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**MANUFACTURING INDUSTRY
AUSTRALIA
1989-90**

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INQUIRIES

- for further information about statistics in this publication and the availability of related unpublished statistics, contact Mark Wise on Sydney (02) 268 4541 or any other ABS office.
- for information about other ABS statistics and services please refer to the back cover of this publication.

INTRODUCTION

This publication contains detailed industry statistics compiled from a census of manufacturing establishments conducted in respect of 1989-90. It expands on the information which was published in the previous publication from this census—*Manufacturing Industry, Summary of Operations, Australia, 1989-90* (8202.0), which was released on 24 December 1992. Some of the data included in this publication have been revised since the release of the Summary of Operations publication.

The results of the 1989-90 manufacturing census are generally comparable with those for previous censuses. However, some changes (especially relating to units definitions) have occurred in recent years and reference to the Explanatory Notes and the Appendix at the end of this publication is recommended for those undertaking detailed analysis.

State data

More detailed manufacturing industry statistics for each State and the Northern Territory will be released in the next few months in a series of publications (8221.1 to 8221.7). These publications will contain a range of data items generally at the industry class level.

Commodity statistics

Commodity statistics will be published in *Manufacturing Production, Australia: Principal Commodities Produced, 1989-90* (8365.0), which is expected to be released shortly.

Unpublished data

A considerable amount of data from the manufacturing census exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request. Further details can be obtained by contacting the Sydney Office of the ABS—see previous page for contact details.

SUMMARY OF FINDINGS

NOTES

1. Statistics relating to 1989-90 manufacturing activity include the operations of all manufacturing establishments shown on the ABS business register. Recent upgrading of the register has resulted in the inclusion in this census of a number of businesses which should have been included in previous censuses (see paragraph 35 of the Explanatory Notes). Coverage factors to convert previous years' data (with the exception of number of establishments) to a comparable basis with 1989-90 data are shown in Table 12. As can be seen from this table, the coverage factor for total manufacturing for Australia is 1.03. This means that previous years' data should be multiplied by a factor of 1.03 to make them comparable with 1989-90 data.

2. Comparability between the 1989-90 census and previous censuses has also been affected by a number of other factors (see paragraphs 34 and 38 to 40 of the Explanatory Notes and the Appendix).

Introduction

The detailed industry statistics presented in the majority of tables in this publication relate to manufacturing establishments owned by multi-establishment businesses and single establishment businesses with four or more persons employed.

There were 30,474 manufacturing establishments employing four or more persons operating in Australia at 30 June 1990. For the year 1989-90, these establishments employed 1,024,000 persons (average over the year) and recorded \$165,886 million in turnover and \$69,241 million in value added.

Only the items employment, wages and salaries and turnover were collected from single establishment businesses with less than four persons employed. This information is presented in Table 11. These small businesses contributed marginally to total turnover (1.1%) and employment (2.5%) in the manufacturing industry in Australia in 1989-90. The only significant contribution they make is to the number of establishments, where there were 11,467 establishments, accounting for 27.3 per cent of the Australian total.

Single establishment businesses not employing staff at 30 June 1990 (such as sole proprietorships or family partnerships) are excluded from the collection.

Share of Gross Domestic Product (GDP)(P)

In 1989-90, the manufacturing industry contributed 15.5 per cent of total Gross Domestic Product, consistent with the proportion in 1986-87 but nearly three percentage points lower than it was ten years ago. As the table below shows, the contribution by manufacturing to the Australian GDP continues to decline, although the rate of decline has slowed.

GROSS DOMESTIC PRODUCT(P) AT AVERAGE 1989-90 PRICES: AUSTRALIAN MANUFACTURING
AS A PROPORTION OF ALL INDUSTRIES

Year	Manufacturing (\$m)	All industries (\$m)	Manufacturing as a proportion of all industries (Per cent)
1979-80	47,959	262,362	18.3
1984-85	49,116	301,975	16.3
1986-87	49,938	319,115	15.6
1989-90	57,281	369,896	15.5

Gross product at market prices (at average 1989-90 prices)(Table 4)

In constant price terms, manufacturing gross product at market prices was 19.4 per cent greater in 1989-90 than in 1979-80. The largest percentage increases were recorded by industry subdivisions Paper, paper products, printing and publishing (up 50.3%—from \$3,605 million to \$5,418 million) and Fabricated metal products (up 40.5%—from \$3,106 million to \$4,365 million).

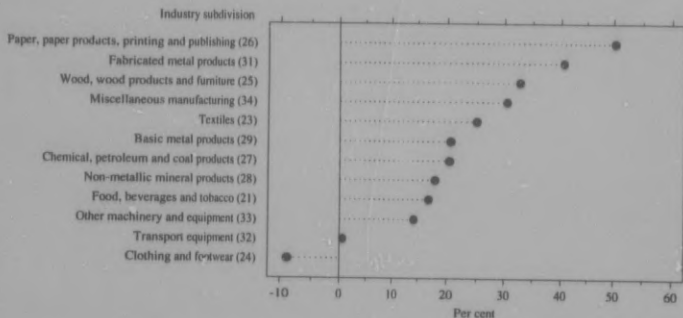
The smallest percentage increase from 1979-80 to 1989-90 was recorded by Transport equipment (up 0.6%—from \$6,152 million to \$6,188 million). This subdivision recorded rises between 1979-80 and 1984-85 (up 2.4%) and between 1984-85 and 1988-89 (up 3.9%), before recording a fall between 1988-89 and 1989-90 (down 5.5%).

For the Clothing and footwear subdivision, gross product at market prices fell between 1979-80 and 1989-90 (down 8.9%—from \$2,070 million to \$1,886 million). However, all of this fall occurred between 1988-89 and 1989-90. Between these years, Clothing and footwear fell by \$529 million (down 21.9%), after recording rises between 1979-80 and 1984-85 (up 5.9%) and between 1984-85 and 1988-89 (up 10.2%).

Manufacturing gross product at market prices grew by 2.8 per cent between 1988-89 and 1989-90, with the largest percentage increase (16.2%) recorded by Fabricated metal products. Four of the 12 manufacturing industry subdivisions recorded decreases in gross product at market prices over this period.

As in previous years, Food, beverages and tobacco was the largest contributor to manufacturing gross product at market prices in 1989-90 (20.3%), while Textiles was the smallest contributor (2.1%). The share of manufacturing gross product at market prices attributable to Paper, paper products, printing and publishing has grown consistently between 1979-80 and 1989-90 (from 7.5% to 9.5%). This was the only subdivision to record an increase in its share both between 1979-80 and 1984-85 (from 7.5% to 8.3%) and between 1984-85 and 1989-90 (from 8.3% to 9.5%).

PERCENTAGE CHANGE IN GROSS PRODUCT AT MARKET PRICES (AVERAGE 1989-90 PRICES) BY INDUSTRY SUBDIVISION, AUSTRALIA, 1979-80 TO 1989-90



The remainder of the comments made in this summary of findings relate only to manufacturing establishments owned by multi-establishment businesses and single manufacturing establishments with four or more persons employed.

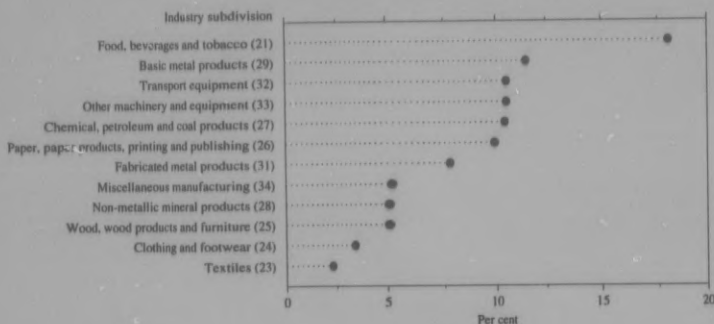
Value added (Table 1)

In 1989-90, the industry subdivisions contributing the largest proportions to total value added and the most significant industry classes within those as a percentage of total value added were:

- Food, beverages and tobacco (18.0%), where the industry classes Meat (except smallgoods or poultry) (ASIC class 2115—2.6%) and Beer (ASIC class 2186—1.6%) were the most significant.
- Basic metal products (11.5%), where the industry classes Iron and steel basic products (ASIC class 2941—3.5%), Alumina (ASIC class 2953—2.4%) and Aluminium smelting (ASIC class 2954—1.9%) were the most significant.
- Transport equipment (10.5%), where the industry classes Motor vehicles (ASIC class 3231—4.7%) and Motor vehicle parts n.e.c. (ASIC class 3234—1.9%) were the most significant.
- Other machinery and equipment (10.5%), where the industry classes Electrical machinery and equipment n.e.c. (ASIC class 3357—1.8%), Industrial machinery and equipment n.e.c. (ASIC class 3369—1.8%) and Electronic equipment n.e.c. (ASIC class 3352—1.7%) were the most significant.
- Chemical, petroleum and coal products (10.4%), where the industry classes Petroleum refining (ASIC class 2770—3.1%) and Pharmaceutical and veterinary products (ASIC class 2763—1.3%) were the most significant.
- Paper, paper products, printing and publishing (9.9%), where the industry classes Printing and publishing (ASIC class 2642—2.9%) and Printing and bookbinding (ASIC class 2644—2.4%) were the most significant.

Industry classes making a significant contribution to total value added and not included in the subdivisions listed above include: Plastic products n.e.c. (ASIC class 3474—2.2%); Furniture (except sheet metal) (ASIC class 2541—1.7%); Fabricated structural steel (ASIC class 3141—1.7%); and Sheet metal products n.e.c. (ASIC class 3153—1.4%).

DISTRIBUTION OF VALUE ADDED BY INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90



Ratio of wages and salaries to value added (Table 2)

In 1989-90, the ratio of wages and salaries to value added for Australia's manufacturing industry was 0.39; that is, it required 39 cents paid in wages and salaries to produce \$1.00 of value added. This was a significant change from the ratio of 0.47 measured in 1986-87.

The wages and salaries to value added ratio fell in all industry subdivisions between 1986-87 and 1989-90, with the largest falls being recorded by Basic metal products (down from 0.46 to 0.30) and Transport equipment (0.58 to 0.40). The smallest falls occurred in Wood, wood products and furniture (0.52 to 0.51) and Paper, paper products, printing and publishing (0.46 to 0.44).

Particular industry classes where large falls in the ratio occurred between 1986-87 and 1989-90 were:

- Ice cream and frozen confections (ASIC class 2124)(down from 0.48 to 0.21)
- Milk products n.e.c. (ASIC class 2125)(0.64 to 0.32)
- Cotton ginning (ASIC class 2341)(0.32 to 0.08)(See paragraph 40 of the Explanatory Notes)
- Man-made fibres and yarns (ASIC class 2343)(1.22 to 0.43)
- Foundation garments (ASIC class 2454)(0.61 to 0.42)
- Petroleum refining (ASIC class 2770)(0.48 to 0.10)(See paragraph 39 of the Explanatory Notes)
- Alumina (ASIC class 2953)(0.32 to 0.14)
- Non-ferrous metals n.e.c. rolling, drawing, extruding (ASIC class 2962)(0.52 to 0.34)
- Ships (ASIC class 3241)(0.64 to 0.25)
- Railway rolling stock and locomotives (ASIC class 3243)(0.73 to 0.44)
- Writing and marking equipment (ASIC class 3486)(0.47 to 0.26)

The largest ratios of wages and salaries to value added in 1989-90 were recorded in Commercial space heating and cooling equipment (ASIC class 3366)(0.74), Non-ferrous metal casting (ASIC class 2963)(0.71) and Aircraft (ASIC class 3244)(0.69).

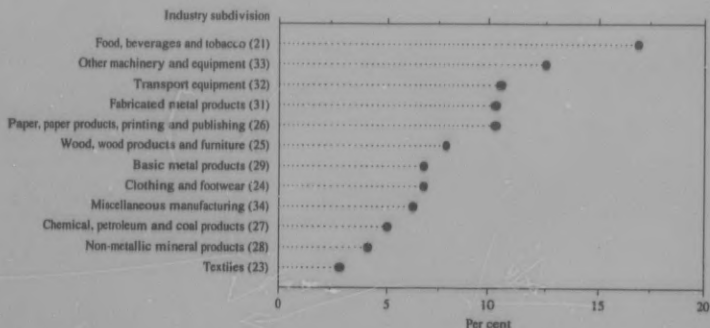
Average employment (Table 1)

In 1989-90, the industry subdivisions contributing the largest proportions to average employment over the year and the most significant industry classes within those as a percentage of total average employment were:

- Food, beverages and tobacco (16.9%), where the industry classes Meat (except smallgoods or poultry) (ASIC class 2115—3.1%) and Bread (ASIC class 2161—1.8%) were the most significant employers.
- Other machinery and equipment (12.5%), where the industry classes Industrial machinery and equipment n.e.c. (ASIC class 3369—2.4%) and Electrical machinery and equipment n.e.c. (ASIC class 3357—2.2%) were the most significant employers.
- Transport equipment (10.5%), where the industry classes Motor vehicles (ASIC class 3231—3.4%) and Motor vehicle parts n.e.c. (ASIC class 3234—2.7%) were the most significant employers.
- Fabricated metal products (10.3%), where industry classes Fabricated structural steel (ASIC class 3141—2.0%) and Sheet metal products n.e.c. (ASIC class 3153—1.8%) were the most significant employers.
- Paper, paper products, printing and publishing (10.3%), where the industry classes Printing and bookbinding (ASIC class 2644—3.2%) and Printing and publishing (ASIC class 2642—2.6%) were the most significant employers.

Industry classes making a significant contribution to average employment over the year and not included in the subdivisions listed above include: Furniture (except sheet metal) (ASIC class 2541—3.2%); Iron and steel basic products (ASIC class 2941—2.9%); Plastic products n.e.c. (ASIC class 3474—2.8%); and Wooden structural fittings and joinery n.e.c. (ASIC class 2535—1.7%).

DISTRIBUTION OF AVERAGE EMPLOYMENT BY INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90



As the table below shows, average employment in the manufacturing industry fell significantly between 1979-80 and 1989-90 (down 11.3%). The only industry subdivisions to show an increase over this time were Wood, wood products and furniture (up 4,000 persons—5.2%) and Paper, paper products, printing and publishing (up 3,500 persons—3.4%).

**MANUFACTURING ESTABLISHMENTS: AVERAGE EMPLOYMENT BY INDUSTRY SUBDIVISION
AUSTRALIA, 1979-80 TO 1989-90**

<i>Industry subdivision</i>					
<i>ASIC code</i>	<i>Description</i>	<i>1979-80 ('000)</i>	<i>1984-85 ('000)</i>	<i>1986-87 ('000)</i>	<i>1989-90 ('000)</i>
21	Food, beverages and tobacco	186.4	167.0	168.7	172.6
23	Textiles	37.5	33.5	33.6	30.0
24	Clothing and footwear	80.0	74.5	73.2	68.9
25	Wood, wood products and furniture	77.2	72.7	74.1	81.2
26	Paper, paper products, printing and publishing	101.6	102.1	105.9	105.1
27	Chemical, petroleum and coal products	60.3	55.1	53.8	51.1
28	Non-metallic mineral products	45.8	38.6	39.5	41.6
29	Basic metal products	94.1	76.7	73.3	69.1
31	Fabricated metal products	109.0	93.2	94.9	105.7
32	Transport equipment	136.9	119.6	111.2	107.3
33	Other machinery and equipment	159.4	126.7	126.7	127.9
34	Miscellaneous manufacturing	66.1	58.7	59.9	63.7
21-34	Total manufacturing	1,154.2	1,018.4	1,015.0	1,024.0

While average manufacturing employment fell over the decade to 1989-90, all of the fall occurred between 1979-80 and 1984-85. After that, there was very small employment growth.

Subdivisions displaying the most significant movements over these periods were:

- Clothing and footwear—average employment decreased in each of 1984-85, 1986-87 and 1989-90 (from 80,000 persons in 1979-80 to 68,900 persons in 1989-90—a decrease of 11,100 persons or 13.9%). The industry group making the major contribution to the decrease between 1986-87 and 1989-90 was Footwear (from 12,500 to 10,000 persons—down 20.0%).
- Wood, wood products and furniture—after recording a fall of 4,500 persons between 1979-80 and 1984-85, average employment rose in both 1986-87 and 1989-90 to the point where it is now 4,000 persons higher than in 1979-80. The industry group contributing most to the rise between 1986-87 and 1989-90 was Furniture and mattresses (from 29,300 to 36,100 persons—up 23.2%).
- Paper, paper products, printing and publishing—after being the only industry subdivision to record rises in both 1984-85 and 1986-87, average employment decreased slightly in 1989-90. However, this was still 3,500 persons higher than in 1979-80. The decrease in average employment between 1986-87 and 1989-90 was caused by a decrease in average employment in the Paper and paper products group (from 21,400 to 20,600 persons—down 3.7%).
- Chemical, petroleum and coal products—average employment declined in 1984-85, 1986-87 and 1989-90 (from 60,300 persons in 1979-80 to 51,100 persons in 1989-90—a fall of 9,200 persons or 15.3%). The industry group making the major contribution to the decrease between 1986-87 and 1989-90 was Other chemical products (from 33,300 to 30,900 persons—down 7.2%).
- Basic metal products—average employment declined in 1984-85, 1986-87 and 1989-90 (from 94,100 persons in 1979-80 to 69,100 persons in 1989-90—a fall of 25,000 persons or 26.6%). The industry group making the major contribution to the decrease between 1986-87 and 1989-90 was Basic iron and steel (from 44,300 to 40,600 persons—down 8.4%).
- Fabricated metal products—after recording a decrease of 15,800 persons between 1979-80 and 1984-85, average employment rose in both 1986-87 and 1989-90, to be only 3,300 persons less than it was in 1979-80. The industry group contributing most to the rise between 1986-87 and 1989-90 was Structural metal products (from 31,500 to 39,800 persons—up 26.3%).
- Transport equipment—average employment declined in 1984-85, 1986-87 and 1989-90 (from 136,900 persons in 1979-80 to 107,200 persons in 1989-90—a fall of 29,600 persons or 21.6%). The industry group making the major contribution to the decrease between 1986-87 and 1989-90 was Other transport equipment (from 45,800 to 30,000 persons—down 34.5%).

Employment by State

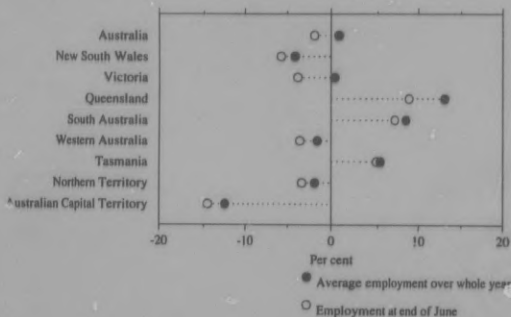
Data on employment are available on two bases—employment at the end of June and average employment over the year. Obviously, each indicator measures employment in a slightly different way and inter-year comparisons using the two bases produce different results. The measure 'average employment over the year', as the name suggests, is an average of the 12-monthly employment figures from July 1989 to June 1990 and covers all industries regardless of their seasonal patterns (eg fruit canning) and is best used for detailed analysis of the manufacturing industry during

1989-90. The measure 'employment at the end of June' is a point in time measure and is best used for assessing overall changes in manufacturing employment over a number of years.

Average employment over the whole year by Australian manufacturing establishments employing four or more persons increased by 9,100 (0.9%) between 1986-87 and 1989-90. Using employment at the end of June, employment decreased by 17,800 persons (1.7%) between June 1987 and June 1990. Similarly, the results of State comparisons over the three year period 1986-87 to 1989-90 differ depending on which basis of employment is used. The fact that the end of June measure consistently shows a larger employment fall or a smaller increase between 1986-87 and 1989-90 reflects the beginning of the substantial downturn in manufacturing employment from late 1989-90 onwards.

The following graph shows State comparisons between 1986-87 and 1989-90 for average employment and employment at the end of June.

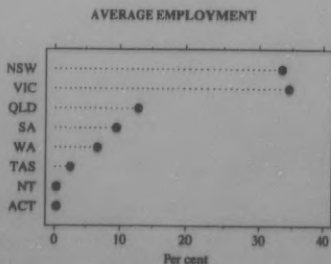
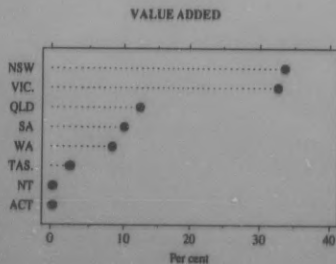
PERCENTAGE CHANGE IN EMPLOYMENT BY STATE, 1986-87 TO 1989-90



State manufacturing (Table 3)

In the three year period 1986-87 to 1989-90, Australian manufacturing value added rose by 52.0 per cent (at current prices which, of course, do not discount the impact of price changes) from \$45,553 million to \$69,241 million. While New South Wales and Victoria continue to dominate Australian manufacturing (between them contributing 67.8% of employment and 66.2% of value added in 1989-90), their percentage increase in value added between 1986-87 and 1989-90 was lower than the national average. The largest percentage increases occurred in Western Australia (103.0%), South Australia (86.3%), Queensland (68.6%) and the Northern Territory (63.7%). The increases in the other States and Territories were: Victoria (43.9%); Tasmania (40.6%); New South Wales (39.3%); and the Australian Capital Territory (32.2%).

DISTRIBUTION OF VALUE ADDED AND AVERAGE EMPLOYMENT BY STATE, 1989-90

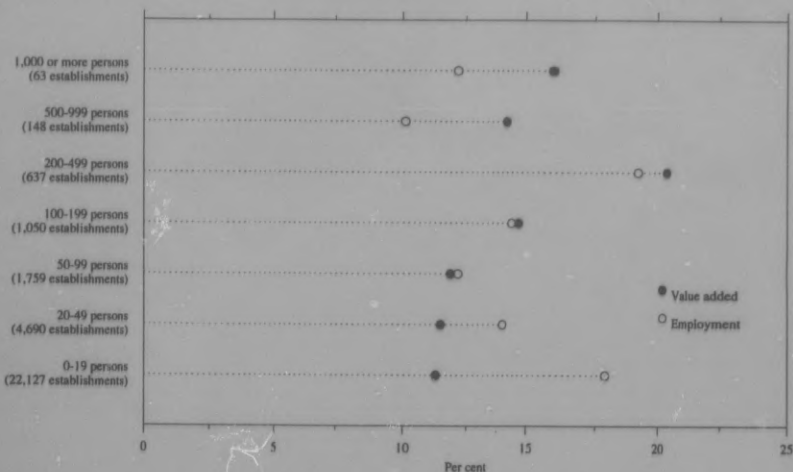


Employment size (Table 7)

Note: The 0-19 size range in the comments and graph below excludes the operations of single establishment businesses with less than four persons employed.

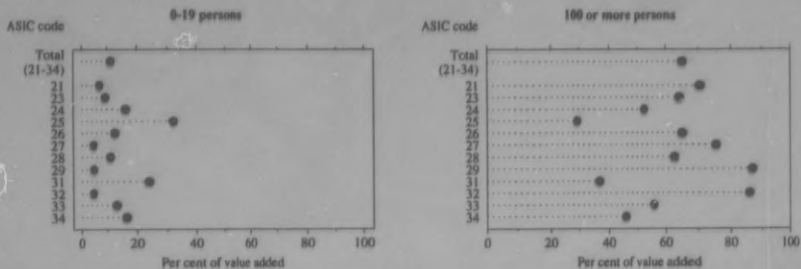
Of the 30,474 manufacturing establishments operating at 30 June 1990, 1,898 were large establishments (employing 100 or more persons). While making up only 6.2 per cent of all establishments, they accounted for 65.4 per cent of manufacturing value added for 1989-90 and 55.8 per cent of employment at the end of June 1990. Although establishments employing 0-19 persons comprised 72.6 per cent of manufacturing establishments in Australia at 30 June 1990, they only accounted for 11.3 per cent of value added and 17.9 per cent of employment. There were 63 manufacturing establishments employing more than 1,000 persons at the end of June 1990. They employed 12.2 per cent of all persons working in the manufacturing industry in Australia and contributed 16.0 per cent of all manufacturing value added.

DISTRIBUTION OF MANUFACTURING VALUE ADDED AND EMPLOYMENT BY EMPLOYMENT SIZE
AUSTRALIA, 1989-90



For all but three industry subdivisions, more than 50 per cent of value added was contributed by large establishments (employing 100 or more persons). Large establishments were particularly dominant in the Basic metal products (86.9%) and Transport equipment (86.1%) industries. Small establishments (employing 0-19 persons) made significant contributions to value added for Wood, wood products and furniture (32.0%) and Fabricated metal products (23.9%).

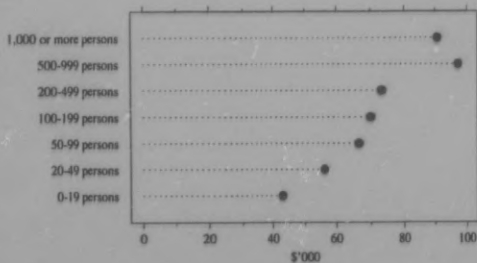
DISTRIBUTION OF VALUE ADDED BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION (a), AUSTRALIA, 1989-90



(a) Refer to the graph on page 2 for ASIC subdivision descriptions.

Small establishments (employing 0-19 persons) recorded a much lower ratio of average value added per person employed at the end of June 1990 (\$43,100) than establishments in the larger size categories. Large establishments (employing 100 or more persons) recorded an average value added per person employed at the end of June 1990 of \$80,300, with establishments employing between 500 and 999 persons having a ratio of \$96,700. It should be remembered that these data include all industries and that somewhat different patterns may emerge through analysis of individual industries.

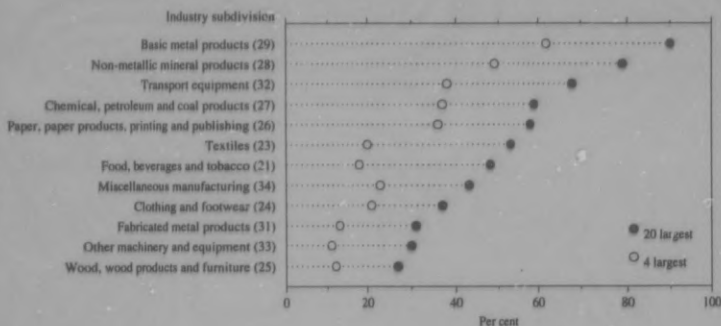
VALUE ADDED PER PERSON EMPLOYED BY EMPLOYMENT SIZE, AUSTRALIA, 1989-90



Concentration statistics (Table 8)

The 30,474 manufacturing establishments employing 4 or more persons operating in Australia at 30 June 1990 represented 26,852 individual enterprise groups. The 20 largest enterprise groups involved in manufacturing accounted for 26.7 per cent of total manufacturing value added and 16.9 per cent of manufacturing employment.

CONTRIBUTION TO INDUSTRY SUBDIVISION VALUE ADDED BY THE 4 LARGEST AND 20 LARGEST ENTERPRISE GROUPS (WITHIN INDIVIDUAL SUBDIVISIONS), AUSTRALIA, 1989-90



For 1989-90, the 20 largest enterprise groups accounted for more than 50 per cent of value added in six of the 12 manufacturing industry subdivisions. The highest concentration ratios were exhibited by Basic metal products (0.89) and Non-metallic mineral products (0.79), with Wood, wood products and furniture (0.27) the lowest. In terms of the four largest enterprise groups, Basic metal products (61.6% of value added) and Non-metallic mineral products (48.6% of value added) showed the greatest levels of concentration.

Capital expenditure (Table 10)

The table below shows capital expenditure on plant, machinery and equipment by industry subdivision for the years 1979-80, 1984-85 and 1989-90. It is difficult to analyse the absolute change in capital expenditure between the reference years, because of the effects of price changes and because expenditure on capital is subject to individual business decisions on an irregular basis. However, examination of the changes in relative shares of capital expenditure across the manufacturing industries is of some interest.

Whilst most industry subdivisions have maintained a relatively constant percentage share of all capital expenditure on plant, machinery and equipment since 1979-80, there have been some notable rises and falls in percentage shares as follows:

- Chemical, petroleum and coal products contributed 17.2 per cent of all manufacturing capital expenditure in 1979-80, which fell to 8.9 per cent in 1984-85, but increased to 13.3 per cent in 1989-90.
- Non-metallic mineral products had a 8.9 per cent share in 1979-80, which fell to 4.3 per cent in 1984-85, but increased to 7.9 per cent in 1989-90.
- Basic metal products had a 14.0 per cent share in 1979-80, which rose to 20.1 per cent in 1984-85, but decreased to 13.6 per cent in 1989-90.
- Fabricated metal products had a 4.2 per cent share in 1979-80, which was fairly constant at 4.9 per cent in 1984-85, but increased significantly to 8.1 per cent in 1989-90.
- Transport equipment had a 10.1 per cent share in 1979-80, which rose to 12.4 per cent in 1984-85, but decreased significantly to 3.7 per cent in 1989-90.

**CAPITAL EXPENDITURE ON PLANT, MACHINERY AND EQUIPMENT BY INDUSTRY SUBDIVISION
AUSTRALIA, 1979-80 TO 1989-90**

<i>Industry subdivision</i>				
<i>ASIC code</i>	<i>Description</i>	<i>1979-80 (\$m)</i>	<i>1984-85 (\$m)</i>	<i>1989-90 (\$m)</i>
21	Food, beverages and tobacco	350.4	572.2	930.5
23	Textiles	44.6	92.4	150.3
24	Clothing and footwear	22.5	51.3	112.7
25	Wood, wood products and furniture	55.7	99.7	336.4
26	Paper, paper products, printing and publishing	172.2	324.1	609.0
27	Chemical, petroleum and coal products	335.0	270.4	834.8
28	Non-metallic mineral products	174.0	131.9	497.9
29	Basic metal products	273.8	612.4	858.7
31	Fabricated metal products	82.1	149.4	507.4
32	Transport equipment	196.7	379.7	357.4
33	Other machinery and equipment	152.7	226.2	482.5
34	Miscellaneous manufacturing	89.4	141.0	621.3
21-34 Total manufacturing		1,949.0	3,050.7	6,298.7

Stocks (Table 5)

Over the twelve months of 1989-90, manufacturing stocks rose by \$2,193 million (10.4%).

Nine of the 12 industry subdivisions recorded an increase in stocks in 1989-90, while three industry subdivisions experienced a decrease. The industry subdivisions that recorded the largest percentage increases were Transport equipment (up 34.5%) and Non-metallic mineral products (up 19.1%). The three industry subdivisions that recorded decreases were Textiles (down 7.6%), Clothing and footwear (down 2.4%) and Paper, paper products, printing and publishing (down 1.3%).

TABLE 1. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Establishments at 30 June (b) (No.)	Average employment over whole year (c) ('000)	Wages and salaries (d) (\$m)	Turnover (\$m)	Value added (e) (\$m)
ASIC code	Description					
FOOD, BEVERAGES AND TOBACCO—						
Meat products—						
2115	Meat (except smallgoods or poultry)	390	31.9	778.4	5,806.7	1,818.1
2116	Poultry	110	8.8	187.5	1,362.5	432.7
2117	Bacon, ham and smallgoods n.e.c.	124	6.7	150.0	1,095.4	318.6
211	Total	624	47.4	1,115.9	8,264.6	2,569.4
Milk products—						
2121	Liquid milk and cream	74	6.7	171.0	1,987.7	542.1
2122	Butter	17	1.3	35.6	649.8	174.3
2123	Cheese	63	4.6	107.6	1,136.9	336.4
2124	Ice cream and frozen confections	34	1.9	36.9	379.2	179.2
2125	Milk products n.e.c.	14	0.9	26.4	246.4	81.8
212	Total	202	15.4	377.5	4,399.9	1,314.4
Fruit and vegetable products—						
2131	Fruit products	92	4.7	113.7	925.6	285.7
2132	Vegetable products	85	7.3	179.8	1,130.6	499.0
213	Total	177	12.0	293.5	2,056.2	784.7
214	Margarine and oils and fats n.e.c.	29	2.2	76.0	688.4	214.1
Flour mill and cereal food products—						
2151	Flour mill products	35	1.9	53.2	655.6	196.2
2152	Starch, gluten and starch sugars	12	0.9	29.2	274.4	61.9
2153	Cereal foods and baking mixes	86	5.1	151.6	1,182.3	517.3
215	Total	133	7.8	233.9	2,112.3	775.4
Bread, cakes and biscuits—						
2161	Bread	1,068	18.4	354.4	1,432.8	692.9
2162	Cakes and pastries	460	10.8	192.3	747.5	367.5
2163	Biscuits	50	6.2	152.2	643.3	340.8
216	Total	1,578	35.4	698.9	2,823.6	1,401.3
Other food products—						
2171	Raw sugar	25	n.p.	n.p.	n.p.	n.p.
2173	Confectionery and cocoa products	102	7.0	181.5	1,048.1	510.4
2174	Processed seafoods	95	3.5	71.8	784.4	295.5
2175	Prepared animal and bird foods	117	4.4	102.2	1,511.7	477.5
2176	Food products n.e.c.	240	n.p.	n.p.	n.p.	n.p.
217	Total	579	31.8	832.7	6,995.0	2,728.7
Beverages and malt—						
2185	Soft drinks, cordials and syrups	90	5.5	153.7	1,598.0	572.3
2186	Beer	18	6.3	239.6	1,910.3	1,083.4
2187	Malt	21	0.5	n.p.	n.p.	n.p.
2188	Wine and brandy	180	5.2	116.0	916.6	460.6
2189	Alcoholic beverages n.e.c.	3	0.1	n.p.	n.p.	n.p.
218	Total	312	17.7	527.0	4,787.6	2,205.7
219	Tobacco products	4	3.0	100.2	806.0	467.4
21	Total food, beverages and tobacco	3,638	172.6	4,255.5	32,933.6	12,461.2

For footnotes see end of table.

TABLE 1. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Establishments at 30 June (b) (No.)	Average employment over whole year (c) ('000)	Wages and salaries (d) (\$m)	Turnover (\$m)	Value added (e) (\$m)
ASIC code	Description					
TEXTILES—						
Textile fibres, yarns and woven fabrics—						
2341	Cotton ginning	15	0.3	8.0	163.9	98.0
2342	Wool scouring and top making	23	1.5	40.7	374.8	74.7
2343	Man-made fibres and yarns	10	1.7	38.2	193.6	89.3
2344	Man-made fibre broadwoven fabrics	29	3.1	84.6	378.8	180.3
2345	Cotton yarns and broadwoven fabrics	42	3.8	94.7	376.9	175.2
2346	Worsted yarns and broadwoven fabrics	13	1.8	46.4	195.4	70.5
2347	Woolen yarns and broadwoven fabrics	16	2.1	45.7	202.4	77.4
2348	Narrow woven and elastic textiles	22	1.1	27.1	135.7	57.0
2349	Textile finishing	65	2.2	55.9	231.1	101.0
234	Total	235	17.5	241.3	2,252.6	2923.6
Other textile products—						
2351	Household textiles	75	1.9	38.0	212.1	88.2
2352	Textile floor coverings	55	4.0	101.2	723.5	245.8
2353	Felt and felt products	8	0.7	20.2	76.6	47.2
2354	Canvas and associated products n.e.c.	219	3.0	61.2	250.7	110.7
2355	Rope, cordage and twine	22	0.4	11.1	52.6	27.0
2356	Textile products n.e.c.	78	2.4	63.1	428.0	206.2
235	Total	245	12.5	224.8	2,174.3	2725.2
23	Total textiles	269	30.0	736.1	3,996.1	2,648.7
CLOTHING AND FOOTWEAR—						
Knitting mills—						
2441	Hosiery	30	3.3	76.6	254.2	144.4
2442	Cardigans and pullovers	100	3.5	68.2	236.3	104.5
2443	Knitted goods n.e.c.	94	5.4	116.4	565.3	243.7
244	Total	224	12.2	261.2	1,055.9	492.6
Clothing—						
2451	Men's trousers and shorts; work clothing	108	7.2	136.3	483.5	250.0
2452	Men's suits and coats; waterproof clothing	89	4.1	77.7	242.2	147.6
2453	Women's outerwear n.e.c.	747	13.0	238.0	1,204.6	494.0
2454	Foundation garments	12	2.3	46.5	167.4	112.1
2455	Underwear and infants' clothing n.e.c.	183	9.6	180.0	625.5	295.3
2456	Headwear and clothing n.e.c.	564	10.6	147.3	615.8	266.9
245	Total	1,703	46.7	825.7	3,339.0	1,565.9
246	Footwear	170	10.0	203.4	705.3	356.7
24	Total clothing and footwear	2,097	68.9	1,290.3	5,100.2	2,415.3
WOOD, WOOD PRODUCTS AND FURNITURE—						
Wood and wood products—						
2531	Log sawmilling	522	10.6	225.3	998.0	603.2
2532	Resawn and dressed timber	114	4.8	118.7	548.8	244.4
2533	Veneers and manufactured boards of wood	84	5.8	164.2	915.9	306.3
2534	Wooden doors	48	1.2	26.0	166.3	65.7
2535	Wooden structural fittings and joinery n.e.c.	1,365	17.7	379.2	1,699.0	710.1
2536	Wooden containers	97	1.2	24.3	104.5	50.2
2537	Hardwood woodchips	18	1.0	31.1	365.5	136.6
2538	Wood products n.e.c.	296	2.8	50.2	203.4	95.7
253	Total	2,544	45.0	1,019.0	5,001.5	2,212.2
Furniture and mattresses—						
2541	Furniture (except sheet metal)	2,167	32.8	696.7	2,608.3	1,168.1
2542	Mattresses (except rubber)	84	3.3	75.2	357.8	153.0
254	Total	2,251	36.1	771.9	2,966.1	1,321.1
25	Total wood, wood products and furniture	4,795	81.2	1,791.0	7,967.6	3,533.3

For footnotes see end of table.

TABLE 1. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY CLASS,
AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Establishments at 30 June (b) (No.)	Average employment over whole year (c) ('000)	Wages and salaries (d) (\$m)	Turnover (\$m)	Value added (e) (\$m)
ASIC code	Description					
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—						
Paper and paper products—						
2631	Pulp, paper and paperboard	50	7.6	285.9	1,951.7	807.1
2632	Paper bags (including textile bags)	38	1.5	39.5	254.1	99.0
2633	Solid fibreboard containers	31	1.8	55.8	246.7	122.8
2634	Corrugated fibreboard containers	52	5.4	171.7	1,004.3	348.4
2635	Paper products n.e.c.	70	4.2	129.4	726.1	288.9
263	Total	241	20.6	682.3	4,183.1	1,667.0
Printing and allied industries—						
2641	Publishing	440	9.7	252.4	1,411.2	768.0
2642	Printing and publishing	247	26.9	786.3	3,021.5	1,976.5
2643	Paper stationery	277	8.8	218.0	967.7	459.4
2644	Printing and bookbinding	1,782	32.9	882.2	3,433.2	1,687.2
2645	Printing trade services n.e.c.	411	6.3	178.0	485.7	302.5
264	Total	3,157	84.5	2,316.8	9,319.2	5,193.6
26	Total paper, paper products, printing and publishing	3,398	105.1	2,999.1	13,502.3	6,866.7
CHEMICAL, PETROLEUM AND COAL PRODUCTS—						
Basic chemicals—						
2751	Chemical fertilisers	28	2.7	89.9	993.5	223.0
2752	Industrial gases	22	1.2	36.7	331.3	200.1
2753	Synthetic resins and rubber	77	4.7	203.0	1,867.3	609.0
2754	Organic industrial chemicals n.e.c.	47	2.8	100.6	958.0	321.1
2755	Inorganic industrial chemicals n.e.c.	71	4.1	141.1	1,171.8	521.4
275	Total	245	15.4	571.3	5,321.9	1,874.6
Other chemical products—						
2761	Ammunition, explosives and fireworks	24	2.8	87.2	540.0	262.1
2762	Paints	120	6.0	171.6	1,338.4	579.2
2763	Pharmaceutical and veterinary products	110	9.4	295.7	1,840.6	876.9
2764	Pesticides	24	1.0	42.2	556.8	249.5
2765	Soap and other detergents	124	4.5	140.9	1,108.3	514.8
2766	Cosmetics and toilet preparations	49	3.0	84.8	570.4	338.1
2767	Inks	32	1.2	34.9	219.9	103.4
2768	Chemical products n.e.c.	122	3.1	85.1	626.0	257.4
276	Total	615	30.9	942.4	6,800.5	3,181.4
277	Petroleum refining	21	4.4	205.9	8,016.8	2,123.0
278	Petroleum and coal products n.e.c.	20	0.4	12.4	128.8	43.7
27	Total chemical, petroleum and coal products	891	51.1	1,732.0	20,268.0	7,222.7

For footnotes see end of table.

TABLE 1. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Establishments at 30 June (b) (No.)	Average employment over whole year (c) ('000)	Wages and salaries (d) (\$m)	Turnover (\$m)	Value added (e) (\$m)
ASIC code	Description					
285	NON-METALLIC MINERAL PRODUCTS— Glass and glass products	88	6.4	212.1	1,111.6	675.6
	Clay products and refractories—					
2861	Clay bricks	95	5.7	175.7	779.8	512.2
2862	Refractories	24	1.2	39.1	179.2	85.1
2863	Ceramic tiles and pipes	37	2.0	54.4	190.5	107.6
2864	Ceramic goods n.e.c.	110	2.3	52.4	151.5	96.7
286	Total	266	11.2	321.6	1,301.0	801.6
	Cement and concrete products—					
2871	Cement	22	3.1	103.6	919.9	420.3
2872	Ready mixed concrete	403	4.2	115.8	1,839.8	357.2
2873	Concrete pipes and box culverts	43	1.9	56.9	259.5	138.4
2874	Concrete products n.e.c.	332	8.7	245.7	1,246.3	589.4
287	Total	800	17.9	522.1	4,265.6	1,505.3
	Other non-metallic mineral products—					
2881	Plaster products and expanded minerals	47	1.5	49.0	438.6	210.7
2882	Stone products	117	1.4	33.1	133.8	79.8
2883	Glass wool and mineral wool products	40	1.9	59.1	296.0	153.9
2884	Non-metallic mineral products n.e.c.	71	1.3	37.4	275.2	123.0
288	Total	275	6.2	178.6	1,143.6	567.4
28	Total non-metallic mineral products	1,429	41.6	1,234.3	7,821.8	3,558.0
	BASIC METAL PRODUCTS—					
	Basic iron and steel—					
2941	Iron and steel basic products	226	29.6	1,038.3	7,842.6	2,414.1
2942	Iron casting	76	4.2	120.9	442.2	227.6
2943	Steel casting	58	3.0	89.6	355.8	177.6
2944	Iron and steel forging	31	1.0	31.4	134.5	62.8
2945	Steel pipes and tubes	55	2.9	89.2	662.7	229.6
294	Total	446	40.6	1,369.4	9,437.8	3,111.7
	Basic non-ferrous metals—					
2951	Copper smelting, refining	7	1.3	47.3	1,459.2	411.6
2952	Silver, lead, zinc smelting, refining	10	3.7	135.0	1,412.6	429.5
2953	Alumina	8	5.9	235.4	2,794.6	1,691.5
2954	Aluminium smelting	8	5.8	231.6	2,636.3	1,325.1
2955	Nickel smelting, refining	7	1.5	52.9	1,104.6	251.9
2956	Non-ferrous metals n.e.c. smelting, refining	2	1.2	35.7	422.5	85.9
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.	39				
295	Total	81	19.3	737.9	9,829.9	4,195.5
	Non-ferrous metal basic products—					
2961	Aluminium rolling, drawing, extruding	35	4.5	145.7	1,324.2	342.7
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	30	2.7	79.1	769.7	235.6
2963	Non-ferrous metal casting	82	1.9	55.4	187.8	78.1
296	Total	147	9.1	280.1	2,281.7	656.4
29	Total basic metal products	674	69.1	2,387.4	21,549.4	7,963.6

For footnotes see end of table.

TABLE 1. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY CLASS,
AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Establishments at 30 June (b) (No.)	Average employment over whole year (c) ('000)	Wages and salaries (d) (\$m)	Turnover (\$m)	Value added (e) (\$m)
ASIC code	Description					
FABRICATED METAL PRODUCTS—						
Structural metal products—						
3141	Fabricated structural steel	942	20.0	538.7	3,132.6	1,151.5
3142	Architectural aluminium products	610	14.7	299.7	1,555.3	501.2
3143	Architectural metal products n.e.c.	333	5.1	120.4	579.6	242.5
314	Total	1,885	39.8	958.8	5,267.4	1,895.2
Sheet metal products—						
3151	Metal containers	75	4.4	130.0	944.6	377.6
3152	Sheet metal furniture	136	4.2	94.4	447.6	183.6
3153	Sheet metal products n.e.c.	896	18.2	461.2	2,189.3	996.7
315	Total	1,107	26.8	685.5	3,581.5	1,557.8
Other fabricated metal products—						
3161	Cutlery and hand tools n.e.c.	124	2.6	62.8	214.0	115.6
3162	Springs and wire products	231	5.9	142.9	646.5	324.2
3163	Nuts, bolts, screws and rivets	89	3.2	87.2	375.4	170.7
3164	Metal coating and finishing	402	5.6	136.4	489.4	259.2
3165	Non-ferrous steam, gas and water fittings	63	3.1	82.5	296.2	170.0
3166	Boiler and plate work	91	2.0	54.7	209.3	106.7
3167	Metal blinds and awnings	80	1.7	36.6	196.9	72.6
3168	Fabricated metal products n.e.c.	756	14.9	351.7	1,317.8	722.9
316	Total	1,836	39.0	954.8	3,745.4	1,941.8
31	Total fabricated metal products	4,828	105.7	2,599.2	12,594.3	5,394.9
TRANSPORT EQUIPMENT—						
Motor vehicles and parts—						
3231	Motor vehicles	67	34.7	965.2	8,453.9	3,229.2
3232	Motor vehicle bodies, trailers, caravans	320	6.4	149.2	662.6	266.3
3233	Motor vehicle instruments and electrical equipment n.e.c.	54	8.4	188.7	877.4	409.8
3234	Motor vehicle parts n.e.c.	608	27.8	695.7	2,622.0	1,349.3
323	Total	1,049	77.3	1,998.8	12,615.8	5,254.5
Other transport equipment—						
3241	Ships	51	7.0	223.5	1,935.9	884.0
3242	Boats	245	3.4	79.5	284.9	131.3
3243	Railway rolling stock and locomotives	25	4.6	118.4	531.6	266.2
3244	Aircraft	143	14.4	512.2	1,188.4	738.8
3245	Transport equipment n.e.c.	42	0.5	10.6	55.6	20.6
324	Total	506	30.0	944.3	3,996.3	2,040.8
32	Total transport equipment	1,555	107.3	2,943.1	16,612.1	7,295.3

For footnotes see end of table.

TABLE 1. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (e).)

Industry class		Establishments at 30 June (b) (No.)	Average employment over whole year (c) ('000)	Wages and salaries (d) (\$m)	Turnover (\$m)	Value added (e) (\$m)
ASIC code	Description					
OTHER MACHINERY AND EQUIPMENT—						
Photographic, professional and scientific equipment—						
3341	Photographic and optical goods	49	2.3	71.0	387.5	161.2
3342	Photographic film processing	338	4.5	89.2	363.4	199.9
3343	Measuring, professional and scientific equipment n.e.c.	151	4.8	131.5	412.8	220.3
334	Total	538	11.6	291.7	1,163.7	581.3
Appliances and electrical equipment—						
3351	Radio and TV receivers; audio equipment	51	2.5	76.4	314.0	169.5
3352	Electronic equipment n.e.c.	363	17.5	492.7	2,544.1	1,162.5
3353	Refrigerators and household appliances	211	13.5	327.3	1,732.3	824.4
3354	Water heating systems	32	1.9	51.5	240.3	100.0
3355	Electric and telephone cable and wire	34	3.7	119.3	822.3	299.5
3356	Batteries	14	1.6	41.2	247.2	91.3
3357	Electrical machinery and equipment n.e.c.	556	22.9	597.0	2,453.2	1,222.8
335	Total	1,261	63.6	1,705.5	8,353.4	3,909.9
Industrial machinery and equipment—						
3361	Agricultural machinery	248	5.5	130.2	545.8	258.1
3362	Construction machinery	77	1.7	47.1	229.4	103.0
3363	Materials handling equipment	195	4.6	125.2	627.9	279.0
3364	Wood and metal working machinery	139	2.4	67.9	216.3	118.1
3365	Pumps and compressors	87	3.9	109.9	556.6	275.0
3366	Commercial space heating and cooling equipment	53	2.9	78.7	325.4	106.4
3367	Dies, saw blades and machine tool accessories	327	5.1	134.2	412.6	239.9
3368	Food processing machinery	99	2.4	64.3	305.4	137.3
3369	Industrial machinery and equipment n.e.c.	911	24.2	705.8	2,726.0	1,249.7
336	Total	2,136	52.7	1,463.2	5,943.3	2,766.4
33	Total other machinery and equipment	3,935	127.9	3,460.5	15,464.4	7,257.6
MISCELLANEOUS MANUFACTURING—						
Leather and leather products—						
3451	Leather tanning and fur dressing	61	1.9	49.6	468.1	94.1
3452	Leather and leather substitute goods n.e.c.	91	1.2	22.2	81.2	40.7
345	Total	152	3.1	71.9	549.3	134.8
Rubber products—						
3461	Rubber tyres, tubes, belts, hose and sheets	110	6.5	188.8	998.6	534.6
3462	Rubber products n.e.c.	104	3.3	81.3	320.7	164.2
346	Total	214	9.8	270.1	1,319.3	698.9
Plastic and related products—						
3471	Flexible packaging and abrasive papers	152	7.2	208.2	1,314.5	595.1
3472	Rigid plastic sheeting	17	0.6	27.6	173.9	78.6
3473	Hard surface floor coverings n.e.c.	6	0.3			
3474	Plastic products n.e.c.	887	28.4			
347	Total	1,062	36.5	891.0	4,934.6	2,179.4
Other manufacturing—						
3481	Ophthalmic articles	50	1.5	32.4	90.3	56.5
3482	Jewellery and silverware	196	2.0	40.7	236.3	85.7
3483	Brooms and brushes	34	0.9	20.9	111.7	56.3
3484	Signs and advertising displays	482	5.4	121.3	401.1	206.2
3485	Sporting equipment	130	1.8	36.9	178.6	73.5
3486	Writing and marking equipment	33	0.6	14.3	87.7	56.0
3487	Manufacturing n.e.c.	189	2.1	40.8	167.6	90.0
348	Total	1,114	14.4	307.3	1,273.2	624.3
34	Total miscellaneous manufacturing	2,542	63.7	1,540.3	8,076.5	3,637.3
21-34	TOTAL MANUFACTURING	9,904,474	1,824.0	26,968.7	165,886.4	69,240.6

(a) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (b) See paragraphs 5 to 10 and 16 of the Explanatory Notes and the Appendix. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors. (e) Subject to sampling error. See paragraphs 12 to 15 of the Explanatory Notes.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (e) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
ASIC code	Description	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	Value added to turnover		Wages and salaries to value added	
										1986-87	1989-90	1986-87	1989-90
FOOD, BEVERAGES AND TOBACCO—													
Meat products—													
2115	Meat (except smallgoods or poultry)	79	81	143.4	182.0	37.2	57.0	20.5	24.5	0.26	0.31	0.55	0.43
2116	Poultry	77	81	117.6	155.4	40.1	49.3	17.5	21.5	0.34	0.32	0.43	0.43
2117	Bacon, ham and smallgoods n.e.c.	56	53	126.7	163.4	33.7	47.5	19.8	22.5	0.27	0.29	0.58	0.47
211	Total	74	76	135.9	174.4	37.2	54.2	19.8	23.6	0.27	0.31	0.53	0.43
Milk products—													
2121	Liquid milk and cream	64	92	243.1	297.6	51.7	81.2	22.1	25.6	0.21	0.27	0.43	0.32
2122	Butter	63	76	318.5	500.6	84.2	134.3	23.1	27.5	0.26	0.27	0.27	0.20
2123	Cheese	56	69	192.8	246.6	53.3	72.9	19.8	23.4	0.28	0.30	0.37	0.32
2124	Ice cream and frozen confections	58	58	119.3	201.9	42.4	95.7	20.5	19.7	0.36	0.47	0.48	0.21
2125	Milk products n.e.c.	128	66	161.8	268.6	39.2	89.2	25.0	28.8	0.24	0.33	0.64	0.32
212	Total	64	76	211.2	286.0	52.6	85.4	21.7	24.6	0.25	0.30	0.41	0.29
Fruit and vegetable products—													
Fruit products													
2131	Fruit products	45	48	137.9	196.6	45.0	60.7	20.0	24.2	0.33	0.31	0.44	0.40
2132	Vegetable products	90	83	114.5	155.2	44.3	68.5	21.4	24.8	0.39	0.44	0.48	0.36
213	Total	63	65	124.9	171.4	44.6	65.4	20.8	24.6	0.36	0.38	0.46	0.37
214	Margarine and oils and fats n.e.c.	77	73	132.6	312.8	196.5	97.3	27.3	34.6	0.29	0.31	0.28	0.35
Flour mill and cereal food products—													
2151	Flour mill products	49	55	257.6	344.5	64.5	103.1	21.7	28.0	0.25	0.30	0.34	0.27
2152	Starch, gluten and starch sugars	61	71	287.7	322.5	85.9	72.7	27.4	34.3	0.30	0.23	0.32	0.47
2153	Cereal foods and baking mixes	68	59	164.0	232.6	69.7	101.8	21.7	29.9	0.43	0.44	0.31	0.29
215	Total	61	59	203.0	269.6	69.8	99.0	22.2	29.9	0.34	0.37	0.32	0.30
Bread, cakes and biscuits—													
2161	Bread	18	17	59.3	78.0	27.0	37.7	16.0	20.2	0.46	0.48	0.57	0.51
2162	Cakes and pastries	25	24	61.4	69.1	28.5	34.0	15.9	18.4	0.46	0.49	0.54	0.52
2163	Biscuits	173	124	76.7	103.9	39.6	55.1	20.0	24.7	0.52	0.53	0.51	0.45
216	Total	23	23	63.0	79.8	29.7	39.6	16.7	20.5	0.47	0.50	0.54	0.50
Other food products—													
2171	Raw sugar	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2173	Confectionery and cocoa products	62	66	127.1	150.2	61.7	73.1	20.0	26.1	0.49	0.49	0.32	0.36
2174	Processed seafoods	39	37	206.6	224.8	45.0	84.7	14.7	20.8	0.22	0.38	0.32	0.24
2175	Prepared animal and bird foods	30	39	295.0	346.9	84.4	109.6	22.2	23.5	0.29	0.32	0.26	0.21
2176	Food products n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
217	Total	52	55	170.6	219.9	59.8	85.8	21.5	26.3	0.35	0.39	0.36	0.31

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (s).)

Industry class		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (e) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
										Value added to turnover		Wages and salaries to value added	
ASIC code	Description	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
Beverages and malt—													
2185	Soft drinks, cordials and syrups	53	63	200.1	288.8	68.1	103.4	21.9	27.9	0.34	0.36	0.32	0.27
2186	Beer	351	347	211.0	312.9	106.8	172.0	28.7	38.1	0.51	0.55	0.27	0.22
2187	Malt	24	22	356.6	n.p.	95.1	n.p.	24.5	n.p.	0.27	n.p.	0.26	n.p.
2188	Wine and brandy	28	28	136.7	175.1	54.4	88.0	18.0	22.4	0.40	0.50	0.32	0.25
2189	Alcoholic beverages n.e.c.	18	40	*	n.p.	*	n.p.	*	n.p.	*	n.p.	*	n.p.
218	Total	54	56	191.3	271.2	79.3	124.9	23.4	30.0	0.42	0.46	0.29	0.24
219	Tobacco products	688	735	161.4	272.3	87.7	157.9	27.9	33.9	0.54	0.58	0.32	0.21
21	Total food, beverages and tobacco	47	47	146.7	190.8	50.0	72.2	20.6	24.9	0.34	0.38	0.41	0.34
TEXTILES—													
Textile fibres, yarns and woven fabrics—													
2341	Cotton ginning	38	30	270.6	602.6	74.9	360.4	23.9	29.2	0.28	0.60	0.32	0.08
2342	Wool scouring and top making	67	63	236.3	252.6	66.8	50.3	23.9	27.5	0.28	0.20	0.36	0.55
2343	Man-made fibres and yarns	218	169	162.1	113.4	121.6	52.3	24.2	22.4	0.35	0.46	0.22	0.43
2344	Man-made fibre broadwoven fabrics	108	105	100.4	122.0	48.6	58.1	19.1	27.2	0.48	0.48	0.39	0.47
2345	Cotton yarns and broadwoven fabrics	105	86	85.7	100.3	39.8	46.7	20.4	25.3	0.46	0.47	0.51	0.54
2346	Worsted yarns and broadwoven fabrics	192	136	62.8	108.2	26.3	39.1	18.8	25.7	0.42	0.36	0.72	0.66
2347	Woolen yarns and broadwoven fabrics	81	131	74.2	97.7	30.0	37.4	17.1	22.1	0.40	0.38	0.57	0.59
2348	Narrow woven and elastic textiles	50	50	74.9	131.0	34.1	50.8	16.6	24.2	0.46	0.42	0.49	0.47
2349	Textile finishing	41	35	99.4	104.8	48.6	45.8	22.3	25.6	0.49	0.44	0.46	0.55
234	Total	82	74	196.1	128.5	139.3	152.7	20.7	25.2	0.41	0.41	0.53	0.48
Other textile products—													
2351	Household textiles	24	24	80.1	110.2	28.8	45.8	14.2	20.0	0.36	0.42	0.49	0.43
2352	Textile floor coverings	86	71	133.8	181.7	45.6	61.7	18.9	25.5	0.34	0.34	0.41	0.41
2353	Felt and felt products	90	85	102.1	112.4	56.0	69.3	24.0	29.6	0.55	0.62	0.43	0.43
2354	Canvas and associated products n.e.c.	14	14	73.9	83.3	35.0	36.8	15.7	20.9	0.47	0.44	0.44	0.55
2355	Rope, cordage and twine	26	19	110.6	125.0	42.4	64.2	19.0	26.7	0.38	0.51	0.44	0.41
2356	Textile products n.e.c.	38	32	126.2	175.1	61.6	84.4	20.5	26.0	0.49	0.48	0.33	0.31
235	Total	31	27	109.3	139.9	44.9	58.2	18.2	23.9	0.41	0.42	0.40	0.41
23	Total textiles	52	43	1100.9	133.2	141.5	155.0	19.8	24.7	0.41	0.41	0.48	0.45

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Persons employed per establishment (c) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (c) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of—			
										Value added to turnover		Wages and salaries to value added	
ASIC code	Description	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
CLOTHING AND FOOTWEAR—													
Knitting mills—													
2441	Hosiery	110	106	64.3	77.0	33.6	43.8	18.3	23.2	0.52	0.57	0.54	0.53
2442	Cardigans and pullovers	40	32	58.5	68.5	28.7	30.3	15.5	19.8	0.49	0.44	0.53	0.65
2443	Knitted goods n.e.c.	49	53	97.6	104.4	36.9	45.0	18.9	21.6	0.38	0.43	0.51	0.48
244	Total	52	51	75.3	86.8	33.1	40.5	17.5	21.5	0.44	0.47	0.53	0.53
Clothing—													
2451	Men's trousers and shorts; work clothing	74	62	55.3	67.3	24.3	34.8	15.3	19.0	0.44	0.52	0.62	0.55
2452	Men's suits and coats; waterproof clothing	54	45	42.5	59.2	23.6	36.1	15.5	19.1	0.56	0.61	0.65	0.53
2453	Women's outerwear n.e.c.	21	17	61.8	93.0	27.1	38.1	14.4	18.8	0.44	0.41	0.52	0.48
2454	Foundation garments	141	187	48.0	73.6	27.5	49.3	16.8	20.5	0.57	0.67	0.61	0.42
2455	Underwear and infants' clothing n.e.c.	57	48	53.4	65.2	26.9	30.8	15.3	18.8	0.50	0.47	0.57	0.61
2456	Headwear and clothing n.e.c.	16	18	46.7	57.8	22.5	25.1	14.1	14.2	0.48	0.43	0.61	0.55
245	Total	30	26	53.6	71.4	25.5	33.5	14.9	17.9	0.47	0.47	0.58	0.53
246	Footwear	59	56	58.1	70.6	28.1	35.7	16.1	20.4	0.48	0.51	0.57	0.47
24	Total clothing and footwear	36	31	58.3	74.0	27.3	35.1	15.6	18.9	0.47	0.47	0.57	0.53
WOOD, WOOD PRODUCTS AND FURNITURE—													
Wood and wood products—													
2531	Log sawmilling	17	20	*	94.1	*	56.9	*	21.9	*	0.60	*	0.37
2532	Resawn and dressed timber	33	41	90.0	115.3	38.5	51.4	19.0	25.1	0.43	0.45	0.49	0.49
2533	Veneers and manufactured boards of wood	67	66	119.8	157.4	42.0	52.6	21.5	28.3	0.35	0.33	0.51	0.54
2534	Wooden doors	29	25	95.0	139.4	33.5	55.1	18.6	22.0	0.35	0.40	0.55	0.40
2535	Wooden structural fittings and joinery n.e.c.	13	13	*	96.1	*	40.2	*	22.3	*	0.42	*	0.53
2536	Wooden containers	14	13	*	84.1	*	40.4	*	20.1	*	0.48	*	0.48
2537	Hardwood woodchips	88	55	374.0	380.7	145.1	142.2	29.2	32.4	0.39	0.37	0.20	0.23
2538	Wood products n.e.c.	10	9	62.8	73.2	29.3	34.5	16.0	19.0	0.47	0.47	0.53	0.52
253	Total	18	17	85.7	111.1	36.1	49.1	18.3	23.2	0.42	0.44	0.49	0.46
Furniture and mattresses—													
2541	Furniture (except sheet metal)	17	15	65.5	79.5	28.9	35.6	16.8	21.9	0.44	0.45	0.57	0.60
2542	Mattresses (except rubber)	36	38	99.4	108.1	38.0	46.2	18.4	22.8	0.38	0.43	0.48	0.49
254	Total	17	15	68.7	82.1	29.8	36.6	16.9	21.9	0.43	0.45	0.56	0.58
25	Total wood, wood products and furniture	18	16	79.0	98.2	33.6	43.5	17.7	22.7	0.43	0.44	0.52	0.51

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (e) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	Value added to turnover		Wages and salaries to value added	
ASIC code	Description	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—													
Paper and paper products—													
2631	Pulp, paper and paperboard	222	145	213.9	256.2	86.4	106.0	31.2	37.5	0.40	0.41	0.36	0.35
2632	Paper bags (including textile bags)	31	39	118.1	166.5	35.4	64.9	18.8	26.0	0.30	0.39	0.53	0.40
2633	Solid fibreboard containers	68	59	130.3	140.2	53.3	69.8	22.9	31.8	0.41	0.50	0.43	0.45
2634	Corrugated fibreboard containers	115	95	155.0	185.2	53.9	64.2	24.5	31.7	0.35	0.35	0.45	0.49
2635	Paper products n.e.c.	61	61	140.8	171.8	56.0	68.4	22.6	30.7	0.40	0.40	0.40	0.45
263	Total	93	82	167.8	203.5	64.8	81.1	26.0	33.2	0.39	0.40	0.40	0.41
Printing and allied industries—													
2641	Publishing	27	23	123.0	145.8	74.8	79.3	22.1	26.2	0.61	0.54	0.29	0.33
2642	Printing and publishing	109	109	72.7	112.4	44.8	73.5	22.9	29.3	0.62	0.65	0.51	0.40
2643	Paper stationery	56	32	89.7	109.8	43.6	52.1	20.9	24.9	0.49	0.47	0.48	0.47
2644	Printing and bookbinding	20	18	75.0	104.4	37.1	51.3	20.4	27.2	0.49	0.49	0.54	0.52
2645	Printing trade services n.e.c.	17	15	62.4	77.6	38.5	48.4	22.9	28.7	0.62	0.62	0.59	0.51
264	Total	30	27	80.6	110.3	44.8	61.4	21.6	27.6	0.56	0.56	0.48	0.45
26	Total paper, paper products, printing and publishing	35	31	98.2	128.5	48.8	65.3	22.5	28.7	0.50	0.51	0.46	0.44
CHEMICAL, PETROLEUM AND COAL PRODUCTS—													
Basic chemicals—													
2751	Chemical fertilisers	94	95	303.5	366.2	87.0	82.2	29.4	33.2	0.29	0.22	0.34	0.40
2752	Industrial gases	34	54	n.p.	285.9	n.p.	172.7	n.p.	31.7	n.p.	0.60	n.p.	0.18
2753	Synthetic resins and rubber	78	61	290.0	398.0	99.3	129.8	30.1	43.3	0.34	0.33	0.50	0.33
2754	Organic industrial chemicals n.e.c.	53	58	n.p.	346.0	n.p.	116.0	n.p.	36.3	n.p.	0.34	n.p.	0.11
2755	Inorganic industrial chemicals n.e.c.	51	59	211.5	287.9	96.3	128.1	29.6	34.7	0.46	0.44	0.31	0.27
275	Total	62	63	279.0	345.5	100.7	121.7	29.5	37.1	0.36	0.35	0.29	0.30
Other chemical products—													
2761	Ammunition, explosives and fireworks	184	116	85.6	194.6	47.4	94.5	23.3	31.4	0.55	0.49	0.49	0.33
2762	Paints	48	51	152.8	223.3	60.7	96.6	23.9	28.7	0.40	0.43	0.39	0.30
2763	Pharmaceutical and veterinary products	94	85	130.8	196.8	64.2	93.7	21.8	31.6	0.49	0.48	0.37	0.34
2764	Pesticides	54	42	373.8	531.8	117.7	238.3	25.0	40.3	0.31	0.45	0.21	0.17
2765	Soap and other detergents	39	37	180.3	247.2	72.9	114.8	22.9	31.5	0.40	0.46	0.31	0.27
2766	Cosmetics and toilet preparations	76	60	134.0	192.1	71.8	113.9	22.9	28.6	0.54	0.59	0.32	0.25
2767	Inks	31	37	164.3	183.3	73.9	86.1	24.2	29.1	0.45	0.47	0.33	0.34
2768	Chemical products n.e.c.	24	24	175.3	205.1	68.8	84.4	23.1	27.9	0.39	0.41	0.34	0.33
276	Total	57	51	150.4	220.3	66.4	103.0	23.5	30.6	0.44	0.47	0.35	0.30

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (c) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
										Value added to turnover		Wages and salaries to value added	
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
ASFC code	Description												
277	Petroleum refining	348	215	410.4	1,805.2	76.5	478.0	36.8	46.4	0.19	0.26	0.48	0.10
278	Petroleum and coal products n.e.c.	24	19	264.3	345.4	59.2	117.2	25.5	33.1	0.22	0.34	0.43	0.28
27	Total chemical, petroleum and coal products	62	57	209.7	396.7	77.2	141.4	26.3	33.9	0.37	0.36	0.34	0.34
285	NON-METALLIC MINERAL PRODUCTS— Glass and glass products	111	73	130.5	174.7	68.6	106.2	26.9	33.5	0.53	0.61	0.39	0.31
	Clay products and refractories—												
2861	Clay bricks	60	59	90.6	136.6	52.7	89.7	22.8	30.8	0.58	0.66	0.43	0.34
2862	Refractories	43	54	122.3	147.5	49.6	70.1	24.5	32.2	0.41	0.48	0.49	0.46
2863	Ceramic tiles and pipes	69	50	70.0	95.8	36.8	54.1	21.5	27.5	0.53	0.57	0.59	0.51
2864	Ceramic goods n.e.c.	24	19	*	66.0	*	42.1	*	23.4	*	0.64	*	0.54
286	Total	47	41	85.6	116.1	47.5	71.5	22.0	28.9	0.55	0.62	0.46	0.40
	Cement and concrete products—												
2871	Cement	129	142	226.2	296.9	87.7	135.7	27.6	33.4	0.39	0.46	0.31	0.25
2872	Ready mixed concrete	4	11	248.2	439.9	52.3	85.4	23.6	28.2	0.21	0.19	0.45	0.32
2873	Concrete pipes and box culverts	36	43	136.6	136.6	72.9	72.9	30.1	30.1	0.53	0.53	0.41	0.41
2874	Concrete products n.e.c.	21	26	103.6	143.6	48.5	67.9	22.0	28.7	0.47	0.47	0.45	0.42
287	Total	13	22	178.1	238.9	57.8	84.3	23.7	29.5	0.32	0.35	0.41	0.35
	Other non-metallic mineral products—												
2881	Plaster products and expanded minerals	34	32	177.3	288.8	82.5	138.7	25.2	32.3	0.47	0.48	0.30	0.23
2882	Stone products	11	12	63.9	94.1	32.8	56.1	19.7	24.0	0.51	0.60	0.57	0.41
2883	Glass wool and mineral wool products	90	50	195.0	154.8	148.3	80.5	127.5	31.1	10.51	0.52	10.45	0.38
2884	Non-metallic mineral products n.e.c.	20	19	121.7	210.9	56.2	94.2	22.8	28.9	0.46	0.45	0.40	0.30
288	Total	23	23	118.8	185.7	156.7	92.1	123.9	29.3	10.48	0.50	0.39	0.31
28	Total non-metallic mineral products	22	29	137.2	188.1	56.4	85.4	123.7	29.9	0.41	0.45	0.41	0.35

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class	Description	Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (c) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	Value added to turnover		Wages and salaries to value added	
ASIC code										1986-87	1989-90	1986-87	1989-90
BASIC METAL PRODUCTS—													
Basic iron and steel—													
2941	Iron and steel basic products	227	131	167.5	265.3	48.4	81.7	28.4	35.2	0.29	0.31	0.59	0.43
2942	Iron casting	56	56	70.2	105.6	36.9	54.3	22.9	28.9	0.53	0.51	0.62	0.53
2943	Steel casting	62	48	87.0	117.6	45.3	58.7	22.6	29.7	0.52	0.50	0.50	0.50
2944	Iron and steel forging	31	32	113.0	139.7	45.2	65.2	25.4	32.6	0.40	0.47	0.56	0.50
2945	Steel pipes and tubes	77	53	144.5	229.3	55.3	79.4	25.7	30.9	0.38	0.35	0.46	0.39
294	Total	134	91	152.1	232.3	47.9	76.6	27.3	33.7	0.31	0.33	0.57	0.44
Basic non-ferrous metals—													
2951	Copper smelting, refining	n.p.	186	n.p.	1,128.5	n.p.	318.3	n.p.	36.6	n.p.	0.28	n.p.	0.11
2952	Silver, lead, zinc smelting, refining	777	365	282.9	381.9	67.9	116.1	25.0	36.5	0.24	0.30	0.37	0.31
2953	Alumina	1,010	732	287.2	477.7	101.6	289.1	32.3	40.2	0.35	0.61	0.32	0.14
2954	Aluminium smelting	518	727	287.3	457.2	120.6	229.8	32.4	40.2	0.42	0.50	0.27	0.17
2955	Nickel smelting, refining	n.p.	221	n.p.	730.1	n.p.	166.5	n.p.	35.0	n.p.	0.23	n.p.	0.21
2956	Non-ferrous metals n.e.c. smelting, refining	63	30	n.p.	353.3	n.p.	71.8	n.p.	30.0	n.p.	0.20	n.p.	0.42
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.	29	29	265.6	508.9	52.8	71.8	21.4	30.0	0.20	0.20	0.41	0.42
295	Total	291	239	291.5	508.9	80.1	217.2	29.6	38.2	0.27	0.43	0.37	0.18
Non-ferrous metal basic products—													
2961	Aluminium rolling, drawing, extruding	116	121	221.3	295.7	71.5	76.5	26.8	32.6	0.32	0.26	0.37	0.43
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	103	90	174.5	281.5	47.5	86.2	24.7	29.0	0.27	0.31	0.52	0.34
2963	Non-ferrous metal casting	23	24	72.6	97.7	30.2	40.6	19.8	29.0	0.42	0.42	0.65	0.71
296	Total	58	61	172.6	249.8	55.1	71.9	24.5	30.7	0.32	0.29	0.44	0.43
29	Total basic metal products	130	102	194.1	312.0	59.8	115.3	27.6	34.6	0.31	0.37	0.46	0.30
FABRICATED METAL PRODUCTS—													
Structural metal products—													
3141	Fabricated structural steel	21	21	114.6	156.6	41.6	57.6	22.9	27.3	0.36	0.37	0.54	0.47
3142	Architectural aluminium products	22	21	90.0	105.7	33.5	34.1	19.5	20.7	0.37	0.32	0.57	0.60
3143	Architectural metal products n.e.c.	15	15	82.2	114.0	35.1	47.7	20.0	24.3	0.43	0.42	0.56	0.50
314	Total	21	20	102.8	132.4	38.1	47.6	21.4	24.5	0.37	0.36	0.53	0.51
Sheet metal products—													
3151	Metal containers	70	56	141.3	215.3	52.4	86.0	23.6	29.7	0.37	0.40	0.45	0.34
3152	Sheet metal furniture	40	29	73.7	105.5	32.6	43.3	19.9	22.4	0.44	0.41	0.61	0.51
3153	Sheet metal products n.e.c.	20	20	80.2	120.4	35.9	54.8	19.2	25.7	0.45	0.46	0.53	0.46
315	Total	26	24	95.5	133.5	39.9	58.1	20.4	25.8	0.42	0.43	0.51	0.44

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class	Description	Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (c) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	Value added to turnover		Wages and salaries to value added	
ASIC code										1986-87	1989-90	1986-87	1989-90
	Other fabricated metal products—												
3161	Cutlery and hand tools n.e.c.	26	20	71.2	81.6	36.7	44.1	19.1	24.2	0.52	0.54	0.52	0.54
3162	Springs and wire products	28	25	101.8	110.2	38.3	55.3	20.3	24.5	0.38	0.50	0.53	0.44
3163	Nuts, bolts, screws and rivets	36	35	79.7	115.6	38.9	52.6	22.7	27.0	0.49	0.45	0.58	0.51
3164	Metal coating and finishing	15	14	*	88.1	*	46.7	*	24.9	*	0.53	*	0.53
3165	Non-ferrous steam, gas and water fittings	56	46	68.6	94.7	34.8	54.4	20.4	26.4	0.51	0.57	0.58	0.49
3166	Boiler and plate work	19	22	82.2	106.2	37.1	54.1	22.9	28.0	0.45	0.51	0.61	0.51
3167	Metal blinds and awnings	21	20	*	113.7	*	41.9	*	21.5	*	0.37	*	0.50
3168	Fabricated metal products n.e.c.	20	20	63.5	88.4	33.2	48.5	19.7	24.1	0.52	0.55	0.59	0.49
316	Total	22	21	74.0	96.0	35.0	49.7	20.1	24.8	0.47	0.52	0.57	0.49
31	Total fabricated metal products	22	21	89.2	119.2	37.3	51.1	20.6	24.9	0.42	0.43	0.55	0.48
	TRANSPORT EQUIPMENT—												
	Motor vehicles and parts—												
3231	Motor vehicles	543	309	198.4	243.6	51.1	93.1	24.5	27.8	0.26	0.38	0.47	0.30
3232	Motor vehicle bodies, trailers, caravans	22	20	83.2	102.9	33.1	41.4	18.5	23.7	0.40	0.40	0.55	0.56
3233	Motor vehicle instruments and electrical equipment n.e.c.	175	145	69.9	105.0	29.3	49.0	17.4	22.6	0.42	0.47	0.60	0.46
3234	Motor vehicle parts n.e.c.	51	44	75.2	94.3	34.8	48.5	20.4	25.2	0.46	0.51	0.58	0.52
323	Total	73	71	127.4	162.2	41.3	68.0	21.7	26.0	0.32	0.42	0.52	0.38
	Other transport equipment—												
3241	Ships	128	139	63.6	278.4	38.4	127.1	24.5	32.2	0.60	0.46	0.64	0.25
3242	Boats	12	14	69.2	83.0	30.9	38.2	17.3	23.8	0.45	0.46	0.55	0.61
3243	Railway rolling stock and locomotives	386	192	51.1	115.0	28.1	57.6	20.6	25.7	0.55	0.50	0.73	0.44
3244	Aircraft	129	102	63.0	82.4	40.4	51.2	29.2	35.6	0.64	0.62	0.69	0.69
3245	Transport equipment n.e.c.	17	13	78.6	107.4	31.3	39.7	15.9	21.0	0.40	0.37	0.50	0.52
324	Total	95	60	160.0	133.4	34.0	68.1	23.4	31.7	0.57	0.51	0.68	0.46
32	Total transport equipment	81	68	99.0	154.9	38.1	68.0	22.4	27.6	0.39	0.44	0.58	0.40
	OTHER MACHINERY AND EQUIPMENT—												
	Photographic, professional and scientific equipment—												
3341	Photographic and optical goods	67	48	186.4	170.2	90.3	70.8	24.5	31.3	0.48	0.42	0.27	0.44
3342	Photographic film processing	9	13	69.2	80.3	35.9	44.1	17.3	20.2	0.52	0.55	0.48	0.45
3343	Measuring, professional and scientific equipment n.e.c.	34	32	76.2	85.8	41.9	45.8	21.6	27.5	0.55	0.53	0.51	0.60
334	Total	17	22	89.3	100.2	46.3	50.0	20.2	25.4	0.52	0.50	0.43	0.50

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (n).)

Industry class		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (c) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	Value added to turnover		Wages and salaries to value added	
ASIC code	Description	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
	Appliances and electrical equipment—												
3351	Radio and TV receivers; audio equipment	69	46	108.2	123.6	51.4	66.7	20.0	30.2	0.48	0.54	0.39	0.45
3352	Electronic equipment n.e.c.	60	49	112.1	145.2	46.5	66.3	22.2	28.2	0.46	0.46	0.47	0.42
3353	Refrigerators and household appliances	78	63	92.8	128.1	40.6	61.0	19.5	24.2	0.44	0.48	0.48	0.40
3354	Water heating systems	41	57	106.5	127.9	36.4	53.2	21.4	27.4	0.34	0.42	0.39	0.51
3355	Electric and telephone cable and wire	123	108	172.8	224.8	53.9	81.9	21.5	32.6	0.31	0.36	0.40	0.40
3356	Batteries	117	112	106.9	158.8	44.3	58.6	23.8	26.5	0.41	0.37	0.54	0.45
3357	Electrical machinery and equipment n.e.c.	44	41	77.3	107.3	35.0	55.2	19.4	26.2	0.45	0.51	0.55	0.47
335	Total	58	50	106.1	131.5	41.4	61.5	20.5	26.9	0.43	0.47	0.49	0.44
	Industrial machinery and equipment—												
3361	Agricultural machinery	26	21	75.7	98.6	30.7	46.6	19.7	24.0	0.41	0.47	0.63	0.50
3362	Construction machinery	21	21	94.9	134.7	38.9	60.5	20.8	28.1	0.41	0.45	0.53	0.46
3363	Materials handling equipment	29	24	87.6	138.0	37.1	61.3	22.4	27.6	0.42	0.44	0.60	0.45
3364	Wood and metal working machinery	29	17	72.3	89.8	35.3	49.0	22.0	28.5	0.49	0.5	0.62	0.58
3365	Pumps and compressors	40	45	96.0	143.7	44.2	71.0	21.1	28.5	0.46	0.49	0.48	0.40
3366	Commercial space heating and cooling equipment	51	53	102.6	112.6	45.2	36.8	22.2	27.3	0.44	0.33	0.49	0.74
3367	Diets, saw blades and machine tool accessories	15	15	63.6	80.9	37.0	47.0	21.9	26.6	0.58	0.58	0.58	0.56
3368	Food processing machinery	27	24	93.6	126.3	41.6	56.8	22.3	26.7	0.44	0.45	0.53	0.47
3369	Industrial machinery and equipment n.e.c.	25	27	90.5	112.5	41.4	51.6	22.7	29.3	0.46	0.45	0.55	0.56
336	Total	25	25	86.3	112.8	39.4	52.5	22.1	28.0	0.46	0.47	0.56	0.53
33	Total other machinery and equipment	34	32	101.6	120.9	41.8	56.8	21.1	27.2	0.45	0.47	0.51	0.48
	MISCELLANEOUS MANUFACTURING—												
	Leather and leather products—												
3451	Leather tanning and fur dressing	31	32	202.7	240.8	49.7	48.4	21.1	25.6	0.25	0.20	0.42	0.53
3452	Leather and leather substitute goods n.e.c.	12	13	53.5	70.5	26.5	35.3	14.7	19.9	0.50	0.50	0.54	0.55
345	Total	21	20	153.4	177.4	42.0	43.5	19.0	23.5	0.27	0.25	0.45	0.53
	Rubber products—												
3461	Rubber tyres, tubes, belts, hose and sheets	57	58	119.4	154.4	52.7	82.6	24.1	29.2	0.44	0.54	0.46	0.35
3462	Rubber products n.e.c.	48	30	70.2	97.3	33.9	49.8	20.3	24.8	0.48	0.51	0.60	0.50
346	Total	53	45	99.2	135.1	45.0	71.6	22.5	27.7	0.45	0.53	0.50	0.39

For footnotes see end of table.

TABLE 2. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY CLASS, AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (d) (\$'000)		Value added per person employed (c) (d) (\$'000)		Wages and salaries per employee (d) (e) (\$'000)		Ratio of:			
										Value added to turnover		Wages and salaries to value added	
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
3471	Plastic and related products—												
3472	Flexible packaging and abrasive papers	58	47	139.0	182.0	54.5	82.4	24.1	28.9	0.39	0.45	0.44	0.35
	Rigid plastic sheeting		36										
3473	Hard surface floor coverings n.e.c.	66	48	143.0	188.0	56.7	85.0	21.7	30.0	0.40	0.45	0.38	0.35
3474	Plastic products n.e.c.	29	29	99.8	121.5	40.2	53.1	18.6	23.2	0.40	0.44	0.49	0.44
347	Total	33	31	109.9	135.2	43.9	59.7	20.7	24.5	0.40	0.44	0.47	0.41
	Other manufacturing—												
3481	Ophthalmic articles	32	29	60.3	61.4	36.0	38.4	19.0	22.2	0.60	0.63	0.53	0.57
3482	Jewellery and silverware	10	10	*	116.6	*	42.3	*	20.8	*	0.36	*	0.48
3483	Brooms and brushes	36	27	77.9	122.1	32.3	61.5	17.6	23.2	0.41	0.50	0.54	0.37
3484	Signs and advertising displays	12	11	58.8	74.0	29.5	38.0	18.0	23.2	0.50	0.51	0.60	0.39
3485	Sporting equipment	14	13	93.2	100.6	34.9	41.4	16.5	21.4	0.37	0.41	0.47	0.50
3486	Writing and marking equipment	23	18	71.8	143.7	37.6	91.8	18.0	23.9	0.52	0.64	0.47	0.26
3487	Manufacturing n.e.c.	12	12	77.8	78.1	33.1	42.0	15.5	19.6	0.42	0.54	0.46	0.45
348	Total	14	13	70.9	88.6	32.7	43.4	17.4	22.0	0.46	0.49	0.52	0.49
34	Total miscellaneous manufacturing	26	24	102.1	126.7	41.4	57.1	20.1	24.4	0.41	0.45	0.48	0.42
21-34	TOTAL MANUFACTURING	36	33	115.0	162.0	45.0	67.6	22.4	26.6	0.39	0.42	0.47	0.39

(a) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (b) Number of persons employed at the end of June (including working proprietors) divided by the number of establishments in operation at 30 June. (c) Includes working proprietors. (d) Value data are at current prices and, therefore, do not discount the impact of price changes.

(e) Excludes working proprietors and their drawings.

* Data have been suppressed due to unacceptable bias. See paragraph 12 of the Explanatory Notes.

TABLE 3. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY SUBDIVISION, STATES, TERRITORIES AND AUSTRALIA, 1986-87 AND 1989-90

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (n).)

Industry subdivision		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (\$'000)		Value added per person employed (c) (\$'000)		Wages and salaries per employee (d) (\$'000)		Ratio of:			
										Value added to turnover		Wages and salaries to value added	
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
NEW SOUTH WALES (e)													
21	Food, beverages and tobacco	54	52	143.6	188.3	52.7	73.4	21.8	26.6	0.37	0.39	0.41	0.36
23	Textiles	42	35	105.2	162.9	44.7	68.0	21.1	26.0	0.43	0.42	0.47	0.38
24	Clothing and footwear	30	27	65.6	84.7	28.1	36.9	15.3	19.6	0.43	0.44	0.54	0.53
25	Wood, wood products and furniture	18	17	83.7	105.6	34.3	46.5	18.5	23.3	0.41	0.44	0.53	0.49
26	Paper, paper products, printing and publishing	32	29	103.8	137.4	51.1	68.4	23.8	29.8	0.49	0.50	0.46	0.43
27	Chemical, petroleum and coal products	66	61	195.5	347.8	80.5	138.5	26.4	33.8	0.41	0.40	0.33	0.24
28	Non-metallic mineral products	22	33	142.8	197.4	55.6	87.3	24.3	30.8	0.39	0.44	0.43	0.35
29	Basic metal products	209	139	156.2	261.0	51.1	87.0	27.3	35.3	0.33	0.33	0.53	0.41
31	Fabricated metal products	22	30	92.4	123.5	39.0	54.9	21.2	26.1	0.42	0.44	0.54	0.47
32	Transport equipment	73	53	73.0	106.0	37.4	55.2	22.5	29.6	0.51	0.52	0.60	0.53
33	Other machinery and equipment	36	37	90.5	123.1	42.3	57.5	21.4	27.9	0.47	0.47	0.50	0.48
34	Miscellaneous manufacturing	27	22	104.2	135.2	41.9	59.7	20.5	25.1	0.40	0.44	0.49	0.42
21-34	Total manufacturing	37	33	113.7	161.1	46.8	67.9	22.3	28.0	0.41	0.42	0.47	0.41
VICTORIA (e)													
21	Food, beverages and tobacco	45	44	158.0	203.3	54.1	78.1	21.1	25.0	0.34	0.38	0.39	0.32
23	Textiles	63	53	93.8	127.3	39.7	51.3	19.7	24.9	0.42	0.40	0.50	0.48
24	Clothing and footwear	40	35	58.1	70.9	27.8	33.5	16.0	18.6	0.48	0.47	0.57	0.55
25	Wood, wood products and furniture	37	15	77.3	94.8	32.9	41.1	18.0	23.6	0.43	0.43	0.54	0.56
26	Paper, paper products, printing and publishing	37	32	104.3	129.7	51.7	68.6	22.8	28.9	0.59	0.53	0.44	0.42
27	Chemical, petroleum and coal products	68	62	175.1	366.9	71.1	125.4	25.6	34.4	0.41	0.34	0.36	0.27
28	Non-metallic mineral products	26	28	131.4	181.4	57.3	87.3	25.2	31.6	0.44	0.48	0.42	0.36
29	Basic metal products	66	56	233.8	315.7	58.4	113.2	27.5	33.4	0.25	0.36	0.47	0.29
31	Fabricated metal products	27	24	86.2	117.7	38.5	51.8	21.1	25.0	0.45	0.44	0.54	0.48
32	Transport equipment	124	110	118.3	154.0	39.8	57.6	23.1	27.7	0.34	0.37	0.58	0.48
33	Other machinery and equipment	37	33	99.5	128.3	42.3	58.3	21.2	27.7	0.43	0.45	0.50	0.47
34	Miscellaneous manufacturing	28	28	107.1	127.6	43.9	60.3	21.0	24.5	0.41	0.47	0.48	0.40
21-34	Total manufacturing	39	35	113.9	154.2	44.6	63.9	21.3	26.3	0.39	0.41	0.47	0.41

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY SUBDIVISION, STATES, TERRITORIES AND AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry subdivision		Persons employed per establishment (b)		Turnover per person employed (c)		Value added per person employed (c)		Wages and salaries per employee (d)		Ratio of:			
		(No.)		(\$'000)		(\$'000)		(\$'000)		Value added to turnover		Wages and salaries to value added	
ASIC code	Description	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
QUEENSLAND													
21	Food, beverages and tobacco	53	52	152.0	196.8	47.6	65.9	19.7	23.7	0.31	0.33	0.41	0.36
23	Textiles	20	17	141.9	131.0	38.9	62.7	19.1	21.4	0.27	0.48	0.48	0.33
24	Clothing and footwear	29	25	43.6	60.9	22.8	34.9	14.2	17.9	0.52	0.57	0.62	0.50
25	Wood, wood products and furniture	16	16	65.7	86.2	29.2	41.5	16.5	20.7	0.44	0.48	0.55	0.48
26	Paper, paper products, printing and publishing	33	30	83.1	113.0	42.9	60.6	19.6	25.2	0.52	0.54	0.45	0.43
27	Chemical, petroleum and coal products	37	39	551.0	591.3	91.3	137.2	28.0	32.1	0.17	0.23	0.31	0.23
28	Non-metallic mineral products	15	25	142.5	197.2	55.2	80.4	22.0	26.1	0.39	0.41	0.39	0.32
29	Basic metal products	94	71	266.0	462.9	85.1	173.7	26.5	32.1	0.32	0.38	0.31	0.18
31	Fabricated metal products	20	19	91.6	117.0	34.4	44.2	19.3	22.7	0.38	0.38	0.55	0.30
32	Transport equipment	43	33	84.3	142.3	33.0	54.4	19.9	23.7	0.39	0.38	0.60	0.43
33	Other machinery and equipment	24	24	83.2	111.4	35.5	52.8	20.3	25.5	0.43	0.47	0.57	0.48
34	Miscellaneous manufacturing	18	15	91.4	118.3	36.4	46.8	17.7	23.2	0.40	0.40	0.48	0.48
21-34	Total manufacturing	29	27	128.6	174.8	43.8	65.4	19.9	24.3	0.34	0.37	0.45	0.37
SOUTH AUSTRALIA													
21	Food, beverages and tobacco	43	45	123.0	162.9	39.7	65.3	18.7	23.4	0.32	0.40	0.47	0.36
23	Textiles	59	50	144.9	132.8	49.0	45.2	18.6	23.5	0.34	0.34	0.36	0.51
24	Clothing and footwear	52	43	51.3	73.1	26.1	42.9	15.0	19.4	0.51	0.59	0.57	0.45
25	Wood, wood products and furniture	21	21	77.8	89.2	33.4	38.3	17.5	21.4	0.43	0.43	0.51	0.54
26	Paper, paper products, printing and publishing	35	32	84.2	115.2	41.0	56.1	21.6	28.3	0.49	0.49	0.52	0.50
27	Chemical, petroleum and coal products	55	44	177.7	441.2	71.5	206.8	27.3	30.7	0.40	0.47	0.38	0.15
28	Non-metallic mineral products	25	31	129.9	167.5	62.0	81.1	23.5	31.4	0.48	0.48	0.38	0.36
29	Basic metal products	141	151	161.5	210.5	71.5	59.7	26.6	31.1	0.44	0.28	0.37	0.52
31	Fabricated metal products	20	21	82.6	100.8	33.6	42.9	18.3	22.8	0.41	0.43	0.54	0.52
32	Transport equipment	120	126	112.9	245.7	40.1	129.7	22.1	27.0	0.36	0.53	0.55	0.21
33	Other machinery and equipment	39	40	78.9	105.6	36.4	55.6	19.4	24.4	0.46	0.53	0.53	0.44
34	Miscellaneous manufacturing	35	39	90.0	105.7	37.0	48.6	19.2	23.9	0.41	0.46	0.51	0.49
21-34	Total manufacturing	40	41	104.1	156.1	41.6	71.3	20.3	25.2	0.40	0.46	0.48	0.35

For footnote, see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY SUBDIVISION, STATES, TERRITORIES AND AUSTRALIA, 1986-87 AND 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry subdivision		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (\$'000)		Value added per person employed (c) (\$'000)		Wages and salaries per employee (d) (\$'000)		Ratio of:			
										Value added to turnover		Wages and salaries to value added	
ASIC code	Description	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
WESTERN AUSTRALIA (e)													
21	Food, beverages and tobacco	34	37	142.7	181.0	42.5	69.7	19.1	23.4	0.30	0.39	0.44	0.33
23	Textiles	32	36	86.4	93.9	45.6	44.3	17.2	23.2	0.53	0.47	0.37	0.52
24	Clothing and footwear	24	23	36.7	49.6	22.1	27.5	14.0	17.7	0.60	0.55	0.62	0.64
25	Wood, wood products and furniture	18	17	75.2	95.8	34.6	41.8	15.8	21.8	0.46	0.44	0.44	0.51
26	Paper, paper products, printing and publishing	30	24	69.6	103.7	35.9	54.0	18.8	25.5	0.52	0.52	0.52	0.46
27	Chemical, petroleum and coal products	45	63	201.3	603.6	70.3	210.8	26.9	36.0	0.35	0.35	0.38	0.17
28	Non-metallic mineral products	24	31	122.2	176.3	53.4	85.4	21.8	29.0	0.44	0.48	0.40	0.34
29	Basic metal products	115	109	267.1	540.0	51.7	272.0	29.7	37.8	0.19	0.50	0.57	0.14
31	Fabricated metal products	20	21	90.0	127.4	34.8	50.5	20.7	26.1	0.39	0.40	0.58	0.51
32	Transport equipment	31	20	70.9	116.7	34.1	49.7	21.7	26.2	0.48	0.43	0.63	0.51
33	Other machinery and equipment	21	22	83.3	112.6	35.0	53.9	21.5	27.0	0.42	0.48	0.61	0.50
34	Miscellaneous manufacturing	16	17	99.8	138.3	38.8	55.9	17.9	23.5	0.39	0.40	0.45	0.41
21-34	Total manufacturing	26	26	115.9	192.4	40.7	83.9	20.6	26.6	0.35	0.44	0.50	0.31
TASMANIA (e)													
21	Food, beverages and tobacco	48	52	148.8	178.5	52.1	77.2	19.0	23.8	0.35	0.43	0.36	0.31
23	Textiles	n.p.	109	n.p.	99.2	n.p.	53.0	n.p.	22.3	n.p.	0.53	n.p.	0.42
24	Clothing and footwear	58	58	45.1	70.5	20.5	34.4	13.6	16.5	0.46	0.49	0.66	0.48
25	Wood, wood products and furniture	23	21	113.9	138.4	46.7	59.4	19.8	23.9	0.41	0.43	0.41	0.39
26	Paper, paper products, printing and publishing	83	88	133.0	159.1	63.4	61.4	25.1	29.7	0.48	0.39	0.39	0.48
27	Chemical, petroleum and coal products	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
28	Non-metallic mineral products	17	28	136.9	180.5	56.4	88.3	21.3	24.7	0.41	0.49	0.37	0.28
29	Basic metal products	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
31	Fabricated metal products	16	16	78.1	94.5	32.9	40.0	18.7	22.3	0.42	0.42	0.55	0.54
32	Transport equipment	32	40	70.3	101.8	36.4	68.1	20.2	28.9	0.52	0.67	0.55	0.41
33	Other machinery and equipment	17	13	65.6	78.0	37.7	37.9	19.0	22.2	0.57	0.49	0.50	0.57
34	Miscellaneous manufacturing	13	14	91.9	89.0	38.7	43.5	18.6	21.7	0.42	0.49	0.47	0.49
21-34	Total manufacturing	38	39	125.4	158.3	50.8	67.9	21.8	27.0	0.40	0.43	0.42	0.39

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY SUBDIVISION, STATES, TERRITORIES AND AUSTRALIA, 1986-87 AND 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry subdivision		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (\$'000)		Value added per person employed (c) (\$'000)		Wages and salaries per employee (d) (\$'000)		Ratio of—			
										Value added to turnover		Wages and salaries to value added	
		1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
NORTHERN TERRITORY													
21	Food, beverages and tobacco	27	29	112.6	225.2	44.2	79.1	20.9	31.3	0.39	0.35	0.46	0.39
23	Textiles	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
24	Clothing and footwear	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
25	Wood, wood products and furniture	10	10	78.6	110.9	31.5	46.7	18.3	27.1	0.40	0.42	0.56	0.57
26	Paper, paper products, printing and publishing	22	24	64.1	80.8	43.2	56.9	20.7	25.6	0.67	0.70	0.47	0.44
27	Chemical, petroleum and coal products	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.
28	Non-metallic mineral products	10	12	194.4	238.0	58.6	72.9	23.8	28.9	0.30	0.31	0.40	0.40
29	Basic metal products	35	40	203.0	288.9	55.1	104.6	30.0	37.5	0.27	0.36	0.54	0.56
31	Fabricated metal products	12	8	84.1	62.7	39.3	33.0	20.8	20.2	0.47	0.53	0.52	0.61
32	Transport equipment	5	5	58.0	109.9	26.0	42.3	16.5	25.3	0.45	0.38	0.62	0.56
33	Other machinery and equipment	9	7	57.2	77.6	24.9	35.8	19.0	21.2	0.44	0.46	0.70	0.56
34	Miscellaneous manufacturing	—	—	—	—	—	—	—	—	—	—	—	—
21-34	Total manufacturing	20	21	145.5	211.0	48.0	88.1	24.7	31.7	0.33	0.38	0.51	0.39
AUSTRALIAN CAPITAL TERRITORY (e)													
21	Food, beverages and tobacco	43	40	80.9	90.2	30.8	38.7	20.5	22.0	0.38	0.43	0.66	0.56
23	Textiles	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.
24	Clothing and footwear	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
25	Wood, wood products and furniture	18	19	85.9	106.2	35.5	51.1	20.7	27.7	0.41	0.48	0.58	0.54
26	Paper, paper products, printing and publishing	62	30	53.3	83.9	31.4	55.2	22.5	33.1	0.59	0.66	0.71	0.59
27	Chemical, petroleum and coal products	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—
28	Non-metallic mineral products	16	19	273.0	250.2	81.8	96.6	26.8	32.7	0.30	0.39	0.32	0.34
29	Basic metal products	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—	n.p.	—
31	Fabricated metal products	36	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
32	Transport equipment	11	12	65.3	90.2	28.6	32.5	17.0	18.3	0.44	0.36	0.60	0.55
33	Other machinery and equipment	21	20	204.2	99.7	104.9	38.6	28.9	32.1	0.51	0.39	0.23	0.83
34	Miscellaneous manufacturing	7	8	44.5	70.2	21.6	36.5	19.0	20.6	0.49	0.52	0.85	0.54
21-34	Total manufacturing	32	25	90.8	115.0	40.4	61.2	22.5	29.0	0.44	0.53	0.54	0.47

For footnotes see end of table.

TABLE 3. MANUFACTURING ESTABLISHMENTS: SELECTED OPERATING RATIOS BY INDUSTRY SUBDIVISION, STATES, TERRITORIES AND AUSTRALIA, 1986-87 AND 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry subdivision		Persons employed per establishment (b) (No.)		Turnover per person employed (c) (\$'000)		Value added per person employed (c) (\$'000)		Wages and salaries per employed (d) (\$'000)		Ratio of			
										Value added to turnover		Wages and salaries to value added	
ASIC code	Description	1986-87	1989-90	1986-87	1989-90 ^a	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90	1986-87	1989-90
AUSTRALIA													
21	Food, beverages and tobacco	47	47	146.7	190.8	50.0	72.2	20.6	24.9	0.34	0.38	0.41	0.34
23	Textiles	52	r43	r100.9	r133.2	r41.5	r55.0	r19.8	r24.7	0.41	0.41	0.48	0.45
24	Clothing and footwear	36	31	58.3	74.0	27.3	35.1	15.6	18.9	0.47	0.47	0.57	0.53
25	Wood, wood products and furniture	18	16	79.0	98.2	33.6	43.5	17.7	22.7	0.43	0.44	0.52	0.51
26	Paper, paper products, printing and publishing	35	31	98.2	128.5	48.8	65.3	22.5	28.7	0.50	0.51	0.46	0.44
27	Chemical, petroleum and coal products	62	57	209.7	396.7	77.2	141.4	26.3	33.9	0.37	0.36	0.34	0.24
28	Non-metallic mineral products	22	29	137.2	188.1	56.4	85.4	23.7	29.9	0.41	0.45	0.41	0.35
29	Basic metal products	130	102	194.1	312.0	59.8	115.3	27.6	34.6	0.31	0.37	0.46	0.30
31	Fabricated metal products	22	21	89.2	119.2	37.3	51.1	20.6	24.9	0.42	0.43	0.55	0.48
32	Transport equipment	81	68	99.0	154.9	38.1	68.0	22.4	27.6	0.39	0.44	0.58	0.40
33	Other machinery and equipment	34	32	r91.6	120.9	r41.0	56.8	21.1	27.2	0.45	0.47	0.51	0.45
34	Miscellaneous manufacturing	26	24	102.1	126.7	41.4	57.1	20.1	24.4	0.41	0.45	0.48	0.42
21-34	Total manufacturing	36	33	115.0	162.0	45.0	67.6	21.4	26.6	0.39	0.42	0.47	0.39

(a) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (b) Number of persons employed at the end of June (including working proprietors) divided by the number of establishments in operation at 30 June. (c) Includes working proprietors. (d) Excludes working proprietors and their drawings. (e) The ratios for this State have not previously been published but the source data have been published. Revisions have subsequently been made to the published source data and, consequently, ratios calculated on the previously published data may differ from the ratios in this table.

TABLE 4. MANUFACTURING ESTABLISHMENTS: GROSS PRODUCT AT MARKET PRICES (AVERAGE 1989-90 PRICES) BY INDUSTRY SUBDIVISION, AUSTRALIA (a), 1979-80 TO 1989-90

Industry subdivision		1979-80 (\$m)	1984-85 (\$m)	1988-89 (\$m)	1989-90 (\$m)	Change between		
						1988-89 and 1989-90 (per cent)	1984-85 and 1989-90 (per cent)	1979-80 and 1989-90 (per cent)
ASIC code	Description							
21	Food, beverages and tobacco	9,966	10,163	11,058	11,646	5.3	14.6	16.9
23	Textiles	979	1,054	1,161	1,224	5.4	16.1	25.0
24	Clothing and footwear	2,070	2,192	2,415	1,886	-21.9	-14.0	-8.9
25	Wood, wood products and furniture	2,245	2,295	2,757	2,982	8.2	29.9	32.8
26	Paper, paper products, printing and publishing	3,605	4,079	5,108	5,418	6.1	32.8	50.3
27	Chemical, petroleum and coal products	4,585	4,882	5,237	5,522	5.4	13.1	20.4
28	Non-metallic mineral products	2,455	2,411	2,974	2,898	-2.6	20.2	18.0
29	Basic metal products	5,431	5,955	6,128	6,551	6.9	10.0	20.6
31	Fabricated metal products	3,106	2,797	3,755	4,365	16.2	56.1	40.5
32	Transport equipment	6,132	6,301	6,545	6,188	-5.5	-1.8	0.6
33	Other machinery and equipment	5,078	4,705	5,875	5,800	-1.3	23.3	14.2
34	Miscellaneous manufacturing	2,146	2,282	2,706	2,801	3.5	22.7	30.5
21-34	Total manufacturing	(b)47,959	49,116	55,719	57,281	2.8	16.6	19.4

Source: Australian National Accounts: National Income, Expenditure and Product (5204.0).

(a) See paragraph 32 of the Explanatory Notes. (b) Includes \$141m as a balancing item. See the Note in paragraph 32 of the Explanatory Notes.

TABLE 5. MANUFACTURING ESTABLISHMENTS: COMPONENTS OF VALUE ADDED BY INDUSTRY CLASS, AUSTRALIA, 1989-90

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Purchases and transfers in (b)				Other selected expenses (b)	Stocks (b)		Value added (b)
ASIC code	Description	Turnover (\$m)	Materials (\$m)	Electricity and fuels (\$m)	Goods for resale (\$m)	(\$m)	opening (\$m)	closing (\$m)	(\$m)
FOOD, BEVERAGES AND TOBACCO—									
Meat products—									
2115	Meat (except smallgoods or poultry)	5,807	3,549	93	79	289	262	283	1,818
2116	Poultry	1,362	845	20	18	67	81	101	433
2117	Bacon, ham and smallgoods n.e.c.	1,095	694	17	11	56	75	77	319
211	Total	8,265	5,088	129	108	413	418	461	2,569
Milk products—									
2121	Liquid milk and cream	1,988	1,283	28	57	85	58	65	542
2122	Butter	650	448	13	4	13	15	17	174
2123	Cheese	1,137	734	18	13	43	170	178	336
2124	Ice cream and frozen confections	379	158	7	15	22	25	27	180
2125	Milk products n.e.c.	246	151	5	—	9	17	18	82
212	Total	4,400	2,775	71	88	172	285	305	1,314
Fruit and vegetable products—									
2131	Fruit products	926	546	16	11	76	181	190	286
2132	Vegetable products	1,131	547	23	9	83	185	215	499
213	Total	2,056	1,092	39	20	160	366	405	785
214	Margarine and oils and fats n.e.c.	688	408	16	7	44	71	73	214
Flour mill and cereal food products—									
2151	Flour mill products	656	404	9	13	38	50	55	196
2152	Starch, gluten and starch sugars	274	174	12	10	22	22	27	62
2153	Cereal foods and baking mixes	1,182	546	24	13	89	208	213	517
215	Total	2,112	1,123	45	36	148	280	295	775
Bread, cakes and biscuits—									
2161	Bread	1,433	499	31	115	99	66	69	693
2162	Cakes and pastries	748	276	15	26	64	48	50	368
2163	Biscuits	643	241	9	15	40	32	33	341
216	Total	2,824	1,016	55	156	203	146	153	1,401
Other food products—									
2171	Raw sugar	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2173	Confectionery and cocoa products	1,048	469	13	21	45	113	124	510
2174	Processed seafoods	784	410	11	13	57	102	104	296
2175	Prepared animal and bird foods	1,512	874	19	20	96	159	134	478
2176	Food products n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
217	Total	6,995	3,656	87	105	407	368	356	2,720
Beverages and malt—									
2185	Soft drinks, cordials and syrups	1,598	858	11	37	105	149	134	572
2186	Beer	1,970	733	30	28	104	127	135	1,083
2187	Malt	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2188	Wine and brandy	917	439	11	8	71	490	363	461
2189	Alcoholic beverages n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
218	Total	4,788	2,205	67	77	300	821	888	2,206
219	Tobacco products	806	274	7	2	51	204	199	467
21	Total food, beverages and tobacco	32,934	17,639	516	597	1,897	3,158	3,335	12,461

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS: COMPONENTS OF VALUE ADDED BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Purchases and transfers in (b)				Other selected expenses (b)	Stocks (b)		Value added (b)
ASIC code	Description	Turnover (\$m)	Materials (\$m)	Electricity and fuels (\$m)	Goods for resale (\$m)	(\$m)	opening (\$m)	closing (\$m)	(\$m)
TEXTILES—									
Textile fibres, yarns and woven fabrics—									
2341	Cotton spinning	164	50	5	—	11	4	5	98
2342	Wool scouring and top making	375	229	10	1	17	85	40	75
2343	Man-made fibres and yarns	194	77	7	1	14	39	33	89
2344	Man-made fibre broadwoven fabrics	379	160	9	8	22	91	91	180
2345	Cotton yarns and broadwoven fabrics	377	155	9	13	27	81	85	175
2346	Worsted yarns and broadwoven fabrics	195	95	5	2	12	56	46	71
2347	Woolen yarns and broadwoven fabrics	202	109	4	—	13	33	33	77
2348	Narrow woven and elastic textiles	136	64	3	3	11	19	21	57
2349	Textile finishing	231	88	9	3	26	33	28	101
234	Total	2,253	1,027	61	30	154	440	382	924
Other textile products—									
2351	Household textiles	212	100	2	5	14	40	39	88
2352	Textile floor coverings	724	354	10	60	50	121	117	246
2353	Felt and felt products	77	16	1	7	8	15	17	47
2354	Canvas and associated products n.e.c.	251	109	1	6	25	34	36	111
2355	Rope, cordage and twine	53	19	1	3	3	11	11	27
2356	Textile products n.e.c.	428	185	4	10	28	45	51	206
235	Total	1,744	784	20	91	128	267	272	725
23	Total textiles	3,996	1,811	81	121	281	707	653	1,649
CLOTHING AND FOOTWEAR—									
Knitting mills—									
2441	Hosiery	254	89	4	7	18	43	51	144
2442	Cardigans and pullovers	236	96	2	2	26	53	47	104
2443	Knitted goods n.e.c.	565	238	5	12	61	115	108	244
244	Total	1,056	422	11	21	104	211	206	493
Clothing—									
2451	Men's trousers and shorts; work clothing	484	165	2	10	49	84	77	250
2452	Men's suits and coats; waterproof clothing	242	77	2	2	20	33	40	148
2453	Women's outerwear n.e.c.	1,205	393	6	9	305	159	162	494
2454	Foundation garments	167	48	1	2	8	33	35	112
2455	Underwear and infants' clothing n.e.c.	626	222	3	30	68	116	109	295
2456	Headwear and clothing n.e.c.	616	225	3	14	108	86	87	267
245	Total	3,339	1,130	17	66	556	512	509	1,566
246	Footwear	705	263	4	19	49	127	114	357
24	Total clothing and footwear	5,100	1,816	33	106	710	850	830	2,415
WOOD, WOOD PRODUCTS AND FURNITURE—									
Wood and wood products—									
2531	Log sawmilling	998	224	29	16	167	130	171	603
2532	Resawn and dressed timber	549	220	11	26	64	109	126	244
2533	Veneers and manufactured boards of wood	916	456	41	27	101	124	141	305
2534	Wooden doors	166	72	1	15	10	19	16	66
2535	Wooden structural fittings and joinery n.e.c.	1,699	735	9	28	210	138	132	710
2536	Wooden containers	105	44	1	1	9	6	6	50
2537	Hardwood woodchips	365	184	4	7	48	22	36	137
2538	Wood products n.e.c.	203	88	2	2	18	23	27	96
253	Total	5,002	2,024	100	123	627	571	656	2,212
Furniture and mattresses—									
2541	Furniture (except sheet metal)	2,608	1,114	19	57	264	348	362	1,168
2542	Mattresses (except rubber)	358	167	2	11	23	45	44	153
254	Total	2,966	1,282	22	68	287	393	406	1,321
25	Total wood, wood products and furniture	7,968	3,305	121	191	914	964	1,062	3,533

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS: COMPONENTS OF VALUE ADDED BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Purchases and transfers in (b)				Other self-selected expenses (b)	Stocks (b)		Value added (b)
ASIC code	Description	Turnover (\$m)	Materials (\$m)	Electricity and fuels (\$m)	Goods for resale (\$m)	(b) (\$m)	opening (\$m)	closing (\$m)	(b) (\$m)
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—									
Paper and paper products—									
2631	Pulp, paper and paperboard	1,952	743	157	2	242	247	247	808
2632	Paper bags (including textile bags)	254	134	2	7	12	40	40	99
2633	Solid fibreboard containers	247	105	3	2	20	24	30	123
2634	Corrugated fibreboard containers	1,004	539	12	30	65	86	77	348
2635	Paper products n.e.c.	726	326	26	14	64	115	106	289
263	Total	4,183	1,847	199	56	403	510	500	1,667
Printing and allied industries—									
2641	Publishing	1,411	228	4	36	366	115	106	768
2642	Printing and publishing	3,021	728	18	15	288	162	166	1,976
2643	Paper stationery	964	398	8	26	86	126	135	459
2644	Printing and bookbinding	3,433	1,266	33	48	390	258	250	1,687
2645	Printing trade services n.e.c.	486	119	5	2	57	32	32	303
264	Total	9,319	2,739	68	126	1,188	694	689	5,194
26	Total paper, paper products, printing and publishing	13,502	4,586	267	183	1,591	1,204	1,188	6,861
CHEMICAL, PETROLEUM AND COAL PRODUCTS—									
Basic chemicals—									
2751	Chemical fertilisers	993	537	66	11	129	320	293	223
2752	Industrial gases	331	64	19	10	40	13	15	200
2753	Synthetic resins and rubber	1,867	1,004	53	53	127	347	325	609
2754	Organic industrial chemicals n.e.c.	958	499	37	23	71	148	142	321
2755	Inorganic industrial chemicals n.e.c.	1,172	439	67	32	139	161	187	521
275	Total	5,322	2,544	242	129	506	989	963	1,875
Other chemical products—									
2761	Ammunition, explosives and fireworks	540	233	9	3	30	154	152	262
2762	Paints	1,338	654	7	56	58	168	183	579
2763	Pharmaceutical and veterinary products	1,841	822	13	78	86	389	423	877
2764	Pesticides	557	293	4	15	24	125	154	250
2765	Soap and other detergents	1,108	496	11	33	64	120	132	515
2766	Cosmetics and toilet preparations	570	199	3	15	30	95	111	338
2767	Inks	220	74	2	29	14	39	41	103
2768	Chemical products n.e.c.	626	306	6	19	42	96	100	257
276	Total	6,801	3,077	54	247	348	1,187	1,295	3,181
277	Petroleum refining	8,017	5,443	269	133	238	348	539	2,123
278	Petroleum and coal products n.e.c.	129	61	2	4	17	17	15	44
27	Total chemical, petroleum and coal products	20,268	11,125	567	514	1,109	2,541	2,812	7,223

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS: COMPONENTS OF VALUE ADDED BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Purchases and transfers in (b)				Other selected expenses (b)	Stocks (b)		Value added (b)
ASIC code	Description	Turnover (\$m)	Materials (\$m)	Electricity and fuels (\$m)	Goods for resale (\$m)	(\$m)	opening (\$m)	closing (\$m)	(\$m)
NON-METALLIC MINERAL PRODUCTS—									
283	Glass and glass products	1,112	294	73	9	83	140	165	676
	Clay products and refractories—								
2861	Clay bricks	780	71	103	3	134	102	146	512
2862	Refractories	179	75	7	6	17	38	49	85
2863	Ceramic tiles and pipes	190	29	16	9	39	39	50	108
2864	Ceramic goods n.e.c.	152	29	6	7	15	23	25	97
286	Total	1,301	204	133	25	205	202	270	802
	Cement and concrete products—								
2871	Cement	920	222	131	6	150	107	116	420
2872	Ready mixed concrete	1,840	1,110	32	4	345	42	50	357
2873	Concrete pipes and box culverts	260	74	5	14	30	30	32	138
2874	Concrete products n.e.c.	1,246	383	23	52	215	138	153	589
287	Total	4,266	1,788	191	77	739	316	351	1,505
	Other non-metallic mineral products—								
2881	Plaster products and expanded minerals	439	150	19	42	25	22	30	211
2882	Stone products	134	41	2	3	14	19	25	80
2883	Glass wool and mineral wool products	296	77	12	30	26	31	33	154
2884	Non-metallic mineral products n.e.c.	275	81	25	8	41	31	34	123
288	Total	1,144	349	58	83	105	104	122	567
28	Total non-metallic mineral products	7,822	2,635	455	194	1,134	763	908	3,550
BASIC METAL PRODUCTS—									
	Basic iron and steel—								
2941	Iron and steel basic products	7,843	4,143	197	154	1,022	1,085	1,173	2,414
2942	Iron casting	442	140	22	10	48	61	67	228
2943	Steel casting	356	129	15	6	33	36	40	178
2944	Iron and steel forging	135	51	8	1	13	18	19	63
2945	Steel pipes and tubes	663	340	11	8	55	112	92	230
294	Total	9,438	4,804	252	179	1,170	1,311	1,391	3,112
	Basic non-ferrous metals—								
2951	Copper smelting, refining	1,459	952	17	—	67	188	176	412
2952	Silver, lead, zinc smelting, refining	1,413	849	79	—	126	233	303	430
2953	Alumina	2,795	589	429	—	130	284	330	1,691
2954	Aluminium smelting	2,636	681	476	—	214	220	279	1,325
2955	Nickel smelting, refining	1,105	763	68	—	61	88	128	252
2956	Non-ferrous metals n.e.c. smelting, refining	423	291	10	7	17	84	74	86
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.								
295	Total	9,830	4,126	1,080	7	615	1,097	1,291	4,195
	Non-ferrous metal basic products—								
2961	Aluminium rolling, drawing, extruding	1,324	862	33	—	77	230	220	343
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	770	472	13	—	28	113	91	236
2963	Non-ferrous metal casting	188	75	7	5	24	15	17	78
296	Total	2,282	1,409	53	5	128	357	328	656
29	Total basic metal products	21,549	10,338	1,385	192	1,914	2,766	3,009	7,964

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS: COMPONENTS OF VALUE ADDED BY INDUSTRY CLASS,
AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Purchases and transfers in (b)				Other selected expenses	Stocks (b)		Value added
ASIC code	Description	Turnover (\$m)	Materials (\$m)	Electricity and fuels (\$m)	Goods for resale (\$m)	(b) (\$m)	opening (\$m)	closing (\$m)	(b) (\$m)
FABRICATED METAL PRODUCTS—									
Structural metal products—									
3141	Fabricated structural steel	3,133	1,517	25	97	338	268	264	1,151
3142	Architectural aluminium products	1,555	857	7	32	151	177	170	501
3143	Architectural metal products n.e.c.	580	246	3	23	66	59	60	243
314	Total	5,267	2,620	35	152	555	505	494	1,895
Sheet metal products—									
3151	Metal containers	945	489	12	25	47	93	98	378
3152	Sheet metal furniture	448	201	5	14	43	54	53	184
3153	Sheet metal products n.e.c.	2,189	940	19	70	169	284	290	997
315	Total	3,582	1,630	36	108	259	431	441	1,558
Other fabricated metal products—									
3161	Cutlery and hand tools n.e.c.	214	67	4	12	18	49	51	116
3162	Springs and wire products	646	248	9	22	50	90	95	324
3163	Nuts, bolts, screws and rivets	375	105	7	76	25	105	112	171
3164	Metal coating and finishing	489	157	20	4	52	32	36	259
3165	Non-ferrous steam, gas and water fittings	296	98	4	9	22	63	69	170
3166	Boiler and plate work	209	83	2	5	17	22	26	107
3167	Metal blinds and awnings	197	94	2	2	25	19	19	73
3168	Fabricated metal products n.e.c.	1,318	459	15	27	106	218	230	723
316	Total	3,745	1,312	62	156	313	597	638	1,942
31	Total fabricated metal products	12,594	5,562	134	416	1,127	1,533	1,572	5,395
TRANSPORT EQUIPMENT—									
Motor vehicles and parts—									
3231	Motor vehicles	8,454	5,208	53	17	215	898	1,166	3,229
3232	Motor vehicle bodies, trailers, caravans	663	339	5	24	38	84	94	266
3233	Motor vehicle instruments and electrical equipment n.e.c.	877	463	6	5	35	152	193	410
3234	Motor vehicle parts n.e.c.	2,622	1,061	39	60	157	324	369	1,349
323	Total	12,616	7,071	103	106	445	1,458	1,822	5,254
Other transport equipment—									
3241	Ships	1,936	420	9	1	1,064	638	1,040	884
3242	Bonats	285	130	2	3	28	39	24	131
3243	Railway rolling stock and locomotives	532	261	5	4	10	71	5	266
3244	Aircraft	1,188	471	13	8	81	554	678	739
3245	Transport equipment n.e.c.	56	30	—	1	5	7	10	21
324	Total	3,996	1,312	30	16	1,189	1,309	1,901	2,041
32	Total transport equipment	16,612	8,383	133	122	1,634	2,768	3,723	7,295

For footnotes see end of table.

TABLE 5. MANUFACTURING ESTABLISHMENTS: COMPONENTS OF VALUE ADDED BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry class		Purchases and transfers in (b)				Other selected expenses (b)	Stocks (b)		Value added (b)
ASPC code	Description	Turnover (\$m)	Materials (\$m)	Electricity and fuels (\$m)	Goods for resale (\$m)	(\$m)	opening (\$m)	closing (\$m)	(\$m)
OTHER MACHINERY AND EQUIPMENT—									
<i>Photographic, professional and scientific equipment—</i>									
3341	Photographic and optical goods	388	184	4	7	11	83	62	161
3342	Photographic film processing	363	98	5	21	40	32	32	200
3343	Measuring, professional and scientific equipment n.e.c.	413	141	5	19	32	78	82	220
334	<i>Total</i>	1,164	423	13	47	83	192	175	581
<i>Appliances and electrical equipment—</i>									
3351	Radio and TV receivers; audio equipment	314	131	3	6	13	56	64	169
3352	Electronic equipment n.e.c.	2,544	1,336	13	38	120	513	639	1,163
3353	Refrigerators and household appliances	1,732	800	16	19	103	283	312	824
3354	Water heating systems	240	114	4	3	16	35	32	100
3355	Electric and telephone cable and wire	822	459	11	5	52	107	113	300
3356	Batteries	247	107	3	28	23	48	54	91
3357	Electrical machinery and equipment n.e.c.	2,455	1,043	23	51	142	472	539	1,263
335	<i>Total</i>	8,353	3,991	73	151	470	1,514	1,754	3,910
<i>Industrial machinery and equipment—</i>									
3361	Agricultural machinery	546	218	6	15	50	104	106	258
3362	Construction machinery	229	117	2	11	13	46	62	103
3363	Material handling equipment	628	281	5	22	52	115	125	279
3364	Wood and metal working machinery	216	82	2	3	17	26	36	118
3365	Pumps and compressors	557	233	6	16	32	131	136	275
3366	Commercial space heating and cooling equipment	325	185	2	8	26	69	72	106
3367	Dies, saw blades and machine tool accessories	413	109	5	15	41	53	50	240
3368	Food processing machinery	305	144	2	8	17	53	56	137
3369	Industrial machinery and equipment n.e.c.	2,726	1,230	23	79	187	389	432	1,250
336	<i>Total</i>	5,945	2,599	53	177	436	989	1,075	2,766
33	<i>Total other machinery and equipment</i>	15,464	7,013	139	375	989	2,695	3,003	7,258
MISCELLANEOUS MANUFACTURING—									
<i>Leather and leather products—</i>									
3451	Leather tanning and fur dressing	468	340	5	1	28	48	48	94
3452	Leather and leather substitute goods n.e.c.	81	29	1	2	7	15	14	41
345	<i>Total</i>	549	369	5	3	35	63	62	135
<i>Rubber products—</i>									
3461	Rubber tyres, tubes, belts, hose and sheets	999	362	14	31	57	81	84	535
3462	Rubber products n.e.c.	321	121	6	7	22	31	32	164
346	<i>Total</i>	1,319	483	20	43	79	112	116	699
<i>Plastic and related products—</i>									
3471	Flexible packaging and abrasive papers	1,315	605	20	20	85	185	195	595
3472	Rigid plastic sheeting	174	79	3	5	12	25	29	79
3473	Hard surface floor coverings n.e.c.								
3474	Plastic products n.e.c.	3,446	1,507	66	103	282	435	452	1,506
347	<i>Total</i>	4,935	2,191	89	128	379	645	677	2,179
<i>Other manufacturing—</i>									
3481	Ophthalmic articles	90	23	1	2	7	15	14	57
3482	Jewellery and silverware	236	131	1	6	17	128	133	86
3473	Brooms and brushes	112	41	1	8	8	19	21	56
3484	Signs and advertising displays	401	128	3	10	56	30	33	206
3485	Sporting equipment	179	79	1	10	16	44	45	74
3486	Writing and marking equipment	88	21	1	3	8	15	16	56
3487	Manufacturing n.e.c.	168	54	2	6	17	22	24	90
348	<i>Total</i>	1,273	477	10	46	130	272	285	624
34	<i>Total miscellaneous manufacturing</i>	8,076	3,520	124	220	622	1,093	1,140	3,637
21-34	TOTAL MANUFACTURING	165,886	77,732	3,955	3,231	13,922	21,043	23,236	69,241

(a) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (b) Subject to sampling error. See paragraphs 12 to 15 of the Explanatory Notes.

TABLE 6. MANUFACTURING ESTABLISHMENTS: PURCHASES, TRANSFERS IN AND SELECTED EXPENSES (a) BY INDUSTRY CLASS, AUSTRALIA, 1989-90

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Purchases and transfers in	Rent, leasing and hiring	Outward freight and carriage	Motor vehicle running expenses	Commission and subcontract expenses	Repair and maintenance	Total purchases, transfers in and selected expenses
ASJC code	Description	(c) (\$m)	(d) (\$m)	(e) (\$m)	(f) (\$m)	(g) (\$m)	(h) (\$m)	(i) (\$m)
FOOD, BEVERAGES AND TOBACCO—								
Meat products—								
2115	Meat (except smallgoods or poultry)	3,721	28	106	24	62	68	4,010
2116	Poultry	882	7	23	9	8	21	950
2117	Bacon, ham and smallgoods n.e.c.	722	10	16	8	4	18	778
211	Total	5,325	45	145	42	74	107	5,738
Milk products—								
2121	Liquid milk and cream	1,368	10	21	18	6	30	1,453
2122	Butter	465	2	2	4	—	6	478
2123	Cheese	766	8	10	7	2	16	809
2124	Ice cream and frozen confections	179	3	4	2	4	9	201
2125	Milk products n.e.c.	157	1	3	1	1	4	166
212	Total	2,935	23	39	32	12	65	3,106
Fruit and vegetable products—								
2131	Fruit products	573	12	40	5	3	16	649
2132	Vegetable products	578	17	29	6	6	26	661
213	Total	1,151	30	69	10	9	42	1,310
214	Margarine and oils and fats n.e.c.	432	3	22	2	—	18	476
Flour mill and cereal food products—								
2151	Flour mill products	427	4	21	4	2	7	464
2152	Starch, gluten and starch sugars	196	1	11	1	1	8	218
2153	Cereal foods and baking mixes	582	7	52	6	9	15	670
215	Total	1,204	11	83	11	12	30	1,352
Bread, cakes and biscuits—								
2161	Bread	644	28	14	24	9	24	743
2162	Cakes and pastries	318	19	17	8	7	12	382
2163	Biscuits	264	7	14	6	2	11	304
216	Total	1,226	54	45	38	18	48	1,429
Other food products—								
2171	Raw sugar	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2173	Confectionery and cocoa products	503	8	12	3	11	11	549
2174	Processed seafoods	434	9	21	5	12	10	491
2175	Prepared animal and bird foods	913	8	53	9	4	22	1,009
2176	Food products n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
217	Total	3,848	59	135	31	45	137	4,254
Beverages and malt—								
2185	Soft drinks, cordials and syrups	906	16	50	11	12	17	1,011
2186	Beer	792	19	30	6	12	37	895
2187	Malt	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2188	Wine and brandy	457	12	22	8	15	14	528
2189	Alcoholic beverages n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
218	Total	2,349	47	111	26	43	74	2,649
219	Tobacco products	283	12	5	6	8	20	334
21	Total food, beverages and tobacco	18,752	285	654	197	221	541	20,649

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS: PURCHASES, TRANSFERS IN AND SELECTED EXPENSES (a) BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Purchases and transfers in (c)	Rent, leasing and hiring (\$m)	Outward freight and cartage (\$m)	Motor vehicle running expenses (d)	Commission and subcontract expenses (\$m)	Repair and maintenance (\$m)	Total purchases, transfers in and selected expenses (\$m)
ASIC code	Description	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)
TEXTILES—								
Textile fibres, yarns and woven fabrics—								
2341	Cotton ginning	55	2	5	1	1	2	66
2342	Wool scouring and top making	239	2	4	1	1	9	256
2343	Man-made fibres and yarns	84	2	2	—	—	10	98
2344	Man-made fibre broadwoven fabrics	177	4	5	1	2	10	200
2345	Cotton yarns and broadwoven fabrics	178	6	6	2	4	10	205
2346	Worsted yarns and broadwoven fabrics	102	3	2	1	2	5	114
2347	Woolen yarns and broadwoven fabrics	113	4	2	1	3	3	125
2348	Narrow woven and elastic textiles	69	4	1	1	2	3	80
2349	Textile finishing	99	13	2	1	2	7	126
234	Total	1,117	39	29	8	18	60	1,271
Other textile products—								
2351	Household textiles	108	4	2	1	5	2	122
2352	Textile floor coverings	424	14	15	3	4	12	474
2353	Felt and felt products	24	1	2	—	2	3	32
2354	Canvas and associated products n.e.c.	117	10	2	3	9	2	141
2355	Rope, cordage and twine	23	1	1	—	—	1	26
2356	Textile products n.e.c.	200	6	8	2	6	6	228
235	Total	895	37	30	10	26	25	1,023
23	Total textiles	2,012	76	59	18	44	85	2,293
CLOTHING AND FOOTWEAR—								
Knitting mills—								
2441	Hosiery	100	4	4	1	5	4	118
2442	Cardigans and pullovers	100	8	2	1	11	2	125
2443	Knitted goods n.e.c.	255	13	7	2	31	6	315
244	Total	454	26	13	5	48	12	558
Clothing—								
2451	Men's trousers and shorts; work clothing	177	8	4	2	30	4	226
2452	Men's suits and coats; waterproof clothing	81	5	2	1	10	2	101
2453	Women's outerwear n.e.c.	408	28	11	8	252	6	713
2454	Foundation garments	50	2	2	1	2	1	58
2455	Underwear and infants' clothing n.e.c.	255	13	6	3	41	5	323
2456	Headwear and clothing n.e.c.	242	17	5	5	77	4	350
245	Total	1,214	73	30	19	413	22	1,770
246	Footwear	287	11	8	4	19	7	336
24	Total clothing and footwear	1,955	110	52	27	480	41	2,664
WOOD, WOOD PRODUCTS AND FURNITURE—								
Wood and wood products—								
2531	Log sawmilling	269	14	44	13	56	40	436
2532	Resawn and dressed timber	258	5	18	6	20	15	321
2533	Veneers and manufactured boards of wood	525	9	41	3	6	42	626
2534	Wooden doors	87	4	1	1	2	2	98
2535	Wooden structural fittings and joinery n.e.c.	773	51	16	23	107	14	983
2536	Wooden containers	46	3	2	2	1	2	55
2537	Hardwood woodchips	196	1	1	10	27	9	243
2538	Wood products n.e.c.	93	8	3	2	3	2	111
253	Total	2,247	94	125	61	220	127	2,874
Furniture and mattresses—								
2541	Furniture (except sheet metal)	1,190	89	37	30	84	24	1,454
2542	Mattresses (except rubber)	181	5	7	3	4	3	204
254	Total	1,371	94	44	33	88	27	1,658
25	Total wood, wood products and furniture	3,618	188	169	94	308	154	4,532

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS: PURCHASES, TRANSFERS IN AND SELECTED EXPENSES (a) BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Purchases and transfers in (c) (\$m)	Rent, leasing and hiring (\$m)	Outward freight and carriage (\$m)	Motor vehicle running expenses (d) (\$m)	Commission and subcontract expenses (\$m)	Repair and maintenance (\$m)	Total purchases, transfers in and selected expenses (\$m)
ASIC code	Description							
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—								
Paper and paper products—								
2631	Pulp, paper and paperboard	902	19	103	9	10	102	1,144
2632	Paper bags (including textile bags)	143	3	4	1	2	2	155
2633	Solid fibreboard containers	110	5	3	2	7	3	130
2634	Corrugated fibreboard containers	581	13	24	7	4	18	647
2635	Paper products n.e.c.	365	8	31	3	4	18	429
263	Total	2,102	48	164	21	26	144	2,505
Printing and allied industries—								
2641	Publishing	268	39	36	10	275	7	634
2642	Printing and publishing	760	26	91	21	122	27	1,049
2643	Paper stationery	431	25	16	7	24	13	517
2644	Printing and bookbinding	1,348	108	49	26	151	56	1,738
2645	Printing trade services n.e.c.	126	21	5	7	15	9	183
264	Total	2,933	219	197	72	588	112	4,121
26	Total paper, paper products, printing and publishing	5,035	267	361	93	614	256	6,626
CHEMICAL, PETROLEUM AND COAL PRODUCTS—								
Basic chemicals—								
2751	Chemical fertilisers	615	9	16	5	55	44	744
2752	Industrial gases	94	3	9	5	3	19	134
2753	Synthetic resins and rubber	1,109	12	52	4	15	46	1,236
2754	Organic industrial chemicals n.e.c.	559	5	15	4	6	41	630
2755	Inorganic industrial chemicals n.e.c.	538	11	44	4	29	52	677
275	Total	2,915	41	135	22	108	201	3,421
Other chemical products—								
2761	Ammunition, explosives and fireworks	245	6	8	3	3	11	276
2762	Paints	717	13	22	8	3	12	774
2763	Pharmaceutical and veterinary products	912	23	20	13	9	21	998
2764	Pesticides	312	4	7	3	3	6	335
2765	Soap and other detergents	540	14	22	8	4	17	605
2766	Cosmetics and toilet preparations	217	11	10	3	2	5	247
2767	Inks	105	5	2	3	1	2	119
2768	Chemical products n.e.c.	331	11	14	5	4	8	373
276	Total	3,379	87	105	45	29	83	3,727
277	Petroleum refining	5,846	15	3	2	72	147	6,084
278	Petroleum and coal products n.e.c.	67	2	8	1	2	4	83
27	Total chemical, petroleum and coal products	12,207	144	252	69	211	434	13,316

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS: PURCHASES, TRANSFERS IN AND SELECTED EXPENSES (a) BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Purchases and transfers in (c)	Rent, leasing and hiring	Outward freight and cartage	Motor vehicle running expenses (d)	Commission and subcontract expenses	Repair and maintenance	Total purchases, transfers in and selected expenses
ASIC code	Description	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)
NON-METALLIC MINERAL PRODUCTS—								
283	Glass and glass products	375	14	28	4	8	31	460
Clay products and refractories—								
2861	Clay bricks	177	6	61	6	4	57	312
2862	Refractories	89	2	2	1	2	10	106
2863	Ceramic tiles and pipes	54	3	10	1	13	13	94
2864	Ceramic goods n.e.c.	42	3	4	1	2	4	56
286	Total	362	14	77	9	22	84	567
Cement and concrete products—								
2871	Cement	359	8	60	2	21	59	510
2872	Ready mixed concrete	1,146	34	176	27	48	59	1,491
2873	Concrete pipes and box culverts	93	2	14	2	1	12	123
2874	Concrete products n.e.c.	457	13	58	11	95	38	672
287	Total	2,056	57	307	42	165	168	2,795
Other non-metallic mineral products—								
2881	Plaster products and expanded minerals	211	3	5	2	7	8	236
2882	Stone products	46	4	1	2	4	3	60
2883	Glass wool and mineral wool products	118	4	10	2	3	7	144
2884	Non-metallic mineral products n.e.c.	114	3	21	3	4	9	155
288	Total	490	14	37	8	18	27	595
28	Total non-metallic mineral products	3,283	99	449	63	212	310	4,417
BASIC METAL PRODUCTS—								
Basic iron and steel—								
2941	Iron and steel basic products	4,495	171	301	9	52	490	5,517
2942	Iron casting	173	5	12	2	8	21	220
2943	Steel casting	150	7	6	1	9	10	183
2944	Iron and steel forging	60	3	1	1	3	4	73
2945	Steel pipes and tubes	358	8	24	1	4	17	413
294	Total	5,235	194	344	14	76	542	6,405
Basic non-ferrous metals—								
2951	Copper smelting, refining	969	12	4	—	39	12	1,036
2952	Silver, lead, zinc smelting, refining	928	3	54	2	13	55	1,054
2953	Alumina	1,018	16	11	1	38	65	1,149
2954	Aluminium smelting	1,157	13	43	1	46	110	1,371
2955	Nickel smelting, refining	832	2	5	—	49	6	893
2956	Non-ferrous metals n.e.c. smelting, refining	309	2	3	1	2	9	326
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.							
295	Total	5,213	48	120	5	186	256	5,828
Non-ferrous metal basic products—								
2961	Aluminium rolling, drawing, extruding	835	4	21	2	9	40	972
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	485	3	9	2	4	10	513
2963	Non-ferrous metal casting	88	11	3	2	2	6	111
296	Total	1,468	18	32	6	16	57	1,596
29	Total basic metal products	11,916	259	496	26	278	855	13,829

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS: PURCHASES, TRANSFERS IN AND SELECTED EXPENSES (a) BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class	Purchases and transfers in (c) (\$m)	Rent, leasing and hiring (\$m)	Outward freight and carriage (\$m)	Motor vehicle running expenses (d) (\$m)	Commission and subcontract expenses (\$m)	Repair and maintenance (\$m)	Total purchases, transfers in and selected expenses (\$m)
ASIC code Description							
FABRICATED METAL PRODUCTS—							
Structural metal products—							
3141 Fabricated structural steel	1,639	59	44	27	174	35	1,577
3142 Architectural aluminium products	896	36	13	18	74	10	1,047
3143 Architectural metal products n.e.c.	272	15	6	7	33	5	338
314 <i>Total</i>	<i>2,807</i>	<i>110</i>	<i>64</i>	<i>51</i>	<i>281</i>	<i>49</i>	<i>3,362</i>
Sheet metal products—							
3151 Metal containers	525	5	12	3	5	22	572
3152 Sheet metal furniture	220	12	7	5	13	5	263
3153 Sheet metal products n.e.c.	1,030	49	29	20	45	25	1,198
315 <i>Total</i>	<i>1,775</i>	<i>67</i>	<i>49</i>	<i>28</i>	<i>63</i>	<i>52</i>	<i>2,033</i>
Other fabricated metal products—							
3161 Cutlery and hand tools n.e.c.	83	6	3	3	3	3	101
3162 Springs and wire products	278	12	9	6	12	12	327
3163 Nuts, bolts, screws and rivets	187	6	5	2	5	7	212
3164 Metal coating and finishing	182	16	8	5	10	13	233
3165 Non-ferrous steam, gas and water fittings	111	7	3	2	5	5	133
3166 Boiler and plate work	90	4	1	2	7	2	107
3167 Metal blinds and awnings	99	7	3	4	8	2	124
3168 Fabricated metal products n.e.c.	502	28	12	14	35	17	607
316 <i>Total</i>	<i>1,530</i>	<i>86</i>	<i>43</i>	<i>39</i>	<i>86</i>	<i>60</i>	<i>1,844</i>
31 <i>Total fabricated metal products</i>	<i>6,112</i>	<i>262</i>	<i>155</i>	<i>118</i>	<i>430</i>	<i>162</i>	<i>7,239</i>
TRANSPORT EQUIPMENT—							
Motor vehicles and parts—							
3231 Motor vehicles	5,278	28	52	10	18	105	5,493
3232 Motor vehicle bodies, trailers, caravans	368	14	2	5	11	7	406
3233 Motor vehicle instruments and electrical equipment n.e.c.	474	11	6	3	4	11	508
3234 Motor vehicle parts n.e.c.	1,161	40	27	13	20	56	1,318
323 <i>Total</i>	<i>7,280</i>	<i>93</i>	<i>88</i>	<i>31</i>	<i>53</i>	<i>180</i>	<i>7,725</i>
Other transport equipment—							
3241 Ships	430	45	1	2	1,002	15	1,494
3242 Boats	135	7	1	3	14	4	163
3243 Railway rolling stock and locomotives	269	2	1	1	3	4	279
3244 Aircraft	492	20	2	4	16	40	573
3245 Transport equipment n.e.c.	32	1	1	1	2	—	37
324 <i>Total</i>	<i>1,358</i>	<i>74</i>	<i>6</i>	<i>10</i>	<i>1,037</i>	<i>63</i>	<i>2,547</i>
32 <i>Total transport equipment</i>	<i>8,638</i>	<i>268</i>	<i>94</i>	<i>41</i>	<i>1,090</i>	<i>242</i>	<i>10,272</i>

For footnotes see end of table.

TABLE 6. MANUFACTURING ESTABLISHMENTS: PURCHASES, TRANSFERS IN AND SELECTED EXPENSES (a) BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Purchases and transfers in (c)	Rent, leasing and hiring (5m)	Outward freight and carriage (5m)	Motor vehicle running expenses (d)	Commission and subcontract expenses (5m)	Repair and maintenance (5m)	Total purchases, transfers in and selected expenses (5m)
ASIC code	Description	(5m)	(5m)	(5m)	(5m)	(5m)	(5m)	(5m)
OTHER MACHINERY AND EQUIPMENT—								
Photographic, professional and scientific equipment—								
3341	Photographic and optical goods	194	4	2	1	2	3	205
3342	Photographic film processing	123	22	3	3	6	6	164
3343	Measuring, professional and scientific equipment n.e.c.	165	13	3	3	8	5	197
334	Total	482	39	8	7	16	14	566
Appliances and electrical equipment—								
3351	Radio and TV receivers; audio equipment	139	4	2	1	2	4	152
3352	Electronic equipment n.e.c.	1,387	39	12	13	33	24	1,507
3353	Refrigerators and household appliances	835	27	35	9	11	21	938
3354	Water heating systems	121	3	5	1	1	5	137
3355	Electric and telephone cable and wire	476	8	14	2	16	13	528
3356	Batteries	139	3	7	2	7	4	162
3357	Electrical machinery and equipment n.e.c.	1,117	41	25	17	29	30	1,260
335	Total	4,215	126	100	44	99	101	4,683
Industrial machinery and equipment—								
3361	Agricultural machinery	239	15	6	5	19	6	289
3362	Construction machinery	130	5	2	1	2	2	143
3363	Materials handling equipment	307	16	10	7	15	4	359
3364	Wood and metal working machinery	87	6	2	2	4	3	105
3365	Pumps and compressors	254	11	4	4	7	3	221
3366	Commercial space heating and cooling equipment	195	8	3	5	15	5	170
3367	Dies, saw blades and machine tool accessories	129	13	3	3	5	3	171
3368	Food processing machinery	154	5	2	3	5	3	171
3369	Industrial machinery and equipment n.e.c.	1,333	56	20	26	58	28	1,519
336	Total	2,829	135	52	58	132	59	3,264
33	Total other machinery and equipment	7,526	300	160	109	247	173	8,515
MISCELLANEOUS MANUFACTURING—								
Leather and leather products—								
3451	Leather tanning and fur dressing	346	4	12	1	5	7	374
3452	Leather and leather substitute goods n.e.c.	32	2	1	1	3	1	39
345	Total	378	6	12	2	8	7	413
Rubber products—								
3461	Rubber tyres, tubes, belts, hose and sheets	410	18	10	9	7	14	467
3462	Rubber products n.e.c.	136	7	4	2	3	6	157
346	Total	546	24	13	11	10	20	624
Plastic and related products—								
3471	Flexible packaging and abrasive papers	645	21	22	7	9	26	730
3472	Rigid plastic sheeting	87	3	4	1	—	4	99
3473	Hard surface floor coverings n.e.c.	1,676	94	69	22	24	73	1,958
3474	Plastic products n.e.c.	2,408	118	94	30	34	103	2,787
347	Total	2,408	118	94	30	34	103	2,787
Other manufacturing—								
3481	Cyathulmic articles	26	3	1	1	1	1	33
3482	Jewellery and silverware	138	5	1	1	8	2	155
3483	Brooms and brushes	49	2	3	1	1	2	57
3484	Signs and advertising displays	142	20	5	8	20	4	197
3485	Sporting equipment	90	6	3	2	4	2	107
3486	Writing and marking equipment	25	5	1	1	1	1	33
3487	Manufacturing n.e.c.	62	5	3	3	5	2	80
348	Total	532	46	16	17	39	12	662
34	Total miscellaneous manufacturing	3,866	194	135	59	91	143	4,486
21-34	TOTAL MANUFACTURING	84,918	2,351	3,036	913	4,225	3,396	98,839

(a) Subject to sampling error. See paragraphs 12 to 15 of the Explanatory Notes. (b) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (c) Transfers in from other establishments of the same business. (d) Excludes depreciation, leasing charges and comprehensive insurance premiums.

TABLE 7. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, AUSTRALIA, 1988-89
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Employment size group	Establishments at 30 June (b)		Emplo. ment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)		Purchases and transfers in (e) (f)		Other selected expenses (e) (f)		Value added (e) (f)	
	(No.)	(%)	('000)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
FOOD, BEVERAGES AND TOBACCO														
0-19 persons	2,411	66.3	20	11.5	326	7.7	2,428	7.4	1,337	7.2	192	10.2	886	7.1
20-49 persons	585	16.1	18	10.5	390	9.2	3,841	11.7	2,314	12.4	239	12.6	1,315	10.6
50-99 persons	263	7.2	19	10.8	443	10.4	4,154	12.7	2,466	13.2	251	13.3	1,462	11.8
Total less than 100 persons	3,259	89.6	56	32.8	1,158	27.3	10,423	31.8	6,117	32.7	682	36.0	3,663	29.5
100-199 persons	173	4.8	24	14.2	603	14.2	4,842	14.8	2,771	14.8	272	14.4	1,831	14.7
200-499 persons	153	4.2	50	28.9	1,311	30.9	9,873	30.1	5,981	32.0	517	27.3	3,450	27.8
500-999 persons	42	1.2	29	16.3	767	18.1	5,193	15.8	2,642	14.1	288	15.2	2,281	18.4
1000 or more persons	11	0.3	13	7.8	397	9.4	2,493	7.6	1,179	6.3	133	7.0	1,197	9.6
Total 100 or more persons	379	10.4	116	67.2	3,079	72.7	22,402	68.2	12,573	67.3	1,210	64.0	8,759	70.3
Total	3,638	100.0	172	100.0	4,237	100.0	32,824	100.0	18,690	100.0	1,892	100.0	12,422	100.0
TEXTILES														
0-19 persons	452	65.3	4	12.6	71	9.8	373	9.5	188	9.5	40	13.9	147	9.0
20-49 persons	114	16.5	4	12.0	79	10.9	521	13.2	230	11.6	42	14.7	254	15.5
50-99 persons	45	6.5	3	10.8	77	10.6	436	11.1	236	12.0	30	10.4	175	10.7
Total less than 100 persons	611	88.3	11	35.4	228	31.4	1,330	33.8	654	33.1	111	39.1	577	35.2
100-199 persons	42	6.1	6	19.8	161	22.2	904	23.0	433	22.0	65	22.8	384	23.4
200-499 persons	34	4.9	10	32.8	247	34.0	1,274	32.3	662	33.5	76	26.9	511	31.2
500-999 persons	4	0.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	1	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	81	11.7	19	64.6	496	68.6	2,610	66.2	1,320	66.9	173	60.9	1,063	64.8
Total	692	100.0	30	100.0	725	100.0	3,940	100.0	1,974	100.0	254	100.0	1,640	100.0
CLOTHING AND FOOTWEAR														
0-19 persons	1,460	69.6	13	19.2	215	16.9	981	19.4	336	17.4	247	35.0	397	16.5
20-49 persons	371	17.7	11	17.0	206	16.1	1,171	16.5	319	16.5	167	23.7	382	15.9
50-99 persons	136	6.5	9	14.3	201	15.7	886	17.5	390	20.2	128	18.1	361	15.1
Total less than 100 persons	1,967	93.8	33	50.5	622	48.7	2,732	54.1	1,045	54.2	542	76.8	1,143	47.6
100-199 persons	72	3.4	10	15.1	215	16.9	871	17.3	354	18.3	78	11.1	427	17.8
200-499 persons	49	2.3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	7	0.3	5	7.5	94	7.3	318	6.3	122	6.3	24	3.5	179	7.5
1000 or more persons	2	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	130	6.2	32	49.3	655	51.3	2,318	45.9	885	45.8	164	23.2	1,258	52.4
Total	2,097	100.0	65	100.0	1,277	100.0	5,050	100.0	1,930	100.0	705	100.0	2,400	100.0

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, AUSTRALIA, 1988-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)		Purchases and transfers in (e) (f)		Other selected expenses (e) (f)		Value added (e) (f)	
	(No.)	(%)	(000)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
WOOD, WOOD PRODUCTS AND FURNITURE														
0-19 persons	3,905	81.4	32	40.3	595	33.5	2,492	31.5	1,064	29.6	313	34.5	1,112	32.0
20-49 persons	647	13.5	19	23.9	455	25.6	1,906	24.1	846	23.6	206	22.8	877	25.0
50-99 persons	144	3.0	10	12.5	225	12.7	1,090	13.8	511	14.2	115	12.6	487	13.9
Total less than 100 persons	4,696	97.9	60	76.7	1,276	71.8	5,489	69.5	2,420	67.4	634	69.9	2,486	70.8
100-199 persons	70	1.5	10	12.2	252	14.2	1,291	16.3	619	17.2	139	15.3	552	15.7
200-499 persons	28	0.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
500-999 persons	1	—	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total 100 or more persons	99	2.1	18	23.3	500	28.2	2,411	30.5	1,170	32.6	273	30.1	1,026	29.2
Total	4,795	100.0	79	100.0	1,776	100.0	7,900	100.0	3,591	100.0	907	100.0	3,511	100.0
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING														
0-19 persons	2,555	75.2	21	20.5	476	16.0	1,801	13.4	627	12.6	280	17.7	887	12.9
20-49 persons	497	14.6	15	14.3	389	13.1	1,526	11.4	581	11.7	188	11.9	761	11.1
50-99 persons	168	4.9	12	11.4	349	11.7	1,522	11.3	612	12.3	190	12.0	731	10.6
Total less than 100 persons	3,220	94.8	48	46.2	1,213	40.8	4,849	36.1	1,821	36.5	659	41.6	2,379	34.7
100-199 persons	95	2.8	13	12.7	375	12.6	1,794	13.4	842	16.9	163	10.3	794	11.6
200-499 persons	59	1.7	16	15.8	539	18.1	2,624	19.6	1,016	20.4	261	16.5	1,355	19.7
500-999 persons	14	0.4	10	9.6	298	10.0	1,577	11.8	577	11.6	226	14.3	762	11.1
1000 or more persons	10	0.3	16	15.7	549	18.5	2,574	19.2	730	14.6	274	17.3	1,574	22.9
Total 100 or more persons	178	5.2	56	53.8	1,761	59.2	8,569	63.9	3,165	63.5	924	58.4	4,485	65.3
Total	3,398	100.0	104	100.0	2,975	100.0	13,418	100.0	4,985	100.0	1,582	100.0	6,864	100.0
CHEMICAL, PETROLEUM AND COAL PRODUCTS														
0-19 persons	473	53.1	4	7.8	97	5.6	854	4.2	452	3.7	67	6.1	347	4.8
20-49 persons	172	19.3	5	10.5	167	9.6	1,500	7.4	839	6.9	104	9.4	580	8.0
50-99 persons	104	11.7	7	13.7	221	12.8	2,070	10.2	1,105	9.1	125	11.3	845	11.7
Total less than 100 persons	749	84.1	16	32.0	485	28.0	4,425	21.9	2,396	19.7	296	26.7	1,772	24.5
100-199 persons	76	8.5	11	20.7	367	21.2	3,149	15.6	1,679	13.8	220	19.8	1,296	17.9
200-499 persons	55	6.2	16	31.5	545	31.5	6,726	33.2	4,195	34.4	318	28.7	2,221	30.8
500-999 persons	10	1.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
1000 or more persons	1	0.1	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total 100 or more persons	142	15.9	35	68.0	1,245	72.0	15,816	78.1	9,790	80.3	812	73.3	5,448	75.5
Total	891	100.0	51	100.0	1,730	100.0	20,241	100.0	12,186	100.0	1,108	100.0	7,220	100.0

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)		Purchases and transfers in (e) (f)		Other selected expenses (e) (g)		Value added (e) (h)	
	(No.)	(%)	('000)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
NON-METALLIC MINERAL PRODUCTS														
0-19 persons	1,063	74.4	7	17.5	159	12.9	1,393	17.9	754	23.0	264	23.3	395	11.1
20-49 persons	178	12.5	6	13.3	155	12.6	949	12.2	417	12.7	157	13.9	393	11.1
50-99 persons	87	6.1	6	15.3	189	15.3	1,095	14.0	402	12.3	186	16.5	528	14.9
Total less than 100 persons	1,328	92.9	19	46.1	503	40.9	3,438	44.1	1,573	48.1	607	53.6	1,316	37.1
100-199 persons	61	4.3	8	20.3	274	22.3	1,882	24.1	759	23.2	237	21.0	922	26.0
200-499 persons	34	2.4	10	24.1	315	25.6	1,882	24.1	745	22.8	241	21.3	928	26.2
500-999 persons	6	0.4	4	9.5	138	11.2	598	7.7	197	6.0	46	4.1	377	10.6
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total 100 or more persons	101	7.1	22	53.9	727	58.1	4,362	55.9	1,700	51.9	524	46.4	2,227	62.9
Total	1,429	100.0	41	100.0	1,230	100.0	7,800	100.0	3,274	100.0	1,131	100.0	3,543	100.0
BASIC METAL PRODUCTS														
0-19 persons	387	57.4	3	5.0	81	3.4	1,050	4.9	604	5.1	109	5.7	386	4.9
20-49 persons	122	18.1	4	5.4	105	4.4	703	3.3	396	3.3	49	2.5	273	3.4
50-99 persons	61	9.1	4	6.3	131	5.5	1,308	6.1	874	7.3	78	4.1	385	4.8
Total less than 100 persons	570	84.6	12	16.7	316	13.3	3,062	14.2	1,874	15.7	236	12.3	1,044	13.1
100-199 persons	46	6.8	7	9.7	203	8.5	1,715	8.0	1,078	9.1	118	6.2	500	6.3
200-499 persons	34	5.0	11	15.5	359	15.1	4,476	20.8	3,073	25.8	202	10.6	1,156	14.5
500-999 persons	13	1.9	10	14.1	360	15.1	3,416	15.9	1,829	15.4	310	16.2	1,300	16.3
1000 or more persons	11	1.6	30	44.1	1,146	48.1	8,860	41.2	4,053	34.0	1,045	54.7	3,957	49.7
Total 100 or more persons	104	15.4	57	83.3	2,058	86.7	18,467	85.8	10,033	84.3	1,676	87.7	6,913	86.9
Total	674	100.0	69	100.0	2,384	100.0	21,529	100.0	11,906	100.0	1,911	100.0	7,957	100.0
FABRICATED METAL PRODUCTS														
0-19 persons	3,674	76.1	30	29.4	652	25.2	2,889	23.1	1,280	21.1	330	29.5	1,283	23.9
20-49 persons	731	15.1	22	21.1	544	21.1	2,513	20.1	1,173	19.3	263	23.5	1,084	20.2
50-99 persons	250	5.2	18	17.3	459	17.8	2,432	19.4	1,241	20.4	183	16.3	1,022	19.0
Total less than 100 persons	4,655	96.4	69	67.8	1,655	64.1	7,833	62.5	3,695	60.8	776	69.4	2,389	43.1
100-199 persons	126	2.6	17	16.8	455	17.6	2,406	19.2	1,249	20.5	165	14.7	1,004	18.7
200-499 persons	40	0.8	11	10.9	330	12.8	1,639	13.1	825	13.6	107	9.7	712	13.2
500-999 persons	7	0.1	5	4.5	143	5.5	648	5.2	312	5.1	71	6.3	267	5.0
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total 100 or more persons	173	3.6	33	32.2	928	35.9	4,693	37.5	2,386	39.2	343	30.6	1,982	36.9
Total	4,828	100.0	102	100.0	2,583	100.0	12,526	100.0	6,081	100.0	1,119	100.0	5,371	100.0

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)		Purchases and transfers in (e) (f)		Other selected expenses (e) (f)		Value added (e) (f)	
	(No.)	(%)	('000)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
TRANSPORT EQUIPMENT														
0-19 persons	1,108	71.3	9	8.3	176	6.0	690	4.2	288	3.3	60	3.7	350	4.8
20-49 persons	219	14.1	6	6.2	163	5.6	675	4.1	342	4.0	50	3.1	289	4.0
50-99 persons	91	5.9	6	5.9	161	5.5	803	4.9	402	4.7	51	3.1	373	5.1
Total less than 100 persons	1,418	91.2	21	20.4	500	17.1	2,168	13.1	1,032	12.0	161	9.9	1,013	13.9
100-199 persons	47	3.0	7	6.3	181	6.2	901	5.5	516	6.0	39	2.4	406	5.6
200-499 persons	49	3.2	16	15.2	453	15.5	2,539	15.4	1,526	17.7	102	6.2	997	13.7
500-999 persons	22	1.4	15	14.4	423	14.4	3,163	19.1	1,081	12.6	1,050	64.4	1,482	20.3
1000 or more persons	19	1.2	46	43.7	1,375	46.9	7,765	47.0	4,450	51.7	279	17.1	3,399	46.6
Total 100 or more persons	137	8.8	84	79.6	2,433	82.9	14,368	86.9	7,572	88.0	1,470	90.1	6,284	86.1
Total	1,555	100.0	105	100.0	2,933	100.0	16,536	100.0	8,604	100.0	1,630	100.0	7,297	100.0
OTHER MACHINERY AND EQUIPMENT														
0-19 persons	2,730	69.4	22	17.6	505	14.7	2,018	13.2	899	12.0	187	19.1	965	13.4
20-49 persons	688	17.5	21	16.4	551	16.0	2,276	14.8	1,011	13.6	186	19.2	1,097	15.2
50-99 persons	258	6.6	18	14.2	515	15.0	2,296	15.0	1,114	14.9	157	16.0	1,116	15.5
Total less than 100 persons	3,676	93.4	62	48.2	1,570	45.6	6,591	43.0	3,024	40.5	533	54.2	3,179	44.0
100-199 persons	162	4.1	22	17.5	625	18.2	2,796	18.2	1,386	18.6	142	14.4	1,325	18.3
200-499 persons	74	1.9	73	17.9	698	20.3	2,796	18.2	1,443	19.3	161	16.4	1,256	17.4
500-999 persons	15	0.4	10	8.0	250	7.3	1,423	9.3	711	9.5	62	6.4	653	9.0
1000 or more persons	8	0.2	11	8.5	299	8.7	1,723	11.2	899	12.0	85	8.6	808	11.2
Total 100 or more persons	259	6.6	66	51.8	1,871	54.4	8,739	57.0	4,440	59.5	450	45.8	4,042	56.0
Total	3,935	100.0	128	100.0	3,442	100.0	15,329	100.0	7,463	100.0	983	100.0	7,221	100.0
MISCELLANEOUS MANUFACTURING														
0-19 persons	1,909	75.1	15	25.1	306	19.9	1,375	17.0	634	16.4	143	23.1	606	16.7
20-49 persons	366	14.4	11	18.7	278	18.1	1,464	18.1	719	18.6	121	19.5	637	17.5
50-99 persons	152	6.0	11	17.6	283	18.4	1,627	20.2	789	20.4	127	20.4	726	20.0
Total less than 100 persons	2,427	95.5	37	61.5	867	56.4	4,465	55.3	2,142	55.5	392	63.1	1,970	54.2
100-199 persons	80	3.1	11	17.8	306	19.9	1,739	21.5	903	23.4	123	19.9	709	19.5
200-499 persons	28	1.1	8	12.8	228	14.8	1,188	14.7	604	15.7	68	11.0	521	14.3
500-999 persons	7	0.3	5	7.9	136	8.9	678	8.4	212	5.5	38	6.1	435	12.0
1000 or more persons	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total 100 or more persons	115	4.5	23	38.5	671	43.6	3,605	44.7	1,719	44.5	230	36.9	1,665	45.8
Total	2,542	100.0	60	100.0	1,538	100.0	8,070	100.0	3,861	100.0	622	100.0	3,635	100.0

For footnotes see end of table.

TABLE 7. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY EMPLOYMENT SIZE AND INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Employment size group	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d) (e)		Turnover (e)		Purchases and transfers in (e) (f)		Other selected expenses (e) (f)		Value added (e) (f)	
	(No.)	(%)	('000)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
TOTAL MANUFACTURING														
0-19 persons	22,127	72.6	180	17.9	3,659	13.6	18,344	11.1	8,463	10.0	2,234	16.1	7,772	11.3
20-49 persons	4,690	15.4	141	14.0	3,483	13.0	18,739	11.3	9,187	10.9	1,775	12.8	7,943	11.5
50-99 persons	1,759	5.8	123	12.2	3,252	12.1	19,720	11.9	10,143	12.0	1,619	11.7	8,214	11.9
Total less than 100 persons	28,576	93.8	445	44.2	10,394	38.7	56,804	34.4	27,793	32.9	5,628	40.6	23,928	34.6
100-199 persons	1,050	3.4	145	14.4	4,018	15.0	24,292	14.7	12,589	14.9	1,761	12.7	10,151	14.7
200-499 persons	637	2.1	193	19.2	5,561	20.7	37,054	22.4	20,933	24.8	2,235	16.1	14,116	20.4
500-999 persons	148	0.5	101	10.1	2,991	11.1	23,215	14.1	11,709	13.8	2,413	17.4	9,804	14.2
1000 or more persons	63	0.2	122	12.2	3,867	14.4	23,799	14.4	11,522	13.6	1,838	13.2	11,082	16.0
Total 100 or more persons	1,898	6.2	562	55.8	16,436	61.3	108,360	65.6	56,753	67.1	8,247	59.4	45,153	65.4
Total	230,474	100.0	1,007	100.0	26,830	100.0	165,164	100.0	84,546	100.0	13,875	100.0	69,082	100.0

(a) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (b) See paragraphs 5 to 10 and 16 of the Explanatory Notes and the Appendix. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors. (e) Figures may differ slightly from those presented in the other tables, because they exclude those manufacturing establishments which operated during 1989-90 but were not operating at 30 June 1990. See paragraph 42 of the Explanatory Notes. (f) Subject to sampling error. See paragraphs 12 to 15 of the Explanatory Notes.

TABLE 1. MANUFACTURING ESTABLISHMENTS: SUMMARY STATISTICS AND CONCENTRATION RATIOS (a) BY INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry subdivision		Enterprise groups ranked by turnover	Enterprises groups at 30 June		Establishments at 30 June (c)		Employment at end of June (d)		Wages and salaries (e)		Turnover		Value added (f)	
ASIC code	Description		Number	Ratio	Number	Ratio	('000)	Ratio	(\$m)	Ratio	(\$m)	Ratio	(\$m)	Ratio
21	Food, beverages and tobacco	First four	4	—	84	0.02	24	0.14	690	0.16	5,960	0.18	2,221	0.18
		Second four	4	—	93	0.03	17	0.10	440	0.10	3,320	0.10	1,358	0.11
		Third four	4	—	30	0.01	10	0.06	324	0.08	2,503	0.08	1,095	0.09
		Fourth four	4	—	45	0.01	7	0.04	191	0.04	1,902	0.06	566	0.05
		Fifth four	4	—	71	0.02	9	0.05	236	0.06	1,642	0.05	657	0.05
		Remainder	2,994	0.99	3,315	0.91	104	0.61	2,373	0.56	17,606	0.53	6,564	0.53
		Industry total	3,014	1.00	3,638	1.00	172	1.00	4,256	1.00	32,934	1.00	12,461	1.00
23	Textiles	First four	4	0.01	22	0.03	6	0.21	162	0.22	818	0.20	327	0.20
		Second four	4	0.01	19	0.03	3	0.09	70	0.10	525	0.13	227	0.14
		Third four	4	0.01	11	0.02	1	0.05	38	0.05	383	0.10	109	0.07
		Fourth four	4	0.01	9	0.01	1	0.05	44	0.06	265	0.07	99	0.06
		Fifth four	4	0.01	10	0.01	2	0.07	47	0.06	210	0.05	105	0.06
		Remainder	603	0.97	621	0.90	16	0.54	374	0.51	1,795	0.45	783	0.47
		Industry total	623	1.00	692	1.00	30	1.00	736	1.00	3,996	1.00	1,649	1.00
24	Clothing and footwear	First four	4	—	45	0.02	11	0.17	247	0.19	997	0.20	302	0.21
		Second four	4	—	11	0.01	2	0.04	70	0.05	262	0.05	126	0.05
		Third four	4	—	11	0.01	3	0.05	67	0.05	194	0.04	126	0.05
		Fourth four	4	—	8	—	2	0.03	35	0.03	159	0.03	65	0.03
		Fifth four	4	—	9	—	1	0.02	38	0.03	141	0.03	62	0.03
		Remainder	1,992	0.97	2,013	0.96	45	0.69	834	0.65	3,347	0.66	1,533	0.63
		Industry total	2,012	1.00	2,097	1.00	65	1.00	1,290	1.00	5,100	1.00	2,415	1.00
25	Wood, wood products and furniture	First four	4	—	56	0.01	7	0.08	194	0.11	1,137	0.14	416	0.12
		Second four	4	—	33	0.01	3	0.03	74	0.04	406	0.05	187	0.05
		Third four	4	—	16	—	2	0.02	43	0.02	317	0.04	136	0.04
		Fourth four	4	—	22	—	2	0.02	45	0.03	231	0.03	114	0.03
		Fifth four	4	—	13	—	1	0.02	36	0.02	194	0.02	89	0.03
		Remainder	4,521	1.00	4,655	0.97	65	0.82	1,399	0.78	5,682	0.71	2,592	0.73
		Industry total	4,541	1.00	4,795	1.00	79	1.00	1,791	1.00	7,968	1.00	3,533	1.00
26	Paper, paper products, printing and publishing	First four	4	—	89	0.03	28	0.27	925	0.31	4,593	0.34	2,474	0.36
		Second four	4	—	35	0.01	6	0.06	193	0.06	1,305	0.10	591	0.09
		Third four	4	—	11	—	5	0.05	172	0.06	861	0.06	383	0.06
		Fourth four	4	—	30	0.01	3	0.03	132	0.04	551	0.04	280	0.04
		Fifth four	4	—	33	0.01	4	0.04	110	0.04	429	0.03	209	0.03
		Remainder	3,079	0.99	3,200	0.94	58	0.55	1,467	0.49	5,764	0.43	2,923	0.43
		Industry total	3,099	1.00	3,338	1.00	104	1.00	2,999	1.00	13,502	1.00	6,861	1.00

For footnotes see end of table.

TABLE 8. MANUFACTURING ESTABLISHMENTS: SUMMARY STATISTICS AND CONCENTRATION RATIOS (a) BY INDUSTRY SUBDIVISION, AUSTRALIA, 1989-99—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry subdivision		Enterprise groups ranked by turnover	Enterprise groups at 30 June		Establishments at 30 June (c)		Employment at end of June (d)		Wages and salaries (e)		Turnover		Value added (f)	
ASIC code	Description		Number	Ratio	Number	Ratio	(000)	Ratio	(\$m)	Ratio	(\$m)	Ratio	(\$m)	Ratio
27	Chemical, petroleum and coal products	First four	4	0.01	55	0.06	8	0.15	130	0.19	8,081	0.40	2,650	0.37
		Second four	4	0.01	12	0.01	3	0.06	233	0.07	2,603	0.13	392	0.07
		Third four	4	0.01	25	0.03	4	0.07	147	0.09	1,173	0.06	409	0.06
		Fourth four	4	0.01	18	0.02	3	0.06	101	0.06	938	0.05	439	0.06
		Fifth four	4	0.01	15	0.02	2	0.05	88	0.05	776	0.04	354	0.05
		Remainder	630	0.97	766	0.86	31	0.61	943	0.54	6,697	0.33	2,978	0.41
		Industry total	650	1.00	891	1.00	51	1.00	1,732	1.00	20,268	1.00	7,223	1.00
28	Non-metallic mineral products	First four	4	—	341	0.24	17	0.41	549	0.44	4,108	0.53	1,727	0.49
		Second four	4	—	23	0.02	5	0.12	159	0.13	990	0.13	579	0.16
		Third four	4	—	13	0.01	3	0.06	89	0.07	434	0.06	237	0.07
		Fourth four	4	—	21	0.01	2	0.05	70	0.06	320	0.04	177	0.05
		Fifth four	4	—	15	0.01	1	0.03	30	0.02	203	0.03	84	0.02
		Remainder	910	0.98	1,016	0.71	14	0.34	337	0.27	1,766	0.23	745	0.21
		Industry total	930	1.00	1,429	1.00	41	1.00	1,234	1.00	7,822	1.00	3,550	1.00
29	Basic metal products	First four	4	0.01	56	0.08	35	0.51	1,310	0.55	12,483	0.58	4,906	0.62
		Second four	4	0.01	22	0.03	7	0.10	257	0.11	3,112	0.14	791	0.10
		Third four	4	0.01	32	0.05	7	0.10	246	0.10	1,823	0.08	701	0.09
		Fourth four	4	0.01	29	0.04	3	0.05	113	0.05	1,164	0.05	456	0.06
		Fifth four	4	0.01	12	0.02	3	0.04	80	0.03	650	0.03	199	0.03
		Remainder	490	0.96	523	0.78	14	0.20	381	0.16	2,307	0.11	910	0.11
		Industry total	510	1.00	674	1.00	69	1.00	2,387	1.00	21,549	1.00	7,964	1.00
31	Fabricated metal products	First four	4	—	90	0.02	9	0.09	278	0.11	1,966	0.16	696	0.13
		Second four	4	—	44	0.01	8	0.08	220	0.08	1,159	0.09	528	0.10
		Third four	4	—	26	0.01	3	0.03	94	0.04	518	0.04	135	0.03
		Fourth four	4	—	26	0.01	3	0.03	68	0.03	375	0.03	153	0.03
		Fifth four	4	—	18	—	2	0.02	43	0.02	317	0.03	134	0.02
		Remainder	4,480	1.00	4,624	0.96	78	0.77	1,895	0.73	8,259	0.66	3,749	0.69
		Industry total	4,500	1.00	4,828	1.00	102	1.00	2,599	1.00	12,594	1.00	5,395	1.00
32	Transport equipment	First four	4	—	14	0.01	25	0.23	679	0.23	7,472	0.45	2,801	0.38
		Second four	4	—	4	—	12	0.11	398	0.14	1,852	0.11	1,039	0.14
		Third four	4	—	35	0.02	9	0.08	277	0.09	1,077	0.06	513	0.07
		Fourth four	4	—	9	0.01	7	0.06	168	0.06	669	0.04	378	0.05
		Fifth four	4	—	8	0.01	5	0.05	149	0.05	549	0.03	311	0.04
		Remainder	1,427	0.99	1,485	0.95	49	0.46	1,273	0.43	4,993	0.30	2,253	0.31
		Industry total	1,447	1.00	1,555	1.00	105	1.00	2,943	1.00	16,612	1.00	7,295	1.00

For footnotes see end of table.

TABLE 8. MANUFACTURING ESTABLISHMENTS: SUMMARY STATISTICS AND CONCENTRATION RATIOS (a) BY INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90—continued

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry subdivision		Enterprise groups ranked by turnover	Enterprise groups at 30 June		Establishments at 30 June (c)		Employment at end of June (d)		Wages and salaries (e)		Turnover		Value added (f)	
ASIC code	Description		Number	Ratio	Number	Ratio	('000)	Ratio	(\$m)	Ratio	(\$m)	Ratio	(\$m)	Ratio
33	Other machinery and equipment	First four	4	—	24	0.01	11	0.09	300	0.09	1,762	0.11	808	0.11
		Second four	4	—	38	0.01	6	0.05	182	0.05	1,239	0.08	488	0.07
		Third four	4	—	36	0.01	7	0.05	203	0.06	863	0.06	389	0.05
		Fourth four	4	—	26	0.01	5	0.04	165	0.05	593	0.04	332	0.05
		Fifth four	4	—	7	—	2	0.01	45	0.01	467	0.03	137	0.02
		Remainder	3,591	0.99	3,804	0.97	96	0.75	2,565	0.74	10,539	0.68	5,103	0.70
		Industry total	3,611	1.00	3,935	1.00	128	1.00	3,460	1.00	15,464	1.00	7,258	1.00
34	Miscellaneous manufacturing	First four	4	—	83	0.03	9	0.16	296	0.19	1,643	0.20	831	0.23
		Second four	4	—	34	0.01	5	0.08	135	0.09	784	0.10	353	0.10
		Third four	4	—	18	0.01	2	0.03	55	0.04	449	0.06	212	0.06
		Fourth four	4	—	13	0.01	1	0.02	34	0.02	290	0.04	82	0.02
		Fifth four	4	—	9	—	1	0.02	34	0.02	237	0.03	68	0.02
		Remainder	2,309	0.99	2,385	0.94	42	0.70	987	0.64	4,673	0.58	2,091	0.57
		Industry total	2,329	1.00	2,542	1.00	60	1.00	1,540	1.00	8,076	1.00	3,637	1.00
21-34	Total manufacturing	First four	4	—	169	0.01	56	0.06	1,907	0.07	16,409	0.10	6,791	0.10
		Second four	4	—	441	0.01	39	0.04	1,164	0.04	9,937	0.06	3,834	0.06
		Third four	4	—	150	—	24	0.02	810	0.03	8,542	0.05	3,135	0.05
		Fourth four	4	—	119	—	28	0.03	822	0.03	6,927	0.04	2,586	0.04
		Fifth four	4	—	140	—	24	0.02	694	0.03	5,396	0.03	2,146	0.03
		Remainder	26,832	1.00	29,455	0.97	837	0.83	21,572	0.80	118,676	0.72	50,754	0.73
		Industry total	26,852	1.00	30,474	1.00	1,007	1.00	26,969	1.00	165,886	1.00	69,341	1.00

(a) See paragraphs 43 to 47 of the Explanatory Notes. (b) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11.

(c) See paragraphs 5 to 10 and 16 of the Explanatory Notes and the Appendix. (d) Includes working proprietors. (e) Excludes the drawings of working proprietors. (f) Subject to sampling error. See paragraphs 12 to 15 of the Explanatory Notes.

TABLE 9. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY VALUE ADDED AND INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90

(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry subdivision	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)		Turnover		Purchases and transfers in (e)		Other selected expenses (f)	
	Value added (\$)											
	(No.)	(%)	(000)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
21 Food, beverages and tobacco—												
Less than 500,000	2,103	57.8	19	11.0	264	6.2	1,321	4.0	848	4.5	103	5.4
500,000 to 1,999,999	693	19.0	17	9.7	330	7.7	2,395	7.0	1,417	7.6	169	6.9
2,000,000 to 9,999,999	545	15.0	40	23.3	962	22.6	8,201	24.9	5,116	27.3	539	28.4
10,000,000 to 24,999,999	197	5.4	45	26.2	1,177	27.7	8,991	27.3	5,397	28.8	452	23.8
25,000,000 and over	100	2.7	51	29.7	1,522	35.8	12,127	36.8	5,975	31.9	633	33.4
Total	3,638	100.0	172	100.0	4,256	100.0	32,934	100.0	18,752	100.0	1,897	100.0
23 Textiles—												
Less than 500,000	392	56.6	3	10.5	56	7.7	234	5.9	131	6.5	27	9.6
500,000 to 1,999,999	148	21.4	4	13.4	87	11.9	422	10.6	235	11.7	39	14.0
2,000,000 to 9,999,999	103	14.9	9	29.8	232	31.5	1,307	32.7	674	33.5	98	34.9
10,000,000 to 24,999,999	37	5.3	8	28.3	214	29.1	1,150	28.8	547	27.2	73	26.0
25,000,000 and over	12	1.7	5	17.9	146	19.9	883	22.1	425	21.1	44	15.7
Total	r692	100.0	r30	100.0	736	100.0	3,966	100.0	2,012	100.0	281	100.0
24 Clothing and footwear—												
Less than 500,000	1,362	64.9	13	19.8	186	14.4	606	11.9	209	10.7	150	21.2
500,000 to 1,999,999	481	22.9	15	22.3	266	20.7	1,082	21.2	407	20.8	199	28.1
2,000,000 to 9,999,999	212	10.1	22	33.1	468	36.3	2,007	39.4	832	42.6	253	35.6
10,000,000 to 24,999,999	35	1.7	11	16.2	247	19.1	959	18.8	355	18.2	81	11.4
25,000,000 and over	7	0.3	6	8.6	123	9.6	446	8.7	151	7.7	26	3.7
Total	2,097	100.0	65	100.0	1,290	100.0	5,100	100.0	1,955	100.0	710	100.0
25 Wood, wood products and furniture—												
Less than 500,000	3,367	70.2	26	32.4	468	26.1	1,649	20.7	760	21.0	209	22.9
500,000 to 1,999,999	1,117	23.3	25	31.3	562	31.4	2,426	30.5	1,102	30.5	289	31.7
2,000,000 to 9,999,999	276	5.8	20	25.6	517	28.9	2,474	31.1	1,132	31.3	254	27.8
10,000,000 to 24,999,999	26	0.5	6	7.2	164	9.2	897	11.3	436	12.1	100	10.9
25,000,000 and over	9	0.2	3	3.6	80	4.5	522	6.6	187	5.2	62	6.8
Total	4,795	100.0	79	100.0	1,791	100.0	7,968	100.0	3,618	100.0	914	100.0
26 Paper, paper products, printing and publishing—												
Less than 500,000	2,075	61.1	16	15.3	318	10.6	1,012	7.5	389	7.7	172	10.8
500,000 to 1,999,999	852	25.1	17	16.4	439	14.7	1,673	12.4	625	12.4	223	14.0
2,000,000 to 9,999,999	363	10.7	26	24.6	752	25.1	3,325	24.6	1,402	27.8	379	23.8
10,000,000 to 24,999,999	68	2.0	15	14.1	467	15.6	2,217	16.4	997	19.8	221	13.9
25,000,000 and over	40	1.2	31	29.8	1,023	34.1	5,275	39.1	1,622	32.2	596	37.5
Total	r3,398	100.0	104	100.0	2,999	100.0	13,502	100.0	5,035	100.0	1,591	100.0

For footnotes see end of table.

TABLE 9. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY VALUE ADDED AND INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (a).)

Industry subdivision	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)		Turnover		Purchases and transfers in (e)		Other selected expenses (f)	
	Value added (\$)		(No.)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
27 Chemical, petroleum and coal products—												
Less than 500,000	289	32.4	2	4.8	59	3.4	375	1.9	291	2.4	37	3.3
500,000 to 1,999,999	239	26.8	4	7.7	105	6.1	730	3.6	415	3.4	61	5.5
2,000,000 to 9,999,999	216	24.2	13	25.5	410	23.7	3,115	15.4	1,814	14.9	275	24.8
10,000,000 to 24,999,999	79	8.9	12	22.7	378	21.8	2,958	14.6	1,543	12.6	189	17.0
25,000,000 and over	68	7.6	20	39.6	780	45.0	13,091	64.6	8,142	66.7	547	49.1
Total	891	100.0	51	100.0	1,732	100.0	20,268	100.0	12,207	100.0	1,109	100.0
28 Non-metallic mineral products—												
Less than 500,000	844	59.1	5	13.0	116	9.4	805	10.3	482	14.7	174	15.4
500,000 to 1,999,999	312	21.8	5	13.3	139	11.1	878	11.2	432	13.2	145	12.8
2,000,000 to 9,999,999	192	13.4	12	28.7	356	28.8	2,216	28.3	973	29.6	364	32.1
10,000,000 to 24,999,999	52	3.6	9	22.1	293	23.7	1,686	21.6	666	20.3	225	19.9
25,000,000 and over	29	2.0	9	22.9	330	26.7	2,236	28.6	730	22.2	236	19.9
Total	1,429	100.0	41	100.0	1,234	100.0	7,822	100.0	3,283	100.0	1,134	100.0
29 Basic metal products—												
Less than 500,000	248	36.8	2	3.6	57	2.4	348	1.6	204	1.7	100	5.2
500,000 to 1,999,999	198	29.4	4	5.9	105	4.4	646	3.0	374	3.1	53	2.6
2,000,000 to 9,999,999	143	21.2	10	13.9	294	12.3	2,527	11.7	1,692	14.1	168	8.8
10,000,000 to 24,999,999	46	6.8	8	12.1	262	11.0	2,664	12.4	1,776	14.8	158	8.2
25,000,000 and over	39	5.8	44	64.5	1,669	69.9	15,364	71.3	7,870	66.1	1,436	75.0
Total	674	100.0	69	100.0	2,387	100.0	21,549	100.0	11,916	100.0	1,914	100.0
31 Fabricated metal products—												
Less than 500,000	2,994	62.0	23	22.3	449	17.3	1,700	13.5	842	13.8	206	18.3
500,000 to 1,999,999	1,284	26.6	27	26.2	667	25.7	3,030	24.1	1,438	23.5	332	29.5
2,000,000 to 9,999,999	471	9.8	34	33.3	919	35.3	4,610	36.6	2,302	37.7	376	33.4
10,000,000 to 24,999,999	62	1.3	12	11.7	349	13.4	1,901	15.1	912	14.9	101	9.0
25,000,000 and over	17	0.4	7	6.4	215	8.3	1,354	10.8	617	10.1	112	9.9
Total	4,828	100.0	102	100.0	2,599	100.0	12,594	100.0	6,112	100.0	1,127	100.0
32 Transport equipment—												
Less than 500,000	941	60.5	7	6.6	133	4.5	470	2.8	212	2.5	46	2.8
500,000 to 1,999,999	365	23.5	8	7.7	196	6.7	813	4.9	398	4.6	62	3.8
2,000,000 to 9,999,999	165	10.6	18	16.8	495	16.8	1,795	10.8	942	10.9	125	7.6
10,000,000 to 24,999,999	36	2.3	12	11.7	328	11.1	1,386	8.3	721	8.3	70	4.3
25,000,000 and over	48	3.1	60	57.3	1,791	60.8	12,148	73.1	6,365	73.7	1,331	81.5
Total	1,555	100.0	105	100.0	2,943	100.0	16,612	100.0	8,638	100.0	1,634	100.0

For footnotes, see end of table.

TABLE 9. MANUFACTURING ESTABLISHMENTS: SUMMARY OF OPERATIONS BY VALUE ADDED AND INDUSTRY SUBDIVISION, AUSTRALIA, 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (s).)

Industry subdivision	Establishments at 30 June (b)		Employment at end of June (c)		Wages and salaries (d)		Turnover		Purchases and transfers in (e)		Other selected expenses (e)	
	Value added (\$)											
	(No.)	(%)	('000)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)	(\$m)	(%)
33 Other machinery and equipment—												
Less than 500,000	2,203	56.0	17	13.0	346	10.0	1,144	7.4	538	7.1	115	11.6
500,000 to 1,999,999	1,083	27.5	24	18.6	602	17.4	2,363	15.3	1,105	14.7	208	21.1
2,000,000 to 9,999,999	515	13.1	41	32.4	1,167	33.7	5,036	32.6	2,531	33.6	322	32.6
10,000,000 to 24,999,999	99	2.5	21	16.6	641	18.5	2,945	19.0	1,355	18.0	158	15.9
25,000,000 and over	35	0.9	25	19.4	704	20.4	3,977	25.7	1,997	26.5	186	18.8
Total	3,935	100.0	128	100.0	3,460	100.0	15,464	100.0	7,526	100.0	989	100.0
34 Miscellaneous manufacturing—												
Less than 500,000	1,573	61.9	11	18.1	195	12.7	722	8.9	340	8.8	82	13.2
500,000 to 1,999,999	610	24.0	13	21.9	306	19.9	1,429	17.7	703	18.2	132	21.3
2,000,000 to 9,999,999	290	11.4	20	33.2	540	35.0	2,965	36.7	1,501	38.9	231	37.2
10,000,000 to 24,999,999	58	2.3	11	18.2	332	21.6	1,894	23.5	953	24.7	119	19.1
25,000,000 and over	11	0.4	5	8.7	167	10.9	1,067	13.2	366	9.5	58	9.3
Total	2,542	100.0	60	100.0	1,540	100.0	8,076	100.0	3,864	100.0	622	100.0
21-34 Total manufacturing—												
Less than 500,000	18,391	60.3	144	14.3	2,648	9.8	10,385	6.3	5,245	6.2	1,422	10.2
500,000 to 1,999,999	7,382	24.2	162	16.1	3,807	14.1	17,785	10.7	8,653	10.2	1,915	13.8
2,000,000 to 9,999,999	3,491	11.5	264	26.2	7,112	26.4	39,577	23.9	20,911	24.6	3,383	24.3
10,000,000 to 24,999,999	795	2.6	170	16.9	4,852	18.0	29,647	17.9	15,659	18.4	1,946	14.0
25,000,000 and over	415	1.4	267	26.5	8,550	31.7	68,492	41.3	34,448	40.6	5,255	37.7
Total	30,474	100.0	1,007	100.0	26,959	100.0	165,886	100.0	84,918	100.0	13,922	100.0

(a) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (b) See paragraphs 5 to 10 and 16 of the Explanatory Notes and the Appendix. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors. (e) Subject to sampling error. See paragraphs 12 to 15 of the Explanatory Notes.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1969-90
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of						Disposal of						
		Land (\$'000)	Dwellings (\$'000)	Other buildings and structures (\$'000)	2nd hand (\$'000)	Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)	Land (\$'000)	Dwellings (\$'000)	Other buildings and structures (\$'000)	Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)
ASIC code	Description													
FOOD, BEVERAGES AND TOBACCO—														
Meat products—														
2115	Meat (except smallgoods or poultry)	2,267	161	10,811	3,610	68,241	1,362	86,451	5,596	194	6,194	11,513	602	24,099
2116	Poultry	3,927	6,595	13,781	2,249	21,800	2,214	50,565	1,197	—	500	9,287	8	10,992
2117	Bacon, ham and smallgoods n.e.c.	3,520	8,251	607	1,750	17,781	445	32,354	—	—	618	2,201	62	2,881
211	Total	9,714	15,007	25,198	7,609	107,821	4,021	169,371	6,793	194	7,313	23,000	672	37,972
Milk products—														
2121	Liquid milk and cream	2,544	138	7,282	31	46,496	4	56,495	2,367	110	2,485	6,811	1,720	13,492
2122	Butter	200	300	944	—	5,866	—	7,310	12	290	55	889	—	1,246
2123	Cheese	207	246	3,584	186	15,174	101	19,498	264	14	138	1,621	798	2,835
2124	Ice cream and frozen confections	—	1	996	—	10,975	36	12,008	—	50	7	1,031	315	1,403
2125	Milk products n.e.c.	29	43	516	—	3,443	—	4,031	11	25	174	4,245	—	4,455
212	Total	2,980	728	13,322	217	81,955	141	99,342	2,654	489	2,859	14,596	2,832	23,430
Fruit and vegetable products—														
2131	Fruit products	840	428	1,377	—	23,252	931	26,828	104	212	360	1,700	13,210	15,586
2132	Vegetable products	2,364	204	6,362	34	43,092	84	52,141	—	—	3	1,836	4,977	6,816
213	Total	3,204	633	7,739	34	66,344	1,014	78,968	104	212	363	3,536	18,187	22,402
214	Margarine and oils and fats n.e.c.	417	16	8,904	908	29,281	—	39,526	5,370	98	2,132	1,864	—	9,604
Flour mill and cereal food products—														
2151	Flour mill products	480	46	8,815	660	24,229	1	34,231	1,093	46	431	953	—	2,523
2152	Starch, gluten and starch sugars	2,965	—	1,130	—	13,264	16	17,375	—	—	—	470	—	470
2153	Cereal foods and baking mixes	4,745	899	14,633	99	55,711	1,044	77,129	102	86	1,169	10,195	—	11,552
215	Total	8,190	945	24,578	759	93,204	1,060	128,735	1,195	132	1,600	11,619	—	14,545
Bread, cakes and biscuits—														
2161	Bread	4,757	3,013	7,349	1,685	54,707	9,412	80,923	2,953	858	—	11,162	759	15,732
2162	Cakes and pastries	1,325	1,575	7,765	1,391	30,921	27,310	70,286	22	260	16	3,215	261	3,774
2163	Biscuits	8,426	71	964	2	32,482	577	42,523	8	—	98	7,369	31	7,506
216	Total	14,508	4,658	16,079	3,078	118,111	37,298	193,731	2,983	1,118	114	21,745	1,052	27,011
Other food products—														
2171	Raw sugar	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2173	Confectionery and cocoa products	1,148	6,524	6,806	3,054	41,840	668	60,039	640	854	791	1,478	—	5,762
2174	Processed seafoods	1,988	99	702	6,803	11,653	52	21,297	1,021	28	1,412	2,659	6,341	11,462
2175	Prepared animal and bird foods	531	7	8,702	295	54,613	56	64,204	655	—	324	7,959	—	8,938
2176	Food products n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
217	Total	9,102	8,110	37,962	11,476	208,048	4,519	279,217	3,744	1,120	7,730	23,522	9,627	45,744

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1989-90—*continues*
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of						Disposal of						
				Other buildings and structures		Plant, machinery and equipment (c)	Intangible assets	Total			Other buildings and structures	Plant, machinery and equipment (c)	Intangible assets	Total
		Land (\$'000)	Dwellings (\$'000)	New (\$'000)	2nd hand (\$'000)	(\$'000)	(\$'000)		Land (\$'000)	Dwellings (\$'000)	(\$'000)	(\$'000)	(\$'000)	
ASIC code	Description													
2185	Beverages and malt—													
	Soft drinks, cordials and syrups	15,338	426	1,559	1,875	54,135	307	76,640	3,462	179	976	11,002	2,278	17,897
2186	Beer	3,850	6,225	5,727	1	111,861	4,505	132,169	2,246	—	—	11,388	8,080	21,714
2187	Malt	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
2188	Wine and brandy	3,830	800	7,165	644	30,083	16	42,537	5,592	125	—	2,292	2	8,011
2189	Alcoholic beverages n.e.c.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
218	Total	26,038	7,451	15,477	2,519	203,839	4,329	260,153	11,300	304	976	24,880	10,360	47,821
219	Tobacco products	—	—	3,174	—	21,882	—	25,056	—	—	—	410	—	410
21	Total food, beverages and tobacco	74,153	37,547	152,433	26,600	930,484	52,883	1,274,098	34,143	3,668	23,087	125,112	42,730	228,740
TEXTILES—														
Textile fibres, yarns and woven fabrics—														
2341	Cotton spinning	—	—	—	—	1,600	—	1,600	—	—	—	37	—	37
2342	Wool scouring and top making	90	—	5,591	—	7,389	—	13,070	408	47	—	1,790	—	2,245
2343	Man-made fibres and yarns	—	—	73	—	8,838	—	8,911	3,600	—	166	36,341	—	40,107
2344	Man-made fibre broadwoven fabrics	—	536	3,652	—	18,919	50	23,157	235	192	—	515	—	942
2345	Cotton yarns and broadwoven fabrics	—	44	3,434	—	21,778	24	25,380	109	—	—	7,746	1,250	9,105
2346	Worsted yarns and broadwoven fabrics	—	—	262	—	7,296	26	7,584	—	—	—	3,496	1,234	4,730
2347	Woolen yarns and broadwoven fabrics	—	—	—	317	7,182	—	7,499	430	879	—	402	—	1,711
2348	Narrow woven and elastic textiles	—	—	—	—	2,400	283	2,683	—	—	—	233	—	233
2349	Textile finishing	1,410	—	160	1,733	13,657	276	17,236	—	—	—	11,080	33	11,113
234	Total	1,500	580	13,172	2,050	89,059	659	107,019	4,782	1,118	166	61,640	2,517	70,223
Other textile products—														
2351	Household textiles	383	28	832	13	5,147	318	6,720	92	—	129	373	49	643
2352	Textile floor coverings	8	14	1,323	40	19,239	2,239	22,863	244	—	181	1,161	70	1,656
2353	Felt and felt products	1,072	—	398	—	7,214	5	8,689	—	—	—	124	—	124
2354	Canvas and associated products n.e.c.	236	178	361	15	3,992	1,773	6,554	491	327	746	759	17	2,340
2355	Rope, cordage and twine	4	6	22	4	1,219	455	1,710	12	—	—	109	—	121
2356	Textile products n.e.c.	577	157	4,650	25	24,396	304	30,108	93	—	300	1,395	237	2,024
235	Total	2,279	384	7,586	96	61,206	5,095	76,645	932	328	1,356	3,921	373	6,909
23	Total textiles	3,780	964	20,757	2,146	150,265	5,753	182,664	5,714	1,446	1,522	65,561	2,890	77,131

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of							Disposal of						
		Land (\$'000)	Dwellings (\$'000)	Other buildings and structures		Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)	Land (\$'000)	Dwellings (\$'000)	Other buildings and structures		Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)
				New (\$'000)	2nd hand (\$'000)										
ASIC code	Description														
CLOTHING AND FOOTWEAR—															
Knitting mills—															
2441	Hosiery	11	—	1,664	750	16,628	72	19,125	—	—	—	—	1,569	3	1,572
2442	Cardigans and pullovers	16	835	29	—	4,182	88	5,150	—	1,100	—	—	2,326	16	2,442
2443	Knitted goods n.e.c.	13	—	180	—	13,134	50	13,378	993	—	—	—	2,120	8	3,120
244	Total	40	835	1,873	750	33,944	210	37,653	993	1,100	—	—	6,014	27	8,134
Clothing—															
2451	Men's trousers and shorts; work clothing	13	5	1,691	39	9,487	609	11,844	—	82	1,703	1,777	42	3,905	
2452	Men's suits and coats; waterproof clothing	54	10	606	258	4,196	205	5,329	—	1	71	158	—	230	
2453	Women's outerwear n.e.c.	520	669	728	5,552	20,498	724	28,691	846	358	31	3,367	44	4,646	
2454	Foundation garments	3	1	477	5	1,937	1	2,423	—	—	—	250	—	250	
2455	Underwear and infants' clothing n.e.c.	33	65	2,018	125	6,788	226	9,255	2,628	2,501	1,765	1,450	—	8,344	
2456	Headwear and clothing n.e.c.	183	314	2,020	2,888	14,387	7,593	27,383	99	1,603	4	5,945	126	7,777	
245	Total	805	1,062	7,540	8,866	57,293	9,358	84,924	3,573	4,546	3,574	12,947	212	34,852	
246	Footwear	—	—	955	—	21,450	217	22,622	139	482	—	2,719	—	3,340	
24	Total clothing and footwear	846	1,897	10,369	9,616	112,487	9,785	145,199	4,705	6,128	3,574	21,681	239	36,327	
WOOD, WOOD PRODUCTS AND FURNITURE—															
Wood and wood products—															
2531	Log sawmilling	1,927	2,338	2,428	1,849	47,580	7,363	63,484	2,707	477	3,676	14,542	47	21,450	
2532	Resawn and dressed timber	1,679	146	1,629	43	26,916	39	30,452	107	32	23	1,951	12	2,124	
2533	Veneers and manufactured boards of wood	851	36	3,693	13,627	128,281	15	146,503	437	12	16,916	66,151	6	83,521	
2534	Wooden doors	38	39	53	5	3,290	54	3,480	3	5	—	786	25	819	
2535	Wooden structural fittings and joinery n.e.c.	1,689	2,384	6,678	2,728	54,503	2,023	70,004	652	1,992	1,087	5,513	678	9,922	
2536	Wooden containers	45	—	31	1,399	2,660	246	4,382	—	—	—	348	13	361	
2537	Hardwood woodchips	21	118	3,166	14	6,742	964	11,024	104	60	—	1,375	—	1,539	
2538	Wood products n.e.c.	1,011	273	412	81	4,907	226	6,909	927	170	—	3,283	45	4,424	
253	Total	7,261	5,333	18,089	19,746	274,879	10,930	336,238	4,937	2,747	21,702	93,948	826	121,160	
Furniture and mattresses—															
2541	Furniture (except sheet metal)	4,770	9,847	15,857	7,759	58,214	10,499	106,946	1,333	334	2,761	9,707	813	14,947	
2542	Mattresses (except rubber)	58	159	382	132	3,315	155	4,201	1,065	1	63	1,165	65	2,359	
254	Total	4,828	10,006	16,238	7,891	61,529	10,654	111,146	2,398	335	2,824	10,872	878	17,306	
25	Total wood, wood products and furniture	12,089	15,339	34,327	27,637	336,408	21,584	447,384	7,334	3,082	34,526	104,819	1,704	141,466	

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1969-70—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of						Disposal of						
		Land (\$'000)	Dwellings (\$'000)	Other buildings and structures (\$'000)	2nd hand (\$'000)	Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)	Land (\$'000)	Dwellings (\$'000)	Other buildings and structures (\$'000)	Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)
ASIC code	Description													
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—														
Paper and paper products—														
2631	Pulp, paper and paperboard	1,100	381	992	814	99,061	174	102,522	187	288	94	34,484	—	35,053
2632	Paper bags (including textile bags)	—	—	—	—	23,320	129	23,449	—	—	—	1,005	—	1,005
2633	Solid fibreboard containers	11,122	126	208	—	13,738	53	25,247	—	—	—	5,170	—	5,170
2634	Corrugated fibreboard containers	—	17,728	1,739	—	36,744	25	56,236	4,131	—	14,908	35,532	—	54,571
2635	Paper products n.e.c.	—	—	1,764	1	50,260	1,745	53,770	—	—	—	6,089	1,388	7,477
263	Total	12,222	18,235	4,703	815	223,123	2,126	261,225	4,318	288	15,002	82,281	1,388	103,277
Printing and allied industries—														
2641	Publishing	1,317	—	146	1,080	23,007	1,280	26,830	5,489	—	10	3,280	5,036	13,815
2642	Printing and publishing	5,248	1,005	50,335	40,067	85,965	24,720	207,341	103	110	179	9,290	94	9,772
2643	Paper stationery	4,800	1,232	2,101	1,919	42,177	2,546	54,774	—	32	—	7,696	169	7,867
2644	Printing and bookbinding	4,350	3,094	5,133	6,059	203,874	9,797	232,306	2,884	429	3,472	64,160	2,252	73,197
2645	Printing trade services n.e.c.	17	5,488	37	465	30,876	1,480	38,363	—	1,603	200	4,093	198	6,094
264	Total	15,732	10,819	57,752	49,589	385,899	39,823	559,614	8,476	2,174	3,861	88,518	7,746	110,774
26	Total paper, paper products, printing and publishing	27,954	29,054	62,455	50,404	609,022	41,949	820,839	12,794	2,462	18,863	176,799	9,134	211,851
CHEMICAL, PETROLEUM AND COAL PRODUCTS—														
Basic chemicals—														
2751	Chemical fertilisers	5,706	15	3,718	101	54,407	—	63,941	45	93	781	32,105	25	33,049
2752	Industrial gases	221	132	1,175	17	8,230	—	9,775	16	4	—	874	—	894
2753	Synthetic resins and rubber	123	832	13,020	7	86,916	19,211	120,108	116	—	18	3,894	1	4,029
2754	Organic industrial chemicals n.e.c.	457	—	1,646	17	17,481	2,883	22,484	—	—	—	1,577	117	1,655
2755	Inorganic industrial chemicals n.e.c.	2,105	964	5,295	702	216,057	927	226,050	40	—	46	1,243	45	1,274
275	Total	8,606	1,943	24,854	844	383,091	23,021	442,358	217	97	845	39,553	189	41,001
Other chemical products—														
2761	Ammunition, explosives and fireworks	1,234	—	1,735	400	14,875	—	18,244	—	—	50	863	4	917
2762	Paints	1,734	3,542	6,887	2,090	23,019	5,607	42,879	821	—	—	4,084	120	5,024
2763	Pharmaceutical and veterinary products	7,186	3,482	10,314	2,887	75,311	8,037	107,216	578	279	49	99,752	315	100,973
2764	Pesticides	1,554	1,915	614	1,148	22,778	3,374	31,383	—	—	269	1,176	4	1,450
2765	Soap and other detergents	4,360	1,497	4,183	1	28,716	2,001	40,758	3,417	—	77	2,967	320	6,781
2766	Cosmetics and toilet preparations	4,809	22,593	8,948	—	15,370	49	51,768	2,253	9,086	826	5,894	76	18,135
2767	Inks	2	—	3	3	4,237	71	4,315	6	—	—	599	63	668
2768	Chemical products n.e.c.	689	—	3,742	365	26,895	1,034	32,725	17	912	—	7,170	1,779	9,879
276	Total	21,567	33,029	36,424	6,894	211,201	20,173	329,288	7,093	10,277	1,271	122,504	2,682	143,826

For footnotes see end of table.

TABLE 16. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of							Disposal of					
				Other buildings and structures		Plant, machinery and equipment (c)	Intangible assets	Total			Other buildings and structures	Plant, machinery and equipment (c)	Intangible assets	Total
		Land (\$'000)	Dwellings (\$'000)	New (\$'000)	2nd hand (\$'000)	(\$'000)	(\$'000)	(\$'000)	Land (\$'000)	Dwellings (\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
277	Petroleum refining	403	1,051	691	758	236,982	—	241,885	8,332	—	—	39,552	5	47,889
278	Petroleum and coal products n.e.c.	6	—	12	8	1,549	1	1,575	—	—	—	399	—	399
27	Total chemical, petroleum and coal products	30,581	36,023	61,981	1,583	834,824	43,194	1,015,107	15,642	10,373	2,116	202,169	2,876	233,116
283	NON-METALLIC MINERAL PRODUCTS— Glass and glass products	2,017	12,011	987	183	163,115	47	178,360	129	140	—	3,274	—	3,544
	Clay products and refractories—													
2861	Clay bricks	829	112	19,339	—	72,066	15	92,361	2,437	—	727	4,628	—	7,792
2862	Refractories	2,207	—	352	2,765	12,065	13	17,521	125	—	—	92	11	228
2863	Ceramic tiles and pipes	2	196	2,290	1	27,296	14,498	44,283	350	1,325	—	7,495	180	9,350
2864	Ceramic goods n.e.c.	1,110	527	289	9	4,661	252	6,948	1,469	160	—	1,440	438	3,207
286	Total	4,148	935	22,270	2,776	116,088	14,897	161,113	4,381	1,485	727	13,656	629	20,877
	Cement and concrete products—													
2871	Cement	405	—	12,109	—	32,235	—	44,749	306	—	73	3,014	—	3,393
2872	Ready mixed concrete	6,277	356	1,515	4,884	72,604	5,659	90,893	1,193	53	87	5,719	3,152	10,204
2873	Concrete pipes and box culverts	142	11	113	330	12,969	3,592	17,157	551	—	193	779	23	1,546
2874	Concrete products n.e.c.	1,732	423	3,684	2,691	44,725	858	54,113	1,213	—	376	9,809	1,396	12,794
287	Total	8,557	790	17,420	7,505	167,532	10,109	206,912	3,263	53	729	19,321	4,571	27,637
	Other non-metallic mineral products—													
2881	Plaster products and expanded minerals	159	4	193	28	12,614	945	13,943	29	24	—	648	5	706
2882	Stone products	392	—	407	—	3,694	20	4,513	—	—	—	485	24	509
2883	Glass wool and mineral wool products	53	1,074	421	54	26,284	10	27,896	87	46	—	971	14	1,119
2884	Non-metallic mineral products n.e.c.	1,533	393	614	151	13,541	433	16,665	134	92	71	964	—	1,261
288	Total	2,136	1,471	1,635	233	56,134	1,408	63,017	250	163	71	3,068	43	3,584
28	Total non-metallic mineral products	16,858	15,207	42,312	10,696	497,869	26,461	609,402	8,023	1,841	1,527	39,319	5,243	58,952

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1993-94—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of						Disposal of						
		Land (\$'000)	Dwellings (\$'000)	Other buildings and structures (\$'000)	2nd hand (\$'000)	Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)	Land (\$'000)	Dwellings (\$'000)	Other buildings and structures (\$'000)	Plant, machinery and equipment (c) (\$'000)	Intangible assets (\$'000)	Total (\$'000)
ASC code	Description													
BASIC METAL PRODUCTS—														
Basic iron and steel—														
2941	Iron and steel basic products	1,790	1,168	23,172	1,875	342,473	4,538	375,015	555	260	1,056	10,866	205	13,045
2942	Iron casting	548	580	1,405	—	14,135	3	16,871	2,009	39	—	818	—	2,867
2943	Steel casting	373	—	6,752	2	15,126	154	22,386	—	—	—	2,761	—	2,761
2944	Iron and steel forging	262	—	34	1	3,579	14	3,890	—	—	—	190	12	202
2945	Steel pipes and tubes	123	63	1,030	328	17,205	302	19,052	1,352	1	313	2,929	—	4,595
294	Total	3,097	1,811	32,372	2,206	392,519	5,010	437,014	1,916	300	1,369	17,666	217	23,469
Basic non-ferrous metals—														
2951	Copper smelting, refining	2	36	755	112	4,176	2,582	7,665	308	—	23	702	—	1,033
2952	Silver, lead, zinc smelting, refining	660	66	4,328	98	71,125	2,127	78,404	37	259	14	3,350	—	3,670
2953	Alumina	—	—	53,173	—	187,733	3,738	244,644	191	160	—	5,732	—	6,023
2954	Aluminium smelting	416	351	15,150	—	88,736	—	104,653	117	2,088	832	11,606	173	14,816
2955	Nickel smelting, refining	—	10	687	—	8,777	—	9,474	420	18	—	350	—	788
2956	Non-ferrous metals n.e.c. smelting, refining	—	—	—	—	—	—	—	—	—	—	—	—	—
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.	—	41	54	30	6,351	19	6,495	—	—	—	2,704	—	2,704
295	Total	1,078	504	74,146	240	356,900	8,467	451,335	1,013	1,525	849	24,654	173	29,034
Non-ferrous metal basic products—														
2961	Aluminium rolling, drawing, extruding	216	—	4,419	—	44,918	135	49,689	—	—	—	1,758	—	1,758
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	3,330	—	8,399	1,686	22,618	5,582	41,815	7	—	—	5,428	—	5,435
2963	Non-ferrous metal casting	75	—	160	—	31,499	6,509	38,243	418	—	—	385	—	803
296	Total	3,621	—	12,978	1,686	99,235	12,227	129,747	424	—	—	7,571	—	7,996
29	Total basic metal products	7,795	2,315	119,497	4,122	858,653	25,703	1,018,095	5,354	1,825	1,238	49,693	390	60,099
FABRICATED METAL PRODUCTS—														
Structural metal products—														
3141	Prefabricated structural steel	6,096	2,479	6,637	2,728	69,340	14,293	101,573	1,588	1,492	2,260	12,053	1,952	19,325
3142	Architectural aluminium products	2,732	561	3,156	2,820	27,957	2,571	39,796	571	385	248	2,889	1,086	5,178
3143	Architectural metal products n.e.c.	546	183	870	195	17,300	2,967	22,061	100	53	69	2,070	117	2,409
314	Total	9,374	3,223	10,663	5,743	114,596	19,831	163,430	2,258	1,930	2,578	16,992	3,153	26,912
Sheet metal products—														
3151	Metal containers	496	8	5,384	71	30,747	65	36,791	1,417	41	2,239	6,513	2,646	12,856
3152	Sheet metal furniture	242	63	584	90	11,749	340	13,068	310	—	701	2,752	483	4,246
3153	Sheet metal products n.e.c.	3,812	1,021	5,455	2,632	81,697	8,275	102,892	3,437	1,297	5,755	10,728	3,079	24,296
315	Total	4,549	1,091	11,422	2,792	124,194	8,700	152,730	5,164	1,338	8,694	19,993	6,209	41,397

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of							Disposal of						
				Other buildings and structures		Plant, machinery and equipment (c)	Intangible assets	Total			Other buildings and structures	Plant, machinery and equipment (c)	Intangible assets	Total	
		Land (\$'000)	Dwellings (\$'000)	New (\$'000)	2nd hand (\$'000)	(\$'000)	(\$'000)	(\$'000)	Land (\$'000)	Dwellings (\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	
ASIC code	Description														
	Other fabricated metal products—														
3161	Cutlery and hand tools n.e.c.	420	232	1,106	29	5,990	2,180	9,958	11	57	11	498	49	626	
3162	Springs and wire products	205	809	450	4,232	28,767	482	34,946	854	1,259	159	4,576	142	7,090	
3163	Nuts, bolts, screws and rivets	58	316	526	304	10,671	1,708	13,583	40	321	1,000	2,518	93	3,972	
3164	Metal coating and finishing	1,159	232	1,683	284	12,558	3,828	19,744	746	—	201	2,077	391	3,416	
3165	Non-ferrous steam, gas and water fittings	5	40	513	10	11,531	119	12,218	—	451	—	5,301	1	5,753	
3166	Boiler and plate work	72	303	308	567	3,185	68	4,503	82	234	—	810	147	1,274	
3167	Metal blinds and awnings	200	2	19	660	1,911	900	3,691	—	—	179	361	6	546	
3168	Fabricated metal products n.e.c.	1,620	2,655	3,015	1,972	193,993	2,477	205,732	582	1,221	637	4,596	832	7,869	
316	Total	3,738	4,589	7,621	8,056	268,607	11,762	304,374	2,316	3,543	2,186	20,837	1,661	30,543	
31	Total fabricated metal products	17,662	8,904	29,706	16,591	507,397	40,293	620,553	9,738	6,811	13,457	57,821	11,025	98,853	
	TRANSPORT EQUIPMENT—														
	Motor vehicles and parts—														
3231	Motor vehicles	1,307	2,845	16,080	994	138,751	125	160,102	15,728	—	10,959	22,721	229	49,638	
3232	Motor vehicle bodies, trailers, caravans	634	81	2,124	454	8,224	440	11,957	1,308	67	382	6,204	175	8,137	
3233	Motor vehicle instruments and electrical equipment n.e.c.	606	10,217	8,585	736	38,514	837	59,496	1	—	457	6,734	240	7,432	
3234	Motor vehicle parts n.e.c.	1,252	1,656	5,271	4,751	121,305	7,931	142,165	1,144	317	291	58,649	1,254	61,654	
323	Total	3,799	14,799	32,059	6,935	306,794	9,334	373,720	18,181	384	12,090	94,308	1,898	126,861	
	Other transport equipment—														
3241	Ships	—	1,301	101,955	3,024	16,436	102	122,819	333	—	584	2,785	—	3,702	
3242	Boats	303	—	10,303	7	5,339	541	16,492	2,738	—	3,197	1,931	166	8,032	
3243	Railway rolling stock and locomotives	4	—	600	586	12,309	16	13,515	2	—	—	674	1	676	
3244	Aircraft	15,771	2,818	13,776	76,459	15,230	944	124,998	2	6	2	1,229	—	1,239	
3245	Transport equipment n.e.c.	159	5	196	25	1,287	385	2,057	40	—	60	165	—	266	
324	Total	16,237	4,124	126,830	80,101	50,602	1,987	279,880	3,115	6	3,843	6,783	167	13,914	
32	Total transport equipment	20,036	18,923	158,889	87,036	357,395	11,321	653,600	21,296	390	15,933	101,091	2,065	140,775	
	OTHER MACHINERY AND EQUIPMENT—														
	Photographic, professional and scientific equipment—														
3341	Photographic and optical goods	5	—	504	—	13,735	10	14,254	—	29	—	985	—	1,014	
3342	Photographic film processing	2	154	912	499	11,680	409	13,655	896	187	15	4,117	93	5,308	
3343	Measuring, professional and scientific equipment n.e.c.	3,947	498	7,964	63	23,194	1,367	37,032	—	7	—	2,954	9	2,970	
334	Total	3,953	652	9,381	562	48,608	1,785	64,941	896	223	16	8,055	101	9,291	

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of						Disposal of						
		Land	Dwellings	Other buildings and structures		Plant, machinery and equipment (c)	Intangible assets	Total	Land	Dwellings	Other buildings and structures	Plant, machinery and equipment (c)	Intangible assets	Total
ASIC code	Description	(\$'000)	(\$'000)	New (\$'000)	2nd hand (\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
3351	Appliances and electrical equipment— Radio and TV receivers; audio equipment	13	39	558	—	11,802	361	12,774	—	—	—	426	1	427
3352	Electronic equipment n.e.c.	533	631	4,134	991	45,404	9,527	101,320	625	—	1,321	4,210	58	6,214
3353	Refrigerators and household appliances	217	58	132	58	57,560	2,083	60,107	290	154	—	10,312	53	10,808
3354	Water heating systems	82	2	—	—	6,613	160	6,856	8	25	—	1,094	1	1,128
3355	Electric and telephone cable and wire	1,410	1,085	16,884	—	35,327	194	54,899	—	110	—	1,026	—	1,136
3356	Batteries	—	—	18	—	14,586	115	14,719	—	—	—	3,878	—	3,878
3357	Electrical machinery and equipment n.e.c.	12,264	774	3,388	8,464	79,177	10,367	114,434	634	1,102	7	8,431	23	10,198
335	Total	14,519	2,589	25,114	9,513	290,568	22,807	365,109	1,556	1,391	1,328	29,377	137	33,789
Industrial machinery and equipment—														
3361	Agricultural machinery	1,258	212	572	1,046	7,813	653	11,555	568	932	3,180	1,763	77	6,520
3362	Construction machinery	255	73	441	86	5,167	175	6,198	36	—	—	454	2	492
3363	Materials handling equipment	541	863	1,056	1,373	13,338	1,605	18,776	1,133	1,628	976	2,144	20	5,901
3364	Wood and metal working machinery	4,289	7	236	2,775	13,516	4,527	25,349	56	360	4,506	1,191	3	6,116
3365	Pumps and compressors	705	126	1,340	71	12,323	222	14,787	74	305	—	1,919	6	2,303
3366	Commercial space heating and cooling equipment	106	36	47,515	125	9,565	556	57,903	64	—	100	1,436	4	1,605
3367	Dies, saw blades and machine tool accessories	453	414	278	172	17,863	739	19,919	1,935	6,411	821	3,572	395	13,134
3368	Food processing machinery	85	164	576	105	7,156	80	8,166	108	851	42	758	9	1,767
3369	Industrial machinery and equipment n.e.c.	3,063	858	3,139	6,675	56,558	2,639	72,932	2,842	3,633	536	16,535	486	24,032
336	Total	10,753	2,753	53,153	12,427	143,300	11,193	235,584	6,816	14,121	10,162	29,771	1,002	61,871
33	Total other machinery and equipment	29,227	5,994	89,648	22,502	482,476	35,788	665,634	9,268	15,734	11,506	67,263	1,240	104,951
MISCELLANEOUS MANUFACTURING—														
Leather and leather products—														
3451	Leather tanning and fur dressing	83	1	385	15	6,598	83	7,166	—	—	—	568	—	568
3452	Leather and leather substitute goods n.e.c.	212	1	27	8	1,254	691	2,192	—	—	—	129	1	131
345	Total	295	2	412	23	7,853	774	9,358	—	—	—	697	1	699
Rubber products—														
3461	Rubber tyres, tubes, belts, hose and sheets	4	—	628	23	17,080	152	17,886	260	371	311	801	—	1,743
3462	Rubber products n.e.c.	8	23	795	743	9,067	121	10,756	443	637	83	875	5	2,042
346	Total	11	23	1,423	766	26,147	273	28,643	703	1,008	394	1,676	5	2,785

For footnotes see end of table.

TABLE 10. MANUFACTURING ESTABLISHMENTS: CAPITAL EXPENDITURE AND DISPOSAL OF ASSETS BY INDUSTRY CLASS, AUSTRALIA (a), 1989-90—continued
(Data in this table exclude the operations of single establishment businesses with less than four persons employed (b).)

Industry class		Acquisition of							Disposal of					
		Land		Other buildings and structures		Plant, machinery and equipment (c)	Intangible assets	Total	Land		Other buildings and structures	Plant, machinery and equipment (c)	Intangible assets	Total
		(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
3471	Plastic and related products—													
3472	Flexible packaging and abrasive papers	1,446	2,904	7,184	60	55,860	963	68,117	2,017	13	4,866	3,073	80	10,049
3473	Rigid plastic sheeting	25	15	18	1	6,755	42	6,856	—	—	—	186	2	187
3474	Hard surface floor coverings n.e.c.	9,160	3,022	16,590	2,421	484,127	7,036	522,355	1,962	386	5,171	28,505	2,543	38,566
347	Plastic products n.e.c.	10,631	5,641	23,792	2,483	546,741	8,040	597,329	3,979	399	10,037	31,763	2,625	48,802
347	Total													
3481	Other manufacturing—													
3482	Ophthalmic articles	11	15	130	—	5,346	126	5,527	13	7	—	229	85	333
3483	Jewellery and silverware	325	—	26	—	10,041	678	11,070	459	510	203	1,291	—	2,463
3484	Brooms and brushes	245	11	1,593	377	3,292	70	5,588	7	—	—	230	2	238
3485	Signs and advertising displays	2,553	505	2,384	1,823	12,878	3,086	23,229	96	41	36	2,096	972	3,240
3486	Sporting equipment	137	116	899	340	3,667	637	5,796	193	55	81	983	29	1,341
3487	Writing and marking equipment	—	128	191	—	1,866	654	2,839	23	—	—	217	—	240
348	Manufacturing n.e.c.	12	267	1,264	98	3,420	954	6,016	21	24	39	1,259	32	1,375
348	Total	3,283	1,042	6,487	2,639	40,312	6,204	60,166	812	636	358	6,304	1,119	7,229
34	Total miscellaneous manufacturing	14,221	6,707	32,114	5,910	621,252	15,291	695,495	5,493	3,043	10,788	40,641	3,758	62,513
21-34	TOTAL MANUFACTURING	255,200	178,874	814,487	271,771	6,298,732	330,006	8,149,071	139,505	56,803	129,137	1,045,647	83,284	1,454,375

(a) Subject to sampling error. See paragraphs 12 to 15 of the Explanatory Notes. (b) These businesses contribute only marginally to statistical aggregates (other than number of establishments). Data for these businesses are presented in Table 11. (c) Includes motor vehicles.

TABLE 11. SINGLE ESTABLISHMENT BUSINESSES (a) WITH LESS THAN FOUR PERSONS EMPLOYED:
SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90

Industry class		Establishments at 30 June (b) (No.)	Employment at end of June (c)			Wages and salaries (d) (\$'000)	Turnover (\$'000)
ASIC Code	Description		Males (No.)	Females (No.)	Persons (No.)		
FOOD, BEVERAGES AND TOBACCO—							
Meat products—							
2115	Meat (except smallgoods or poultry)	30	50	14	64	872	6,116
2116	Poultry	11	19	10	29	467	2,742
2117	Bacon, ham and smallgoods n.e.c.	9	14	7	21	196	1,754
211	Total	50	83	31	114	1,534	10,612
Milk products—							
2121	Liquid milk and cream	1	n.p.	n.p.	n.p.	n.p.	n.p.
2122	Butter	—	—	—	—	—	—
2123	Cheese	6	n.p.	n.p.	n.p.	n.p.	n.p.
2124	Ice cream and frozen confections	4	7	3	10	76	313
2125	Milk products n.e.c.	1	n.p.	n.p.	n.p.	n.p.	n.p.
212	Total	12	20	11	31	384	1,920
Fruit and vegetable products—							
2131	Fruit products	11	14	14	28	440	1,932
2132	Vegetable products	6	9	5	14	207	766
213	Total	17	23	19	42	647	2,698
214	Margarine and oils and fats n.e.c.	6	12	3	15	291	4,347
Flour mill and cereal food products—							
2151	Flour mill products	1	n.p.	n.p.	n.p.	n.p.	n.p.
2152	Starch, gluten and starch sugars	—	—	—	—	—	—
2153	Cereal foods and baking mixes	7	n.p.	n.p.	n.p.	n.p.	n.p.
215	Total	8	11	7	18	137	904
Bread, cakes and biscuits—							
2161	Bread	208	293	239	532	5,650	30,956
2162	Cakes and pastries	54	n.p.	n.p.	n.p.	n.p.	n.p.
2163	Biscuits	2	n.p.	n.p.	n.p.	n.p.	n.p.
216	Total	264	359	317	676	7,057	39,433
Other food products—							
2171	Raw sugar	—	—	—	—	—	—
2173	Confectionery and cocoa products	26	30	31	61	722	3,733
2174	Processed seafoods	13	17	8	25	432	6,315
2175	Prepared animal and bird foods	33	65	18	83	1,197	9,934
2176	Food products n.e.c.	55	88	35	123	1,651	10,479
217	Total	127	200	92	292	4,001	30,460
Beverages and malt—							
2185	Soft drinks, cordials and syrups	29	46	17	63	654	5,035
2186	Beer	3	n.p.	n.p.	n.p.	n.p.	n.p.
2187	Malt	—	—	—	—	—	—
2188	Wine and brandy	57	77	53	130	1,280	9,572
2189	Alcoholic beverages n.e.c.	1	n.p.	n.p.	n.p.	n.p.	n.p.
218	Total	90	129	72	201	2,067	15,599
219	Tobacco products	—	—	—	—	—	—
21	Total food, beverages and tobacco	574	837	552	1,389	16,118	105,973

For footnotes see end of table.

TABLE 11. SINGLE ESTABLISHMENT BUSINESSES (a) WITH LESS THAN FOUR PERSONS EMPLOYED:
SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

Industry class		Establishments at 30 June (b) (No.)	Employment at end of June (c)			Wages and salaries (d) (\$'000)	Turnover (\$'000)
ASIC Code	Description		Males (No.)	Females (No.)	Persons (No.)		
TEXTILES—							
Textile fibres, yarns and woven fabrics—							
2341	Cotton ginning	1	n.p.	n.p.	n.p.	n.p.	n.p.
2342	Wool scouring and top making	3	5	2	7	82	228
2343	Man-made fibres and yarns	—	—	—	—	—	—
2344	Man-made fibre broadwoven fabrics	11	11	10	21	324	966
2345	Cotton yarns and broadwoven fabrics	10	12	11	23	301	1,310
2346	Worsted yarns and broadwoven fabrics	—	—	—	—	—	—
2347	Woollen yarns and broadwoven fabrics	1	n.p.	n.p.	n.p.	n.p.	n.p.
2348	Narrow woven and elastic textiles	3	n.p.	n.p.	n.p.	n.p.	n.p.
2349	Textile finishing	22	26	20	46	766	2,563
234	Total	51	62	48	110	1,751	7,515
Other textile products—							
2351	Household textiles	36	36	46	82	954	3,640
2352	Textile floor coverings	23	34	19	53	767	5,431
2353	Felt and felt products	2	n.p.	n.p.	n.p.	n.p.	n.p.
2354	Canvas and associated products n.e.c.	91	139	71	210	2,786	15,543
2355	Rope, cordage and twine	7	n.p.	n.p.	n.p.	n.p.	n.p.
2356	Textile products n.e.c.	16	23	15	38	650	2,303
235	Total	175	250	154	404	5,440	27,990
23	Total textiles	226	312	202	514	7,191	35,505
CLOTHING AND FOOTWEAR—							
Knitting mills—							
2441	Hosiery	4	4	5	9	83	430
2442	Cardigans and pullovers	10	9	16	25	283	1,303
2443	Knitted goods n.e.c.	28	38	30	68	1,053	4,180
244	Total	42	51	51	102	1,419	5,913
Clothing—							
2451	Men's trousers and shorts; work clothing	14	n.p.	n.p.	n.p.	n.p.	n.p.
2452	Men's suits and coats; waterproof clothing	17	16	18	34	450	2,641
2453	Women's outerwear n.e.c.	169	135	232	367	4,723	22,292
2454	Foundation garments	1	n.p.	n.p.	n.p.	n.p.	n.p.
2455	Underwear and infants' clothing n.e.c.	21	12	37	49	576	4,065
2456	Headwear and clothing n.e.c.	295	296	353	649	8,994	37,003
245	Total	517	473	657	1,130	15,121	67,719
246	Footwear	44	59	42	101	1,202	4,095
24	Total clothing and footwear	603	583	750	1,333	17,743	77,727
WOOD, WOOD PRODUCTS AND FURNITURE—							
Wood and wood products—							
2531	Log sawmilling	119	227	47	274	3,027	15,173
2532	Resawn and dressed timber	15	29	3	32	541	4,679
2533	Veneers and manufactured boards of wood	8	9	5	14	249	1,379
2534	Wooden doors	10	n.p.	n.p.	n.p.	n.p.	n.p.
2535	Wooden structural fittings and joinery n.e.c.	549	1,030	266	1,296	18,915	92,607
2536	Wooden containers	33	61	15	76	1,247	7,558
2537	Hardwood woodchips	2	n.p.	n.p.	n.p.	n.p.	n.p.
2538	Wood products n.e.c.	288	409	233	642	7,473	37,808
253	Total	1,024	1,787	575	2,362	31,995	162,763
Furniture and mattresses—							
2541	Furniture (except sheet metal)	1,141	1,981	660	2,641	34,894	149,271
2542	Mattresses (except rubber)	12	19	14	33	499	2,191
254	Total	1,153	2,000	674	2,674	35,392	151,462
25	Total wood, wood products and furniture	2,177	3,787	1,249	5,036	67,387	314,226

For footnotes see end of table.

TABLE II. SINGLE ESTABLISHMENT BUSINESSES (a) WITH LESS THAN FOUR PERSONS EMPLOYED:
SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

Industry class		Employment at end of June (c)					Wages and salaries (d)	Turnover
ASIC Code	Description	Establishments at 30 June (b) (No.)	Males (No.)	Females (No.)	Persons (No.)	(\$'000)	(\$'000)	
PAPER, PAPER PRODUCTS, PRINTING AND PUBLISHING—								
Paper and paper products—								
2631	Pulp, paper and paperboard	14	26	6	32	715	3,114	
2632	Paper bags (including textile bags)	—	—	—	—	—	—	
2633	Solid fibreboard containers	4	5	1	6	184	549	
2634	Corrugated fibreboard containers	6	8	6	14	204	946	
2635	Paper products n.e.c.	14	16	12	28	622	4,714	
263	Total	38	55	25	80	1,725	9,346	
Printing and allied industries—								
2641	Publishing	258	267	253	520	10,041	47,014	
2642	Printing and publishing	151	185	159	344	5,994	22,522	
2643	Paper stationery	34	43	30	73	1,761	5,978	
2644	Printing and bookbinding	623	916	537	1,453	23,304	96,880	
2645	Printing trade services n.e.c.	243	290	213	503	10,087	33,359	
264	Total	1,309	1,701	1,192	2,893	51,188	205,754	
26	Total paper, paper products, printing and publishing	1,347	1,756	1,217	2,973	52,913	215,100	
CHEMICAL, PETROLEUM AND COAL PRODUCTS—								
Basic chemicals—								
2751	Chemical fertilisers	9	14	6	20	340	1,704	
2752	Industrial gases	1	n.p.	n.p.	n.p.	n.p.	n.p.	
2753	Synthetic resins and rubber	18	28	12	40	602	3,505	
2754	Organic industrial chemicals n.e.c.	11	n.p.	n.p.	n.p.	n.p.	n.p.	
2755	Inorganic industrial chemicals n.e.c.	21	29	16	45	648	3,184	
275	Total	60	86	42	128	2,139	10,964	
Other chemical products—								
2761	Ammunition, explosives and fireworks	4	5	2	7	87	498	
2762	Paints	24	40	9	49	795	4,547	
2763	Pharmaceutical and veterinary products	34	43	26	69	1,251	5,557	
2764	Pesticides	4	6	2	8	158	881	
2765	Soap and other detergents	47	74	26	100	2,029	12,151	
2766	Cosmetics and toilet preparations	27	n.p.	n.p.	n.p.	n.p.	n.p.	
2767	Inks	2	n.p.	n.p.	n.p.	n.p.	n.p.	
2768	Chemical products n.e.c.	34	48	25	73	1,258	8,280	
276	Total	176	247	114	361	6,368	37,042	
277	Petroleum refining	—	—	—	—	—	—	
278	Petroleum and coal products n.e.c.	9	16	7	23	330	1,889	
27	Total chemical, petroleum and coal products	245	349	163	512	8,837	49,899	

For footnotes see end of table.

TABLE 11. SINGLE ESTABLISHMENT BUSINESSES (a) WITH LESS THAN FOUR PERSONS EMPLOYED:
SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

Industry class		Employment at end of June (c)					Turnover (\$'000)
ASIC Code	Description	Establishments at 30 June (b) (No.)	Males (No.)	Females (No.)	Persons (No.)	Wages and salaries (d) (\$'000)	
285	NON-METALLIC MINERAL PRODUCTS— Glass and glass products	84	122	64	186	2,955	10,997
	Clay products and refractories—						
2861	Clay bricks	6	9	4	13	150	328
2862	Refractories	4	4	1	5	102	514
2863	Ceramic tiles and pipes	18	19	16	35	373	1,242
2864	Ceramic goods n.e.c.	83	88	92	180	1,954	7,766
286	Total	111	120	113	233	2,579	9,850
	Cement and concrete products—						
2871	Cement	1	n.p.	n.p.	n.p.	n.p.	n.p.
2872	Ready mixed concrete	56	104	30	134	2,492	21,223
2873	Concrete pipes and box culverts	2	n.p.	n.p.	n.p.	n.p.	n.p.
2874	Concrete products n.e.c.	95	171	54	225	3,186	17,304
287	Total	154	280	86	366	5,768	39,127
	Other non-metallic mineral products—						
2881	Plaster products and expanded minerals	22	31	14	45	872	2,612
2882	Stone products	60	100	37	137	1,956	7,128
2883	Glass wool and mineral wool products	8	14	3	17	308	1,112
2884	Non-metallic mineral products n.e.c.	15	24	7	31	916	4,912
288	Total	105	169	61	230	4,053	15,764
28	Total non-metallic mineral products	454	691	324	1,015	15,355	75,739
	BASIC METAL PRODUCTS—						
	Basic iron and steel—						
2941	Iron and steel basic products	60	110	40	150	2,856	11,626
2942	Iron casting	3	3	3	6	59	287
2943	Steel casting	17	24	14	38	855	3,306
2944	Iron and steel forging	16	26	11	37	540	2,036
2945	Steel pipes and tubes	11	18	8	26	781	2,766
294	Total	107	181	76	257	5,092	20,021
	Basic non-ferrous metals—						
2951	Copper smelting, refining	—	—	—	—	—	—
2952	Silver, lead, zinc smelting, refining	3	n.p.	n.p.	n.p.	n.p.	n.p.
2953	Alumina	—	—	—	—	—	—
2954	Aluminium smelting	1	n.p.	n.p.	n.p.	n.p.	n.p.
2955	Nickel smelting, refining	—	—	—	—	—	—
2956	Non-ferrous metals n.e.c. smelting, refining	3	n.p.	n.p.	n.p.	n.p.	n.p.
2957	Secondary recovery and alloying of non-ferrous metals n.e.c.	8	13	4	17	217	1,310
295	Total	15	26	7	33	572	6,857
	Non-ferrous metal basic products—						
2961	Aluminium rolling, drawing, extruding	4	9	1	10	165	1,179
2962	Non-ferrous metals n.e.c. rolling, drawing, extruding	5	8	4	12	332	1,362
2963	Non-ferrous metal casting	24	44	11	55	772	3,508
296	Total	33	61	16	77	1,269	6,049
29	Total basic metal products	155	268	99	367	6,932	32,927

For footnotes see end of table.

TABLE 11. SINGLE ESTABLISHMENT BUSINESSES (a) WITH LESS THAN FOUR PERSONS EMPLOYED:
SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

Industry class		Establishments at 30 June (b) (No.)	Employment at end of June (c)			Wages and salaries (d) (\$'000)	Turnover (\$'000)
ASIC Code	Description		Males (No.)	Females (No.)	Persons (No.)		
FABRICATED METAL PRODUCTS—							
Structural metal products—							
3141	Fabricated structural steel	278	456	176	632	10,839	55,253
3142	Architectural aluminium products	170	283	104	387	6,380	32,674
3143	Architectural metal products n.e.c.	104	181	63	244	3,940	15,691
314	Total	552	920	343	1,263	21,160	103,618
Sheet metal products—							
3151	Metal containers	17	33	8	41	680	2,798
3152	Sheet metal furniture	34	60	21	81	1,205	4,905
3153	Sheet metal products n.e.c.	227	381	126	507	8,750	42,360
315	Total	278	474	155	629	10,635	50,063
Other fabricated metal products—							
3161	Cutlery and hand tools n.e.c.	96	129	64	193	3,592	11,472
3162	Springs and wire products	38	63	24	87	1,485	6,602
3163	Nuts, bolts, screws and rivets	17	27	12	39	628	2,734
3164	Metal coating and finishing	131	217	77	294	4,921	16,709
3165	Non-ferrous steam, gas and water fittings	6	7	4	11	233	848
3166	Boiler and plate work	59	76	31	107	1,722	6,588
3167	Metal blinds and awnings	29	38	27	65	1,089	5,748
3168	Fabricated metal products n.e.c.	676	1,009	402	1,411	22,169	85,015
316	Total	1,052	1,566	641	2,207	35,841	135,715
31	Total fabricated metal products	1,882	2,960	1,139	4,099	67,635	289,396
TRANSPORT EQUIPMENT—							
Motor vehicles and parts—							
3231	Motor vehicles	15	24	8	32	576	1,625
3232	Motor vehicle bodies, trailers, caravans	95	179	46	225	2,947	14,415
3233	Motor vehicle instruments and electrical equipment n.e.c.	6	7	5	12	204	825
3234	Motor vehicle parts n.e.c.	162	296	78	374	6,570	28,129
323	Total	278	506	137	643	10,297	44,994
Other transport equipment—							
3241	Ships	15	34	7	41	384	2,137
3242	Boats	196	314	103	417	5,922	24,055
3243	Railway rolling stock and locomotives	2	n.p.	n.p.	n.p.	n.p.	n.p.
3244	Aircraft	70	111	43	154	2,464	8,350
3245	Transport equipment n.e.c.	25	n.p.	n.p.	n.p.	n.p.	n.p.
324	Total	308	501	173	674	9,878	38,330
32	Total transport equipment	586	1,007	310	1,317	20,176	83,324

For footnotes see end of table.

TABLE 11. SINGLE ESTABLISHMENT BUSINESSES (a) WITH LESS THAN FOUR PERSONS EMPLOYED:
SUMMARY OF OPERATIONS BY INDUSTRY CLASS, AUSTRALIA, 1989-90—continued

Industry class		Establishments at 30 June (b) (No.)	Employment at end of June (c)			Wages and salaries (d) (\$'000)	Turnover (\$'000)
ASIC Code	Description		Males (No.)	Females (No.)	Persons (No.)		
OTHER MACHINERY AND EQUIPMENT—							
Photographic, professional and scientific equipment—							
3341	Photographic and optical goods	28	41	20	61	766	2,668
3342	Photographic film processing	242	248	299	547	8,205	38,924
3343	Measuring, professional and scientific equipment n.e.c.	87	114	75	189	3,641	13,475
334	Total	357	403	394	797	12,612	55,067
Appliances and electrical equipment—							
3351	Radio and TV receivers; audio equipment	27	42	17	59	872	4,782
3352	Electronic equipment n.e.c.	214	285	151	436	8,972	32,168
3353	Refrigeration and household appliances	68	113	34	147	2,950	16,477
3354	Water heating systems	13	28	5	33	565	2,638
3355	Electric and telephone cable and wire	6	9	2	14	244	1,227
3356	Batteries	5	8	2	10	215	1,807
3357	Electrical machinery and equipment n.e.c.	212	312	163	475	8,053	33,964
335	Total	545	797	377	1,174	21,872	93,063
Industrial machinery and equipment—							
3361	Agricultural machinery	88	145	54	199	2,950	14,604
3362	Construction machinery	17	21	14	35	623	1,592
3363	Materials handling equipment	53	92	34	126	2,544	11,141
3364	Wood and metal working machinery	87	126	48	174	3,124	11,242
3365	Pumps and compressors	23	36	15	51	869	5,223
3366	Commercial space heating and cooling equipment	15	21	8	29	605	2,982
3367	Dies, saw blades and machine tool accessories	116	178	77	255	4,802	17,053
3368	Food processing machinery	15	20	10	30	568	3,218
3369	Industrial machinery and equipment n.e.c.	459	686	294	980	18,312	77,205
336	Total	873	1,325	554	1,879	34,398	144,260
33	Total other machinery and equipment	1,775	2,525	1,325	3,859	68,882	292,390
MISCELLANEOUS MANUFACTURING—							
Leather and leather products—							
3451	Leather tanning and fur dressing	21	24	18	42	585	2,633
3452	Leather and leather substitute goods n.e.c.	48	56	35	111	1,695	8,294
345	Total	69	80	73	153	2,280	10,927
Rubber products—							
3461	Rubber tyres, tubes, belts, hose and sheets	15	26	9	35	678	2,706
3462	Rubber products n.e.c.	20	26	15	41	792	2,680
346	Total	35	52	24	76	1,470	5,386
Plastic and related products—							
3471	Flexible packaging and abrasive papers	28	40	25	65	959	5,478
3472	Rigid plastic sheeting	5					
3473	Hard surface floor coverings n.e.c.	2	15	3	18	292	1,360
3474	Plastic products n.e.c.	316	487	209	696	11,852	54,404
347	Total	351	542	237	779	13,103	61,242
Other manufacturing—							
3481	Ophthalmic articles	13	15	13	28	465	1,879
3482	Jewellery and silverware	202	288	151	439	6,064	23,793
3483	Brooms and brushes	10	17	7	24	370	1,493
3484	Signs and advertising displays	432	664	305	969	14,558	46,260
3485	Signage equipment	102	162	64	226	2,858	14,938
3486	Waxing and marking equipment	14	22	12	34	604	1,940
3487	Manufacturing n.e.c.	215	316	145	461	7,465	31,841
348	Total	988	1,484	697	2,181	32,383	122,143
34	Total miscellaneous manufacturing	1,443	2,159	1,031	3,189	49,239	199,688
21-34	TOTAL MANUFACTURING	11,467	17,233	8,361	25,594	398,408	1,771,899

(a) See paragraph 11 of the Explanatory Notes. (b) See paragraphs 5 to 10 and 16 of the Explanatory Notes and the Appendix. (c) Includes working proprietors. (d) Excludes the drawings of working proprietors.

TABLE 12. MANUFACTURING ESTABLISHMENTS: COVERAGE FACTORS (a) TO CONVERT DATA FOR PREVIOUS YEARS TO A COMPARABLE BASIS WITH 1989-90 DATA

Industry subdivision										
ASFC code	Description	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
21	Food, beverages and tobacco	1.01	1.02	1.01	1.00	1.01	1.02	1.00	1.01	1.01
23	Textiles	1.02	1.02	1.12	1.00	1.06	1.00	1.00	1.00	1.02
24	Clothing and footwear	1.04	1.04	1.02	1.00	1.01	1.00	1.00	1.35	1.04
25	Wood, wood products and furniture	1.06	1.05	1.02	1.00	1.03	1.01	1.00	1.02	1.04
26	Paper, paper products, printing and publishing	1.04	1.04	1.02	1.01	1.01	1.00	1.00	1.05	1.03
27	Chemical, petroleum and coal products	1.01	1.02	1.05	1.01	1.01	1.00	1.00	—	1.02
28	Non-metallic mineral products	1.02	1.02	1.02	1.00	1.00	1.01	1.04	1.02	1.02
29	Basic metal products	1.01	1.02	1.01	1.00	1.00	1.00	1.02	1.00	1.01
31	Fabricated metal products	1.05	1.05	1.02	1.01	1.02	1.00	1.02	1.10	1.04
32	Transport equipment	1.01	1.01	1.02	1.00	1.06	1.01		1.05	1.01
33	Other machinery and equipment	1.03	1.05	1.04	1.00	1.03	1.03		1.07	1.03
34	Miscellaneous manufacturing	1.04	1.04	1.04	1.01	1.05	1.01		1.03	1.03
21-34	TOTAL MANUFACTURING	1.03	1.03	1.02	1.00	1.02	1.01	1.02	1.05	1.03

(a) See paragraph 35 of the Explanatory Notes.

EXPLANATORY NOTES

Introduction

This publication presents statistics compiled from a full-scale census of manufacturing establishments for 1989-90 and some comparative statistics relating to preceding years.

2. The manufacturing census is conducted as a component of the ABS's integrated economic statistics system. This system has been developed so that data from each industry sector conform to the same basic conceptual standards thereby allowing comparative analysis between and across different industry sectors. The results of this census are therefore broadly comparable with other ABS economic data collections.

3. The manufacturing census is an annual collection. A full-scale census is conducted triennially, with small-scale censuses being conducted in each of the intervening years. For small-scale censuses, businesses are requested to provide only data on employment, wages and salaries paid and turnover. For full-scale censuses, additional data are requested on stocks, purchases, value added, capital expenditure, fuels used, materials used and commodities produced.

4. Manufacturing, as specified in Division C of the *Australian Standard Industrial Classification* (ASIC), broadly relates to the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand.

Scope and coverage

5. The unit for which statistics are reported in the manufacturing census 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. For a more detailed interpretation, refer to the Appendix.

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

7. The new management unit and establishment definitions are being progressively implemented on the ABS central business register as reporting arrangements with individual businesses are finalised. At the time that this census was conducted, most large businesses classified to the Manufacturing Industry were reporting according to the new units definitions.

8. 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. Some of those establishments predominantly engaged in one activity are 'split' into two or more establishments, when the secondary activity exceeds a specific value. (For 1989-90, this value was \$6.2 million in terms of sales and transfers out of goods and services.) These separate establishments are then classified to the industry appropriate to its activity.

10. Data contained in this publication relate to all manufacturing establishments which operated in Australia during the year ended 30 June 1990, except for single establishment businesses not employing staff at 30 June 1990 (such as sole proprietorships or family partnerships). These types of businesses contribute only marginally to statistical aggregates other than number of establishments. In addition, the ABS attempts to obtain data for those businesses which either commenced or ceased operation during the year, but it is not possible to obtain data for all of them.

11. For those single establishment businesses with less than four persons employed, only details of employment, wages and salaries and turnover were collected. These 'small' businesses also contribute only marginally to statistical aggregates other than number of establishments. Statistics for these small businesses are shown in Table 11.

Methodology

12. For the 1989-90 census, a sample component was used for single establishment businesses with from four to nineteen persons employed. For those establishments selected in the sample, for multi-establishment businesses and for single establishment businesses with more than nineteen persons employed, the full range of census detail was collected. For those single establishment businesses employing from four to nineteen persons which were not selected in the sample, only details relating to employment at the end of June 1990, wages and salaries paid during the year and turnover were sought (that is, the same details as for the small businesses referred to above). As a consequence, census results for June employment, wages and salaries paid and turnover are not subject to sampling variability. However, component details for these items were estimated from the sample and therefore are subject to sampling variability, as are estimates for average employment, stocks, expenses, value added, and capital expenditure and disposal of assets. (This is the same methodology as was used for the 1986-87 census. However, the bias that was evident for some ASIC class data for that census was not evident in the 1989-90 census data. For further information on this matter, see paragraphs 10 to 14 of the Explanatory Notes to the publication *Manufacturing Industry, Details of Operations, Australia, 1986-87* (8203.0).)

Reliability of estimates

13. The estimates for those data items which are based on information obtained from a sample of manufacturers are subject to sampling variability, that is, they may differ

from the figures that would have been produced if the data had been obtained from all manufacturers in the collection. 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 nineteen chances in twenty that the difference will be less than two standard errors.

14. The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error. For the major data items of interest, the relative standard errors are generally less than four per cent at the industry class level for Australia; they are even lower at the industry group/subdivision levels. Detailed relative standard errors can be made available on request.

15. 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 respondents and errors made in collection and processing of 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.

Unit definitions

16. The standard units now in use are:

(a) *Enterprise group.* This is 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. 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) *Management unit.* The management unit is the highest-level unit within a business, having regard to industry homogeneity, for which accounts are maintained; in nearly all cases, it coincides with the legal entity owning the business (that is, company, partnership, trust, sole operator, etc.). In the case of large diversified businesses, however, there may be more than one management unit, each coinciding with a 'division' or 'line of business'. A division or line of business is recognised where separate and comprehensive accounts are compiled for it.

(c) *Establishment.* The establishment is the smallest accounting unit of a business, within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data enabling value added to be calculated. In general,

an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory. The majority of establishments operate at one location only.

Data item definitions

17. *Establishments at 30 June.* The number of establishments in operation at 30 June.

18. *Enterprise groups at 30 June.* The number of enterprise groups in operation at 30 June.

19. *Employment at the end of June.* The number of working proprietors and the number of employees on the payroll for the last pay period in June 1990.

20. *Average employment over whole year.* The average number of persons employed over the year (including working proprietors).

21. *Wages and salaries.* The gross wages and salaries of all employees of the establishment. The drawings of working proprietors are excluded.

22. *Turnover* (see Note (a) 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 revenue from outside the business (such as commission revenue, repair and service revenue, and rent, leasing and hiring revenue), plus capital work done for own use, or for rental or lease. Receipts from interest, royalties, dividends and the sale of fixed tangible assets are excluded.

23. *Stocks—opening and closing.* Stocks of materials, fuels, etc. and of finished goods and work-in-progress of the establishment whether located at the establishment or elsewhere.

24. *Purchases, transfers in and other selected expenses* (see Note (a) below). Purchase of materials, fuels, power, containers, etc. and of goods for resale, plus transfers in of goods from other establishments of the same business, plus charges for commission and sub-contract work (including sales commission payments), repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses, and rent, leasing and hiring expenses. The components of other selected expenses are shown separately in Table 6.

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

Note (a). Transfers to and from other establishments of the same business referred to in the definitions of turnover and purchases, transfers in and selected expenses are valued, for statistical purposes, at prices commensurate with the prices which would have been received or paid 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 thereto. For similar reasons, the value of materials used in producing those commodities is likewise not reflected in figures for purchases, transfers in and selected expenses.

Note (b): While value added is the basic measure of an industry's contribution to total production, it cannot be inferred that when wages and salaries are deducted from value added the whole of the surplus is available for profit. There are many miscellaneous expenses (such as depreciation, workers' compensation insurance, other insurance, payroll tax, income tax, rates, advertising, interest on borrowed funds, bad debts and other sundry charges) which are not taken into account when arriving at value added. Value added as calculated in this publication differs from the concept used in National Accounts, where the concept of value added also excludes some administrative expenses and sundry charges, and the change in stocks component which is measured by valuing the physical changes in stocks at average annual current prices. It is not practicable in these censuses to collect data fully in accord with the National Accounts concept of value added.

26. *Persons employed per establishment.* Employment at the last pay period in June 1990 divided by the number of establishments in operation at 30 June 1990 (see paragraph 41).

27. *Turnover per person employed.* Turnover of manufacturing establishments which operated during the year ended 30 June 1990 divided by the average number of persons employed over the whole year (including working proprietors).

28. *Value added per person employed.* Value added of manufacturing establishments which operated during the year ended 30 June 1990 divided by the average number of persons employed over the whole year (including working proprietors).

29. *Wages and salaries per employee.* The wages and salaries paid by manufacturing establishments which operated during the year ended 30 June 1990 divided by the average number of employees over the whole year.

30. *Ratio of value added to turnover.* Value added of manufacturing establishments which operated during the year ended 30 June 1990 as a proportion of turnover of manufacturing establishments which operated during the same year.

31. *Ratio of wages and salaries to value added.* The wages and salaries paid by manufacturing establishments which operated during the year ended 30 June 1990 as a proportion of the value added of manufacturing establishments which operated during the same year.

32. *Gross product at market prices (average 1989-90 prices).* Constant price estimates of gross product contained in this publication are at market prices. The meaning and measurement of production at constant prices and the limitations and qualifications to which the estimates are subject are discussed in detail in the publication *Australian National Accounts: Concepts, Sources and Methods* (5216.0).

Note. In order to calculate 1979-80 reference year data on average 1989-90 prices, previously published data on average 1984-85 prices have been used for linking purposes. Linking is undertaken at the industry subdivision level as well as at the total manufacturing division level. As the sum of the manufacturing subdivisions do not agree with the total manufacturing division for periods prior to 1984-85 (the link period), a 'balancing' component has been included in the total. Further information on 'linking' can be found in Section 5 of the Information Paper *Australian National Accounts: Introduction of Constant Price Estimates at Average 1989-90 Prices* (5243.0).

33. *Acquisition and disposal of assets.* Acquisition of assets includes all costs which have been capitalised, including interest, legal fees, real estate transfer costs, finance leases and assets acquired under finance leases. Also included are progress payments made to contractors for capital works done by them. Disposal of assets is the revenue from the sales of assets.

(a) *Other buildings and structures.* This includes, for example, roads, warehouses, offices and bridges.

(b) *Plant, machinery and equipment.* All plant, machinery and equipment, including motor vehicles.

(c) *Intangible assets.* All intangible assets, including goodwill.

Comparability with previous statistics

34. As explained above, the standard units definitions were revised for the 1988-89 census and the new definitions are being progressively implemented on the ABS central business register. At the time that this census was conducted, most large businesses classified to the Manufacturing Industry were reporting according to the new units definitions.

35. The system used to update business information on the ABS central business register has also been recently upgraded. As a result of this exercise, a significant number of businesses which should have been included in previous censuses were detected. Analysis indicates that the level of undercoverage on the ABS business register has been fairly constant since 1982. Coverage factors to convert previous years' data (with the exception of number of establishments) to a comparable basis with 1989-90 data are shown in Table 12.

36. For more detailed information on the upgrading of the ABS central business register, refer to the publication

Australian Bureau of Statistics Business Register, Recent Developments, 1991 (8130.0).

37. For a detailed explanation of the various factors which have affected the comparability of counts of establishments over time, see the Appendix.

38. The combining of railway workshop locations (primary to ASIC class 3243) with rail transport locations (primary to ASIC class 5200) to form establishments primary to Division G: Transport and Storage (that is, out of scope of this collection) has significantly affected statistics for Subdivision 32 in some States in this census and comparability with previous years' data.

39. Prior to this census, most commodities produced in the petroleum refining industry (ASIC Class 2770) were manufactured on commission for non-manufacturing businesses from materials owned and supplied by those businesses. In these cases, manufacturing turnover reflected only the value of commission earned by the manufacturing establishments involved (not the gross value of the commodities produced). Due to a change in accounting practices, a number of businesses have changed to reporting gross value of production. This change has significantly affected the comparability of turnover and value added statistics between 1989-90 and previous years for Industry Subdivision 27.

40. Value added data for the cotton ginning industry (ASIC class 2341) between 1986-87 and 1989-90 are not strictly comparable. This is because there has been a difference in treatment by the ABS, the effect of which is that published value added data for this ASIC class were significantly understated in 1986-87. In 1986-87, some establishments reported data on the value of cotton purchased, its value then as cotton produced and the value of the commission earned in ginning this cotton. In 1989-90, only the value of the commission earned was (correctly) included. This change in treatment has also affected the comparability of turnover statistics between 1989-90 and previous years for this ASIC class, but to a lesser extent.

41. Data on persons employed per establishment presented in this publication have been compiled on a different basis to that used for previous publications. Previously, data on the average number of persons employed over the year had been used, whereas employment at the end of June is now 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. (Whilst the current method is the conceptually correct method, 'average employment over year' is included in Table 1, thereby enabling those users who wish to do so to calculate this ratio using the previous method.)

Employment size data

42. Summary of operations data at the industry subdivision level classified by employment size are presented in Table 7. These statistics relate only to those manufacturing establishments operating at 30 June 1990.

As such, the figures presented in Table 7 may differ slightly from those presented in the other tables. These other tables include data for those manufacturing establishments which operated at any time during 1989-90. The data in Table 7 also exclude those single establishment businesses with less than four persons employed.

Concentration statistics

43. 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 ending 30 June 1990 and exclude those single establishment businesses with less than four persons employed.

44. 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 among enterprise groups engaged in an industry.

45. 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

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

- (a) Enterprise group/industry units were formed by combining establishments within the enterprise group with the same industry classification.
- (b) 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 ASIC Subdivision 21 (Food, beverages and tobacco), the enterprise group/industry units for Subdivision 21 include all the establishments owned and/or controlled by the enterprise group and classified to any ASIC class within Subdivision 21.
- (c) 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.
- (d) 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 1990, the enterprise group has not been counted in the item 'enterprise groups at 30 June', but its activities

have been included, where appropriate, in the items 'wages and salaries', 'turnover' and 'value added'.

47. 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.

Related publications

48. A series of publications (8221.1 to 8221.7) for 1989-90 will be produced for each State and the Northern Territory, which will contain a range of data items generally at the industry class level. The 1990-91 issue of this publication was released on 3 March 1993.

49. Users may also wish to refer to the following publications:

Australian National Accounts: National Income, Expenditure and Product, 1991-92 (5204.0) to be released in May 1993.

Quarterly Indexes of Industrial Production, Australia (8125.0).

Manufacturing Industry, Summary of Operations, Australia, 1989-90 (8202.0) released on 24 December 1992.

Constant Price Estimates of Manufacturing Production, Australia, 1989-90 and 1990-91 (8211.0), to be released later in 1993.

Manufacturing Production, Australia: Principal Commodities Produced, 1989-90 (8365.0), to be released shortly.

Monthly commodity data

50. A number of publications are produced each month showing details of the quantity produced of an extensive range of the more important commodities manufactured in Australia (some 600 in all). These publications include *Production Statistics, Australia, Preliminary* (8301.0) and a series of ten publications each relating to a particular range of products (8357.0 to 8369.0).

Back data and unpublished statistics

51. A range of manufacturing industry statistics publications are available for previous years. As well, a considerable amount of data from the manufacturing census exists in unpublished form. More detailed information to satisfy individual user requirements may be available on request. A charge would normally be made for providing such information.

Symbols and other usages

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 publication
—	nil or rounded to zero
*	data have been suppressed—see paragraph 12 of the Explanatory Notes

52. Where figures have been rounded, discrepancies may occur between totals and the sums of the component items.

APPENDIX

ESTABLISHMENT COUNTS IN MANUFACTURING CENSUSES

This appendix has been prepared to assist users better understand the implication of various factors which have affected the count of 'Number of Manufacturing Establishments' as contained in this and previous publications.

2. Generally speaking, the ABS does not promote 'Number of Establishments' as an analytical tool to look at specific changes over time, especially where the focus is on counts of very small establishments. In the case of manufacturing census counts, there are two main reasons for this:

(a) Simple counts say very little about an establishment's contribution to manufacturing in Australia unless size, industry and other factors are taken into account. For example, a factory with 10,000 employees and a factory with 10 employees are both counted as '1'.

(b) Changes in definition and periodic large-scale coverage enhancement exercises result in breaks in continuity.

3. This especially applies in recent years, when there have been a number of major influences on those counts, which together make them an even less valuable analytical tool than, say, employment or turnover. These influences can be split into two categories—changes to definitions, and changes in methodology.

Changes to definitions

4. Prior to the 1988-89 census, the core definition of 'establishment' was 'All operations under single ownership at a single physical location'. Minor variations were permitted, such as businesses with more than one factory in the same Statistical Local Area which wished to report them as a single establishment were permitted to do so. Conversely, large and diverse establishments were (and still are) split into two or more establishments if they undertook, in a significant way, activities normally undertaken in two or more different industries.

5. For the 1988-89 and subsequent censuses, the definition of an establishment was changed from the 'single ownership/single location' concept of an establishment to the concept as defined in paragraph 16 of the Explanatory Notes.

6. This new definition is more sympathetic to manufacturers' actual record keeping practices. A simplified version of it is that an establishment is now delineated on the basis of the availability of suitable accounting records, along with criteria relating to State boundaries and industry homogeneity.

7. One effect of this change has been the creation of establishments which are amalgamations of formerly separate establishments. For example, in the concrete

industry, it is not unusual for a company to run (say) 50 plants in a single State. Under the current definition, these 50 locations may end up as 50 establishments if separate accounts are kept for each or as one establishment if State accounts are kept or (more typically) as 3 or 4 establishments if regional accounts are kept. Under the previous definition, this situation would more than likely have resulted in a count of 50 establishments.

8. This process of re-aligning establishments to accounts took two years. As a result, there was downward pressure on counts (especially for the category 'establishments employing 4 or more persons') for both the 1988-89 and the 1989-90 censuses.

Changes in methodology

9. In 1987-88, a census was conducted which did not collect fine level commodity/activity data.

10. The significance of this is that (in previous censuses) the availability of fine commodity/activity detail enabled ABS editing staff to better identify those establishments which were actually in the scope of the census and those which should not be included in the manufacturing census final results, because (for example) they were really wholesalers or retailers. On average, some 2,000 establishments were found to have a predominant activity which was not manufacturing and were, therefore, not included in the final published results.

11. For the 1987-88 census, when this fine commodity/activity detail was not available to support decision making by ABS editing staff, fewer establishments were removed for reasons of belonging to other sectors. Whilst this would not fully explain the increase in establishment numbers from the 1986-87 to the 1987-88 census, it would have been a major influence.

12. Fine commodity/activity detail was also not collected in the 1988-89 census, but it was collected in the 1989-90 census.

13. Another influence which impacted counts of manufacturing establishments beginning with the 1988-89 census was the removal of non-employing businesses from the scope of the census. Non-employing businesses are unincorporated businesses where the only labour input is provided by proprietors or partners. Removal of these businesses would largely explain the fall from the 1987-88 to the 1988-89 census in the count for the category 'less than 4 persons employed'.

14. For the 1989-90 census, there was a counter effect on counts arising from a large-scale check of the completeness of the ABS business register (but still excluding non-employing businesses). This check (which matched the contents of the ABS business register against other sources) led to the inclusion in the 1989-90 census

of a couple of thousand manufacturing establishments which had been missing from the register for some time.

Overall impact of these changes

15. For the 1987-88 census, there was upward pressure on counts impacting comparisons with 1986-87, as there was no commodity coding available to refine the scope of the census.

16. In 1988-89, there were three influences on counts, one with an upward impact (no commodity coding—although consistent with 1987-88) and two with downwards impacts both of which affected comparability with 1987-88 (removal of non-employing businesses and definitional changes).

17. In 1989-90, commodity coding was undertaken which affected comparability with the previous two censuses. In addition, the impacts of the definitional change were still flowing through. There was also the upward impact of adding manufacturing establishments which had been missing from the ABS business register for some time.

18. As can be seen from the above, counts of the number of establishments have been subject to various and conflicting influences over the last three years. Users need to bear this in mind in attempting to analyse changes in counts over this period, especially if the focus of the analysis is on numbers of small businesses.



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