

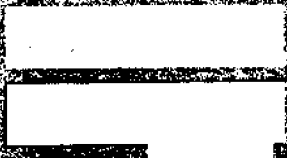
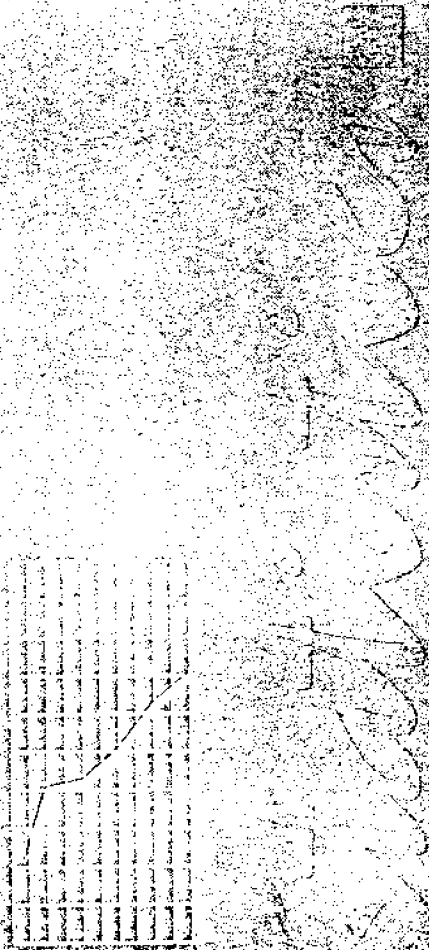


1993-94

EMBARGOED UNTIL 11:30 AM FRI 18 OCTOBER 1996

# Manufacturing Industry

## Australia





**MANUFACTURING INDUSTRY  
AUSTRALIA  
1993-94**

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**AUSTRALIAN BUREAU OF STATISTICS**

**CATALOGUE NO. 8221.0**

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## INQUIRIES

- *for further information about statistics in this publication and the availability of related unpublished statistics, contact John Ridley on Sydney (02) 9268 4541 or any other ABS office.*
- *for information about other ABS statistics and services, please refer to the back page of this publication.*

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## INTRODUCTION

### ABOUT THIS ISSUE

This publication contains detailed industry statistics compiled from a census of manufacturing establishments (see paragraph 8 of the Explanatory Notes) conducted in respect of 1993–94, with some comparative statistics for earlier years. It expands and updates the information which was published in *Manufacturing Industry, Australia, 1993–94, Preliminary* (8201.0), which was released on 13 December 1995.

The 1993–94 manufacturing census sought information on employment, wages and salaries and turnover for all manufacturing establishments. In addition to data for these items, this publication contains additional data to provide a more complete picture of the manufacturing industry. The additional data include information on gross domestic product (average 1989–90) prices and persons employed for all Australian industries (tables 1 and 2), gross product at factor cost (average 1989–90 prices) (table 3) and current and capital expenditure on environmental protection (table 10).

As part of the 1993–94 manufacturing collection, a sample of approximately 18,000 establishments was asked to supply additional information on commodities produced and sold. Commodities information from this sample will be published in *Manufacturing Production, Australia: Principal Commodities Produced, 1993–94* (8365.0), to be released later in 1996.

Australian and New Zealand  
Standard Industrial Classification  
(ANZSIC)

This publication continues to use the Australian and New Zealand Standard Industrial Classification (ANZSIC), which replaced the Australian Standard Industrial Classification (ASIC) used prior to the 1992–93 reference year. It also presents finer level detail than was issued in the publication *Manufacturing Industry, Australia, 1993–94, Preliminary* (8201.0). Manufacturing collections dating back to the 1989–90 reference year have been coded to industry using ANZSIC and, therefore, all time series comparisons in this publication are made on a consistent ANZSIC basis. ASIC-based data are not available from 1992–93.

Data as contained in  
this publication

As was foreshadowed in the previous issue of this publication, all data in this publication (except for tables 1 and 2) have been adjusted to allow for lags in processing new businesses to the ABS business register, and omission of some businesses from the business register. More information on these adjustments can be found in paragraphs 16 to 18 of the Explanatory Notes.

The industry code for 18,000 of the establishments included in the 1993–94 collection has been determined on an objective industry coding basis, compared to the more subjective industry coding which has occurred in each of the three previous manufacturing collections. More information on this subject can be found in paragraph 19 of the Explanatory Notes.

Because of the above reasons, comparison of industry class (especially) level data for 1993–94 with data for 1992–93 and earlier years as previously published should be undertaken with caution.

Revised 1992–93 management unit tables	<p>The management unit data contained in tables 17 to 20 (inclusive) of <i>Manufacturing Industry, Australia, 1992–93</i> (8221.0), released on 12 March 1996, have been found to be in error in a number of respects and have now been revised. The major reason for the revision is the reclassification (at the management unit level) of some major contributors from Wholesale Trade to Manufacturing. Revised data for tables 17 to 20 are shown on pages 38 to 41 of this publication. The data in these tables have NOT been adjusted to allow for the lags in processing new businesses to the ABS business register and the omission of some businesses from the business register (referred to above). The remaining (1992–93) management unit table (table 21) is not affected by these errors.</p>
STATE DATA	<p>More detailed manufacturing industry statistics for each State will be released shortly in a series of publications (8221.1 to 8221.6). The publication for New South Wales (8221.1) also contains selected data for the Australian Capital Territory.</p>
UNPUBLISHED DATA	<p>A considerable amount of data from the annual manufacturing collection is available in unpublished form. More detailed information to satisfy individual user requirements may be available on request. Further details can be obtained by referring to the <i>Information Paper: Availability of Statistics Related to Manufacturing, 1996</i> (8205.0) or by contacting the NSW Office of the ABS — see page iv for contact details.</p>



## SUMMARY OF FINDINGS

Overview Turnover for the year 1993–94 by manufacturing establishments operating in Australia was \$183,855m. This represents a 5.9% increase, in current price terms, from the \$173,638m turnover recorded for the year 1992–93. In constant price terms (1989–90 prices), manufacturing gross product at factor cost increased by 4.9% in 1993–94 from 1992–93. Manufacturing employment at the end of June 1994 was 911,100, a marginal 0.3% lower than 12 months earlier.

### INDUSTRY DIVISION STATISTICS

The commentary in this section relates to industry division statistics presented in tables 1 and 2. The source of these data are the publications *Australian National Accounts: National Income, Expenditure and Product, 1994–95* (5204.0) and *Australian National Accounts: National Income, Expenditure and Product, June Quarter 1996* (5206.0).

Gross Domestic Product  
(average 1989–90 prices)  
(Table 1)

The total Gross Domestic Product (GDP) at average 1989–90 prices for 1993–94 for all industries was \$388,504m. The manufacturing industry share of this figure was \$57,219m (14.7%), making it the largest contributor to GDP. Longer term trends show that the manufacturing share of GDP at average 1989–90 prices had been steadily declining since the late 1980s before making a slight increase of 0.2 percentage points in 1993–94 from 1992–93. The 1993–94 manufacturing share is the highest recorded since 1990–91, when it was 15.1%. In 1983–84, the manufacturing industry share was 16.3%.

The industries which have significantly increased their percentage share of GDP at average 1989–90 prices over the 1983–84 to 1993–94 period were Communication services (from 1.8% to 3.1%), Property and business services (from 6.8% to 8.1%) and Mining (from 3.7% to 4.4%).

Industry division employment  
(Table 2)

Table 2 presents a time series of employment data for all industries. In 1984–85, manufacturing accounted for 15.8% of employment for all industries, making it then the largest employing industry, followed by Retail trade (13.4%). By 1988–89, the manufacturing employment percentage share had dropped to 14.6%, declining to 11.9% in both 1991–92 and 1992–93, before marginally falling to 11.8% in 1993–94. Manufacturing in 1993–94 was the second largest employing industry behind Retail trade (14.3%).

### MANUFACTURING ESTABLISHMENT DATA

The commentary in this section relates to establishment data only (refer to paragraphs 4 to 11 of the Explanatory Notes).

Gross product at factor cost  
(average 1989–90 prices)  
(Table 3)

Constant price estimates of gross product at factor cost are the most accurate measure of the relative growth or decline of the manufacturing industry, as they discount the impact of price changes. In constant price terms, manufacturing gross product at factor cost increased by 4.9% from \$56,401m in 1992–93 to \$59,151m in 1993–94.

All nine industry subdivisions recorded an increase in constant price estimates of gross product at factor cost over the period 1992–93 to 1993–94. The largest percentage increase was recorded by Machinery and equipment manufacturing (up 9.0%), followed by Other manufacturing (up 6.3%) and Petroleum, coal, chemical and associated product manufacturing (up 5.4%). The smallest percentage increases over this period were recorded by Textile, clothing, footwear and leather manufacturing (up 1.5%) and Non-metallic mineral product manufacturing (up 1.6%).

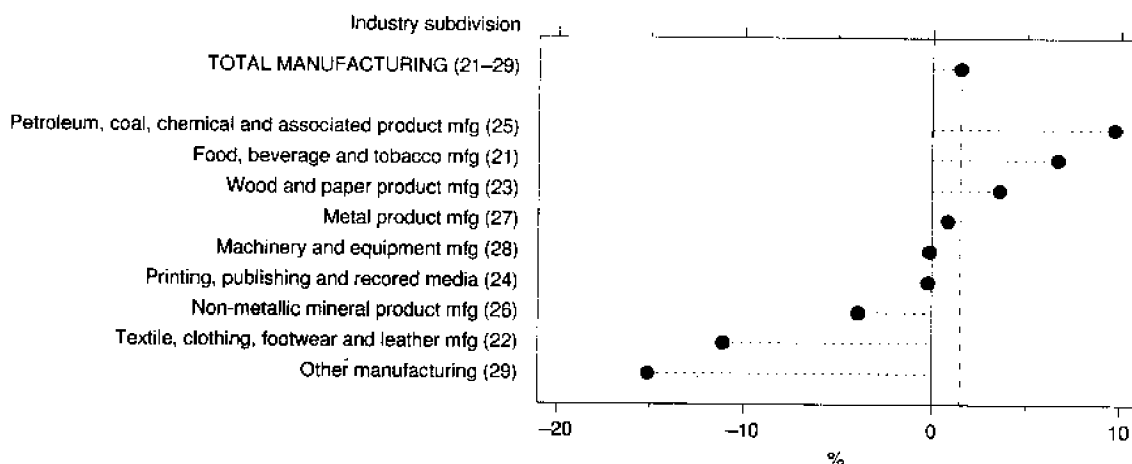
*Longer term trends  
(1989-90 to 1993-94)*

Over the period 1989-90 to 1993-94, manufacturing gross product in constant price terms increased by 1.5%. Although there was this overall increase in constant price estimates of gross product at factor cost over this five year period, only four industry subdivisions recorded an increase with the other five industry subdivisions recording decreases.

The largest percentage increases were recorded by Petroleum, coal, chemical and associated product manufacturing (up 9.7%) and Food, beverage and tobacco manufacturing (up 6.7%). The largest percentage decreases were recorded by Other manufacturing (down 15.1%) and Textile, clothing, footwear and leather manufacturing (down 11.1%).

Over the period 1989-90 to 1993-94, there was an increase in gross product per person employed of 17.9%. Eight of the industry subdivisions recorded increases over this five year period. The largest percentage increases were recorded by Machinery and equipment manufacturing (up 24.3%), Textile, clothing, footwear and leather manufacturing (up 23.0%) and Metal product manufacturing (up 20.9%). The decrease was recorded by Other manufacturing (down 0.7%).

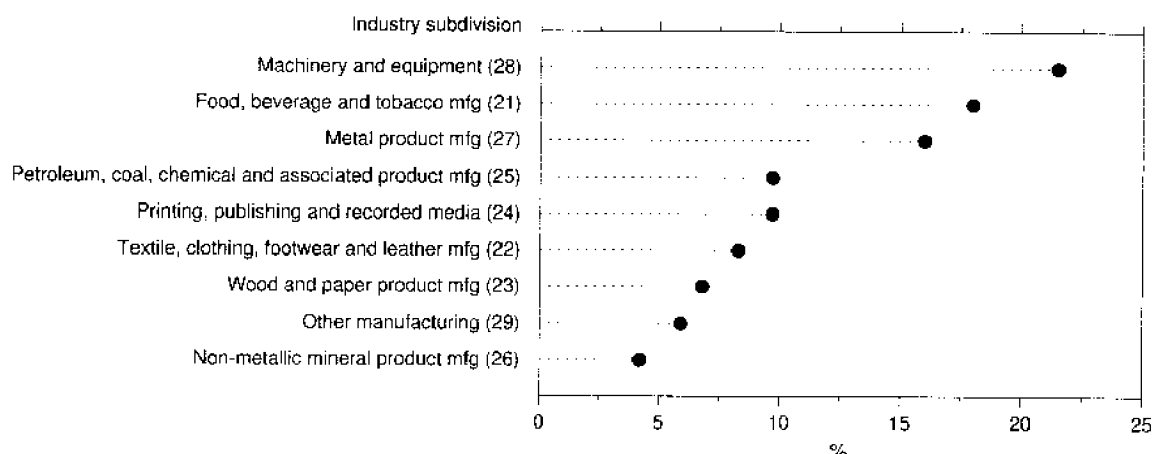
PERCENTAGE CHANGE IN GROSS PRODUCT AT FACTOR COST (AVERAGE 1989-90 PRICES) BY INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90 TO 1993-94



**Employment**  
(Tables 4, 5 and 6)

The 1993-94 manufacturing census recorded 911,100 persons employed at the end of June 1994. Machinery and equipment manufacturing (21.5%), Food, beverage and tobacco manufacturing (18.0%) and Metal product manufacturing (16.0%) were the major contributors to employment at the end of June 1994. Non-metallic mineral product manufacturing (4.2%) and Other manufacturing (5.9%) were the smallest contributors.

DISTRIBUTION OF EMPLOYMENT BY INDUSTRY SUBDIVISION, AUSTRALIA  
JUNE 1994



Manufacturing employment decreased by 0.3% between June 1993 and June 1994. Four of the nine industry subdivisions recorded decreases in the level of employment over this period. Textile, clothing, footwear and leather manufacturing (down 4.5% from 79,300 persons to 75,700 persons) and Non-Metallic mineral product manufacturing (down 3.5% from 39,600 persons to 38,200 persons) recorded the largest percentage decreases. Of the five industry subdivisions to record an increase in employment, the two largest in percentage terms were Other manufacturing (up 3.1% from 52,400 persons to 54,000 persons) and Wood and paper product manufacturing (up 2.6% from 60,000 persons to 61,600 persons).

As in previous years, New South Wales and Victoria were the major contributors to employment in the manufacturing industry at the end of June 1994. New South Wales accounted for 33.6% of Australian manufacturing employment, with the corresponding figure for Victoria being 31.4%. This represents an increase of 0.1 percentage points for New South Wales, but a drop of 0.6 percentage points for Victoria on the percentage contributions they recorded 12 months earlier.

*Longer term trends  
(June 1990 to June 1994)*

Employment in the Australian manufacturing industry decreased by 147,700 persons (down 13.9% from 1,058,800 persons to 911,100 persons) over the period June 1990 to June 1994. All industry subdivisions recorded decreases over this period, with Textile, clothing, footwear and leather manufacturing (down 27.7% from 104,700 persons to 75,700 persons), Machinery and equipment manufacturing (down 19.6% from 243,200 persons to 195,500 persons) and Metal product manufacturing (down 16.5% from 174,400 persons to 145,600 persons) recording the largest percentage decreases.

Between June 1990 and June 1994, the only increase in employment amongst the States and Territories was recorded by the Australian Capital Territory (up 7.5% from 3,900 persons to 4,200 persons). Employment in Queensland remained unchanged at 138,500 persons. The largest decrease in both absolute and percentage terms was recorded by Victoria, where employment decreased by 72,600 persons (down 20.2% from 358,700 persons to 286,100 persons). Other large percentage decreases were recorded by Tasmania (down 20.0% from 27,000 persons to 21,600 persons), South Australia (down 15.0% from 101,400 persons to 86,200 persons) and New South Wales (down 13.7% from 354,900 persons to 306,200 persons). The other decreases were recorded by the Northern Territory (down 8.8% from 3,200 persons to 2,900 persons) and Western Australia (down 8.1% from 71,200 persons to 65,400 persons).

The percentage contribution by Victoria to Australian manufacturing employment has declined since June 1990 (decreasing by 2.5 percentage points to 31.4%), as did Tasmania (down 0.2 percentage points to 2.4%). Queensland increased its percentage share of employment over this period (up 2.1 percentage points to 15.2%), as did Western Australia (up 0.5 percentage points to 7.2%). New South Wales marginally increased its percentage contribution (up 0.1 percentage points to 33.6%) while South Australia and both Territories also showed little or no change over this period.

Turnover  
(Tables 4, 5 and 6)

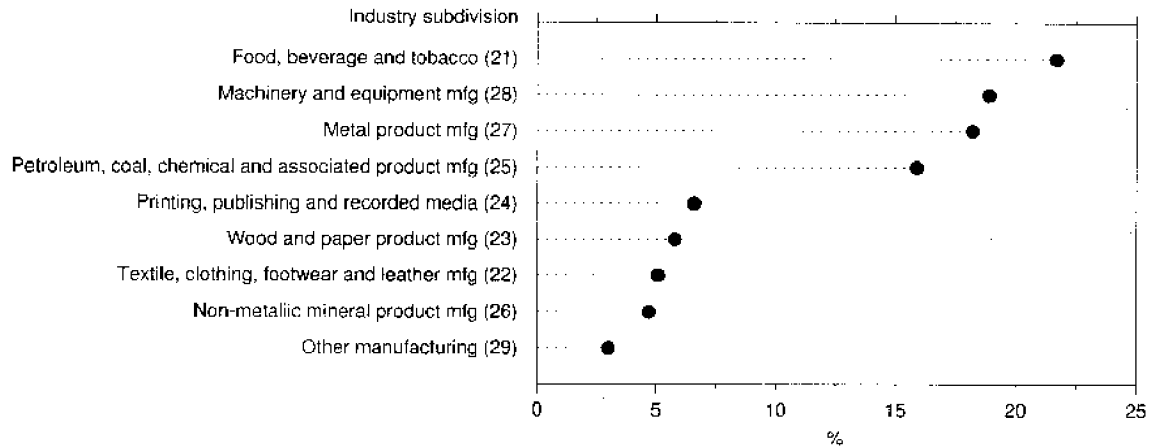
Turnover for the year 1993-94 by manufacturing establishments operating in Australia was \$183,854.7m. This represents a 5.9% increase, in current price terms, from \$173,637.9m turnover recorded for the year 1992-93. Food, beverage and tobacco manufacturing remains the subdivision with the largest contribution to turnover in the manufacturing industry. In 1993-94, Machinery and equipment manufacturing replaced Metal product manufacturing as the subdivision with the second largest contribution to turnover.

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

- Food, beverage and tobacco manufacturing (21.7%), where the industry classes Meat processing (ANZSIC class 2111 at 3.4%) and Dairy product manufacturing n.e.c. (ANZSIC class 2129 at 1.6%) were the most substantial.
- Machinery and equipment manufacturing (18.9%), where the industry classes Motor vehicle manufacturing (ANZSIC class 2811 at 4.9%) and Automotive component manufacturing n.e.c. (ANZSIC class 2819 at 1.4%) were the most substantial.
- Metal product manufacturing (18.2%), where the industry class Basic iron and steel manufacturing (ANZSIC class 2711 at 4.5%) was the most substantial.
- Petroleum, coal, chemical and associated product manufacturing (15.9%), where the industry classes Petroleum refining (ANZSIC class 2510 at 4.2%) and Medicinal and pharmaceutical product manufacturing (ANZSIC class 2543 at 1.8%) were the most substantial.

Industry classes making a notable contribution to total turnover and not included in the subdivisions listed above included Printing (ANZSIC class 2412 at 2.2%) and Newspaper printing or publishing (ANZSIC class 2421 at 1.9%).

DISTRIBUTION OF TURNOVER BY INDUSTRY SUBDIVISION, AUSTRALIA, 1993-94



Longer term trends  
(1989-90 to 1993-94)

Turnover for the manufacturing industry increased, in current price terms, by 8.2% over the period 1989-90 to 1993-94. Three industry subdivisions recorded decreases and six recorded increases. The three industry subdivisions to show a decrease were Textile, clothing, footwear and leather manufacturing (down 4.4% from \$9,870.2m to \$9,436.7m), Other manufacturing (down 2.8% from \$5,671.1m to \$5,511.6m) and Metal product manufacturing (down 2.1% from \$34,137.6m to \$33,417.9m). The largest percentage increases, in current price terms, were recorded in Food, beverage and tobacco manufacturing (up 19.9% from \$33,320.7m to \$39,958.3m) and Printing, publishing and recorded media (up 17.2% from \$10,440.7m to \$12,234.8m).

Three of the States increased their share of Australian turnover between 1989-90 and 1993-94. New South Wales increased its contribution by 0.6 percentage points (to 34.0% of Australian turnover), followed by Queensland (up 0.5 percentage points to 14.4%) and South Australia (up 0.2 percentage points to 9.1%). The three States to record a decrease were Victoria (down 0.8 percentage points to 32.0%), Western Australia (down 0.4 percentage points to 7.5%) and Tasmania (down 0.2 percentage points to 2.2%). The Northern Territory (at 0.4%) and the Australian Capital Territory (at 0.3%) maintained their share of Australian turnover over the period.

Components of turnover  
(Table 9)

Of the total manufacturing turnover of \$183,854.7m, by far the majority of it (\$172,356.5m or 93.7%) comes from sales and transfers out, followed by income from services (\$9,864.8m or 5.4%). Nearly two-thirds of the total income from services is contributed by the two subdivisions of Printing, publishing and recorded media (\$3,443.0m) and Machinery and equipment manufacturing (\$3,006.0m).

Ratio of wages and salaries  
to turnover (Tables 4 and 5)

In 1993-94, the ratio of wages and salaries to turnover for Australia's manufacturing industry was 0.15; that is, on average, 15 cents in wages and salaries is paid for each \$1.00 of turnover. This ratio is a decrease from the ratio of 0.16 measured in both 1989-90 and 1992-93.

The wages and salaries to turnover ratio decreased in eight of the nine industry subdivisions between 1989-90 and 1993-94, with the largest falls being recorded by Textile, clothing, footwear and leather manufacturing (down from 0.22 to 0.19), Wood and paper product manufacturing (0.19 to 0.17) and Machinery and equipment manufacturing (0.20 to 0.18). The ratio for Petroleum, coal, chemical and associated product manufacturing remained unchanged (at 0.11).

The largest ratios of wages and salaries to turnover in 1993-94 were recorded in Aircraft manufacturing (ANZSIC class 2824) (0.40), Services to printing (ANZSIC class 2413) (0.34), Medical and surgical equipment manufacturing (ANZSIC class 2832) (0.32) and Machine tool and part manufacturing (ANZSIC class 2864) (0.31). The smallest ratios of wages and salaries to turnover were recorded in Petroleum refining (ANZSIC class 2510) (0.03), Prepared animal and bird feed manufacturing (ANZSIC class 2174) (0.06) and Petroleum and coal product manufacturing n.e.c. (ANZSIC class 2520) (0.06).

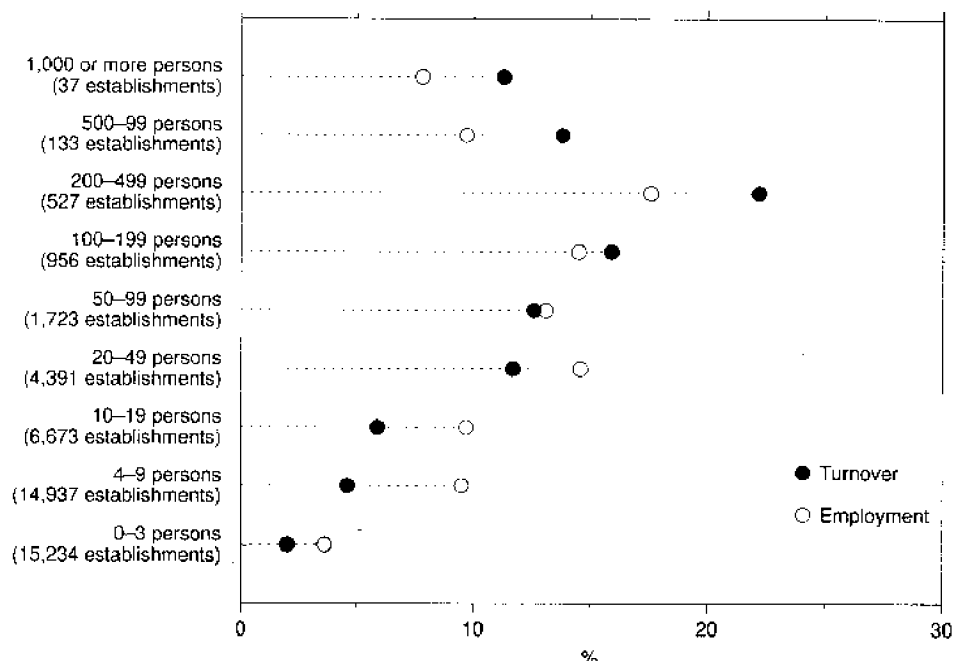
Turnover per person employed  
(Tables 4 and 5)

Petroleum, coal, chemical and associated product manufacturing comprised a substantially larger share of turnover than of employment, which resulted in this subdivision recording a substantially higher value of turnover per person employed (\$330,000) than other subdivisions in the manufacturing industry. Other manufacturing recorded the lowest value for this ratio (\$102,100). Turnover per person employed for total manufacturing in 1993-94 was \$201,800, which is 6.2% higher than the figure recorded 12 months earlier. Various factors affect the magnitude of turnover per person employed. In general, industries which are labour intensive will record lower values of turnover per person employed than will those industries which are capital intensive. This ratio may also be influenced by commodity prices.

Employment size (Table 7)

Of the 44,610 manufacturing establishments operating in Australia at 30 June 1994, 1,653 were large establishments (employing 100 or more persons). While making up only 3.7% of all establishments, they accounted for 49.6% of employment at the end of June 1994 and 63.2% of manufacturing turnover for 1993-94. Although establishments employing 0-19 persons comprised 82.6% of manufacturing establishments in Australia at 30 June 1994, they accounted for only 22.8% of employment and 12.6% of turnover. There were 37 manufacturing establishments employing 1,000 or more persons at the end of June 1994. They employed 7.8% of all persons working in the manufacturing industry in Australia and contributed 11.3% of all manufacturing turnover.

DISTRIBUTION OF MANUFACTURING TURNOVER AND EMPLOYMENT BY  
EMPLOYMENT SIZE, AUSTRALIA, 1993-94

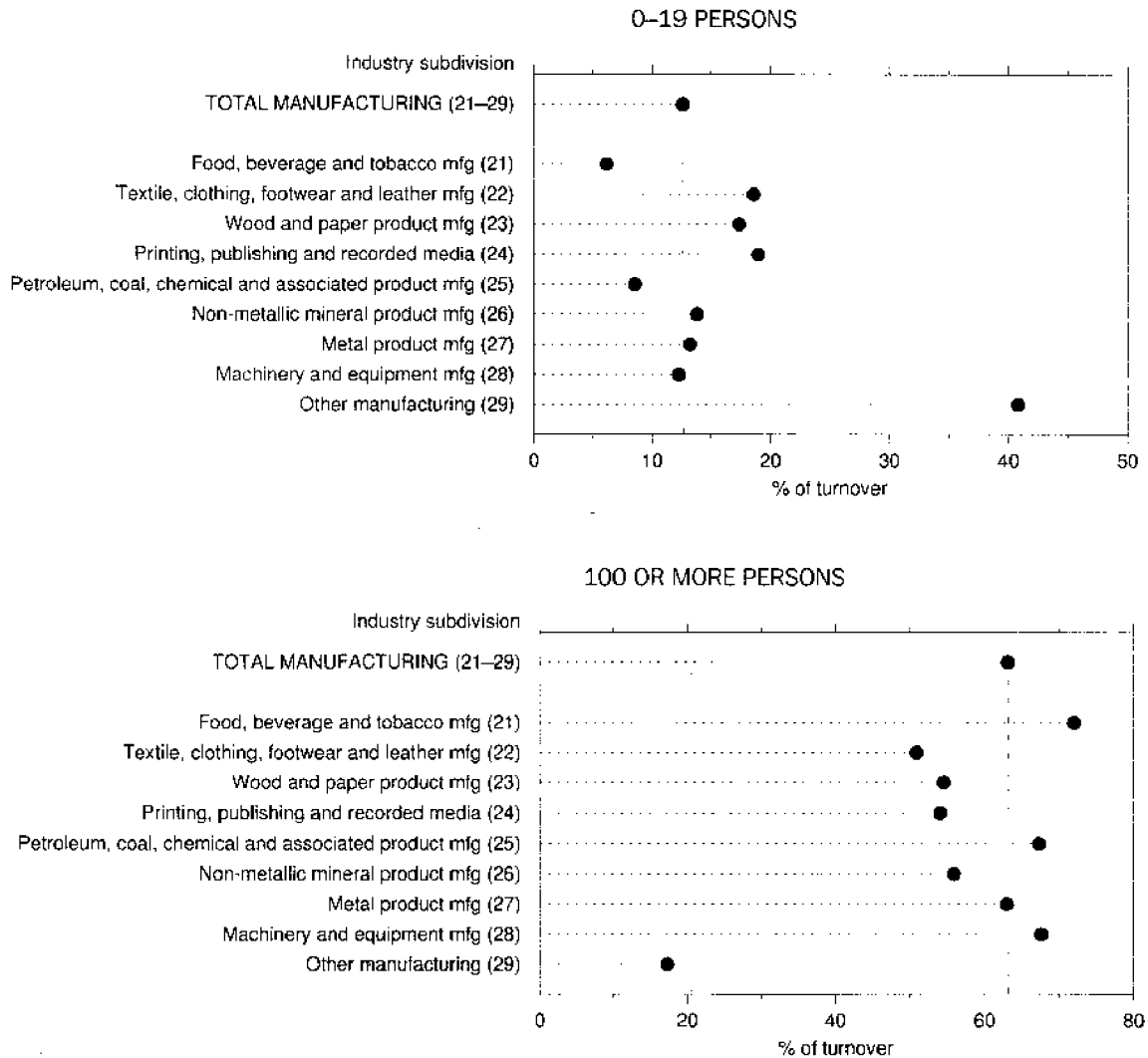


For 1993-94, the percentage distribution of turnover by employment size for the manufacturing industry was:

0-19 persons	—	12.6%
20-99 persons	—	24.3%
100 or more persons	—	63.2%

For eight of the nine industry subdivisions, more than 50% of turnover was contributed by large establishments (employing 100 or more persons). The industries where large establishments contributed most to turnover were Food, beverage and tobacco manufacturing (72.0%), Machinery and equipment manufacturing (67.7%) and Petroleum, coal, chemical and associated product manufacturing (67.4%). Small establishments (employing 0-19 persons) made relatively significant contributions to turnover for Other manufacturing (40.8%), Printing, publishing and recorded media (19.0%) and Textile, clothing, footwear and leather manufacturing (18.6%).

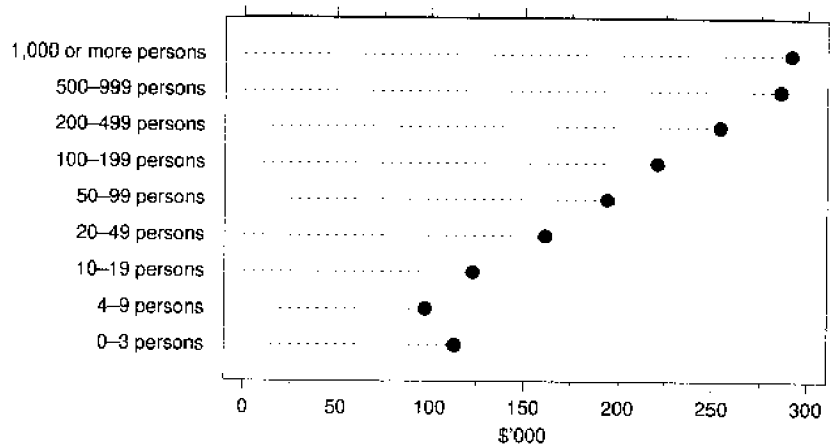
DISTRIBUTION OF TURNOVER BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION  
AUSTRALIA, 1993-94



Small establishments (employing 0-19 persons) displayed a much lower ratio of turnover per person employed at the end of June 1994 (\$110,700) than establishments in the larger size categories. Large establishments (employing 100 or more persons) recorded an average turnover per person employed of \$256,100, with establishments employing 1,000 or more persons having a ratio of \$291,300. It should be remembered that the data include all manufacturing industries and that different patterns may emerge through analysis of individual industries.



TURNOVER PER PERSON EMPLOYED BY EMPLOYMENT SIZE, AUSTRALIA, 1993-94

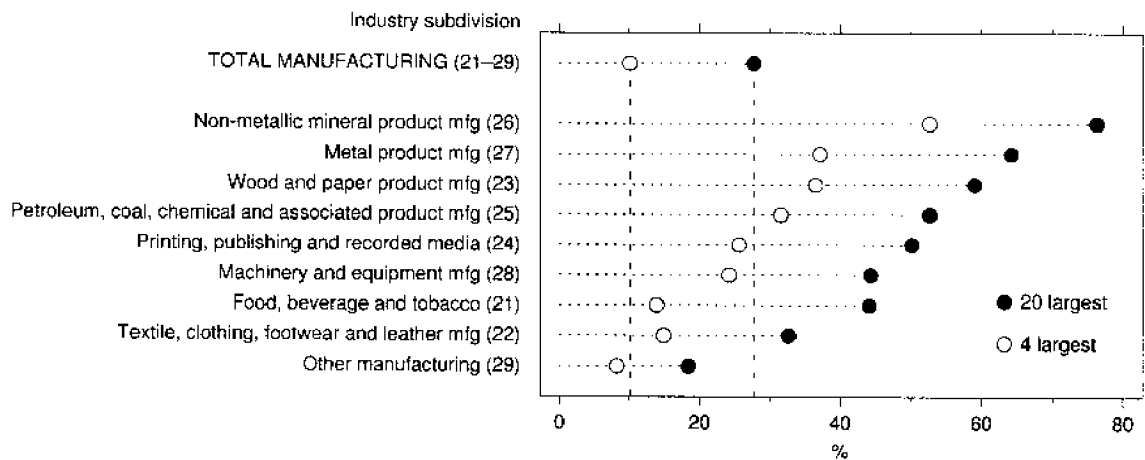


Concentration statistics (Table 8)

The 44,610 manufacturing establishments operating in Australia at 30 June 1994 represented 41,342 individual enterprise groups. The 20 largest enterprise groups involved in manufacturing accounted for 27.7% of total manufacturing turnover and 15.9% of total manufacturing employment. The four largest enterprise groups contributed 10.1% of total turnover and employed 4.7% of all persons working in the manufacturing industry.

For 1993-94, the distribution by industry subdivision showed that in five of the nine industry subdivisions, the 20 largest enterprise groups accounted for 50 per cent or more of turnover. The highest concentration ratios were exhibited by Non-metallic mineral product manufacturing (0.76), Metal product manufacturing (0.64) and Wood and paper product manufacturing (0.59). In terms of the four largest enterprise groups, Non-metallic mineral product manufacturing (52.6% of turnover), Metal product manufacturing (37.1% of turnover) and Wood and paper product manufacturing (36.5% of turnover) again showed the greatest levels of concentration.

CONTRIBUTION TO INDUSTRY SUBDIVISION TURNOVER BY THE 4 LARGEST AND THE 20 LARGEST ENTERPRISE GROUPS (WITHIN INDIVIDUAL SUBDIVISIONS) AUSTRALIA, 1993-94



MANUFACTURING MANAGEMENT  
UNIT DATA

The commentary in this section relates to manufacturing management unit data (refer to paragraph 7 of the Explanatory Notes).

Expenditure on  
environmental protection  
(Table 10)

In 1993-94, total current expenditure by manufacturing management units on environmental protection was \$473.7m. This amounts to 0.3% of the total manufacturing industry turnover for the year. Of the total current expenditure on environmental protection, over a third (36.3%) was spent by manufacturers in the Metal product manufacturing subdivision (\$172.1m). This represented 0.6% of total turnover for the subdivision, which was at least twice the proportion spent by manufacturers in any other subdivision or of that for manufacturing as a whole. The next largest contribution to the total was by manufacturers in the Petroleum, coal, chemical and associated product manufacturing subdivision (22.2% or \$105.4m).

In 1993-94, reported total capital expenditure by manufacturers to abate pollution was \$227.8m. This amounts to 2.0% of the total capital expenditure spent by manufacturers. Of this total, manufacturers in the Metal product manufacturing subdivision again spent the most (\$73.3m or 5.3% of total capital expenditure for the industry). However, manufacturers in the Wood and paper product manufacturing subdivision (at 6.9%) spent a higher proportion of their total capital expenditure to abate pollution.

## 1

GROSS DOMESTIC PRODUCT (AVERAGE 1989-90 PRICES) BY INDUSTRY<sup>1</sup>, AUSTRALIA  
1983-84 TO 1993-94<sup>2</sup>

Industry description	1983-84		1988-89		1992-93r		1993-94	
	Value	Proportion <sup>3</sup>	Value	Proportion <sup>3</sup>	Value	Proportion <sup>3</sup>	Value	Proportion <sup>3</sup>
	\$m	%	\$m	%	\$m	%	\$m	%
Agriculture, forestry and fishing	14 087	5.0	13 682	3.8	15 933	4.3	16 239	4.2
Mining	10 632	3.7	14 650	4.1	16 940	4.5	17 194	4.4
Manufacturing	46 191	16.3	56 448	15.8	54 307	14.5	57 219	14.7
Electricity, gas and water supply	9 387	3.3	11 627	3.3	12 847	3.4	13 098	3.4
Construction	20 062	7.1	26 506	7.4	23 847	6.4	25 433	6.5
Wholesale trade	30 399	10.7	37 661	10.6	34 012	9.1	36 447	9.4
Retail trade	22 949	8.1	26 293	7.4	28 014	7.5	28 623	7.4
Accommodation, cafes and restaurants	5 286	1.9	6 617	1.9	6 852	1.8	7 268	1.9
Transport and storage	14 486	5.1	19 152	5.4	20 627	5.5	22 040	5.7
Communication services	5 169	1.8	7 652	2.1	10 878	2.9	11 959	3.1
Finance and insurance	13 380	4.7	19 193	5.4	16 719	4.5	16 489	4.2
Property and business services	19 404	6.8	27 931	7.8	31 601	8.5	31 505	8.1
Government administration and defence	10 943	3.9	13 117	3.7	14 294	3.8	14 688	3.8
Education	12 910	4.5	15 385	4.3	18 112	4.8	18 950	4.9
Health and community services	14 236	5.0	18 160	5.1	20 497	5.5	20 891	5.4
Cultural and recreational services	5 768	2.0	7 050	2.0	7 585	2.0	7 841	2.0
Personal and other services	4 766	1.7	5 892	1.7	6 433	1.7	6 420	1.7
Ownership of dwellings	28 570	10.1	33 443	9.4	37 792	10.1	39 058	10.1
Import duties	2 560	0.9	3 827	1.1	4 262	1.1	4 527	1.2
Less Imputed bank service charge	7 041	..	8 036	..	7 876	..	7 385	..
<b>All industries (GDP(P))</b>	<b>284 026</b>	<b>100.0</b>	<b>356 250</b>	<b>100.0</b>	<b>373 676</b>	<b>100.0</b>	<b>388 504</b>	<b>100.0</b>
Market sector <sup>4</sup>	183 955	64.8	227 710	63.9	232 700	62.3	244 699	63.0
Non-farm market sector <sup>4</sup>	170 065	59.9	214 222	60.1	216 972	58.1	228 652	58.9

Source: *Australian National Accounts: National Income, Expenditure and Product, 1994-95* (5204.0) and *Australian National Accounts: National Income, Expenditure and Product, June Quarter 1996* (5206.0)

<sup>1</sup> Estimates prior to 1984-85 have been derived by linking estimates for earlier base years to estimates at average 1989-90 prices. The linking has been done separately for components and totals. Consequently, additivity has not been maintained for years prior to 1984-85.

<sup>2</sup> The data in this table have NOT 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. See paragraphs 16 to 18 of the Explanatory Notes.

<sup>3</sup> Each item calculated as a proportion of "All industries (GDP(P))". That is, additivity is to greater than 100%, because of the effect of the item "Imputed bank service charge" and because of the method of estimation used— see footnote 1.

<sup>4</sup> The Market sector comprises those industries listed in the table except the non-market industries, namely: Finance and insurance; Property and business services; Government administration and defence; Education; Health and community services; Personal and other services; and Ownership of dwellings plus the Imputed bank service charges related to these industries. The Non-farm market sector relates to the market sector less Agriculture, forestry and fishing plus the Imputed bank service charges related to this industry.

## 2

PERSONS EMPLOYED BY INDUSTRY<sup>1</sup>, AUSTRALIA, 1984-85 TO 1993-94<sup>2</sup>

Industry description	1984-85		1988-89		1992-93		1993-94	
	Number	Proportion <sup>3</sup>	Number	Proportion <sup>3</sup>	Number	Proportion <sup>3</sup>	Number	Proportion <sup>3</sup>
	'000	%	'000	%	'000	%	'000	%
Agriculture, forestry and fishing	402	6.0	436	5.7	405	5.3	409	5.2
Mining	93	1.4	98	1.3	87	1.1	90	1.1
Manufacturing	1 056	15.8	1 113	14.6	915	11.9	922	11.8
Electricity, gas and water supply	139	2.1	120	1.6	98	1.3	92	1.2
Construction	487	7.3	593	7.8	550	7.1	574	7.3
Wholesale trade	405	6.1	478	6.3	481	6.2	504	6.4
Retail trade	896	13.4	1 072	14.1	1 115	14.5	1 124	14.3
Accommodation, cafes and restaurants	223	3.3	288	3.8	336	4.4	348	4.4
Transport and storage	339	5.1	368	4.8	355	4.6	360	4.6
Communication services	132	2.0	131	1.7	111	1.4	121	1.5
Finance and insurance	268	4.0	343	4.5	318	4.1	317	4.0
Property and business services	439	6.6	581	7.6	646	8.4	674	8.6
Government administration and defence	394	5.9	395	5.2	429	5.6	429	5.5
Education	441	6.6	485	6.4	548	7.1	553	7.1
Health and community services	518	7.7	620	8.1	656	8.5	672	8.6
Cultural and recreational services	117	1.8	146	1.9	156	2.0	168	2.1
Personal and other services	222	3.3	266	3.5	304	3.9	301	3.8
<b>All industries</b>	<b>6 684</b>	<b>100.0</b>	<b>7 619</b>	<b>100.0</b>	<b>7 698</b>	<b>100.0</b>	<b>7 841</b>	<b>100.0</b>
Market sector <sup>4</sup>	4 401	65.8	4 930	64.7	4 798	62.3	4 896	62.4
Non-farm market sector <sup>4</sup>	3 999	59.8	4 494	59.0	4 393	57.1	4 487	57.2

Source: Australian National Accounts: National Income, Expenditure and Product, 1994-95 (5204.0) Note: Estimates of employment have not yet been derived on an ANZSIC basis for years prior to 1984-85.

<sup>1</sup> Average annual estimates are entirely based on the Labour Force Survey except for Manufacturing, the estimates for which are mainly based on establishments' data from the annual manufacturing collection. As a result, the sum of employment in each industry differs from the total shown. Similarly, the figures for Manufacturing in this table may be different to the employment figures in other tables of this publication.

<sup>2</sup> The data in this table have NOT 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. See paragraphs 16 to 18 of the Explanatory Notes.

<sup>3</sup> Each industry calculated as a proportion of "All industries". That is, additivity may not be to 100%, because of the method of estimation used— see footnote 1.

<sup>4</sup> The Market sector comprises those industries listed in the table except the non-market industries, namely: Finance and insurance; Property and business services; Government administration and defence; Education; Health and community services; and Personal and other services. The Non-farm market sector relates to the market sector less Agriculture, forestry and fishing.

**3** MANUFACTURING ESTABLISHMENTS<sup>1</sup>: PERCENTAGE CHANGE IN GROSS PRODUCT AT FACTOR COST (AVERAGE 1989-90 PRICES)<sup>2</sup> BY INDUSTRY SUBDIVISION  
AUSTRALIA, 1989-90 TO 1993-94<sup>3</sup>

Industry subdivision	1989-90 to 1993-94						
	1989-90 to 1990-91	1990-91 to 1991-92	1991-92 to 1992-93	1992-93 to 1993-94			
ANZSIC code	Description	Percentage movement	Change in gross product per person employed <sup>4,5</sup>				
21	Food, beverage and tobacco mfg	2.2	-0.1	1.8	2.7	6.7	12.2
22	Textile, clothing, footwear and leather mfg	-3.4	-5.3	-4.2	1.5	-11.1	23.0
23	Wood and paper product mfg	-4.5	-0.9	5.7	3.6	3.6	15.4
24	Printing, publishing and recorded media	-2.9	-7.1	6.1	4.2	-0.2	4.9
25	Petroleum, coal, chemical and associated product mfg	4.3	-1.9	1.6	5.4	9.7	18.6
26	Non-metallic mineral product mfg	-10.8	-2.7	8.9	1.6	-3.9	11.3
27	Metal product mfg	-1.5	-0.9	-1.1	4.5	0.9	20.9
28	Machinery and equipment mfg	-3.7	-5.2	0.3	9.0	-0.1	24.3
29	Other manufacturing	-16.4	-3.9	-0.7	6.3	-15.1	-0.7
<b>21-29</b>	<b>Total manufacturing</b>	<b>-1.9</b>	<b>-2.7</b>	<b>1.4</b>	<b>4.9</b>	<b>1.5</b>	<b>17.9</b>

<sup>1</sup> See paragraph 8 of the Explanatory Notes.

<sup>2</sup> See paragraphs 24 to 26 of the Explanatory Notes.

<sup>3</sup> For factors affecting comparability of data over the time periods shown, see paragraphs 15 to 21 of the Explanatory Notes.

<sup>4</sup> Based on employment at the end of June of the reference year. Includes working proprietors.

<sup>5</sup> The basis for the calculation of this data item in this issue of the publication differs from that used in the 1992-93 issue of the publication. See paragraph 22 of the Explanatory Notes.

## 4

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION, AUSTRALIA 1989-90 TO 1993-94<sup>2</sup>

Industry subdivision			Establish- ments at 30 June <sup>3</sup>	Employment at end of June <sup>4</sup>	Wages and salaries <sup>5,6</sup>	Turnover <sup>6</sup>	Ratio of wages and salaries to turnover <sup>6</sup>	Turnover per person employed <sup>6,7</sup>
ANZSIC code	Description		No.	'000	\$m	\$m	Ratio	\$'000
21	Food, beverage and tobacco mfg	1993-94	3 514	164.2	4 969.2	39 958.3	0.12	243.4
		1992-93	3 574	162.8	4 819.0	37 489.9	0.13	230.3
		1991-92	3 668	162.3	4 560.2	35 574.2	0.13	219.2
		1990-91	3 720	169.2	4 566.0	34 997.2	0.13	206.8
		1989-90	3 850	172.5	4 281.7	33 320.7	0.13	193.1
22	Textile, clothing, footwear and leather mfg	1993-94	4 456	75.7	1 808.8	9 436.7	0.19	124.6
		1992-93	4 277	79.3	1 903.5	9 081.7	0.21	114.6
		1991-92	4 298	82.4	1 980.8	9 367.1	0.21	113.7
		1990-91	4 294	91.0	2 073.1	9 787.1	0.21	107.6
		1989-90	4 557	104.7	2 175.7	9 870.2	0.22	94.2
23	Wood and paper product mfg	1993-94	3 973	61.6	1 785.6	10 719.4	0.17	174.1
		1992-93	3 722	60.0	1 772.9	10 066.9	0.18	167.7
		1991-92	3 900	60.6	1 743.5	9 404.3	0.19	155.2
		1990-91	4 009	62.4	1 755.3	9 463.4	0.19	151.7
		1989-90	4 379	68.6	1 766.1	9 518.5	0.19	138.7
24	Printing, publishing and recorded media	1993-94	5 265	88.0	2 794.3	12 234.8	0.23	139.0
		1992-93	4 782	87.5	2 745.9	11 548.0	0.24	132.0
		1991-92	5 085	85.5	2 568.0	10 575.5	0.24	123.7
		1990-91	4 850	88.4	2 599.3	10 733.7	0.24	121.4
		1989-90	5 006	92.5	2 477.9	10 440.7	0.24	112.8
25	Petroleum, coal, chemical and associated product mfg	1993-94	3 009	88.3	3 234.2	29 155.4	0.11	330.0
		1992-93	2 867	89.2	3 144.6	28 318.4	0.11	317.5
		1991-92	3 045	90.5	3 116.7	28 142.9	0.11	310.9
		1990-91	2 978	93.9	3 141.1	28 192.7	0.11	300.1
		1989-90	3 000	95.5	2 892.5	26 175.6	0.11	274.0
26	Non-metallic mineral product mfg	1993-94	1 909	38.2	1 288.7	8 608.7	0.15	225.4
		1992-93	1 786	39.6	1 300.1	8 333.2	0.16	210.6
		1991-92	1 969	39.5	1 268.9	7 673.3	0.17	194.2
		1990-91	1 895	41.3	1 321.1	7 729.4	0.17	187.3
		1989-90	2 138	44.2	1 286.9	8 132.5	0.16	183.9
27	Metal product mfg	1993-94	7 522	145.6	4 845.0	33 417.9	0.14	229.6
		1992-93	7 467	148.0	4 829.7	32 368.3	0.15	218.7
		1991-92	7 655	150.7	4 904.9	31 793.6	0.15	210.9
		1990-91	7 692	163.7	5 098.4	33 607.2	0.15	205.3
		1989-90	7 851	174.4	5 004.3	34 137.6	0.15	195.8

For footnotes see end of table.

## 4

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION, AUSTRALIA 1989-90 TO 1993-94<sup>2</sup>—continued

Industry subdivision			Establish- ments at 30 June <sup>3</sup>	Employment at end of June <sup>4</sup>	Wages and salaries <sup>5,6</sup>	Turnover <sup>6</sup>	Ratio of wages and salaries to turnover <sup>6</sup>	Turnover per person employed <sup>6,7</sup>
ANZSIC code	Description		No.	'000	\$m	\$m	Ratio	\$'000
28	Machinery and equipment mfg	1993-94	8 988	195.5	6 182.0	34 811.9	0.18	178.0
		1992-93	8 318	194.9	6 118.4	31 355.0	0.20	160.9
		1991-92	8 632	197.5	6 001.2	30 413.1	0.20	154.0
		1990-91	8 533	216.7	6 613.1	32 028.5	0.21	147.8
		1989-90	8 895	243.2	6 587.8	32 679.3	0.20	134.4
29	Other manufacturing	1993-94	5 973	54.0	1 199.3	5 511.6	0.22	102.1
		1992-93	5 915	52.4	1 174.9	5 076.5	0.23	97.0
		1991-92	6 211	52.5	1 150.1	4 973.4	0.23	94.8
		1990-91	6 150	54.7	1 202.9	5 090.0	0.24	93.0
		1989-90	6 430	63.1	1 321.7	5 671.1	0.23	89.8
<b>21-29 Total manufacturing</b>		<b>1993-94</b>	<b>44 610</b>	<b>911.1</b>	<b>28 107.3</b>	<b>183 854.7</b>	<b>0.15</b>	<b>201.8</b>
		<b>1992-93</b>	<b>42 708</b>	<b>913.6</b>	<b>27 809.0</b>	<b>173 637.9</b>	<b>0.16</b>	<b>190.1</b>
		<b>1991-92</b>	<b>44 463</b>	<b>921.5</b>	<b>27 294.3</b>	<b>167 917.3</b>	<b>0.16</b>	<b>182.2</b>
		<b>1990-91</b>	<b>44 121</b>	<b>981.4</b>	<b>28 370.5</b>	<b>171 629.1</b>	<b>0.17</b>	<b>174.9</b>
		<b>1989-90</b>	<b>46 105</b>	<b>1 058.8</b>	<b>27 794.6</b>	<b>169 946.3</b>	<b>0.16</b>	<b>160.5</b>

<sup>1</sup> See paragraph 8 of the Explanatory Notes.

<sup>2</sup> For factors affecting comparability of data over the time periods shown, see paragraphs 15 to 21 of the Explanatory Notes.

<sup>3</sup> See paragraphs 4 to 11 of the Explanatory Notes.

<sup>4</sup> Includes working proprietors.

<sup>5</sup> Excludes the drawings of working proprietors.

<sup>6</sup> Value data are at current prices and, therefore, do not discount the impact of price changes.

<sup>7</sup> Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
<b>FOOD, BEVERAGE AND TOBACCO MFG</b>							
<b>Meat and meat product mfg</b>							
2111	Meat processing	326	28 648	865.2	6 163.6	0.14	215.1
2112	Poultry processing	116	9 657	224.4	1 721.4	0.13	178.3
2113	Bacon, ham and smallgoods mfg	146	7 106	185.1	1 303.2	0.14	183.4
211	<i>Total</i>	587	45 411	1 274.8	9 188.2	0.14	202.3
<b>Dairy product mfg</b>							
2121	Milk and cream processing	60	6 008	216.2	2 746.6	0.08	457.2
2122	Ice cream mfg	49	1 966	55.9	646.1	0.09	328.7
2129	Dairy product mfg n.e.c.	107	7 741	244.9	2 915.2	0.08	376.6
212	<i>Total</i>	216	15 715	517.1	6 307.9	0.08	401.4
213	<i>Fruit and vegetable processing</i>	179	10 175	339.5	2 638.2	0.13	259.3
214	<i>Oil and fat mfg</i>	39	1 817	78.6	625.0	0.13	344.0
<b>Flour mill and cereal food mfg</b>							
2151	Flour mill product mfg	64	3 463	120.9	1 303.2	0.09	376.3
2152	Cereal food and baking mix mfg	98	5 776	193.9	1 517.5	0.13	262.7
215	<i>Total</i>	163	9 240	314.8	2 820.6	0.11	305.3
<b>Bakery product mfg</b>							
2161	Bread mfg	567	13 134	314.3	1 283.3	0.24	97.7
2162	Cake and pastry mfg	412	9 002	192.2	787.3	0.24	87.5
2163	Biscuit mfg	46	5 705	171.2	751.4	0.23	131.7
216	<i>Total</i>	1 025	27 841	677.7	2 822.0	0.24	101.4
<b>Other food mfg</b>							
2171	Sugar mfg	26	6 698	223.9	2 136.8	0.10	319.0
2172	Confectionery mfg	135	6 368	216.7	1 089.9	0.20	171.2
2173	Seafood processing	132	4 299	84.6	1 074.6	0.08	250.0
2174	Prepared animal and bird feed mfg	204	4 484	130.1	2 016.1	0.06	449.6
2179	Food mfg n.e.c.	385	13 025	420.6	2 476.5	0.17	190.1
217	<i>Total</i>	883	34 873	1 075.9	8 793.9	0.12	252.2
<b>Beverage and malt mfg</b>							
2181	Soft drink, cordial and syrup mfg	131	6 087	193.5	2 010.7	0.10	330.3
2182	Beer and malt mfg	40	3 869	215.4	2 376.6	0.09	614.3
2183	Wine mfg	231	6 450	152.7	1 367.7	0.11	212.0
2184	Spirit mfg	14	356	10.0	108.3	0.09	304.1
218	<i>Total</i>	416	16 763	571.6	5 863.2	0.10	349.8
219	<i>Tobacco product mfg</i>	6	2 332	119.2	899.3	0.13	385.6
<b>21</b>	<b>Total food, beverage and tobacco mfg</b>	<b>3 514</b>	<b>164 167</b>	<b>4 969.2</b>	<b>39 958.3</b>	<b>0.12</b>	<b>243.4</b>

For footnotes see end of table.



## 5

 MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
 AUSTRALIA, 1993-94—continued

Industry class		Establish- ments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>6</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG							
Textile fibre, yarn and woven fabric mfg							
2211	Wool scouring	30	1 637	55.8	381.8	0.15	233.2
2212	Synthetic fibre textile mfg	74	4 925	165.4	751.1	0.22	152.5
2213	Cotton textile mfg	53	2 686	74.8	353.0	0.21	131.4
2214	Wool textile mfg	27	2 763	70.4	303.7	0.23	109.9
2215	Textile finishing	90	2 426	74.1	315.9	0.23	130.2
221	<i>Total</i>	275	14 437	440.5	2 105.4	0.21	145.8
Textile product mfg							
2221	Made-up textile product mfg	615	5 463	110.1	544.6	0.20	99.7
2222	Textile floor covering mfg	77	3 388	89.5	674.7	0.13	199.1
2223	Rope, cordage and twine mfg	27	498	14.6	72.1	0.20	144.8
2229	Textile product mfg n.e.c.	201	2 645	62.0	392.7	0.16	148.5
222	<i>Total</i>	921	11 994	276.1	1 684.1	0.16	140.4
Knitting mills							
2231	Hosiery mfg	35	2 493	64.2	266.3	0.24	106.8
2232	Cardigan and pullover mfg	81	1 664	33.9	130.6	0.26	78.5
2239	Knitting mill product mfg n.e.c.	85	2 422	72.6	614.8	0.12	253.8
223	<i>Total</i>	201	6 579	170.7	1 011.6	0.17	153.8
Clothing mfg							
2241	Men's and boys' wear mfg	397	9 049	202.5	774.0	0.26	85.5
2242	Women's and girls' wear mfg	1 176	10 210	192.8	1 302.0	0.15	127.5
2243	Sleepwear, underwear and infant clothing mfg	118	5 342	126.0	556.4	0.23	104.2
2249	Clothing mfg n.e.c.	917	7 224	141.3	635.0	0.22	87.9
224	<i>Total</i>	2 607	31 825	662.6	3 267.4	0.20	102.7
225	<i>Footwear mfg</i>	223	7 092	160.4	629.6	0.25	88.8
Leather and leather product mfg							
2261	Leather tanning and fur dressing	101	2 864	82.0	666.8	0.12	232.8
2262	Leather and leather substitute product mfg	129	936	16.5	71.6	0.23	76.5
226	<i>Total</i>	230	3 801	98.6	738.4	0.13	194.3
<b>22</b>	<b>Total textile, clothing, footwear and leather mfg</b>	<b>4 456</b>	<b>75 728</b>	<b>1 808.8</b>	<b>9 436.7</b>	<b>0.19</b>	<b>124.6</b>

For footnotes see end of table.

Industry class		Establishments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
<b>WOOD AND PAPER PRODUCT MFG</b>							
Log sawmilling and timber dressing							
2311	Log sawmilling	552	7 468	174.0	886.6	0.20	118.7
2312	Wood chipping	35	813	29.1	367.7	0.08	452.2
2313	Timber resawing and dressing	132	6 322	159.1	988.3	0.16	156.3
231	<i>Total</i>	719	14 602	362.2	2 242.5	0.16	153.6
Other wood product mfg							
2321	Plywood and veneer mfg	38	1 803	49.3	273.3	0.18	151.6
2322	Fabricated wood mfg	69	3 847	134.2	801.8	0.17	208.4
2323	Wooden structural component mfg	1 834	17 068	386.9	1 897.2	0.20	111.2
2329	Wood product mfg n.e.c.	985	6 813	136.1	609.7	0.22	89.5
232	<i>Total</i>	2 925	29 531	706.6	3 582.0	0.20	121.3
Paper and paper product mfg							
2331	Pulp, paper and paperboard mfg	95	5 586	246.3	2 114.9	0.12	378.6
2332	Solid paperboard container mfg	47	2 394	89.3	466.6	0.19	194.9
2333	Corrugated paperboard container mfg	35	4 823	215.9	1 336.8	0.16	277.2
2334	Paper bag and sack mfg	36	1 021	31.0	191.8	0.16	187.9
2339	Paper product mfg n.e.c.	116	3 631	134.4	784.8	0.17	216.1
233	<i>Total</i>	329	17 455	716.9	4 894.9	0.15	280.4
<b>23</b>	<b>Total wood and paper product mfg</b>	<b>3 973</b>	<b>61 588</b>	<b>1 785.6</b>	<b>10 719.4</b>	<b>0.17</b>	<b>174.1</b>
<b>PRINTING, PUBLISHING AND RECORDED MEDIA</b>							
Printing and services to printing							
2411	Paper stationery mfg	358	7 472	215.3	1 106.2	0.19	148.0
2412	Printing	2 607	33 769	983.2	4 040.2	0.24	119.6
2413	Services to printing	848	7 629	233.6	688.1	0.34	90.2
241	<i>Total</i>	3 814	48 870	1 432.1	5 834.5	0.25	119.4
Publishing							
2421	Newspaper printing or publishing	623	26 596	943.2	3 464.7	0.27	130.3
2422	Other periodical publishing	366	4 559	160.4	987.6	0.16	216.6
2423	Book and other publishing	365	6 398	207.7	1 366.1	0.15	213.5
242	<i>Total</i>	1 354	37 553	1 311.2	5 818.4	0.23	154.9
243	Recorded media manufacturing and publishing	98	1 569	51.0	581.9	0.09	370.9
<b>24</b>	<b>Total printing, publishing and recorded media</b>	<b>5 265</b>	<b>87 992</b>	<b>2 794.3</b>	<b>12 234.8</b>	<b>0.23</b>	<b>139.0</b>

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
<b>PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG</b>							
251	Petroleum refining	31	4 040	244.8	7 783.9	0.03	1 926.7
252	Petroleum and coal product mfg n.e.c.	40	455	17.6	298.1	0.06	655.2
Basic chemical mfg							
2531	Fertiliser mfg	70	2 061	79.2	916.1	0.09	444.5
2532	Industrial gas mfg	18	1 237	54.3	285.7	0.19	231.0
2533	Synthetic resin mfg	106	4 402	221.3	1 777.6	0.12	403.8
2534	Organic industrial chemical mfg n.e.c.	61	2 259	105.3	1 188.8	0.09	526.2
2535	Inorganic industrial chemical mfg n.e.c.	117	3 935	160.8	1 387.2	0.12	352.5
253	Total	371	13 894	620.9	5 555.4	0.11	399.8
Other chemical product mfg							
2541	Explosive mfg	23	1 212	54.4	411.0	0.13	339.1
2542	Paint mfg	156	5 413	194.5	1 550.1	0.13	286.4
2543	Medicinal and pharmaceutical product mfg	152	11 219	444.6	3 302.6	0.13	294.4
2544	Pesticide mfg	20	904	39.1	601.9	0.07	665.8
2545	Soap and other detergent mfg	182	3 398	110.4	1 046.5	0.11	308.0
2546	Cosmetic and toiletry preparation mfg	91	3 270	113.0	705.1	0.16	215.6
2547	Ink mfg	33	716	25.2	218.9	0.12	305.7
2549	Chemical product mfg n.e.c.	166	3 329	120.3	871.8	0.14	261.9
254	Total	823	29 461	1 101.6	8 707.8	0.13	295.6
Rubber product mfg							
2551	Rubber tyre mfg	86	3 934	179.0	876.8	0.20	222.9
2559	Rubber product mfg n.e.c.	190	3 981	114.3	528.9	0.22	132.9
255	Total	276	7 915	293.2	1 405.7	0.21	177.6
Plastic product mfg							
2561	Plastic blow moulded product mfg	80	3 014	93.7	600.0	0.16	199.1
2562	Plastic extruded product mfg	122	4 230	132.9	865.0	0.15	204.5
2563	Plastic bag and film mfg	192	7 068	246.1	1 522.9	0.16	215.5
2564	Plastic product, rigid fibre reinforced, mfg	186	1 702	40.0	204.5	0.20	120.2
2565	Plastic foam product mfg	64	1 679	49.1	364.6	0.13	217.2
2566	Plastic injection moulded product mfg	823	14 886	394.4	1 847.4	0.21	124.1
256	Total	1 468	32 579	956.1	5 404.5	0.18	165.9
<b>25</b>	<b>Total petroleum, coal, chemical and associated product mfg</b>	<b>3 009</b>	<b>88 344</b>	<b>3 234.2</b>	<b>29 155.4</b>	<b>0.11</b>	<b>330.0</b>

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
<b>NON-METALLIC MINERAL PRODUCT MFG</b>							
261	Glass and glass product mfg	275	5 572	213.2	1 172.8	0.18	210.5
Ceramic mfg							
2621	Clay brick mfg	83	4 983	167.5	832.5	0.20	167.1
2622	Ceramic product mfg	49	1 175	44.5	232.4	0.19	197.7
2623	Ceramic tile and pipe mfg	40	1 262	41.1	177.6	0.23	140.7
2629	Ceramic product mfg n.e.c.	258	2 444	59.0	224.7	0.26	91.9
262	Total	429	9 865	312.1	1 467.1	0.21	148.7
Cement, lime, plaster and concrete product mfg							
2631	Cement and lime mfg	19	2 118	102.4	1 024.0	0.10	483.5
2632	Plaster product mfg	117	2 225	78.3	635.4	0.12	285.6
2633	Concrete slurry mfg	244	4 780	154.0	1 886.4	0.08	394.7
2634	Concrete pipe and box culvert mfg	82	1 640	56.0	269.1	0.21	164.1
2635	Concrete product mfg n.e.c.	404	7 406	227.1	1 312.7	0.17	177.2
263	Total	866	18 168	617.8	5 127.6	0.12	282.2
264	Non-metallic mineral product mfg n.e.c.	339	4 595	145.7	841.2	0.17	183.1
<b>26</b>	<b>Total non-metallic mineral product mfg</b>	<b>1 909</b>	<b>38 200</b>	<b>1 288.7</b>	<b>8 608.7</b>	<b>0.15</b>	<b>225.4</b>
<b>METAL PRODUCT MFG</b>							
Iron and steel mfg							
2711	Basic iron and steel mfg	218	22 825	1 032.7	8 337.6	0.12	365.3
2712	Iron and steel casting and forging	201	6 207	202.8	892.7	0.23	143.8
2713	Steel pipe and tube mfg	76	2 782	97.2	658.3	0.15	236.6
271	Total	496	31 814	1 332.8	9 888.7	0.13	310.8
Basic non-ferrous metal mfg							
2721	Alumina production	7	6 120	291.1	2 813.3	0.10	459.7
2722	Aluminium smelting	19	5 528	245.6	2 757.8	0.09	498.9
2723	Copper, silver, lead and zinc smelting, refining	24	3 777	190.9	2 220.3	0.09	587.8
2729	Basic non-ferrous metal mfg n.e.c.	43	1 768	72.2	1 074.1	0.07	607.5
272	Total	92	17 194	799.8	8 865.5	0.09	515.6

For footnotes see end of table.

## 5

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
AUSTRALIA, 1993-94—continued

Industry class		Establish- ments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
Non-ferrous basic metal product mfg							
2731	Aluminium rolling, drawing, extruding	42	3 913	157.3	1 255.4	0.13	320.8
2732	Non-ferrous metal rolling, drawing, extruding n.e.c.	31	1 560	60.7	605.4	0.10	388.1
2733	Non-ferrous metal casting	89	1 714	49.6	187.6	0.26	109.5
273	<i>Total</i>	163	7 187	267.6	2 048.4	0.13	285.0
Structural metal product mfg							
2741	Structural steel fabricating	1 053	15 364	440.8	2 844.9	0.15	185.2
2742	Architectural aluminium product mfg	990	12 033	309.6	1 564.0	0.20	130.0
2749	Structural metal product mfg n.e.c.	490	4 606	107.6	541.8	0.20	117.6
274	<i>Total</i>	2 533	32 003	858.1	4 950.8	0.17	154.7
Sheet metal product mfg							
2751	Metal container mfg	117	4 749	167.4	1 221.0	0.14	257.1
2759	Sheet metal product mfg n.e.c.	1 023	13 115	350.6	1 713.5	0.20	130.7
275	<i>Total</i>	1 141	17 864	518.0	2 934.5	0.18	164.3
Fabricated metal product mfg							
2761	Hand tool and general hardware mfg	202	2 390	60.2	214.7	0.28	89.8
2762	Spring and wire product mfg	307	6 583	192.4	1 169.9	0.16	177.7
2763	Nut, bolt, screw and rivet mfg	112	2 600	80.2	392.0	0.20	150.8
2764	Metal coating and finishing	605	6 160	152.1	521.5	0.29	84.7
2765	Non-ferrous pipe fitting mfg	69	2 776	77.0	339.5	0.23	122.3
2769	Fabricated metal product mfg n.e.c.	1 803	19 006	506.9	2 092.5	0.24	110.1
276	<i>Total</i>	3 098	39 516	1 068.8	4 730.1	0.23	119.7
<b>27</b>	<b>Total metal product mfg</b>	<b>7 522</b>	<b>145 577</b>	<b>4 845.0</b>	<b>33 417.9</b>	<b>0.14</b>	<b>229.6</b>
MACHINERY AND EQUIPMENT MFG							
Motor vehicle and part mfg							
2811	Motor vehicle mfg	79	22 541	777.9	8 994.6	0.09	399.0
2812	Motor vehicle body mfg	451	6 300	151.7	730.5	0.21	116.0
2813	Automotive electrical and instrument mfg	63	3 704	99.4	595.8	0.17	160.9
2819	Automotive component mfg n.e.c.	798	20 247	604.0	2 560.1	0.24	126.4
281	<i>Total</i>	1 391	52 792	1 633.0	12 881.1	0.13	244.0

For footnotes see end of table.

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MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY CLASS  
AUSTRALIA, 1993-94—continued

Industry class		Establish- ments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
Other transport equipment mfg							
2821	Shipbuilding	64	5 842	252.7	1 477.2	0.17	252.9
2822	Boatbuilding	473	3 239	65.5	275.3	0.24	85.0
2823	Railway equipment mfg	37	5 012	172.9	924.7	0.19	184.5
2824	Aircraft mfg	269	12 441	557.9	1 391.6	0.40	111.9
2829	Transport equipment mfg n.e.c.	63	563	12.6	52.9	0.24	93.9
282	<i>Total</i>	905	27 097	1 061.7	4 121.6	0.26	152.1
Photographic and scientific equipment mfg							
2831	Photographic and optical good mfg	146	2 967	94.7	703.5	0.13	237.1
2832	Medical and surgical equipment mfg	673	4 126	105.6	333.5	0.32	80.8
2839	Professional and scientific equipment mfg n.e.c.	251	4 990	173.8	600.7	0.29	120.4
283	<i>Total</i>	1 070	12 083	374.1	1 637.7	0.23	135.5
Electronic equipment mfg							
2841	Computer and business machine mfg	160	2 466	81.8	989.1	0.08	401.1
2842	Telecommunication, broadcasting and transceiving equipment mfg	131	6 763	252.4	1 831.6	0.14	270.8
2849	Electronic equipment mfg n.e.c.	476	6 081	172.4	852.3	0.20	140.1
284	<i>Total</i>	767	15 310	506.7	3 673.0	0.14	239.9
Electrical equipment and appliance mfg							
2851	Household appliance mfg	352	13 726	371.0	2 145.2	0.17	156.3
2852	Electric cable and wire mfg	52	4 250	164.4	1 221.1	0.13	287.3
2853	Battery mfg	18	988	30.9	225.9	0.14	228.7
2854	Electric light and sign mfg	336	4 558	123.3	542.6	0.23	119.0
2859	Electrical equipment mfg n.e.c.	730	16 026	464.6	2 074.4	0.22	129.4
285	<i>Total</i>	1 489	39 548	1 154.2	6 209.3	0.19	157.0

For footnotes see end of table.

Industry class		Establish- ments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover	Ratio of wages and salaries to turnover	Turnover per person employed <sup>5</sup>
ANZSIC code	Description	No.	No.	\$m	\$m	Ratio	\$'000
Industrial machinery and equipment mfg							
2861	Agricultural machinery mfg	422	6 085	149.6	765.7	0.20	125.8
2862	Mining and construction machinery mfg	269	5 396	166.8	815.1	0.20	151.1
2863	Food processing machinery mfg	108	1 802	57.2	253.3	0.23	140.6
2864	Machine tool and part mfg	740	7 495	217.3	704.0	0.31	93.9
2865	Lifting and material handling equipment mfg	409	8 313	271.6	1 310.2	0.21	157.6
2866	Pump and compressor mfg	112	2 685	88.3	441.5	0.20	164.4
2867	Commercial space heating and cooling equipment mfg	69	2 582	83.1	357.1	0.23	138.3
2869	Industrial machinery and equipment mfg n.e.c.	1 238	14 359	418.3	1 642.3	0.25	114.4
286	<i>Total</i>	3 367	48 717	1 452.3	6 289.3	0.23	129.1
<b>28</b>	<b>Total machinery and equipment mfg</b>	<b>8 988</b>	<b>195 546</b>	<b>6 182.0</b>	<b>34 811.9</b>	<b>0.18</b>	<b>178.0</b>
OTHER MANUFACTURING							
Prefabricated building mfg							
2911	Prefabricated metal building mfg	186	2 110	48.2	392.8	0.12	186.2
2919	Prefabricated building mfg n.e.c.	56	528	11.8	93.5	0.13	177.0
291	<i>Total</i>	242	2 637	60.0	486.3	0.12	184.4
Furniture mfg							
2921	Wooden furniture and upholstered seat mfg	3 222	27 922	580.4	2 440.2	0.24	87.4
2922	Sheet metal furniture mfg	185	3 084	87.2	379.8	0.23	123.2
2923	Mattress mfg (except rubber)	93	2 632	66.0	383.9	0.17	145.9
2929	Furniture mfg n.e.c.	541	5 986	144.7	640.7	0.23	107.0
292	<i>Total</i>	4 040	39 624	878.3	3 844.7	0.23	97.0
Miscellaneous manufacturing							
2941	Jewellery and silverware mfg	454	2 644	60.1	298.7	0.20	113.0
2942	Toy and sporting good mfg	299	2 271	46.6	230.7	0.20	101.6
2949	Manufacturing n.e.c.	938	6 807	154.2	651.2	0.24	95.7
294	<i>Total</i>	1 691	11 722	260.9	1 180.6	0.22	100.7
<b>29</b>	<b>Total other manufacturing</b>	<b>5 973</b>	<b>53 983</b>	<b>1 199.3</b>	<b>5 511.6</b>	<b>0.22</b>	<b>102.1</b>
<b>21-29</b>	<b>TOTAL MANUFACTURING</b>	<b>44 610</b>	<b>911 125</b>	<b>28 107.3</b>	<b>183 854.7</b>	<b>0.15</b>	<b>201.8</b>

<sup>1</sup> See paragraph 8 of the Explanatory Notes.

<sup>2</sup> See paragraphs 4 to 11 of the Explanatory Notes.

<sup>3</sup> Includes working proprietors.

<sup>4</sup> Excludes the drawings of working proprietors.

<sup>5</sup> Turnover divided by the number of persons employed at the end of June. Includes working proprietors.

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION  
STATES, TERRITORIES AND AUSTRALIA, 1993-94

Industry subdivision		Establishments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover
ANZSIC code	Description	No.	'000	\$m	\$m
NEW SOUTH WALES					
21	Food, beverage and tobacco mfg	998	50.4	1 629.2	12 332.8
22	Textile, clothing, footwear and leather mfg	1 530	22.6	520.7	2 866.1
23	Wood and paper product mfg	1 401	19.3	545.7	3 383.6
24	Printing, publishing and recorded media	2 048	35.2	1 184.4	5 480.2
25	Petroleum, coal, chemical and associated product mfg	1 049	33.5	1 244.2	11 383.8
26	Non-metallic mineral product mfg	573	11.6	398.8	2 730.2
27	Metal product mfg	2 743	55.2	1 986.1	12 984.4
28	Machinery and equipment mfg	3 047	62.2	2 045.5	9 626.0
29	Other manufacturing	1 788	16.2	384.0	1 752.1
<b>21-29</b>	<b>Total manufacturing</b>	<b>15 177</b>	<b>306.2</b>	<b>9 938.5</b>	<b>62 539.2</b>
VICTORIA					
21	Food, beverage and tobacco mfg	954	44.1	1 402.6	11 736.1
22	Textile, clothing, footwear and leather mfg	1 768	36.2	899.0	4 685.0
23	Wood and paper product mfg	977	16.0	503.5	3 017.2
24	Printing, publishing and recorded media	1 530	26.3	855.9	3 876.6
25	Petroleum, coal, chemical and associated product mfg	970	33.5	1 282.7	9 976.7
26	Non-metallic mineral product mfg	510	9.8	343.8	2 073.2
27	Metal product mfg	1 959	35.4	1 125.3	7 431.2
28	Machinery and equipment mfg	2 691	69.4	2 259.7	14 367.3
29	Other manufacturing	1 704	15.5	351.7	1 658.6
<b>21-29</b>	<b>Total manufacturing</b>	<b>13 063</b>	<b>286.1</b>	<b>9 024.3</b>	<b>58 821.9</b>
QUEENSLAND					
21	Food, beverage and tobacco mfg	628	35.7	1 003.0	8 403.2
22	Textile, clothing, footwear and leather mfg	623	6.0	120.2	570.1
23	Wood and paper product mfg	817	11.6	295.5	1 656.2
24	Printing, publishing and recorded media	772	11.2	317.7	1 222.5
25	Petroleum, coal, chemical and associated product mfg	456	8.8	278.4	3 433.4
26	Non-metallic mineral product mfg	368	7.9	256.9	1 887.2
27	Metal product mfg	1 370	24.5	699.9	5 632.8
28	Machinery and equipment mfg	1 456	22.0	594.2	2 643.8
29	Other manufacturing	1 221	11.0	225.9	1 024.1
<b>21-29</b>	<b>Total manufacturing</b>	<b>7 709</b>	<b>138.5</b>	<b>3 791.6</b>	<b>26 473.4</b>

For footnotes see end of table.



## 6

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY INDUSTRY SUBDIVISION  
STATES, TERRITORIES AND AUSTRALIA, 1993-94—continued

Industry subdivision		Establishments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover
ANZSIC code	Description	No.	'000	\$m	\$m
SOUTH AUSTRALIA					
21	Food, beverage and tobacco mfg	407	16.0	429.2	3 294.6
22	Textile, clothing, footwear and leather mfg	224	5.5	141.0	816.0
23	Wood and paper product mfg	255	6.1	184.8	978.5
24	Printing, publishing and recorded media	333	5.4	153.8	637.2
25	Petroleum, coal, chemical and associated product mfg	224	6.3	203.4	1 400.4
26	Non-metallic mineral product mfg	152	2.8	91.5	550.2
27	Metal product mfg	547	11.7	358.8	2 360.6
28	Machinery and equipment mfg	694	27.9	895.4	6 340.1
29	Other manufacturing	458	4.5	95.6	430.2
<b>21-29</b>	<b>Total manufacturing</b>	<b>3 294</b>	<b>86.2</b>	<b>2 553.5</b>	<b>16 807.7</b>
WESTERN AUSTRALIA					
21	Food, beverage and tobacco mfg	351	10.9	312.5	2 673.8
22	Textile, clothing, footwear and leather mfg	228	3.4	78.2	296.7
23	Wood and paper product mfg	319	4.5	126.5	691.6
24	Printing, publishing and recorded media	403	6.0	169.4	645.0
25	Petroleum, coal, chemical and associated product mfg	241	5.3	194.7	2 736.9
26	Non-metallic mineral product mfg	212	4.8	153.7	983.7
27	Metal product mfg	680	14.1	490.4	3 706.1
28	Machinery and equipment mfg	878	10.7	295.5	1 510.4
29	Other manufacturing	624	5.6	116.5	531.6
<b>21-29</b>	<b>Total manufacturing</b>	<b>3 936</b>	<b>65.4</b>	<b>1 937.6</b>	<b>13 775.8</b>
TASMANIA					
21	Food, beverage and tobacco mfg	132	6.0	165.4	1 342.3
22	Textile, clothing, footwear and leather mfg	51	1.8	45.3	188.0
23	Wood and paper product mfg	147	3.6	115.1	919.9
24	Printing, publishing and recorded media	80	1.8	50.4	143.8
25	Petroleum, coal, chemical and associated product mfg	52	0.9	28.0	210.7
26	Non-metallic mineral product mfg	55	1.0	29.2	244.2
27	Metal product mfg	139	3.3	132.7	796.6
28	Machinery and equipment mfg	141	2.5	66.8	236.9
29	Other manufacturing	109	0.7	13.4	54.2
<b>21-29</b>	<b>Total manufacturing</b>	<b>906</b>	<b>21.6</b>	<b>646.2</b>	<b>4 136.5</b>

For footnotes see end of table.

Industry subdivision		Establishments at 30 June <sup>2</sup>	Employment at end of June <sup>3</sup>	Wages and salaries <sup>4</sup>	Turnover
ANZSIC code	Description	No.	'000	\$m	\$m
NORTHERN TERRITORY					
21	Food, beverage and tobacco mfg	24	0.5	11.7	106.0
22	Textile, clothing, footwear and leather mfg	18	0.1	2.7	8.6
23	Wood and paper product mfg	26	0.2	3.8	18.5
24	Printing, publishing and recorded media	31	0.4	9.8	34.5
25	Petroleum, coal, chemical and associated product mfg	11	0.1	1.9	8.5
26	Non-metallic mineral product mfg	16	0.2	6.8	58.6
27	Metal product mfg	50	1.1	n.p.	n.p.
28	Machinery and equipment mfg	41	0.3	n.p.	n.p.
29	Other manufacturing	26	0.1	1.8	7.7
<b>21-29</b>	<b>Total manufacturing</b>	<b>242</b>	<b>2.9</b>	<b>91.2</b>	<b>745.4</b>
AUSTRALIAN CAPITAL TERRITORY					
21	Food, beverage and tobacco mfg	20	0.6	15.7	69.6
22	Textile, clothing, footwear and leather mfg	14	0.1	1.8	6.3
23	Wood and paper product mfg	32	0.4	10.7	54.0
24	Printing, publishing and recorded media	69	1.7	53.0	195.0
25	Petroleum, coal, chemical and associated product mfg	7	—	1.0	5.0
26	Non-metallic mineral product mfg	23	0.2	7.9	81.3
27	Metal product mfg	34	0.3	n.p.	n.p.
28	Machinery and equipment mfg	41	0.6	n.p.	n.p.
29	Other manufacturing	44	0.4	10.3	53.2
<b>21-29</b>	<b>Total manufacturing</b>	<b>284</b>	<b>4.2</b>	<b>124.4</b>	<b>554.7</b>
AUSTRALIA					
21	Food, beverage and tobacco mfg	3 514	164.2	4 969.2	39 958.3
22	Textile, clothing, footwear and leather mfg	4 456	75.7	1 808.8	9 436.7
23	Wood and paper product mfg	3 973	61.6	1 785.6	10 719.4
24	Printing, publishing and recorded media	5 265	88.0	2 794.3	12 234.8
25	Petroleum, coal, chemical and associated product mfg	3 009	88.3	3 234.2	29 155.4
26	Non-metallic mineral product mfg	1 909	38.2	1 288.7	8 608.7
27	Metal product mfg	7 522	145.6	4 845.0	33 417.9
28	Machinery and equipment mfg	8 988	195.5	6 182.0	34 811.9
29	Other manufacturing	5 973	54.0	1 199.3	5 511.6
<b>21-29</b>	<b>Total manufacturing</b>	<b>44 610</b>	<b>911.1</b>	<b>28 107.3</b>	<b>183 854.7</b>

<sup>1</sup> See paragraph 8 of the Explanatory Notes.<sup>2</sup> See paragraphs 4 to 11 of the Explanatory Notes.<sup>3</sup> Includes working proprietors.<sup>4</sup> Excludes the drawings of working proprietors.

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	'000	%	\$m	%	\$m	%
<b>FOOD, BEVERAGE AND TOBACCO MFG</b>								
0-3 persons	627	17.8	1.4	0.8	23.9	0.5	217.8	0.6
4-9 persons	1 049	29.9	6.3	3.9	112.2	2.3	788.5	2.0
10-19 persons	624	17.8	8.3	5.0	161.5	3.3	1 432.6	3.6
20-49 persons	562	16.0	17.5	10.7	421.2	8.6	3 855.4	9.8
50-99 persons	272	7.7	18.9	11.5	523.1	10.7	4 781.3	12.1
<i>Total less than 100 persons</i>	<b>3 134</b>	<b>89.2</b>	<b>52.5</b>	<b>32.0</b>	<b>1 241.8</b>	<b>25.3</b>	<b>11 075.6</b>	<b>28.0</b>
100-199 persons	168	4.8	23.7	14.5	701.0	14.3	6 440.3	16.3
200-499 persons	160	4.6	52.0	31.7	1 673.1	34.1	12 901.6	32.6
500-999 persons	48	1.4	31.5	19.2	1 120.3	22.9	8 049.3	20.4
1 000 or more persons	4	0.1	4.5	2.7	165.0	3.4	1 070.0	2.7
<i>Total 100 or more persons</i>	<b>380</b>	<b>10.8</b>	<b>111.7</b>	<b>68.0</b>	<b>3 659.3</b>	<b>74.7</b>	<b>28 461.1</b>	<b>72.0</b>
<b>Total</b>	<b>3 514</b>	<b>100.0</b>	<b>164.2</b>	<b>100.0</b>	<b>4 901.1</b>	<b>100.0</b>	<b>39 536.7</b>	<b>100.0</b>
<b>TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MFG</b>								
0-3 persons	1 684	37.8	3.6	4.7	47.1	2.6	273.2	2.9
4-9 persons	1 492	33.5	8.4	11.1	135.0	7.5	693.7	7.4
10-19 persons	579	13.0	7.7	10.2	151.7	8.4	783.7	8.3
20-49 persons	396	8.9	11.6	15.3	258.6	14.4	1 455.0	15.5
50-99 persons	147	3.3	10.3	13.6	263.5	14.6	1 413.0	15.0
<i>Total less than 100 persons</i>	<b>4 299</b>	<b>96.5</b>	<b>41.6</b>	<b>55.0</b>	<b>855.8</b>	<b>47.5</b>	<b>4 618.6</b>	<b>49.1</b>
100-199 persons	100	2.2	13.5	17.8	371.3	20.6	2 046.3	21.8
200-499 persons	45	1.0	13.0	17.2	375.3	20.8	1 775.3	18.9
500-999 persons	10	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	1	—	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<b>156</b>	<b>3.5</b>	<b>34.1</b>	<b>45.0</b>	<b>944.7</b>	<b>52.5</b>	<b>4 782.3</b>	<b>50.9</b>
<b>Total</b>	<b>4 456</b>	<b>100.0</b>	<b>75.7</b>	<b>100.0</b>	<b>1 800.6</b>	<b>100.0</b>	<b>9 400.9</b>	<b>100.0</b>

For footnotes see end of table.

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>6</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	'000	%	\$m	%	\$m	%
WOOD AND PAPER PRODUCT MFG								
0-3 persons	1 398	35.2	3.1	5.0	48.6	2.7	240.0	2.2
4-9 persons	1 391	35.0	8.1	13.1	152.7	8.6	699.7	6.5
10-19 persons	611	15.4	8.2	13.3	188.9	10.6	925.0	8.6
20-49 persons	363	9.1	10.7	17.3	268.6	15.1	1 542.1	14.4
50-99 persons	103	2.6	7.2	11.7	216.8	12.2	1 461.7	13.6
<i>Total less than 100 persons</i>	<i>3 865</i>	<i>97.3</i>	<i>37.3</i>	<i>60.5</i>	<i>875.6</i>	<i>49.1</i>	<i>4 868.6</i>	<i>45.5</i>
100-199 persons	62	1.6	8.9	14.4	285.0	16.0	1 754.3	16.4
200-499 persons	39	1.0	11.1	18.0	416.6	23.4	2 851.2	26.6
500-999 persons	7	0.2	4.4	7.1	206.4	11.6	1 236.3	11.5
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>108</i>	<i>2.7</i>	<i>24.3</i>	<i>39.5</i>	<i>908.0</i>	<i>50.9</i>	<i>5 841.8</i>	<i>54.5</i>
<b>Total</b>	<b>3 973</b>	<b>100.0</b>	<b>61.6</b>	<b>100.0</b>	<b>1 783.6</b>	<b>100.0</b>	<b>10 710.4</b>	<b>100.0</b>
PRINTING, PUBLISHING AND RECORDED MEDIA								
0-3 persons	1 852	35.2	3.9	4.4	77.7	2.8	378.3	3.1
4-9 persons	1 862	35.4	10.9	12.3	247.4	8.9	963.7	7.9
10-19 persons	774	14.7	10.3	11.7	264.0	9.5	982.5	8.0
20-49 persons	477	9.1	14.5	16.5	421.3	15.1	1 877.8	15.4
50-99 persons	161	3.1	10.4	11.8	336.4	12.1	1 404.4	11.5
<i>Total less than 100 persons</i>	<i>5 126</i>	<i>97.4</i>	<i>49.9</i>	<i>56.7</i>	<i>1 346.8</i>	<i>48.4</i>	<i>5 606.8</i>	<i>45.9</i>
100-199 persons	89	1.7	11.9	13.5	399.9	14.4	1 921.9	15.7
200-499 persons	34	0.6	10.3	11.7	350.8	12.6	1 416.9	11.6
500-999 persons	9	0.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	7	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<i>139</i>	<i>2.6</i>	<i>38.1</i>	<i>43.3</i>	<i>1 436.9</i>	<i>51.6</i>	<i>6 598.5</i>	<i>54.1</i>
<b>Total</b>	<b>5 265</b>	<b>100.0</b>	<b>88.0</b>	<b>100.0</b>	<b>2 783.7</b>	<b>100.0</b>	<b>12 205.3</b>	<b>100.0</b>

For footnotes see end of table.

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	'000	%	\$m	%	\$m	%
PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MFG								
0-3 persons	757	25.2	1.6	1.8	31.9	1.0	334.2	1.1
4-9 persons	856	28.4	5.0	5.7	120.6	3.7	734.3	2.5
10-19 persons	508	16.9	6.9	7.8	192.6	6.0	1 450.5	5.0
20-49 persons	470	15.6	14.8	16.7	451.4	14.0	3 341.7	11.5
50-99 persons	204	6.8	13.8	15.6	472.4	14.6	3 621.1	12.4
<i>Total less than 100 persons</i>	<b>2 796</b>	<b>92.9</b>	<b>42.1</b>	<b>47.6</b>	<b>1 268.8</b>	<b>39.3</b>	<b>9 481.8</b>	<b>32.6</b>
100-199 persons	128	4.3	17.6	19.9	676.2	20.9	4 955.6	17.0
200-499 persons	77	2.6	22.2	25.2	933.8	28.9	9 197.9	31.6
500-999 persons	8	0.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1 000 or more persons	1	—	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
<i>Total 100 or more persons</i>	<b>214</b>	<b>7.1</b>	<b>46.3</b>	<b>52.4</b>	<b>1 959.6</b>	<b>60.7</b>	<b>19 646.6</b>	<b>67.4</b>
<b>Total</b>	<b>3 009</b>	<b>100.0</b>	<b>88.3</b>	<b>100.0</b>	<b>3 228.4</b>	<b>100.0</b>	<b>29 128.5</b>	<b>100.0</b>
NON-METALLIC MINERAL PRODUCT MFG								
0-3 persons	690	36.1	1.5	3.8	31.1	2.4	189.7	2.2
4-9 persons	613	32.1	3.6	9.3	88.7	6.9	492.5	5.7
10-19 persons	255	13.4	3.4	8.9	87.6	6.8	501.4	5.8
20-49 persons	174	9.1	5.2	13.7	162.9	12.7	1 130.3	13.1
50-99 persons	89	4.7	6.5	17.1	228.5	17.8	1 477.3	17.2
<i>Total less than 100 persons</i>	<b>1 820</b>	<b>95.3</b>	<b>20.2</b>	<b>52.8</b>	<b>598.9</b>	<b>46.6</b>	<b>3 791.1</b>	<b>44.1</b>
100-199 persons	61	3.2	8.8	23.0	331.2	25.8	2 517.2	29.3
200-499 persons	24	1.3	6.9	18.2	263.6	20.5	1 709.4	19.9
500-999 persons	4	0.2	2.3	6.0	92.0	7.2	578.0	6.7
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<b>89</b>	<b>4.7</b>	<b>18.0</b>	<b>47.2</b>	<b>686.8</b>	<b>53.4</b>	<b>4 804.5</b>	<b>55.9</b>
<b>Total</b>	<b>1 909</b>	<b>100.0</b>	<b>38.2</b>	<b>100.0</b>	<b>1 285.6</b>	<b>100.0</b>	<b>8 595.6</b>	<b>100.0</b>

For footnotes see end of table.

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE  
AND INDUSTRY SUBDIVISION, AUSTRALIA, 1993-94—continued

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4,5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	'000	%	\$m	%	\$m	%
<b>METAL PRODUCT MFG</b>								
0-3 persons	2 395	31.8	5.1	3.5	91.3	1.9	1 008.2	3.0
4-9 persons	2 677	35.6	15.7	10.8	338.7	7.0	1 527.3	4.6
10-19 persons	1 208	16.1	16.1	11.0	396.3	8.2	1 870.5	5.6
20-49 persons	729	9.7	21.8	15.0	598.4	12.4	3 339.5	10.0
50-99 persons	314	4.2	22.3	15.3	722.4	15.0	4 549.9	13.7
<i>Total less than 100 persons</i>	<i>7 323</i>	<i>97.4</i>	<i>81.0</i>	<i>55.6</i>	<i>2 147.1</i>	<i>44.6</i>	<i>12 295.3</i>	<i>36.9</i>
100-199 persons	131	1.7	18.0	12.4	582.2	12.1	4 205.7	12.6
200-499 persons	47	0.6	14.4	9.9	575.8	11.9	4 836.5	14.5
500-999 persons	14	0.2	10.4	7.1	447.0	9.3	3 686.6	11.1
1 000 or more persons	8	0.1	21.8	15.0	1 066.7	22.1	8 301.9	24.9
<i>Total 100 or more persons</i>	<i>200</i>	<i>2.7</i>	<i>64.6</i>	<i>44.4</i>	<i>2 671.7</i>	<i>55.4</i>	<i>21 030.8</i>	<i>63.1</i>
<b>Total</b>	<b>7 522</b>	<b>100.0</b>	<b>145.6</b>	<b>100.0</b>	<b>4 818.8</b>	<b>100.0</b>	<b>33 326.1</b>	<b>100.0</b>
<b>MACHINERY AND EQUIPMENT MFG</b>								
0-3 persons	3 277	36.5	6.8	3.5	130.8	2.1	635.3	1.8
4-9 persons	2 894	32.2	16.7	8.6	372.7	6.0	1 623.2	4.7
10-19 persons	1 350	15.0	17.9	9.1	464.2	7.5	2 023.8	5.8
20-49 persons	838	9.3	25.2	12.9	723.3	11.7	3 539.6	10.2
50-99 persons	307	3.4	21.2	10.8	676.2	11.0	3 395.3	9.8
<i>Total less than 100 persons</i>	<i>8 666</i>	<i>96.4</i>	<i>87.9</i>	<i>45.0</i>	<i>2 367.2</i>	<i>38.4</i>	<i>11 217.2</i>	<i>32.3</i>
100-199 persons	179	2.0	24.5	12.5	822.6	13.3	4 582.4	13.2
200-499 persons	94	1.0	28.3	14.5	958.4	15.5	5 630.8	16.2
500-999 persons	33	0.4	21.9	11.2	763.4	12.4	4 271.7	12.3
1 000 or more persons	16	0.2	32.9	16.8	1 259.6	20.4	9 066.2	26.1
<i>Total 100 or more persons</i>	<i>322</i>	<i>3.6</i>	<i>107.6</i>	<i>55.0</i>	<i>3 804.1</i>	<i>61.6</i>	<i>23 551.1</i>	<i>67.7</i>
<b>Total</b>	<b>8 988</b>	<b>100.0</b>	<b>195.5</b>	<b>100.0</b>	<b>6 171.3</b>	<b>100.0</b>	<b>34 768.3</b>	<b>100.0</b>

For footnotes see end of table.

Employment size group	Establishments at 30 June <sup>2</sup>		Employment at end of June <sup>3</sup>		Wages and salaries <sup>4, 5</sup>		Turnover <sup>5</sup>	
	Number	Proportion	Number	Proportion	Amount	Proportion	Amount	Proportion
	No.	%	'000	%	\$m	%	\$m	%
<b>OTHER MANUFACTURING</b>								
0-3 persons	2 554	42.8	5.5	10.1	82.9	7.0	391.0	7.1
4-9 persons	2 102	35.2	11.9	22.1	217.0	18.2	923.8	16.9
10-19 persons	764	12.8	10.0	18.5	214.8	18.0	920.0	16.8
20-49 persons	382	6.4	11.2	20.8	264.3	22.2	1 283.1	23.4
50-99 persons	126	2.1	8.4	15.5	210.3	17.7	1 016.5	18.5
<i>Total less than 100 persons</i>	<i>5 928</i>	<i>99.2</i>	<i>47.0</i>	<i>87.1</i>	<i>989.4</i>	<i>83.1</i>	<i>4 534.3</i>	<i>82.7</i>
100-199 persons	38	0.6	5.1	9.5	139.7	11.7	679.9	12.4
200-499 persons	7	0.1	1.9	3.4	61.4	5.2	266.3	4.9
500-999 persons	—	—	—	—	—	—	—	—
1 000 or more persons	—	—	—	—	—	—	—	—
<i>Total 100 or more persons</i>	<i>45</i>	<i>0.8</i>	<i>7.0</i>	<i>12.9</i>	<i>201.2</i>	<i>16.9</i>	<i>946.2</i>	<i>17.3</i>
<b>Total</b>	<b>5 973</b>	<b>100.0</b>	<b>54.0</b>	<b>100.0</b>	<b>1 190.5</b>	<b>100.0</b>	<b>5 480.6</b>	<b>100.0</b>
<b>TOTAL MANUFACTURING</b>								
0-3 persons	15 234	34.1	32.4	3.6	565.3	2.0	3 667.6	2.0
4-9 persons	14 937	33.5	86.7	9.5	1 785.0	6.4	8 446.8	4.6
10-19 persons	6 673	15.0	88.7	9.7	2 121.5	7.6	10 889.9	5.9
20-49 persons	4 391	9.8	132.6	14.6	3 569.9	12.8	21 364.5	11.7
50-99 persons	1 723	3.9	119.1	13.1	3 649.7	13.1	23 120.5	12.6
<i>Total less than 100 persons</i>	<i>42 958</i>	<i>96.3</i>	<i>459.5</i>	<i>50.4</i>	<i>11 691.4</i>	<i>41.8</i>	<i>67 489.3</i>	<i>36.8</i>
100-199 persons	956	2.1	132.1	14.5	4 309.1	15.4	29 103.7	15.9
200-499 persons	527	1.2	160.1	17.6	5 608.9	20.1	40 585.9	22.2
500-999 persons	133	0.3	88.6	9.7	3 361.0	12.0	25 294.9	13.8
1 000 or more persons	37	0.1	71.0	7.8	2 993.4	10.7	20 678.6	11.3
<i>Total 100 or more persons</i>	<i>1 653</i>	<i>3.7</i>	<i>451.7</i>	<i>49.6</i>	<i>16 272.3</i>	<i>58.2</i>	<i>115 663.1</i>	<i>63.2</i>
<b>Total</b>	<b>44 610</b>	<b>100.0</b>	<b>911.1</b>	<b>100.0</b>	<b>27 963.7</b>	<b>100.0</b>	<b>183 152.4</b>	<b>100.0</b>

<sup>1</sup> See paragraph 8 of the Explanatory Notes.<sup>2</sup> See paragraphs 4 to 11 of the Explanatory Notes.<sup>3</sup> Includes working proprietors.<sup>4</sup> Excludes the drawings of working proprietors.<sup>5</sup> Figures may be slightly less than those presented in other tables, because they exclude those manufacturing establishments which operated during 1993-94 but were not operating at 30 June 1994. See paragraph 27 of the Explanatory Notes.

MANUFACTURING ESTABLISHMENTS : SUMMARY STATISTICS AND CONCENTRATION RATIOS<sup>2</sup> BY INDUSTRY SUBDIVISION, AUSTRALIA, 1993-94

Industry subdivision	ANZSIC code	Description	Enterprise groups ranked by turnover		Enterprise groups at 30 June		Establishments at 30 June <sup>3</sup>		Employment at end of June <sup>4</sup>		Wages and salaries <sup>5</sup>		Turnover	
			No.	Ratio	No.	Ratio	No.	Ratio	'000	Ratio	'000	\$m	Ratio	\$m
21		Food, beverage and tobacco mfg	First four	4	—	75	0.02	18.3	0.11	661.3	0.13	5 543.8	0.14	
			Second four	4	—	61	0.02	11.7	0.07	419.1	0.08	3 829.3	0.10	
			Third four	4	—	47	0.01	10.3	0.06	354.7	0.07	3 356.5	0.08	
			Fourth four	4	—	50	0.01	8.5	0.05	318.3	0.06	2 825.0	0.07	
			Fifth four	4	—	33	0.01	5.9	0.04	197.9	0.04	2 045.1	0.05	
			Remainder	2 939	0.99	3 248	0.92	109.5	0.67	3 017.9	0.61	22 358.6	0.56	
			Industry total	2 959	1.00	3 514	1.00	164.2	1.00	4 969.2	1.00	39 958.3	1.00	
22		Textile, clothing, footwear and leather mfg	First four	4	—	30	0.01	7.5	0.10	218.4	0.12	1 405.4	0.15	
			Second four	4	—	19	—	4.3	0.06	133.0	0.07	691.9	0.07	
			Third four	4	—	11	—	1.9	0.02	57.0	0.03	376.8	0.04	
			Fourth four	4	—	11	—	2.6	0.03	72.6	0.04	324.7	0.03	
			Fifth four	4	—	8	—	1.7	0.02	47.2	0.03	291.4	0.03	
			Remainder	4 320	1.00	4 377	0.98	57.7	0.76	1 280.7	0.71	6 346.4	0.67	
			Industry total	4 340	1.00	4 456	1.00	75.7	1.00	1 808.8	1.00	9 436.7	1.00	
23		Wood and paper product mfg	First four	4	—	76	0.02	12.7	0.21	543.6	0.30	3 909.4	0.36	
			Second four	4	—	35	0.01	4.8	0.08	181.5	0.10	1 157.4	0.11	
			Third four	4	—	16	—	2.9	0.05	98.1	0.05	645.6	0.06	
			Fourth four	4	—	27	0.01	2.1	0.03	63.9	0.04	378.3	0.04	
			Fifth four	4	—	8	—	1.2	0.02	37.6	0.02	233.9	0.02	
			Remainder	3 727	0.99	3 811	0.96	37.9	0.62	861.0	0.48	4 394.8	0.41	
			Industry total	3 747	1.00	3 973	1.00	61.6	1.00	1 785.6	1.00	10 719.4	1.00	

For footnotes see end of table.



ANZSIC code	Industry subdivision	Description	Enterprise groups ranked by turnover		Enterprise groups at 30 June		Establishments at 30 June <sup>3</sup>		Employment at end of June <sup>4</sup>		Wages and salaries <sup>5</sup>		Turnover	
			No.	Ratio	No.	Ratio	No.	Ratio	'000	Ratio	\$m	Ratio	\$m	Ratio
24	Printing, publishing and recorded media	First four	4	—	55	0.01	16.2	0.18	686.5	0.25	3 126.5	0.26		
		Second four	4	—	32	0.01	7.2	0.08	266.0	0.10	1 417.1	0.12		
		Third four	4	—	56	0.01	3.6	0.04	131.0	0.05	847.6	0.07		
		Fourth four	4	—	43	0.01	3.8	0.04	123.1	0.04	436.5	0.04		
		Fifth four	4	—	7	—	1.5	0.02	59.0	0.02	305.5	0.02		
		Remainder	4 955	1.00	5 072	0.96	55.7	0.63	1 528.7	0.55	6 101.5	0.50		
	Industry total	4 975	1.00	5 265	1.00	88.0	1.00	2 794.3	1.00	12 234.8	1.00			
25	Petroleum, coal, chemical and associated product mfg	First four	4	—	62	0.02	7.6	0.09	410.6	0.13	9 169.6	0.31		
		Second four	4	—	53	0.02	5.8	0.07	258.6	0.08	2 493.0	0.09		
		Third four	4	—	22	0.01	3.1	0.04	152.3	0.05	1 418.1	0.05		
		Fourth four	4	—	39	0.01	3.1	0.04	121.5	0.04	1 212.1	0.04		
		Fifth four	4	—	40	0.01	4.9	0.06	169.0	0.05	1 055.4	0.04		
		Remainder	2 514	0.99	2 793	0.93	63.7	0.72	2 122.2	0.66	13 807.3	0.47		
	Industry total	2 534	1.00	3 009	1.00	88.3	1.00	3 234.2	1.00	29 155.4	1.00			
26	Non-metallic mineral product mfg	First four	4	—	187	0.10	15.2	0.40	591.4	0.46	4 527.1	0.53		
		Second four	4	—	27	0.01	4.1	0.11	172.2	0.13	1 086.5	0.13		
		Third four	4	—	20	0.01	1.8	0.05	72.5	0.06	535.6	0.06		
		Fourth four	4	—	17	0.01	1.2	0.03	43.3	0.03	265.7	0.03		
		Fifth four	4	—	11	0.01	0.8	0.02	26.8	0.02	152.8	0.02		
		Remainder	1 598	0.99	1 647	0.86	15.1	0.39	382.4	0.30	2 041.1	0.24		
	Industry total	1 618	1.00	1 909	1.00	38.2	1.00	1 288.7	1.00	8 608.7	1.00			

For footnotes see end of table.

Industry subdivision	ANZSIC code	Description	Enterprise groups ranked by turnover		Enterprise groups at 30 June		Establishments at 30 June <sup>3</sup>		Employment at end of June <sup>4</sup>		Wages and salaries <sup>5</sup>		Turnover	
			No.	Ratio	No.	Ratio	No.	Ratio	'000	Ratio	\$m	Ratio	\$m	Ratio
27		Metal product mfg	First four	4	—	78	0.01	28.0	0.19	1 330.0	0.27	12 390.6	0.37	
			Second four	4	—	23	—	7.3	0.05	354.8	0.07	3 011.0	0.09	
			Third four	4	—	61	0.01	6.8	0.05	268.5	0.06	2 594.3	0.08	
			Fourth four	4	—	41	0.01	7.9	0.05	274.7	0.06	1 999.0	0.06	
			Fifth four	4	—	40	0.01	3.6	0.02	179.3	0.04	1 457.1	0.04	
			Remainder	6 993	1.00	7 279	0.97	92.0	0.63	2 437.8	0.50	11 965.8	0.36	
			Industry total	7 013	1.00	7 522	1.00	145.6	1.00	4 845.0	1.00	33 417.9	1.00	
28		Machinery and equipment mfg	First four	4	—	30	—	22.7	0.12	771.3	0.12	8 417.6	0.24	
			Second four	4	—	48	0.01	13.1	0.07	575.5	0.09	2 322.8	0.07	
			Third four	4	—	14	—	6.5	0.03	245.3	0.04	1 881.6	0.05	
			Fourth four	4	—	16	—	4.7	0.02	175.7	0.03	1 589.3	0.05	
			Fifth four	4	—	20	—	5.1	0.03	169.4	0.03	1 218.1	0.03	
			Remainder	8 553	1.00	8 860	0.99	143.5	0.73	4 244.8	0.69	19 382.7	0.56	
			Industry total	8 573	1.00	8 988	1.00	195.5	1.00	6 182.0	1.00	34 811.9	1.00	
29		Other manufacturing	First four	4	—	33	0.01	2.8	0.05	76.6	0.06	454.6	0.08	
			Second four	4	—	8	—	1.3	0.02	42.5	0.04	227.9	0.04	
			Third four	4	—	7	—	1.0	0.02	33.8	0.03	140.1	0.03	
			Fourth four	4	—	4	—	0.4	0.01	13.3	0.01	109.8	0.02	
			Fifth four	4	—	5	—	0.5	0.01	17.8	0.01	82.2	0.01	
			Remainder	5 875	1.00	5 916	0.99	47.9	0.89	1 015.3	0.85	4 497.1	0.82	
			Industry total	5 895	1.00	5 973	1.00	54.0	1.00	1 199.3	1.00	5 511.6	1.00	

For footnotes see end of table.

Industry subdivision	ANZSIC code	Description	Enterprise groups at 30 June		Establishments at 30 June <sup>3</sup>		Employment at end of June <sup>4</sup>		Wages and salaries <sup>5</sup>		Turnover	
			No.	Ratio	No.	Ratio	'000	Ratio	\$m	Ratio	\$m	Ratio
		Enterprise groups ranked by turnover										
<b>21-29</b>		<b>Total manufacturing</b>	<b>4</b>	<b>—</b>	<b>186</b>	<b>—</b>	<b>43.3</b>	<b>0.05</b>	<b>1 904.1</b>	<b>0.07</b>	<b>18 555.0</b>	<b>0.10</b>
		First four	4	—	291	0.01	35.4	0.04	1 327.8	0.05	11 123.4	0.06
		Second four	4	—	278	0.01	35.4	0.04	1 260.6	0.04	9 131.7	0.05
		Third four	4	—	80	—	10.5	0.01	409.4	0.01	6 826.3	0.04
		Fourth four	4	—	73	—	20.4	0.02	681.6	0.02	5 202.3	0.03
		Fifth four	41 322	1.00	43 702	0.98	766.1	0.84	22 523.7	0.80	133 015.9	0.72
		Remainder	41 342	1.00	44 610	1.00	911.1	1.00	28 107.3	1.00	183 854.7	1.00
		Industry total										

<sup>1</sup> See paragraph 8 of the Explanatory Notes.

<sup>2</sup> See paragraphs 28 to 32 of the Explanatory Notes.

<sup>3</sup> See paragraphs 4 to 11 of the Explanatory Notes.

<sup>4</sup> Includes working proprietors.

<sup>5</sup> Excludes the drawings of working proprietors.

## 9

MANUFACTURING ESTABLISHMENTS<sup>1</sup>: COMPONENTS OF TURNOVER BY INDUSTRY SUBDIVISION, AUSTRALIA, 1993-94

Industry subdivision	Description	Sales and transfers out	Income from services	Total government subsidies	Rent, leasing and hiring income	Own account capital work	Turnover
ANZSIC code		\$m	\$m	\$m	\$m	\$m	\$m
21	Food, beverage and tobacco mfg	39 173.2	517.2	46.3	53.1	168.5	39 958.3
22	Textile, clothing, footwear and leather mfg	8 661.9	664.0	86.2	11.2	13.2	9 436.7
23	Wood and paper product mfg	10 481.2	147.5	28.2	7.5	55.0	10 719.4
24	Printing, publishing and recorded media	8 727.0	3 443.0	34.0	11.5	19.3	12 234.8
25	Petroleum, coal, chemical and associated product mfg	28 477.2	426.6	59.8	99.4	92.4	29 155.4
26	Non-metallic mineral product mfg	18 394.3	134.8	3.0	11.1	65.5	8 608.7
27	Metal product mfg	31 805.5	1 321.2	20.8	27.5	242.9	33 417.9
28	Machinery and equipment mfg	31 361.7	3 006.0	179.8	188.4	76.0	34 811.9
29	Other manufacturing	5 274.4	204.5	10.6	13.5	8.6	5 511.6
<b>21-29</b>	<b>Total manufacturing</b>	<b>172 356.5</b>	<b>9 864.8</b>	<b>468.7</b>	<b>423.3</b>	<b>741.5</b>	<b>183 854.7</b>

<sup>1</sup> See paragraph 8 of the Explanatory Notes.

## 10

MANUFACTURING MANAGEMENT UNITS<sup>1</sup>: EXPENDITURE ON ENVIRONMENTAL PROTECTION<sup>2</sup>  
BY INDUSTRY SUBDIVISION, AUSTRALIA, 1993-94<sup>3</sup>

Industry subdivision		Current expenditure on environmental protection		Capital expenditure to abate pollution	
			<i>Proportion of total turnover</i>		<i>Proportion of total capital expenditure</i>
ANZSIC code	Description	\$'000	%	\$'000	%
21	Food, beverage and tobacco mfg	79 231	0.2	45 139	1.2
22	Textile, clothing, footwear and leather mfg	15 719	0.2	2 742	1.0
23	Wood and paper product mfg	18 532	0.2	*42 444	6.9
24	Printing, publishing and recorded media	8 729	0.1	3 414	0.3
25	Petroleum, coal, chemical and associated product mfg	105 392	0.3	34 359	2.1
26	Non-metallic mineral product mfg	24 454	0.3	10 396	1.2
27	Metal product mfg	172 146	0.6	73 289	5.3
28	Machinery and equipment mfg	43 854	0.1	15 539	1.0
29	Other manufacturing	5 676	0.1	*472	*0.3
<b>21-29</b>	<b>Total manufacturing</b>	<b>473 733</b>	<b>0.3</b>	<b>227 794</b>	<b>2.0</b>

<sup>1</sup> See paragraph 7 of the Explanatory Notes.

<sup>2</sup> See paragraph 33 of the Explanatory Notes. Manufacturing management units which did not respond to the questions were treated as having nil expenditure.

<sup>3</sup> The basis for the collection of these data items in respect of 1993-94 differs from that previously used. See paragraph 23 of the Explanatory Notes.

MANUFACTURING MANAGEMENT UNITS<sup>1</sup>: DERIVATION OF INDUSTRY GROSS PRODUCT BY INDUSTRY SUBDIVISION, AUSTRALIA, REVISED DATA FOR 1992-93  
(\$ million)

Items	ANZSIC subdivision description and code										Total manufacturing 21-29
	Food, beverage and tobacco mfg 21	Textile, clothing, footwear and leather mfg 22	Wood and paper product mfg 23	Printing, publishing and recorded media 24	Petroleum, coal, chemical and associated product mfg 25	Non- metallic mineral product mfg 26	Metal product mfg 27	Machinery and equipment mfg 28	Other manufacturing 29		
Sales of goods	36 898.2	8 232.8	9 631.9	8 281.7	31 015.8	8 660.7	27 507.1	30 477.0	4 465.8	165 171.0	
Plus											
Other selected income	709.0	430.7	224.4	3 018.4	668.9	202.9	864.3	2 839.0	195.3	9 152.9	
<b>Turnover</b>	<b>37 607.3</b>	<b>8 663.4</b>	<b>9 856.3</b>	<b>11 300.1</b>	<b>31 684.7</b>	<b>8 863.7</b>	<b>28 371.3</b>	<b>33 316.0</b>	<b>4 661.2</b>	<b>174 324.0</b>	
Less											
Purchases and selected expenses	23 747.7	4 982.9	5 597.9	4 870.0	20 333.7	4 708.3	18 061.3	20 106.3	2 641.4	105 049.5	
Plus											
Change in stocks	287.9	23.6	45.7	10.1	96.0	-61.6	-161.4	107.1	32.1	379.7	
<b>Value added</b>	<b>14 147.5</b>	<b>3 704.2</b>	<b>4 304.1</b>	<b>6 440.3</b>	<b>11 447.1</b>	<b>4 093.8</b>	<b>10 148.7</b>	<b>13 316.7</b>	<b>2 051.8</b>	<b>69 654.2</b>	
Less											
Fringe benefits tax	34.5	10.2	7.9	19.2	34.6	10.6	27.4	38.5	4.8	187.7	
Payroll tax	274.9	86.7	86.1	124.7	203.1	69.5	253.2	305.7	27.7	1 431.6	
Other operating expenses (excluding income tax and extraordinary expenses)	3 664.1	778.6	647.6	1 215.6	3 470.9	882.6	1 677.6	3 347.6	406.2	16 090.7	
<b>INDUSTRY GROSS PRODUCT</b>	<b>10 174.0</b>	<b>2 828.6</b>	<b>3 562.6</b>	<b>5 080.8</b>	<b>7 738.5</b>	<b>3 131.1</b>	<b>8 190.5</b>	<b>9 625.1</b>	<b>1 613.2</b>	<b>51 944.3</b>	

<sup>1</sup> See paragraph 7 of the Explanatory Notes.

Items	ANZSIC subdivision description and code										Total manufacturing 21-29
	Food, beverage and tobacco mfg 21	Textile, clothing, footwear and leather mfg 22	Wood and paper product mfg 23	Printing, publishing and recorded media 24	Petroleum, coal, chemical and associated product mfg 25	Non- metallic mineral product mfg 26	Machinery and equipment mfg 28	Metal product mfg 27	Other manufacturing 29		
Sales of goods and services	37 376.3	8 545.6	9 765.0	11 242.9	31 323.2	8 790.6	32 968.2	28 128.6	4 634.2	172 774.6	
Less											
Cost of sales	27 433.3	5 834.8	6 293.8	6 219.3	23 946.2	5 732.5	23 690.9	20 180.8	3 048.0	122 379.7	
<b>Trading profit</b>	<b>9 943.0</b>	<b>2 710.8</b>	<b>3 471.2</b>	<b>5 023.6</b>	<b>7 377.0</b>	<b>3 058.1</b>	<b>9 277.3</b>	<b>7 947.7</b>	<b>1 586.2</b>	<b>50 394.9</b>	
Plus											
Interest income	150.2	20.6	22.0	72.8	89.0	20.5	123.4	100.7	11.4	610.6	
Other operating income	444.4	166.3	80.1	216.4	387.0	112.3	709.5	143.6	36.9	2 296.4	
Less											
Selected labour costs	5 681.5	1 993.7	2 037.3	2 888.8	4 068.5	1 607.7	6 711.0	5 247.1	1 174.7	31 410.3	
Depreciation	971.6	165.0	350.4	301.1	936.5	360.8	793.6	971.0	65.5	4 915.6	
Other expenses	250.1	103.8	205.7	613.2	366.4	110.4	381.1	200.5	55.1	2 286.3	
<b>Earnings before interest and tax</b>	<b>3 634.4</b>	<b>635.2</b>	<b>980.0</b>	<b>1 509.6</b>	<b>2 481.5</b>	<b>1 112.0</b>	<b>2 224.5</b>	<b>1 773.5</b>	<b>339.2</b>	<b>14 689.7</b>	
Less											
Interest expenses	655.2	150.9	221.0	345.3	385.2	231.8	436.8	309.0	78.1	2 813.3	
<b>OPERATING PROFIT BEFORE TAX</b>	<b>2 979.2</b>	<b>484.3</b>	<b>759.0</b>	<b>1 164.3</b>	<b>2 096.3</b>	<b>880.2</b>	<b>1 787.6</b>	<b>1 464.4</b>	<b>261.1</b>	<b>11 876.4</b>	

<sup>1</sup> See paragraph 7 of the Explanatory Notes.

MANUFACTURING MANAGEMENT UNITS<sup>1</sup>: ASSETS, LIABILITIES AND NET WORTH BY INDUSTRY SUBDIVISION, AUSTRALIA, REVISED DATA FOR 1992-93  
(\$ million)

Items	ANZSIC subdivision description and code										Total manufacturing 21-29
	Food, beverage and tobacco mfg 21	Textile, clothing footwear and leather mfg 22	Wood and paper product mfg 23	Printing, publishing and recorded media 24	Petroleum, coal, chemical and associated product mfg 25	Non-metallic mineral product mfg 26	Metal product mfg 27	Machinery and equipment mfg 28	Other manufacturing 29		
<b>ASSETS—</b>											
Current assets—											
Closing stocks	4 463.5	1 392.2	1 268.8	667.2	4 314.1	1 029.1	3 982.4	4 901.5	523.9		22 542.7
Other current assets	7 001.2	2 203.0	1 856.7	2 824.5	6 973.2	2 113.4	6 622.0	7 458.8	913.9		37 966.6
Non-current assets	15 817.2	1 911.7	5 901.9	12 813.6	12 286.1	6 180.2	16 737.1	9 436.1	926.5		82 010.4
<b>Total value of assets</b>	<b>27 281.9</b>	<b>5 507.0</b>	<b>9 027.3</b>	<b>16 305.2</b>	<b>23 573.4</b>	<b>9 322.8</b>	<b>27 341.4</b>	<b>21 796.4</b>	<b>2 364.2</b>		<b>142 519.6</b>
<b>LIABILITIES—</b>											
Current liabilities	10 409.9	2 500.0	2 423.4	3 982.0	9 443.2	3 156.5	7 935.8	9 800.3	1 091.0		50 742.0
Non-current liabilities	6 271.3	1 065.6	2 323.4	3 833.6	4 256.0	1 607.8	6 484.5	3 213.1	472.1		29 527.6
<b>Total value of liabilities</b>	<b>16 681.1</b>	<b>3 565.6</b>	<b>4 746.8</b>	<b>7 815.6</b>	<b>13 699.2</b>	<b>4 764.3</b>	<b>14 420.3</b>	<b>13 013.4</b>	<b>1 563.2</b>		<b>80 269.6</b>
<b>NET WORTH</b>	<b>10 600.8</b>	<b>1 941.4</b>	<b>4 280.5</b>	<b>8 489.6</b>	<b>9 874.2</b>	<b>4 558.5</b>	<b>12 921.1</b>	<b>8 783.0</b>	<b>801.0</b>		<b>62 250.0</b>

<sup>1</sup> See paragraph 7 of the Explanatory Notes.



## ANZSIC subdivision description and code

Items	Unit value	ANZSIC subdivision description and code										Total manufacturing
		Food, beverage and tobacco mfg 21	Textile, clothing, footwear and leather mfg 22	Wood and paper product mfg 23	Printing, publishing and recorded media 24	Petroleum, coal, chemical and associated product mfg 25	Non-metallic mineral product mfg 26	Metal product mfg 27	Machinery and equipment mfg 28	Other manufacturing 29	21, 29	
<b>Turnover ratios—</b>												
Stocks turnover	times	8.4	6.1	7.7	16.9	7.3	8.5	7.1	6.7	8.8	7.7	7.7
Assets turnover	times	1.4	1.6	1.1	0.7	1.3	0.9	1.0	1.5	2.0	1.2	1.2
<b>Profitability ratios—</b>												
Operating profit margin	%	8.0	5.7	7.8	10.4	6.7	10.0	5.2	5.4	5.6	6.9	6.9
Return on assets	%	10.9	8.8	8.4	7.1	8.9	9.4	5.4	8.2	11.0	8.3	8.3
Return on net worth	%	28.1	24.9	17.7	13.7	21.2	19.3	11.3	20.4	32.6	19.1	19.1
<b>Liquidity ratios—</b>												
Liquidity ratio	times	0.7	0.9	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7
Current ratio	times	1.1	1.4	1.3	0.9	1.2	1.0	1.3	1.3	1.3	1.2	1.2
<b>Debt ratios—</b>												
Interest coverage	times	5.5	4.2	4.4	4.4	6.4	4.8	5.7	5.1	4.3	5.2	5.2
Debt to assets	%	61.1	64.7	52.6	47.9	58.1	51.1	52.7	59.7	66.1	56.3	56.3
Short-term debt to equity	%	98.2	128.8	56.6	46.9	95.6	69.2	61.4	111.6	136.2	81.5	81.5
Long-term debt to equity	%	59.2	54.9	54.3	45.2	43.1	35.3	50.2	36.6	58.9	47.4	47.4
<b>Labour ratios—</b>												
Operating profit before tax per person employed	\$'000	17.0	6.4	12.7	13.8	20.6	20.6	10.1	9.3	5.5	12.8	12.8
Selected labour costs per person employed	\$'000	32.4	26.4	34.0	34.1	40.1	37.6	36.0	34.8	25.0	33.9	33.9
Total assets per person employed	\$'000	155.5	73.0	150.8	192.7	232.1	217.9	187.8	113.0	50.2	154.0	154.0
<b>Capital expenditure ratios—</b>												
Net capital expenditure to assets	%	6.1	3.6	7.0	3.6	7.5	5.1	4.2	4.4	2.7	5.3	5.3
Net capital expenditure to profits	%	56.0	41.2	83.0	50.5	84.9	54.2	79.2	53.4	24.0	63.3	63.3

<sup>1</sup> See paragraph 7 of the Explanatory Notes.

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication presents final statistics compiled from a census of manufacturing establishments for 1993–94, with some comparative statistics relating to preceding years. It also contains data on expenditure on environmental protection by manufacturing management units for 1993–94, collected as part of the ABS's Economic Activity Survey.

**2** The manufacturing collection is conducted on an annual basis. For the 1993–94 collection, businesses were requested to provide data on employment, wages and salaries and turnover for each manufacturing establishment. A sample of approximately 18,000 establishments was asked to supply additional information on commodities produced and sold. Commodities information from this sample will be published in *Manufacturing Production, Australia: Principal Commodities Produced, 1993–94* (8365.0), to be released later in 1996.

**3** 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

**4** The main unit for which statistics are reported in the 1993–94 manufacturing collection is the establishment. Prior to the 1988–89 census, this unit covered, in general, all the operations carried on under the ownership of one enterprise (business) at a single physical location.

**5** The standard units definitions were revised for the 1988–89 census, with the establishment now being generally delineated on the basis of availability of accounting data rather than in terms of a location.

**6** These new definitions were progressively implemented on the ABS central business register as reporting arrangements with individual businesses were finalised. The new management unit and establishment definitions were fully implemented on the ABS central business register in time for the 1990–91 census for those units classified to the manufacturing industry.

**7** A manufacturing management unit is one predominantly engaged in manufacturing activity, but the data collected for it cover all activities of the management unit (including in respect of non-manufacturing establishments). Conversely, there are some management units predominantly engaged in non-manufacturing activities which have establishments engaged in manufacturing activities and which are excluded.

**8** Similarly, 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.

**9** 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 by different establishments 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 1993-94 manufacturing collection, 'significant' was defined as \$6.6 million or more.

**10** The statistics in this publication exclude some very small manufacturers. Those excluded are manufacturers not employing staff at 30 June 1994 (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

**11** For the definition of the standard units now in use, see the Glossary.

#### RELIABILITY OF ESTIMATES

**12** With the exception of data for expenditure on environmental protection, all 1993-94 data contained in this publication are based on a census. The 1993-94 expenditure on environmental protection data and all 1992-93 data contained in this publication are based on information obtained from samples of manufacturers and are, therefore, subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all manufacturers in the population. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.

**13** The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error. The relative standard errors for the 1992-93 data presented in this publication are 2% or less. For further information, see the 1992-93 issue of this publication. The relative standard errors for the environmental expenditure data presented in table 10 are generally 10% or less.

**14** The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by businesses and errors made in collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling error and they may occur in any collection, whether it be a full count or only a sample. Every effort is made to reduce non-sampling error to a minimum by careful design of forms, editing of data and efficient operating procedures.

#### COMPARABILITY WITH PREVIOUS STATISTICS

**15** As explained above, the standard units definitions were revised for the 1988-89 census and the new definitions were fully implemented on the ABS central business register in time for the 1990-91 census for units classified to the manufacturing industry.

**16** As was done for the *Manufacturing Industry, Australia, Preliminary, 1993-94* publication (8201.0), all data in this publication (except for tables 1 and 2) 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 on to the ABS business register in time for inclusion in the annual manufacturing industry collection. The magnitude of these adjustments varies slightly over time, and so estimates of movement from one period to the next can be affected. 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 revealed by recent investigations, were not previously added to the ABS business register. The ABS is remedying these omissions, but they had led to results being understated by small amounts which increased over the period 1992 to 1994.

**17** The majority of businesses affected by these lags and omissions and to which both types of adjustments apply are small. Although these adjustments have resulted in counts of manufacturers at 30 June 1994 being adjusted upward by 13%, the effect on 1993-94 turnover is much less at 2%. The effect on employment is an adjustment of 4%. Most States and Territories and most industries were affected to a similar degree.

**18** The time series statistics presented in this publication have been similarly affected and the industry subdivision data for years prior to 1993-94 have been accordingly adjusted (except for tables 1 and 2). Adjustment factors for the more detailed manufacturing industries for each of the years 1989-90 to 1992-93 (inclusive) can be made available on request. At the same time, some revisions have been made to the underlying data previously published, as a result of further processing and/or additional information becoming available.

**19** As explained above, about 18,000 establishments included in the 1993-94 collection were asked additional information on commodities produced and sold. The availability of this fine level commodity/activity data for these 18,000 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. This fine level commodity/activity data has also enabled an objective industry code to be determined for these units, compared to the more subjective industry coding which has occurred in each of the three previous manufacturing collections. The industry code for the units not included in the commodity sample has continued to be a subjectively determined code.

**20** 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 for the 1993-94 collection.

GROSS PRODUCT AT FACTOR  
COST

**21** The 1993–94 data contained in this publication include data relating to those manufacturers not employing staff at 30 June 1994 (such as sole proprietorships or family partnerships) which had registered as group employers with the Australian Taxation Office. 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 (except for the number of establishments, where the effect has been slightly more significant).

**22** The basis for the calculation of the data used in table 3 of this publication for the data item 'Percentage change in gross product per person employed' is different to that used in the 1992–93 issue of this publication. The employment data now used are 'Employment at the end of June', whereas in the 1992–93 issue the conceptually more precise data item 'Average employment over the year' was used. For some industries, the values obtained by using these different methods may differ significantly and, therefore, care should be exercised when making inter-year comparisons. (The reason for making this change is that the detailed data necessary to calculate 'Average employment over the year' were not obtained by the 1993–94 collection.)

**23** The data presented in table 10 of this publication on expenditure on environmental protection relate to such expenditure by manufacturing management units. These data were collected as part of the ABS's Economic Activity Survey. The environmental expenditure data presented in all previous issues of this publication related to such expenditure by manufacturing establishments.

**24** Table 3 presents data by industry subdivision for the period 1989–90 to 1993–94 (inclusive) related to constant price estimates of gross product at factor cost. The meaning and measurement of production at constant prices and the limitations and qualifications of the estimates are discussed in detail in *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

**25** In association with the change of the base year for the data in table 3 to 1989–90 (introduced with the 1991–92 issue of this publication), the methodology used to derive these estimates also changed. This came about because only turnover data are now available from the manufacturing collection on an annual basis. The basic approach in compiling these data involves extrapolating a base year estimate of gross product (described below) by a measure of output at constant prices. Constant price turnover is now used as the output indicator with which to extrapolate the base year gross product. To obtain constant price estimates of turnover, current price estimates at the ANZSIC class level are deflated by components of the price indices contained in *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0).

**26** The base year gross product is estimated for each ANZSIC class using 1989–90 manufacturing census data for value added and adjusted value added. Value added is calculated using turnover, plus the increase (or less the decrease) in the value of stocks, less purchases, transfers in and selected expenses. Adjusted value added is defined as value added less land tax, rates and payroll tax, insurance premiums (other than for workers' compensation) and other business expenses. To conform to the national accounting concept of gross product at factor cost, further adjustments would be necessary using information from other than manufacturing census sources e.g. by the addition of workers' compensation paid less premiums received. However, due to data limitations, these further adjustments can only be made at the ANZSIC subdivision level and are not taken into account in this publication. (This is because the ANZSIC subdivision data contained in this publication are derived from the data calculated at the ANZSIC class level.) The base year gross product values used in this publication are derived by taking establishment based estimates of adjusted value added and applying a stock valuation adjustment. (See Section 8 of *Australian National Accounts: Concepts, Sources and Methods* (5216.0) for an explanation of how this adjustment is undertaken.)

#### EMPLOYMENT SIZE DATA

**27** Summary of operations data at the industry subdivision level classified by employment size are presented in table 7. The statistics in this table relate only to those manufacturing establishments operating at 30 June 1994. As such, the figures presented may be slightly less than 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 1993–94.

#### CONCENTRATION STATISTICS

**28** Industry concentration statistics at the industry subdivision level are presented in table 8. This information relates to manufacturing establishments which operated at any time during the year ended 30 June 1994.

**29** Industry concentration statistics are concerned with providing measures of the extent to which a few enterprise groups predominate in individual industries. They are a useful aid in assessing the degree of competition existing between enterprise groups engaged in an industry.

**30** These statistics provide measures of concentration in industries as a whole and, therefore, are not measures of concentration in the market for commodities or activities.

#### CALCULATION OF CONCENTRATION RATIOS

**31** The following steps outline the method used to calculate concentration ratios for each industry.

- Enterprise group/industry units were formed by combining establishments within the enterprise group with the same industry classification.

- Because some enterprise groups own or control establishments in a number of industry classes, the composition of their enterprise group/industry units might differ for different levels of the industry classification. Concentration ratios are presented in this publication only for manufacturing subdivisions. What this means, for example, is that where data are presented for ANZSIC subdivision 21 (Food, beverage and tobacco manufacturing), the enterprise group/industry units for subdivision 21 include all the establishments owned and/or controlled by the enterprise group and classified to any ANZSIC class within subdivision 21.
- Enterprise group/industry units were then ranked in descending order according to the size of the contribution of their establishments to the total turnover of the industry concerned.
- For the purpose of compiling table 8, the ranked enterprise groups were brought together into a number of cumulative categories.

Note Where an enterprise group ceased operation prior to 30 June, the enterprise group has not been counted in the items 'Enterprise groups at 30 June', 'Establishments at 30 June' and 'Employment at end of June', but its activities have been included, where appropriate, in the items 'Wages and salaries' and 'Turnover'.

**32** Categories of four enterprise groups were chosen to conform with international practice and will, therefore, facilitate comparison of concentration patterns in Australian industries with those in other countries.

#### ENVIRONMENTAL STATISTICS

**33** Data contained in table 10 relate to current and capital expenditure on environmental protection in the year ended 30 June 1994. Management units which did not respond were treated as if they had no current or capital expenditure on environmental protection.

#### USE OF ANZSIC

**34** The 1992-93 manufacturing survey introduced the Australian and New Zealand Standard Industrial Classification (ANZSIC) into the annual manufacturing collection. This classification replaced the Australian Standard Industrial Classification (ASIC) previously used. All time series statistics contained in this publication are ANZSIC-based. Corresponding ANZSIC-based data for years prior to 1989-90 are not available, except for constant prices data (see paragraph 40). Similarly, ASIC-based data are not available from 1992-93.

#### INFORMATION PAPER

**35** The *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (8205.0) outlines the vast amount of data available about the manufacturing industry in both published and unpublished form available from the annual manufacturing collection and other ABS collections.

#### RELATED PUBLICATIONS

**36** A series of publications (8221.1 to 8221.6) will be produced for each State. The publication for New South Wales (8221.1) also contains selected data for the Australian Capital Territory. These publications will all be released shortly.

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

- *Environment Protection Expenditure, Australia, 1992-93 and 1993-94* (4603.0), to be released early in 1997.
- *Australian National Accounts: National Income, Expenditure and Product, 1994-95* (5204.0), released on 4 July 1996.
- *Australian National Accounts: National Income, Expenditure and Product, June Quarter 1996* (5206.0), released on 20 August 1996.
- *Private New Capital Expenditure and Expected Expenditure, Australia* (5625.0).
- *Stocks, Selected Industry Sales and Expected Sales, Australia* (5629.0).
- *Company Profits, Australia* (5651.0).
- *Labour Force, Australia* (6203.0).
- *Indexes of Industrial Production, Australia* (8125.0), issued quarterly.
- *Business Operations and Industry Performance, Australia, 1993-94* (8140.0), released on 6 September 1995.
- *Manufacturing Industry, Australia, Preliminary, 1994-95* (8201.0), released on 23 August 1996.
- *Information Paper: Availability of Statistics Related to Manufacturing, 1996* (8205.0), released on 21 March 1996.
- *Manufacturing Production, Australia: Principal Commodities Produced, 1993-94* (8365.0), to be released later in 1996.

#### MONTHLY COMMODITY DATA

**38** The monthly publication *Manufacturing Production, Australia* (8301.0) includes data for 61 major commodities.

#### BACK DATA AND UNPUBLISHED STATISTICS

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

**40** In particular, constant prices data 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 1993-94 (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 (06) 252 6801.



## ROUNDING

**41** Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS business register and the omission of some businesses from the business register (see paragraph 16 above), this 'rounding rule' also applies to the count of establishments.

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

## SYMBOLS AND OTHER USAGES

ANZSIC	Australian and New Zealand Standard Industrial Classification
ASIC	Australian Standard Industrial Classification
n.e.c.	not elsewhere classified
n.p.	not available for publication but included in totals where applicable
r	figure or series revised since previous issue
*	data subject to sampling variability of between 25% and 50%
..	not applicable
—	nil or rounded to zero

## GLOSSARY

<b>ABS</b>	Australian Bureau of Statistics
<b>Adjusted value added</b>	Value added less land tax, rates and payroll tax, insurance premiums (other than for workers' compensation) and other business expenses (e.g. cleaning, legal, office supplies and accounting). Referred to as 'Industry gross product' in some related publications.
<b>Australian National Accounts (ANA)</b>	These Accounts are set up to provide a systematic summary of Australia's national economic activity. They have been developed in such a way as to facilitate the practical application of economic theory. National Accounts are summarised to show the key economic flows of the Keynesian system, being: production, income, consumption, investment and saving. They are also designed to show at a more detailed level the statistical picture of the structure of the economy and the detailed processes that make up domestic production and its distribution.
<b>ANZSIC</b>	Australian and New Zealand Standard Industrial Classification
<b>ASIC</b>	Australian Standard Industrial Classification
<b>Capital expenditure</b>	Includes all costs incurred in the acquisition of items that are of a capital nature. Included in this are expenses for the acquisition of: dwellings, other buildings and structures; plant, machinery and equipment; and other capital expenditure (including land and intangible assets). Also included is capital work done for own use (see definition below).
<b>Capital expenditure to abate pollution</b>	Expenditure on new plant, machinery or equipment designed to abate or control pollution by using either end-of-line techniques or change-in-production processes.
<b>Capital expenditure to abate pollution as a proportion of total capital expenditure</b>	This item represents the proportion of total capital expenditure that is utilised in measures designed to abate pollution. Please note that for the data item capital expenditure to abate pollution, management units which did not respond to the question were treated as if they had no such capital expenditure. However, the ratio is calculated by dividing the reported capital expenditure designed to abate pollution by the total capital expenditure for the ANZSIC subdivision, not just the aggregated capital expenditure for those units which reported capital expenditure to abate pollution.
<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 value of the cost of the materials and the wages and salaries involved. This item is described in this publication as 'Own account capital work'.
<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 financial year.
<b>Concentration ratios</b>	Industry concentration statistics are concerned with providing measures of the extent to which a few enterprise groups predominate in individual industries. See paragraphs 28 to 32 of the Explanatory Notes.

<b>Current expenditure on environmental protection</b>	Expenditure on waste management plus other operational or maintenance costs incurred in protection of the environment from pollution. Included are such expenses as government and council fees, charges and taxes relating to pollution abatement and control, charges to remove and dispose of wastes arising from a management unit's production processes, research and development expenditure on pollution abatement and control, and expenditure on environmental impact assessments and environmental audits.
<b>Current expenditure on environmental protection as a proportion of total turnover</b>	This item represents the current expenditure on environmental protection expressed as a proportion of the total turnover. Please note that for the data item current expenditure on environmental protection, management units which did not respond to the question were treated as if they had no such current expenditure. However, the ratio is calculated by dividing the reported current expenditure on environmental protection by the total turnover for the ANZSIC subdivision, not just the aggregated turnover for those units which reported current expenditure on environmental protection.
<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 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 Corporations Legislation Amendment Act 1991). 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>Enterprise groups at 30 June</b>	The number of enterprise groups in operation at 30 June.
<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 at 30 June</b>	The number of establishments in operation at 30 June in the year of a given reference period.
<b>Gross Domestic Product (GDP)</b>	Gross domestic product (also referred to as gross domestic product at market prices) is the total market value of goods and services produced in Australia within a given period after deduction of the cost of goods and services used up in the process of production, but before deducting allowances for the consumption of fixed capital. Thus, gross domestic product, as here defined, is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services.

<b>Gross product at factor cost</b>	Gross product at factor cost is that part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour, land, capital and enterprise). It represents the value added by these factors in the process of production and is equivalent to gross domestic product less indirect taxes plus subsidies.																		
<b>Gross product per person employed</b>	Gross product at factor cost of manufacturing establishments which operated during the year ended 30 June divided by employment at the end of June in the same year.																		
<b>Income from services</b>	Income received from service activities. This income includes: repair and service income and fees; contract, subcontract and commission income; installation charges; and management fees/charges from related and unrelated businesses. Excluded are interest and royalties received.																		
<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 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>	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 table gives the manufacturing industry subdivision codes and their descriptions:																		
	<table border="0"> <tr><td>21</td><td>Food, beverage and tobacco mfg</td></tr> <tr><td>22</td><td>Textile, clothing, footwear and leather mfg</td></tr> <tr><td>23</td><td>Wood and paper product mfg</td></tr> <tr><td>24</td><td>Printing, publishing and recorded media</td></tr> <tr><td>25</td><td>Petroleum, coal, chemical and associated product mfg</td></tr> <tr><td>26</td><td>Non-metallic mineral product mfg</td></tr> <tr><td>27</td><td>Metal product mfg</td></tr> <tr><td>28</td><td>Machinery and equipment mfg</td></tr> <tr><td>29</td><td>Other manufacturing</td></tr> </table>	21	Food, beverage and tobacco mfg	22	Textile, clothing, footwear and leather mfg	23	Wood and paper product mfg	24	Printing, publishing and recorded media	25	Petroleum, coal, chemical and associated product mfg	26	Non-metallic mineral product mfg	27	Metal product mfg	28	Machinery and equipment mfg	29	Other manufacturing
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26	Non-metallic mineral product mfg																		
27	Metal product mfg																		
28	Machinery and equipment mfg																		
29	Other manufacturing																		
<b>Management unit</b>	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.																		

<b>Manufacturing establishment</b>	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.
<b>Manufacturing management unit</b>	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.
<b>Opening stocks</b>	The value of all stocks of finished goods, work-in-progress, raw materials, fuels, containers and packaging as at the beginning of the financial year.
<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 value of the cost of the materials and the wages and salaries involved.
<b>Purchases, transfers in and selected expenses</b>	Purchases of materials, components, containers, packaging, fuels, electricity and water, and of goods for resale, plus transfers in of goods from other establishments of the same business for further processing, assembly, installation or resale, plus contract, subcontract and commission expenses (including sales commission payments), repair and maintenance expenses, outward freight and cartage expenses, motor vehicle running expenses, and rent, leasing and hiring expenses. Transfers in are valued, for statistical purposes, at prices commensurate with the prices which would have been paid if the establishments concerned had been under separate ownership i.e. at commercial selling price.
<b>Rent, leasing and hiring income</b>	Includes royalties from mineral leases and income from operating leases, but excludes income from finance leases and payments received under hire purchase arrangements.
<b>Sales and transfers out</b>	Includes sales of goods produced by the establishment (or for it on commission) and of goods not produced by the establishment, sales or transfers to related businesses, progress payments billed on engineering and construction projects, and delivery charges. Also included are transfers out to other establishments of the same business. 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. It excludes 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 and service income and fees; contract, subcontract and commission income; installation charges; and management fees/charges from related and unrelated businesses. Excluded are interest and royalties received.
<b>Total government subsidies</b>	Includes revenue received from government bodies in the form of bounties, subsidies and export grants. It also includes payments for Jobstart and subsidies for apprenticeship schemes. Excludes capital grants payments.

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

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

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

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

**Wages and salaries** The gross 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. The drawings of working proprietors are also excluded.

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



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