>21–29</b>	<b>TOTAL MANUFACTURING</b>	<b>141 093</b>	<b>4 479.2</b>	<b>30 141.1</b>	<b>8 469.8</b>	<b>213.6</b>	<b>60.0</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

(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.

# 3

## MANUFACTURING ESTABLISHMENTS(a), Percentage Change(b) in Industry Gross Product

INDUSTRY SUBDIVISION		1992-93 TO 1996-97.....			
ANZSIC Code	Description	1992-93 to 1995-96	1995-96 to 1996-97	Percentage movement	Change in IGP per person employed(c)
21	Food, beverage and tobacco mfg	17.0	6.1	24.2	23.9
22	Textile, clothing, footwear and leather mfg	-11.1	4.7	-6.9	4.5
23	Wood and paper product mfg	3.0	3.0	6.1	10.1
24	Printing, publishing and recorded media	13.5	1.9	15.6	10.3
25	Petroleum, coal, chemical and associated product mfg	89.2	-6.3	77.4	41.6
26	Non-metallic mineral product mfg	-12.3	5.7	-7.2	1.5
27	Metal product mfg	68.6	-17.2	39.6	32.9
28	Machinery and equipment mfg	45.5	-6.7	35.7	18.6
29	Other manufacturing	13.2	2.7	16.3	23.2
<b>21-29</b>	<b>Total manufacturing</b>	<b>32.2</b>	<b>-3.7</b>	<b>27.3</b>	<b>23.2</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) Percentage changes are calculated using current price data and, therefore, do not discount the impact of price changes. For factors affecting comparability of data over the time periods shown, see paragraphs 13-18 of the Explanatory Notes.

(c) Based on employment at the end of June of the reference year. Includes working proprietors.



# 4

## MANUFACTURING ESTABLISHMENTS(a), Summary of Operations—Employment size(b)

Employment size group(f)	Employment at end of June(c).....		Wages and salaries(d)(e).....		Turnover(e).....		Industry gross product(e).....	
	no.	%	\$m	%	\$m	%	\$m	%
FOOD, BEVERAGE AND TOBACCO MANUFACTURING								
0–4 persons	566	1.6	9.4	0.8	58.7	0.7	16.4	0.8
5–9 persons	897	2.6	18.7	1.7	110.1	1.3	20.1	0.9
10–19 persons	1 420	4.1	31.9	2.9	312.7	3.6	76.5	3.6
20–49 persons	3 034	8.8	78.0	7.0	640.3	7.3	165.8	7.8
50–99 persons	3 400	9.9	105.0	9.4	908.3	10.3	210.8	9.9
<i>Total less than 100 persons</i>	<i>9 317</i>	<i>27.2</i>	<i>243.1</i>	<i>21.7</i>	<i>2 030.1</i>	<i>23.1</i>	<i>489.6</i>	<i>23.0</i>
100–199 persons	3 267	9.5	109.8	9.8	835.0	9.5	224.4	10.5
200–499 persons	9 626	28.1	334.3	29.9	2 730.5	31.1	607.1	28.5
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>	<i>24 995</i>	<i>72.8</i>	<i>874.6</i>	<i>78.3</i>	<i>6 759.0</i>	<i>76.9</i>	<i>1 637.8</i>	<i>77.0</i>
<b>Total</b>	<b>34 312</b>	<b>100.0</b>	<b>1 117.7</b>	<b>100.0</b>	<b>8 789.1</b>	<b>100.0</b>	<b>2 127.3</b>	<b>100.0</b>
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING								
0–4 persons	1 075	18.1	13.8	11.2	68.6	11.8	25.9	13.9
5–9 persons	1 180	19.9	19.1	15.6	75.4	13.0	29.3	15.8
10–19 persons	1 021	17.2	19.6	15.9	65.4	11.2	24.0	12.9
20–49 persons	1 196	20.1	26.9	22.0	130.8	22.5	44.4	23.9
50–99 persons	827	13.9	22.5	18.3	149.9	25.8	41.5	22.4
<i>Total less than 100 persons</i>	<i>5 300</i>	<i>89.3</i>	<i>101.9</i>	<i>83.0</i>	<i>490.1</i>	<i>84.3</i>	<i>164.9</i>	<i>88.9</i>
100–199 persons	638	10.7	20.8	16.9	91.6	15.8	20.6	11.1
200–499 persons	—	—	—	—	—	—	—	—
500–999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>638</i>	<i>10.7</i>	<i>20.8</i>	<i>16.9</i>	<i>91.6</i>	<i>15.8</i>	<i>20.6</i>	<i>11.1</i>
<b>Total</b>	<b>5 937</b>	<b>100.0</b>	<b>122.7</b>	<b>100.0</b>	<b>581.7</b>	<b>100.0</b>	<b>185.6</b>	<b>100.0</b>
WOOD AND PAPER PRODUCT MANUFACTURING								
0–4 persons	1 218	11.3	20.0	6.3	93.2	5.5	26.4	4.5
5–9 persons	1 123	10.4	22.3	7.0	94.6	5.6	34.1	5.8
10–19 persons	2 080	19.2	54.4	17.2	243.8	14.4	79.0	13.5
20–49 persons	2 396	22.2	64.8	20.5	309.1	18.2	107.7	18.4
50–99 persons	1 197	11.1	33.3	10.5	189.2	11.2	73.2	12.5
<i>Total less than 100 persons</i>	<i>8 013</i>	<i>74.1</i>	<i>194.8</i>	<i>61.6</i>	<i>929.9</i>	<i>54.8</i>	<i>320.4</i>	<i>54.7</i>
100–199 persons	1 194	11.0	43.7	13.8	292.2	17.2	92.2	15.8
200–499 persons	1 604	14.8	77.9	24.6	473.5	27.9	172.6	29.5
500–999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>2 798</i>	<i>25.9</i>	<i>121.5</i>	<i>38.4</i>	<i>765.7</i>	<i>45.2</i>	<i>264.8</i>	<i>45.3</i>
<b>Total</b>	<b>10 812</b>	<b>100.0</b>	<b>316.3</b>	<b>100.0</b>	<b>1 695.6</b>	<b>100.0</b>	<b>585.2</b>	<b>100.0</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 21 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996–97 but were not operating at 30 June 1997. See paragraph 20 of the Explanatory Notes.

(f) See paragraph 19 of the Explanatory Notes.

## 4

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations—Employment size(b) *continued*

Employment size group(f)	Employment at end of June(c).....		Wages and salaries(d)(e).....		Turnover(e).....		Industry gross product(e).....	
	no.	%	\$m	%	\$m	%	\$m	%
PRINTING, PUBLISHING AND RECORDED MEDIA								
0-4 persons	1 186	9.9	21.4	6.0	96.7	6.8	40.6	6.2
5-9 persons	1 507	12.6	33.6	9.4	127.5	8.9	56.2	8.6
10-19 persons	1 644	13.7	40.5	11.3	143.7	10.1	63.1	9.7
20-49 persons	1 798	15.0	54.8	15.3	211.5	14.8	81.1	12.5
50-99 persons	1 742	14.6	52.6	14.7	206.2	14.4	82.9	12.8
<i>Total less than 100 persons</i>	<i>7 877</i>	<i>65.8</i>	<i>202.9</i>	<i>56.7</i>	<i>785.6</i>	<i>55.0</i>	<i>323.9</i>	<i>49.8</i>
100-199 persons	1 011	8.5	37.0	10.3	121.4	8.5	64.5	9.9
200-499 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<i>4 087</i>	<i>34.2</i>	<i>154.6</i>	<i>43.2</i>	<i>643.4</i>	<i>45.0</i>	<i>326.3</i>	<i>50.2</i>
<b>Total</b>	<b>11 964</b>	<b>100.0</b>	<b>357.5</b>	<b>100.0</b>	<b>1 428.9</b>	<b>100.0</b>	<b>650.2</b>	<b>100.0</b>
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING								
0-4 persons	580	5.4	11.9	2.9	100.6	2.1	37.5	3.5
5-9 persons	759	7.1	21.2	5.2	149.4	3.2	41.1	3.8
10-19 persons	996	9.3	29.8	7.2	183.7	3.9	54.1	5.0
20-49 persons	1 970	18.3	65.4	15.9	491.0	10.4	133.2	12.3
50-99 persons	1 674	15.6	60.2	14.6	516.4	10.9	240.2	22.2
<i>Total less than 100 persons</i>	<i>5 978</i>	<i>55.6</i>	<i>188.4</i>	<i>45.8</i>	<i>1 441.1</i>	<i>30.4</i>	<i>506.1</i>	<i>46.9</i>
100-199 persons	1 688	15.7	78.6	19.1	672.8	14.2	202.5	18.8
200-499 persons	3 093	28.7	144.1	35.0	2 629.5	55.4	371.0	34.4
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>4 781</i>	<i>44.4</i>	<i>222.6</i>	<i>54.2</i>	<i>3 302.3</i>	<i>69.6</i>	<i>573.5</i>	<i>53.1</i>
<b>Total</b>	<b>10 759</b>	<b>100.0</b>	<b>411.1</b>	<b>100.0</b>	<b>4 743.4</b>	<b>100.0</b>	<b>1 079.6</b>	<b>100.0</b>
NON-METALLIC MINERAL PRODUCT MANUFACTURING								
0-4 persons	511	6.8	8.6	3.2	45.0	2.5	12.7	2.5
5-9 persons	415	5.5	10.2	3.8	53.9	3.0	15.1	3.0
10-19 persons	699	9.2	17.4	6.4	87.4	4.8	24.5	4.9
20-49 persons	866	11.4	27.0	10.0	127.4	7.0	48.3	9.6
50-99 persons	1 040	13.7	36.7	13.6	268.1	14.7	71.3	14.1
<i>Total less than 100 persons</i>	<i>3 531</i>	<i>46.6</i>	<i>99.9</i>	<i>37.1</i>	<i>581.9</i>	<i>31.9</i>	<i>171.9</i>	<i>34.1</i>
100-199 persons	2 061	27.2	81.2	30.2	625.8	34.3	182.4	36.2
200-499 persons	1 978	26.1	88.1	32.7	618.4	33.9	150.2	29.8
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>4 039</i>	<i>53.4</i>	<i>169.3</i>	<i>62.9</i>	<i>1 244.2</i>	<i>68.1</i>	<i>332.6</i>	<i>65.9</i>
<b>Total</b>	<b>7 570</b>	<b>100.0</b>	<b>269.2</b>	<b>100.0</b>	<b>1 826.1</b>	<b>100.0</b>	<b>504.5</b>	<b>100.0</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 21 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996-97 but were not operating at 30 June 1997. See paragraph 20 of the Explanatory Notes.

(f) See paragraph 19 of the Explanatory Notes.

## 4

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations—Employment size(b) *continued*

Employment size group(f)	Employment at end of June(c).....		Wages and salaries(d)(e).....		Turnover(e).....		Industry gross product(e).....	
	no.	%	\$m	%	\$m	%	\$m	%
<b>METAL PRODUCT MANUFACTURING</b>								
0–4 persons	2 106	8.5	42.5	5.1	1 578.2	24.6	1 154.4	..
5–9 persons	2 474	9.9	61.4	7.4	294.3	4.6	98.7	..
10–19 persons	2 818	11.3	75.1	9.0	345.6	5.4	117.7	..
20–49 persons	4 601	18.5	142.8	17.1	699.9	10.9	225.8	..
50–99 persons	2 995	12.0	102.5	12.3	774.1	12.1	240.8	..
<i>Total less than 100 persons</i>	<i>14 993</i>	<i>60.2</i>	<i>424.3</i>	<i>50.9</i>	<i>3 692.0</i>	<i>57.6</i>	<i>1 837.4</i>	<i>..</i>
100–199 persons	3 673	14.8	152.8	18.3	1 414.8	22.1	303.9	..
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.	..
<i>Total 100 or more persons</i>	<i>9 906</i>	<i>39.8</i>	<i>409.4</i>	<i>49.1</i>	<i>2 722.1</i>	<i>42.4</i>	<i>-58.8</i>	<i>..</i>
<b>Total</b>	<b>24 899</b>	<b>100.0</b>	<b>833.7</b>	<b>100.0</b>	<b>6 414.2</b>	<b>100.0</b>	<b>1 778.7</b>	<b>100.0</b>
<b>MACHINERY AND EQUIPMENT MANUFACTURING</b>								
0–4 persons	2 174	9.0	43.2	5.6	219.8	6.4	79.6	7.0
5–9 persons	2 251	9.3	55.7	7.2	217.1	6.3	80.5	7.1
10–19 persons	2 800	11.5	76.1	9.8	342.2	10.0	127.0	11.2
20–49 persons	4 109	16.9	126.8	16.4	565.9	16.5	185.2	16.4
50–99 persons	3 140	12.9	112.3	14.5	550.6	16.1	207.9	18.4
<i>Total less than 100 persons</i>	<i>14 474</i>	<i>59.6</i>	<i>414.1</i>	<i>53.4</i>	<i>1 895.7</i>	<i>55.4</i>	<i>680.3</i>	<i>60.1</i>
100–199 persons	3 803	15.7	145.1	18.7	637.8	18.6	206.5	18.3
200–499 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500–999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<i>9 808</i>	<i>40.4</i>	<i>361.0</i>	<i>46.6</i>	<i>1 525.0</i>	<i>44.6</i>	<i>451.2</i>	<i>39.9</i>
<b>Total</b>	<b>24 282</b>	<b>100.0</b>	<b>775.1</b>	<b>100.0</b>	<b>3 420.7</b>	<b>100.0</b>	<b>1 131.5</b>	<b>100.0</b>
<b>OTHER MANUFACTURING</b>								
0–4 persons	1 944	18.4	32.2	13.4	159.4	15.0	58.6	15.3
5–9 persons	2 029	19.2	42.3	17.6	180.7	17.0	64.8	16.9
10–19 persons	1 899	18.0	45.2	18.7	197.9	18.6	72.9	19.1
20–49 persons	2 162	20.5	54.0	22.4	231.5	21.8	80.0	20.9
50–99 persons	1 895	18.0	48.6	20.2	200.3	18.8	61.2	16.0
<i>Total less than 100 persons</i>	<i>9 929</i>	<i>94.1</i>	<i>222.3</i>	<i>92.2</i>	<i>969.7</i>	<i>91.2</i>	<i>337.5</i>	<i>88.3</i>
100–199 persons	628	5.9	18.8	7.8	94.1	8.8	44.8	11.7
200–499 persons	—	—	—	—	—	—	—	—
500–999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>628</i>	<i>5.9</i>	<i>18.8</i>	<i>7.8</i>	<i>94.1</i>	<i>8.8</i>	<i>44.8</i>	<i>11.7</i>
<b>Total</b>	<b>10 557</b>	<b>100.0</b>	<b>241.0</b>	<b>100.0</b>	<b>1 063.8</b>	<b>100.0</b>	<b>382.2</b>	<b>100.0</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 21 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996–97 but were not operating at 30 June 1997. See paragraph 20 of the Explanatory Notes.

(f) See paragraph 19 of the Explanatory Notes.

## 4

MANUFACTURING ESTABLISHMENTS(a), Summary of Operations—Employment size(b) *continued*

<i>Employment size group(f)</i>	<i>Employment at end of June(c).....</i>		<i>Wages and salaries(d)(e).....</i>		<i>Turnover(e).....</i>		<i>Industry gross product(e).....</i>	
	no.	%	\$m	%	\$m	%	\$m	%
<b>TOTAL MANUFACTURING</b>								
0–4 persons	11 361	8.1	203.1	4.6	2 420.1	8.1	1 452.2	17.2
5–9 persons	12 635	9.0	284.6	6.4	1 303.1	4.3	439.9	5.2
10–19 persons	15 376	10.9	389.7	8.8	1 922.3	6.4	638.7	7.6
20–49 persons	22 133	15.7	640.6	14.4	3 407.5	11.4	1 071.4	12.7
50–99 persons	17 910	12.7	573.6	12.9	3 763.0	12.6	1 229.7	14.6
<i>Total less than 100 persons</i>	<i>79 413</i>	<i>56.3</i>	<i>2 091.6</i>	<i>47.1</i>	<i>12 816.1</i>	<i>42.8</i>	<i>4 832.0</i>	<i>57.4</i>
100–199 persons	17 963	12.7	687.7	15.5	4 785.6	16.0	1 341.8	15.9
200–499 persons	25 931	18.4	986.2	22.2	8 674.4	28.9	1 835.3	21.8
500–999 persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<i>61 680</i>	<i>43.7</i>	<i>2 352.6</i>	<i>52.9</i>	<i>17 147.5</i>	<i>57.2</i>	<i>3 592.8</i>	<i>42.6</i>
<b>Total</b>	<b>141 093</b>	<b>100.0</b>	<b>4 444.2</b>	<b>100.0</b>	<b>29 963.5</b>	<b>100.0</b>	<b>8 424.8</b>	<b>100.0</b>

(a) See paragraph 5 of the Explanatory Notes.

(b) See paragraph 21 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

(e) Figures may differ slightly from those presented in other tables, because they exclude those manufacturing establishments which operated during 1996–97 but were not operating at 30 June 1997. See paragraph 20 of the Explanatory Notes.

(f) See paragraph 19 of the Explanatory Notes.

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	1 059.4	76.1	7.2
22	Textile, clothing, footwear and leather mfg	317.1	9.0	2.9
23	Wood and paper product mfg	711.8	9.5	1.3
24	Printing, publishing and recorded media	518.4	4.5	0.9
25	Petroleum, coal, chemical and associated product mfg	890.2	36.9	4.1
26	Non-metallic mineral product mfg	292.5	3.5	1.2
27	Metal product mfg	2 725.0	887.6	32.6
28	Machinery and equipment mfg	1 166.0	130.4	11.2
29	Other manufacturing	701.5	12.4	1.8
21–29	<i>Total manufacturing</i>	8 381.8	1 169.8	14.0
50–99 PERSONS				
21	Food, beverage and tobacco mfg	870.9	115.8	13.3
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.
23	Wood and paper product mfg	169.7	3.5	2.1
24	Printing, publishing and recorded media	n.p.	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	489.5	30.3	6.2
26	Non-metallic mineral product mfg	261.5	19.3	7.4
27	Metal product mfg	677.5	32.5	4.8
28	Machinery and equipment mfg	464.3	65.2	14.0
29	Other manufacturing	n.p.	n.p.	n.p.
21–29	<i>Total manufacturing</i>	3 413.1	315.5	9.2
100 OR MORE PERSONS				
21	Food, beverage and tobacco mfg	6 547.5	1 601.3	24.5
22	Textile, clothing, footwear and leather mfg	n.p.	n.p.	n.p.
23	Wood and paper product mfg	754.5	58.0	7.7
24	Printing, publishing and recorded media	n.p.	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	3 268.4	149.6	4.6
26	Non-metallic mineral product mfg	1 197.0	65.4	5.5
27	Metal product mfg	2 664.4	828.8	31.1
28	Machinery and equipment mfg	1 285.5	318.3	24.8
29	Other manufacturing	n.p.	n.p.	n.p.
21–29	<i>Total manufacturing</i>	16 119.5	3 060.4	19.0
TOTAL				
21	Food, beverage and tobacco mfg	8 477.8	1 793.2	21.2
22	Textile, clothing, footwear and leather mfg	534.6	71.1	13.3
23	Wood and paper product mfg	1 636.1	71.0	4.3
24	Printing, publishing and recorded media	906.5	6.6	0.7
25	Petroleum, coal, chemical and associated product mfg	4 648.1	216.8	4.7
26	Non-metallic mineral product mfg	1 750.9	88.1	5.0
27	Metal product mfg	6 066.9	1 748.9	28.8
28	Machinery and equipment mfg	2 915.7	513.8	17.6
29	Other manufacturing	977.9	36.2	3.7
21–29	<b>Total manufacturing</b>	<b>27 914.4</b>	<b>4 545.7</b>	<b>16.3</b>

(a) See paragraph 5 of the Explanatory Notes.

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

(c) This table excludes those manufacturing establishments which operated during 1996–97 but were not operating at 30 June 1997. See paragraph 20 of the Explanatory Notes. Also, see paragraph 21 of the Explanatory Notes for an explanation of the impact of unincorporated joint ventures on these estimates.

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	42.2	40.3	39.7	40.8
22	Textile, clothing, footwear and leather mfg	71.5	62.9	55.3	64.2
23	Wood and paper product mfg	77.0	70.4	69.2	71.0
24	Printing, publishing and recorded media	90.2	90.1	89.9	92.0
25	Petroleum, coal, chemical and associated product mfg	46.1	45.4	33.3	38.2
26	Non-metallic mineral product mfg	68.7	68.4	70.8	64.9
27	Metal product mfg	66.8	58.4	38.9	41.6
28	Machinery and equipment mfg	57.1	55.5	45.2	52.8
29	Other manufacturing	79.9	77.6	77.3	74.4
<b>21–29</b>	<b>Total manufacturing</b>	<b>61.6</b>	<b>57.4</b>	<b>46.8</b>	<b>51.8</b>
ESTABLISHMENTS WITH EXPORTS UP TO AND INCLUDING 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	33.6	36.4	38.0	41.0
22	Textile, clothing, footwear and leather mfg	24.3	30.2	32.6	29.3
23	Wood and paper product mfg	23.0	29.6	30.8	29.0
24	Printing, publishing and recorded media	9.6	9.7	9.9	7.7
25	Petroleum, coal, chemical and associated product mfg	52.7	53.4	66.2	61.1
26	Non-metallic mineral product mfg	28.9	28.3	25.4	30.6
27	Metal product mfg	25.8	32.1	35.3	11.8
28	Machinery and equipment mfg	38.2	39.3	46.9	42.6
29	Other manufacturing	18.9	20.8	21.3	24.0
<b>21–29</b>	<b>Total manufacturing</b>	<b>29.9</b>	<b>33.5</b>	<b>39.7</b>	<b>32.5</b>
ESTABLISHMENTS WITH EXPORTS OF MORE THAN 50% OF SALES OF GOODS THAT THEY PRODUCED					
21	Food, beverage and tobacco mfg	24.2	23.3	22.3	18.2
22	Textile, clothing, footwear and leather mfg	4.2	7.0	12.1	6.4
23	Wood and paper product mfg	—	—	—	—
24	Printing, publishing and recorded media	0.2	0.1	0.2	0.3
25	Petroleum, coal, chemical and associated product mfg	1.2	1.2	0.5	0.7
26	Non-metallic mineral product mfg	2.4	3.3	3.8	4.4
27	Metal product mfg	7.4	9.5	25.8	46.6
28	Machinery and equipment mfg	4.7	5.2	7.9	4.7
29	Other manufacturing	1.2	1.6	1.5	1.5
<b>21–29</b>	<b>Total manufacturing</b>	<b>8.6</b>	<b>9.2</b>	<b>13.6</b>	<b>15.6</b>

(a) See paragraph 5 of the Explanatory Notes.

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

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Now again includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

INDUSTRY SUBDIVISION		Locations at 30 June	Employment at end of June(c)	Wages and salaries(d)	Turnover
ANZSIC code	Description	no.	no.	\$m	\$m
BRISBANE STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	283	15 388	499.5	3 765.0
22	Textile, clothing, footwear and leather mfg	442	3 374	74.6	362.0
23	Wood and paper product mfg	383	5 279	180.1	1 037.7
24	Printing, publishing and recorded media	573	6 927	220.5	977.6
25	Petroleum, coal, chemical and associated product mfg	363	8 044	311.8	3 851.0
26	Non-metallic mineral product mfg	215	4 680	178.7	1 212.6
27	Metal product mfg	924	14 081	459.8	2 962.5
28	Machinery and equipment mfg	931	14 666	484.6	2 158.4
29	Other manufacturing	743	6 884	173.7	784.6
<b>21–29</b>	<b>Total manufacturing</b>	<b>4 857</b>	<b>79 324</b>	<b>2 583.2</b>	<b>17 111.2</b>
MORETON STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	143	2 346	70.0	450.8
22	Textile, clothing, footwear and leather mfg	246	1 414	28.8	123.5
23	Wood and paper product mfg	241	1 933	48.5	218.5
24	Printing, publishing and recorded media	243	2 013	55.7	193.4
25	Petroleum, coal, chemical and associated product mfg	104	1 004	36.3	291.1
26	Non-metallic mineral product mfg	127	813	22.4	138.7
27	Metal product mfg	326	2 444	71.0	321.7
28	Machinery and equipment mfg	361	2 650	78.3	341.9
29	Other manufacturing	373	2 085	45.6	197.5
21–29	Total manufacturing	2 164	16 702	456.5	2 277.0
WIDE BAY-BURNETT STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	64	2 698	80.2	723.7
22	Textile, clothing, footwear and leather mfg	32	232	n.p.	n.p.
23	Wood and paper product mfg	94	1 527	44.3	255.6
24	Printing, publishing and recorded media	51	469	13.3	38.9
25	Petroleum, coal, chemical and associated product mfg	21	160	4.5	26.6
26	Non-metallic mineral product mfg	42	439	12.3	61.1
27	Metal product mfg	89	647	n.p.	n.p.
28	Machinery and equipment mfg	84	1 923	64.5	256.1
29	Other manufacturing	71	271	4.5	24.0
21–29	Total manufacturing	548	8 366	243.5	1 470.4
DARLING DOWNS STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	73	4 586	146.9	1 305.1
22	Textile, clothing, footwear and leather mfg	36	342	8.6	63.3
23	Wood and paper product mfg	75	584	13.1	58.1
24	Printing, publishing and recorded media	46	618	18.8	57.7
25	Petroleum, coal, chemical and associated product mfg	14	182	4.9	29.8
26	Non-metallic mineral product mfg	32	248	7.0	35.1
27	Metal product mfg	101	758	20.0	87.6
28	Machinery and equipment mfg	111	1 920	57.3	257.0
29	Other manufacturing	64	293	5.9	30.1
21–29	Total manufacturing	552	9 531	282.5	1 923.9

(a) See paragraph 8 of the Explanatory Notes.

(b) Figures in this table differ to those in the other tables. See paragraphs 26–29 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

INDUSTRY SUBDIVISION		Locations at 30 June	Employment at end of June(c)	Wages and salaries(d)	Turnover
ANZSIC code	Description	no.	no.	\$m	\$m
SOUTH WEST STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	9	54	1.6	5.2
22	Textile, clothing, footwear and leather mfg	2	n.p.	n.p.	n.p.
23	Wood and paper product mfg	12	171	3.8	14.2
24	Printing, publishing and recorded media	11	37	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	1	n.p.	n.p.	n.p.
26	Non-metallic mineral product mfg	4	n.p.	n.p.	n.p.
27	Metal product mfg	14	64	1.5	5.9
28	Machinery and equipment mfg	6	37	n.p.	n.p.
29	Other manufacturing	5	10	0.2	1.2
21–29	<i>Total manufacturing</i>	64	413	n.p.	n.p.
FITZROY STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	29	1 930	62.6	457.2
22	Textile, clothing, footwear and leather mfg	14	58	0.7	3.7
23	Wood and paper product mfg	39	373	8.4	32.9
24	Printing, publishing and recorded media	24	412	10.4	34.3
25	Petroleum, coal, chemical and associated product mfg	20	495	23.1	309.8
26	Non-metallic mineral product mfg	33	419	17.0	180.7
27	Metal product mfg	108	3 113	140.2	1 413.0
28	Machinery and equipment mfg	51	302	8.7	38.0
29	Other manufacturing	34	131	2.1	9.3
21–29	<i>Total manufacturing</i>	352	7 233	273.4	2 478.9
CENTRAL WEST STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	5	43	0.9	4.8
22	Textile, clothing, footwear and leather mfg	1	n.p.	n.p.	n.p.
23	Wood and paper product mfg	1	n.p.	n.p.	n.p.
24	Printing, publishing and recorded media	3	11	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	1	n.p.	n.p.	n.p.
26	Non-metallic mineral product mfg	1	n.p.	n.p.	n.p.
27	Metal product mfg	3	11	n.p.	n.p.
28	Machinery and equipment mfg	2	n.p.	n.p.	n.p.
29	Other manufacturing	3	n.p.	n.p.	n.p.
21–29	<i>Total manufacturing</i>	20	113	2.4	13.2
MACKAY STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	20	2 265	91.4	805.2
22	Textile, clothing, footwear and leather mfg	11	26	0.4	1.6
23	Wood and paper product mfg	29	161	2.9	16.0
24	Printing, publishing and recorded media	23	280	8.6	27.0
25	Petroleum, coal, chemical and associated product mfg	15	220	10.3	104.2
26	Non-metallic mineral product mfg	20	130	4.3	27.8
27	Metal product mfg	60	661	18.7	94.8
28	Machinery and equipment mfg	76	1 180	44.3	149.6
29	Other manufacturing	35	150	2.2	11.3
21–29	<i>Total manufacturing</i>	289	5 073	183.2	1 237.4

(a) See paragraph 8 of the Explanatory Notes.

(b) Figures in this table differ to those in the other tables. See paragraphs 26–29 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.



INDUSTRY SUBDIVISION		Locations at 30 June	Employment at end of June(c)	Wages and salaries(d)	Turnover
ANZSIC code	Description	no.	no.	\$m	\$m
.....					
NORTHERN STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	42	2 133	83.0	729.5
22	Textile, clothing, footwear and leather mfg	23	167	3.9	13.9
23	Wood and paper product mfg	47	335	9.6	49.0
24	Printing, publishing and recorded media	41	419	12.5	44.4
25	Petroleum, coal, chemical and associated product mfg	28	474	17.9	130.9
26	Non-metallic mineral product mfg	31	224	7.1	54.8
27	Metal product mfg	98	1 085	44.5	598.5
28	Machinery and equipment mfg	91	779	23.2	135.5
29	Other manufacturing	58	334	7.4	35.6
21–29	<i>Total manufacturing</i>	459	5 950	209.1	1 792.0
.....					
FAR NORTH STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	63	2 253	80.3	573.1
22	Textile, clothing, footwear and leather mfg	16	101	1.9	6.3
23	Wood and paper product mfg	73	345	7.7	29.8
24	Printing, publishing and recorded media	55	627	18.0	63.6
25	Petroleum, coal, chemical and associated product mfg	13	82	2.5	12.8
26	Non-metallic mineral product mfg	35	237	7.7	60.9
27	Metal product mfg	94	722	19.9	95.7
28	Machinery and equipment mfg	91	802	23.2	134.3
29	Other manufacturing	81	443	11.8	47.6
21–29	<i>Total manufacturing</i>	521	5 612	173.0	1 024.3
.....					
NORTH WEST STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	5	48	1.2	4.9
22	Textile, clothing, footwear and leather mfg	1	n.p.	n.p.	n.p.
23	Wood and paper product mfg	3	n.p.	n.p.	n.p.
24	Printing, publishing and recorded media	3	60	n.p.	n.p.
25	Petroleum, coal, chemical and associated product mfg	7	n.p.	n.p.	n.p.
26	Non-metallic mineral product mfg	1	n.p.	n.p.	n.p.
27	Metal product mfg	22	845	n.p.	n.p.
28	Machinery and equipment mfg	19	n.p.	n.p.	n.p.
29	Other manufacturing	2	n.p.	n.p.	n.p.
21–29	<i>Total manufacturing</i>	63	1 101	n.p.	n.p.
.....					
QUEENSLAND EXCLUDING BRISBANE STATISTICAL DIVISION					
21	Food, beverage and tobacco mfg	453	18 356	618.1	5 059.6
22	Textile, clothing, footwear and leather mfg	382	2 388	48.6	230.0
23	Wood and paper product mfg	614	5 449	139.0	676.4
24	Printing, publishing and recorded media	500	4 946	139.3	466.1
25	Petroleum, coal, chemical and associated product mfg	224	2 657	101.3	918.8
26	Non-metallic mineral product mfg	326	2 545	79.1	570.5
27	Metal product mfg	915	10 351	371.6	3 428.3
28	Machinery and equipment mfg	892	9 672	302.4	1 336.4
29	Other manufacturing	726	3 731	80.1	357.3
<b>21–29</b>	<b>Total manufacturing</b>	<b>5 032</b>	<b>60 094</b>	<b>1 879.5</b>	<b>13 043.4</b>

(a) See paragraph 8 of the Explanatory Notes.

(b) Figures in this table differ to those in the other tables. See paragraphs 26–29 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

INDUSTRY SUBDIVISION		Locations at 30 June	Employment at end of June(c)	Wages and salaries(d)	Turnover
ANZSIC code	Description	no.	no.	\$m	\$m
.....					
QUEENSLAND					
21	Food, beverage and tobacco mfg	736	33 744	1 117.5	8 824.6
22	Textile, clothing, footwear and leather mfg	824	5 762	123.1	592.0
23	Wood and paper product mfg	997	10 728	319.1	1 714.1
24	Printing, publishing and recorded media	1 073	11 873	359.8	1 443.7
25	Petroleum, coal, chemical and associated product mfg	587	10 701	413.1	4 769.8
26	Non-metallic mineral product mfg	541	7 225	257.8	1 783.1
27	Metal product mfg	1 839	24 432	831.4	6 390.8
28	Machinery and equipment mfg	1 823	24 338	787.1	3 494.8
29	Other manufacturing	1 469	10 615	253.8	1 141.9
<b>21-29</b>	<b>TOTAL MANUFACTURING</b>	<b>9 889</b>	<b>139 418</b>	<b>4 462.7</b>	<b>30 154.7</b>
.....					

(a) See paragraph 8 of the Explanatory Notes.

(b) Figures in this table differ to those in the other tables. See paragraphs 26-29 of the Explanatory Notes.

(c) Includes working proprietors.

(d) Excludes the drawings of working proprietors. Includes provision expenses for employee entitlements. See paragraph 16 of the Explanatory Notes.

# EXPLANATORY NOTES

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## INTRODUCTION

- 1** This publication presents final statistics for Queensland compiled from a census of manufacturing establishments for 1996–97, 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 census.
- 2** The manufacturing collection is conducted on an annual basis. For the 1996–97 collection, all manufacturing businesses were requested to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. Data on IGP are also available from this collection. In addition, a variety of samples was selected to produce data on a range of other variables. The next manufacturing census will be conducted in respect of 2001–02, with sample surveys conducted for the next four years.
- 3** All data in this publication, with the exception of IGP estimates, have been compiled from the full census population. Estimates of IGP were compiled using data from this census population and a sample of approximately 7,000 establishments nationally which were asked to provide detailed structural and performance data. These 7,000 establishments were also asked to supply value of sales for commodities produced. (These commodity data will be released in the publication *Manufacturing Production, Commodities Produced, Australia, 1996–97* (Cat. no. 8365.0).) A sample of approximately 5,300 manufacturing management units nationally was asked the detailed information required to derive operating profit before tax. A separate sample of 5,000 manufacturing management units nationally was asked for information related to waste management and environmental protection. Information from this sample will be published in *Environment Protection Expenditure, Australia, 1995–96 and 1996–97* (Cat. no. 4603.0). Selected data from the census and sample populations as well as data from other collections will be included in the compendium publication *Manufacturing, Australia, 1998* (Cat. no. 8225.0).
- 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 business unit for which statistics are presented in this publication is the establishment. A manufacturing establishment is one predominantly engaged in manufacturing activities, but the data collected for it cover all activities of the establishment (including non-manufacturing activities). Conversely, there are some establishments predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities 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 1996–97 manufacturing collection, 'significant' was defined as \$7.3 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 Technical Note.

### DATA ADJUSTED

**10** As was done for the 1993–94 to 1995–96 (inclusive) 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 collection. Adjustments of this type will continue to be applied in future periods. Second, 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. In this issue of this publication, a further set of adjustments have been made to allow for omissions not previously identified. In respect of this further set of adjustments, actual data have been collected for 1996–97 and adjustment factors have been applied for each year back to 1991–92. For more information on these various adjustments, please refer to the *Information Paper: Improvements to ABS Economic Statistics, 1997* (Cat. no. 1357.0).

**11** The majority of businesses affected by these lags and omissions, and to which both types of adjustments apply, are small in size. The effect of these adjustments on 1996–97 turnover for Queensland is an increase of 2.1% while the effect on employment is an increase of 4.3%. Most industries were affected to a similar degree. The exceptions are Other manufacturing (for which the adjustments are 10.1% and 10.2% respectively) and Textile, clothing, footwear and leather manufacturing (for which the adjustments are 5.1% and 8.9% respectively).

**12** At the same time as these adjustments have been applied to the time series statistics in this publication, some revisions have been made to the underlying data previously published, as a result of further processing and/or additional information becoming available.

### 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.

**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.

**15** As explained above, about 7,000 establishments included in the 1996–97 collection were asked to supply value of sales for commodities produced. A similar sampling procedure was followed for the 1993–94 to 1995–96 (inclusive) collections. 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 1996–97 collection, provision expenses for employee entitlements are included in wages and salaries, as was the case prior to 1995–96. For the 1995–96 collection, these provision expenses were excluded from wages and salaries.

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

**18** Data in this publication have been subjected to various adjustments (see paragraphs 10–12). As a result, they are not on a comparable basis to previously published data. Comparable data for earlier periods are available from the ABS. A charge is made for providing such information.

## EXPLANATORY NOTES *continued*

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### COMPARABILITY WITH PREVIOUS STATISTICS *continued*

**19** The two smallest employment size categories used in table 4 in this publication have been changed to accord with standard ABS size ranges. That is, the categories now used are 0–4 and 5–9 persons employed instead of the 0–3 and 4–9 persons employed previously used. However, as the 1996–97 collection is a census, it may be possible (depending on confidentiality constraints) to, on request, construct data on the previous basis. From the 1997–98 collection onwards, the sample design used will only deliver reliable data in accordance with the standard ABS size ranges.

### EMPLOYMENT SIZE DATA

**20** Summary of operations data at the industry subdivision level classified by employment size are presented in table 4. Similarly, exports of goods produced data at the industry subdivision level classified by broad employment size are presented in table 5. The statistics in these two tables relate only to those manufacturing establishments operating at 30 June 1997. 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 1996–97.

**21** The treatment of unincorporated joint ventures according to the ABS's standard units definitions has an effect on the data when the data are classified by employment size. This is because joint venture participants report details of turnover, but often have few or no employees or operating expenses. The labour for such operations is usually employed and paid for by the joint venture operator. Similarly, the operating expenses are usually reported by the joint venture operator. On the other hand, the operator does not report any details of turnover (unless it also happens to be a participant). If each of these joint venture operations were to be treated as a single business unit in the statistics, it is highly probable that the Metal product manufacturing industry would reflect a similar dominance pattern to the other manufacturing industries.

**22** The two smallest employment size categories used in table 4 in this publication have been changed. See paragraph 19 for details.

### EXPORTS BY MANUFACTURERS

**23** All establishments included in the manufacturing census were asked whether they exported and, if so, what percentage of their sales of goods produced plus transfers out of goods produced by the establishment for sale were exported by their business or an agent on their behalf. The data presented in table 5 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. The data in table 5 exclude those manufacturing establishments which operated during 1996–97 but were not operating at 30 June 1997.

**24** The statistics presented in table 5 for the value of exports by manufacturers or their agents are not intended to be the same as the value of exports classified by manufacturing industry of origin as published by the ABS in international trade statistics. These latter statistics are intended to measure total exports regardless of which business or organisation does the exporting (and to identify the probable industry from which the goods originated), whereas the statistics in tables 5 and 6 only include exports directly undertaken by the manufacturer or by its agent.

### EXPORTS BY MANUFACTURERS *continued*

**25** The data in table 5 showing exports by manufacturers or their agents can be expected to show a much lower value than the exports data from the international trade series. The main reason is that for many exports of goods manufactured in Australia, the actual exporting activity is undertaken by a business other than the manufacturer. Also, the value of goods produced on a commission or fee basis for non-manufacturing businesses and which are then exported is not included in the data in tables 5 and 6. Examples of relevant commission work are the 'slaughtering fee' charged by an abattoir for processing livestock owned by a meat exporter and the 'tolling fee' charged by an aluminium smelter to process ores owned by other (e.g. mining) businesses. Also excluded from tables 5 and 6 are any exports by manufacturers of goods which were not produced by that manufacturer. These and other goods exported (e.g. re-exports) are included in the international trade data. Finally, differences in valuation of exports arise because the value of exports in the international trade series would include the value to the manufacturer plus profit margins for the exporter and for any intermediaries between the manufacturer and the exporter.

### STATISTICAL DIVISION DATA

**26** The location data presented in table 7 are based on additional data collected in the 1996–97 census. The extra data requested were the activity carried out at the location, the number of persons employed and the address of the location.

**27** Employment data shown in this table are based on reported employment, but in the case of wages and salaries and turnover data they do not reflect reported data in all cases. This is because in those circumstances where an establishment operates at more than one location or where small multi-establishment management units have been 'collapsed' for reporting purposes into single establishment management units (see paragraph 14), the data have been synthesised to derive location-level wages and salaries and turnover data. (However, it should be noted that most establishments operate at only the one location.) The location-level synthesised data were derived by using the location data collected on activity and employment, and then pro-rating wages and salaries and turnover based on the reported employment.

**28** As indicated in paragraph 5, a manufacturing establishment covers all activities of the establishment, including any non-manufacturing activities. In table 7, the non-manufacturing locations of manufacturing establishments have been excluded. For this reason, the State industry subdivision totals (for location data) in table 7 may be less than those shown in the other tables (for establishment data). However, it is also possible for State industry subdivision totals in table 7 to be greater than those shown in the other tables, as a result of individual locations of establishments being allocated a different industry classification to that of the 'parent' establishment. Differences between the data in table 7 and in the other tables may also occur because of the existence of multi-establishment management units which have been 'collapsed' (as explained in paragraph 14). In these circumstances, it is also possible that at least one of the locations of these units may be situated in a State or Territory other than the principal State or Territory of the 'parent' establishment.

**29** A map displaying the boundaries of each statistical division in Queensland can be found on page 40 of this publication. The statistical division structure is based on the *Australian Standard Geographical Classification (ASGC)* (Cat. no. 1216.0), 1996 edition.

## EXPLANATORY NOTES *continued*

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### USE OF ANZSIC

**30** The 1992–93 manufacturing survey introduced the 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 36). Similarly, ASIC-based data are not available from 1992–93.

### ACKNOWLEDGMENT

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

### INFORMATION PAPER

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

### RELATED PUBLICATIONS

**33** A series of publications *Manufacturing Industry, [State], 1996–97* (Cat. nos 8221.1–8221.6) 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. For 1996–97, all of these publications contain a table showing industry subdivision data by statistical division. These publications are being released progressively.

**34** Users may also wish to refer to the following publications:

- *Australian Standard Geographical Classification (ASGC)* (Cat. no. 1216.0), 1996 edition—Annual publication
- *Business Operations and Industry Performance, Australia, 1996–97* (Cat. no. 8140.0), to be released in January 1999—Annual publication
- *Business Operations and Industry Performance, Australia, Preliminary, 1996–97* (Cat. no. 8142.0), released on 29 May 1998—Annual publication
- *Environment Protection Expenditure, Australia, 1995–96 and 1996–97* (Cat. no. 4603.0), to be released in March 1999—Annual publication
- *Indexes of Industrial Production, Australia* (Cat. no. 8125.0)—Quarterly publication (Discontinued with release of December quarter 1997 issue)
- *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (Cat. no. 8205.0), released on 21 March 1996—Irregular publication
- *Information Paper: Availability of Statistics Related to Manufacturing, 1997* (Cat. no. 8205.0), released on 16 January 1998—Irregular publication
- *Information Paper: Improvements to ABS Economic Statistics, 1997* (Cat. no. 1357.0), released on 22 August 1997—Irregular publication
- *Labour Force, Australia* (Cat. no. 6203.0)—Monthly publication
- *Manufacturing, Australia, 1998* (Cat. no. 8225.0), to be released in December 1998—Annual publication
- *Manufacturing Industry, Australia, Preliminary, 1997–98* (Cat. no. 8201.0), to be released in March 1999—Annual publication
- *Manufacturing Production, Commodities Produced, Australia, 1996–97* (Cat. no. 8365.0), to be released in December 1998—Annual publication



### BACK DATA AND UNPUBLISHED STATISTICS

**35** 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 (Cat. no. 8205.0) referred to in paragraphs 32 and 34 provides more details.

**36** 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 1996–97 (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

**37** Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS business register (see paragraph 10), this 'rounding rule' also applies to employment counts and to counts of locations (in table 7).

**38** 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 1996–97 manufacturing collection comprised a census component and a sample component. All manufacturing establishments were requested to provide data on employment, wages and salaries, turnover, purchases and whether their products were exported. A sample of approximately 7,000 manufacturing establishments nationally were asked to provide additional structural and performance data.

As the data items listed above were collected from the full 1996–97 census population, they are not subject to sampling variability. Estimates of IGP on the other hand were compiled using data from both the census and sample components. As such, IGP data are subject to sampling variability; that is, they may differ from the figures that would have been produced if all the components of IGP had been obtained from all manufacturers in the census population.

However, as turnover and purchases (two of the major components in calculating IGP) are collected from the census population, the variability due to sampling, especially at the industry subdivision level, is minimal.

All data for 1991–92 and 1993–94 as contained in this publication were obtained from a census and, as such, are not subject to sampling variability.

All data for 1992–93, 1994–95 and 1995–96 as contained in this publication were obtained from samples of manufacturers and are, therefore, subject to sampling variability. For further information, see these issues of this publication.

### NON-SAMPLE ERROR

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

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 upgrade has resulted in improvements in the quality of the statistical series whose population frames are drawn from the register.

## G L O S S A R Y

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ABS	Australian Bureau of Statistics
<b>Amount of goods produced by this establishment (or for it on commission) that are exported by this business or its agent</b>	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 (or are intended for export) outside Australia by the business or its agent.
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
<b>Capital work done for own use</b>	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.
<b>Change in stocks</b>	The value of total closing stocks minus total opening stocks.
<b>Closing stocks</b>	The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the end of the reference period.
<b>Employment at end of June</b>	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.
<b>Enterprise group</b>	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.
<b>Establishment</b>	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.
<b>Establishments that do not export</b>	Establishments that reported no exports (either by their business or for them by an agent) of goods that they produced.
<b>Establishments with exports of more than 50% of sales</b>	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.
<b>Establishments with exports up to and including 50% of sales</b>	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.

<b>Exports as a proportion of sales of goods produced (Table 5)</b>	For an individual establishment, this represents the percentage of the total sales and transfers out of goods for sale produced by the establishment (or for it on commission) which are exported (or are intended for export) outside Australia by the business or its agent. In table 5, the ratio is calculated by dividing the total value of goods exported by the total value of sales and transfers out of goods for sale produced by all establishments, not just the aggregated value for those units which exported.
<b>Income from services</b>	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.
<b>Industry class</b>	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.
<b>Industry gross product (IGP)</b>	<p>IGP is very similar to the national accounting measure gross product at factor cost which is the official statistical measure of production. IGP for an industry is a measure of the value which is added by the industry's production processes to the raw materials and services which are input to those processes. Another way of describing IGP is the value of an industry's output minus the value of intermediate inputs.</p> <p>The formula used to calculate IGP is as follows—definitions of the relevant component items also appear in this Glossary.</p> <div style="margin-left: 40px;"> <p>Calculation of IGP = Turnover              + Change in stocks              – Purchases, transfers in and selected expenses              = Establishment value added              – Fringe benefits tax              – Payroll tax              – Other operating expenses              = Industry Gross Product</p> </div>
<b>Industry gross product (IGP) per person employed</b>	IGP of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.
<b>Industry group</b>	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.

<b>Industry subdivision</b>	<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"> <li>21 Food, beverage and tobacco mfg</li> <li>22 Textile, clothing, footwear and leather mfg</li> <li>23 Wood and paper product mfg</li> <li>24 Printing, publishing and recorded media</li> <li>25 Petroleum, coal, chemical and associated product mfg</li> <li>26 Non-metallic mineral product mfg</li> <li>27 Metal product mfg</li> <li>28 Machinery and equipment mfg</li> <li>29 Other manufacturing</li> </ul>
<b>Location</b>	<p>A location is a physical unit of the establishment. It consists usually of an unbroken physical area or site, occupied by an establishment, at which, or from which, the establishment engages in productive activity on a relatively permanent basis. An establishment can consist of one or more locations. In specified circumstances, non-contiguous sites occupied by the same establishment can be combined to form a location.</p>
<b>Locations at 30 June</b>	<p>The number of locations in operation at 30 June in the year of a given reference period.</p>
<b>Management unit</b>	<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>
<b>Manufacturing establishment</b>	<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>
<b>Manufacturing location</b>	<p>A location predominantly engaged in manufacturing activities.</p>
<b>Manufacturing management unit</b>	<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>
<b>Opening stocks</b>	<p>The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the beginning of the reference period.</p>
<b>Other operating expenses</b>	<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 expenses, advertising costs and land tax. Excludes income and sales taxes, and extraordinary expenses.</p>

<b>Own account capital work</b>	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.
<b>Purchases</b>	Purchase of materials, components, containers, packaging, fuels, electricity and water, and of finished goods for resale. The purchase of parts and fuel for motor vehicles is excluded.
<b>Purchases, transfers in and selected expenses</b>	Purchase of materials, components, containers, packaging, fuels, electricity and water, and of finished goods for resale, plus transfers in of goods from other establishments of the same business for further processing, assembly, installation or for sale or resale, plus commission expenses (including sales commission expenses), repair and maintenance expenses, 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.
<b>Reference period</b>	Businesses are asked to report data for the financial year ended 30 June. However, if a business has a different financial year, it is asked to report for the 12-month period which ends between 1 October of the previous year and 30 September of the current year. This period is then used as a substitute for the financial year ended 30 June. For example, for the 1996–97 collection, a business may have reported data for the year ended 31 December 1996.
<b>Sales and transfers out of goods produced by the establishment</b>	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).
<b>Service income</b>	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.
<b>Statistical division</b>	A general purpose spatial unit and is the largest and most stable spatial unit within each State and Territory in the Main Structure of the Australian Standard Geographical Classification. The map on page 40 indicates the statistical division boundaries for Queensland.



**Turnover** Sales (exclusive of excise and sales tax) of goods whether produced by the establishment or not, plus transfers out of goods to other establishments of the same business, plus bounties and subsidies on production, plus all other operating income from outside the 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, i.e. at commercial selling price. A significant proportion of the commodities manufactured by some industries is manufactured on commission for non-manufacturing businesses from materials owned and supplied by those businesses. As a consequence, the turnover figures do not reflect the gross value of those commodities but only the commission earned relating to them.

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

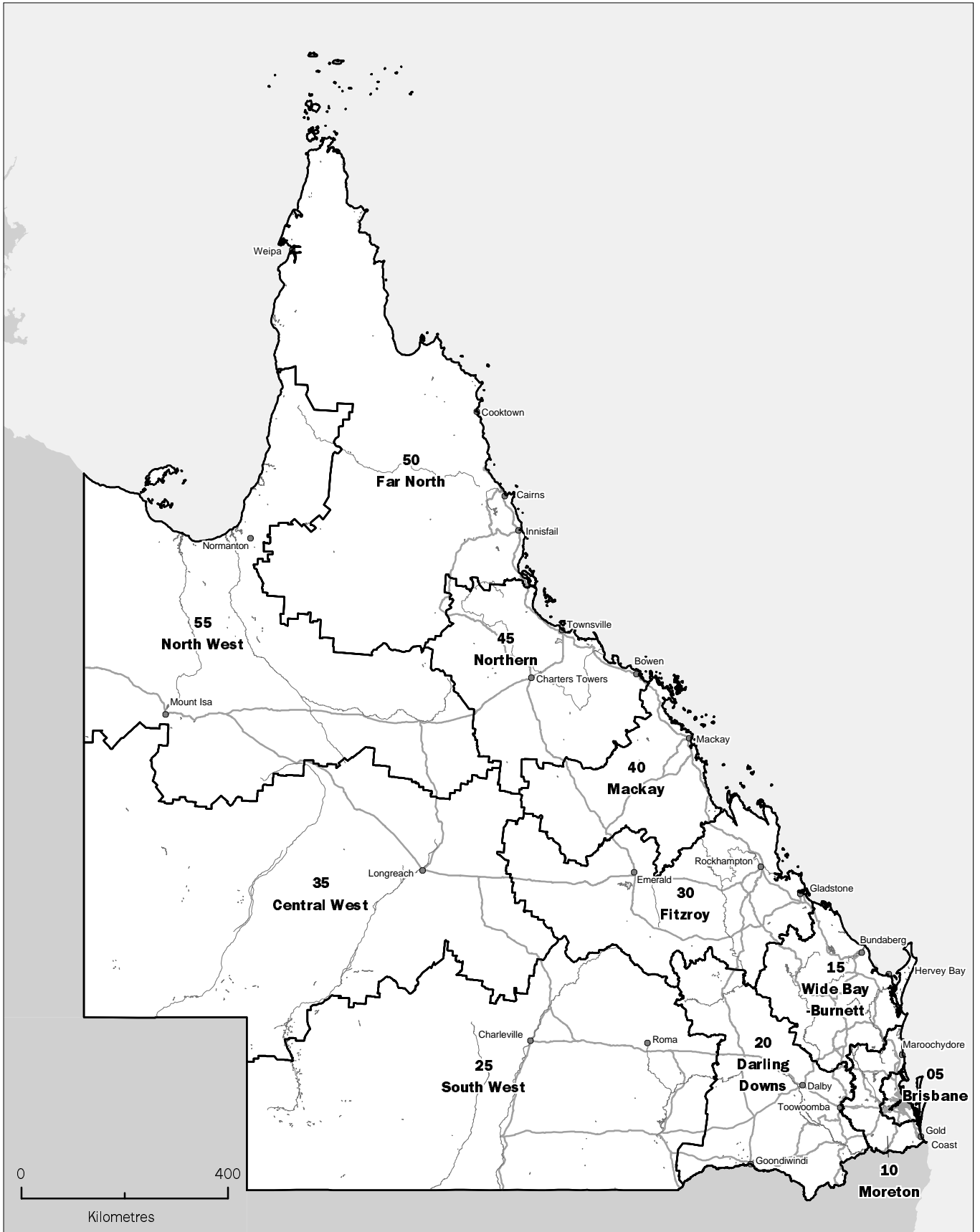
**Value added** Turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses.

**Wages and salaries** The gross wages and salaries (including capitalised wages and salaries) of all employees of the establishment. The item includes severance, termination and redundancy payments, but excludes reimbursements or allowances to employees for travel, entertainment, etc. For the 1995–96 collection only, 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.



QUEENSLAND—STATISTICAL DIVISIONS, 1996 EDITION











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*EMAIL* [client.services@abs.gov.au](mailto:client.services@abs.gov.au)



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