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For further information about these and related statistics, contact the National Information and Referral Service on 1300135070 or Phillip Lui on Sydney (02) 92684269.

This publication presents estimates of the economic and financial performance in 2006-07 of the Australian manufacturing industry. The estimates are compiled from the ABS Economic Activity Survey (EAS) and from business tax data reported to the Austalian Taxation Office.

As foreshadowed in the previous issue, the estimates in this publication are based on the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 edition for the first time. Previous issues were compiled using the 1993 version of the ANZSIC. ANZSIC 2006 was adopted to provide a more contemporary industrial classification system, taking into account issues such as changes in the structure and composition of the economy, changing user demands, and compatibility with major international classification standards.

The methodology used to produce these estimates has also substantially changed, notably, the way in which business tax data are used. See Technical Note 1 for details.

For these reasons, a new statistical series has commenced with the 2006-07 collection.
This publication includes key data at industry subdivision level for 2004-05 and 2005-06 compiled using the new methodology and on a 2006 ANZSIC basis, as an aid to analysis. For details see Explanatory Notes paragraph 23 and Technical Note 1 paragraph 22.

Industry class data at a national level, and industry subdivision data at a state level are available in this publication for 2006-07 only. This is due to the limitations of applying the new methodology and classification standards to produce detailed historical data. Selected additional time series information may be available on request.

As a result of changes to the ABS economic surveys work program, this publication will not be produced for the 2007-08 reference year. For 2007-08 the number of manufacturers selected in EAS will decrease. National estimates at the ANZSIC class and subdivision levels for states will, as a consequence, not be compiled from the survey estimates, as the sample will not be large enough to support reliable estimates to these levels. The ABS will be investigating whether it is able to model these detailed estimates utilising administrative data, data collected in EAS and the rich body of historical data from previous surveys for which the survey samples for manufacturing were denser.

Manufacturing estimates will continue to be released in Australian Industry, (ABS cat. no. 8155.0), which supports national ANZSIC subdivision and state divisional estimates.

Manufacturing sub-state estimates of employment, wages and salaries, and sales of goods and services for 2006-07 will be made available in the near future as additional data cubes to this release.

The text components of this publication are available free on-line. A PDF publication and extended data spreadsheets are also available free on-line. Further information on the ABS and its products is available on the ABS website.

Brian Pink
Australian Statistician

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## ABBREVIATIONS

| \$'000 | thousand dollars |
| ---: | :--- |
| $\$ \mathrm{~b}$ | billion (thousand million) dollars |
| \$m | million dollars |
| ABN | Australian Business Number |
| ABR | Australian Business Register |
| ABS | Australian Bureau of Statistics |
| ABSBR | Australian Bureau of Statistics Business Register |
| ACT | Australian Capital Territory |
| ANZSIC | Australian and New Zealand Standard Industrial Classification |
| ATO | Australian Taxation Office |
| Aust. | Australia |
| BAS | Business Activity Statement |
| EAS | Economic Activity Survey |
| EBITDA | earnings before interest, tax, depreciation and amortisation |
| FBT | Fringe Benefits Tax |
| GFCF | gross fixed capital formation |
| GST | goods and services tax |
| IVA | industry value added |
| mfg | manufacturing |
| n.e.c. | not elsewhere classified |
| no. | number |
| NSW | New South Wales |
| NT | Northern Territory |
| OPBT | operating profit before tax |
| PAYGW | pay-as-you-go withholding |
| Qld | Queensland |
| RSE | relative standard error |
| SA | South Australia |
| SISCA | Standard Institutional Sector Classification of Australia |
| Tas. | Tasmania |
| TAU | type of activity unit |
| TNTS | The New Tax System |
| Vic. | Victoria |
| WA | Western Australia |
| In |  |

## chapter 1

## INTRODUCTION

KEY DATA

This publication presents estimates, from the annual Economic Activity Survey, of the economic and financial performance of the Australian manufacturing industry.

This industry is specified in Division C of the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 edition. Please see paragraph 2 of the Explanatory Notes for a full definition.

Table 1.1 presents a time series for selected items, from 2004-05 to 2006-07. All value data in this table are shown at current prices.

In all but one of the eight headline measures presented, the Australian manufacturing industry showed growth in 2006-07 when compared to 2005-06. Sales and service income increased by $12 \%$, industry value added by $9 \%$, wages and salaries by $7 \%$, however employment declined by $0.2 \%$. Commentary about these items is presented in Chapter 2.

For information about survey methodology, see Technical Note 1.
The Glossary provides definitions for terms used.

Table 1.2 provides estimates of labour costs.
The Australian manufacturing industy incurred $\$ 58.6 \mathrm{~b}$ in total labour costs during 2006-07. Food product manufacturing accounted for $\$ 10.1 \mathrm{~b}$ ( $17 \%$ ), followed by Machinery and equipment manufacturing with $\$ 7.2 \mathrm{~b}$ (12\%).

The Australian manufacturing industry paid $\$ 50.2 \mathrm{~b}$ in wages and salaries in 2006-07, which represented $86 \%$ of labour costs for the industry overall.

Total wages and salaries paid rose, in current price terms, in 13 of the 15 manufacturing industry subdivisions between 2005-06 and 2006-07. The largest decline ( $0.9 \%$ ) was recorded in Pulp, paper and converted paper product manufacturing.

The manufacturing industry subdivision showing the largest percentage and absolute increase in wages and salaries in 2006-07 was Primary metal and metal product manufacturing (up $14 \%$ or $\$ 0.5$ b).

Table 1.3 presents the components of industry value added for these industries.
Overall $\$ 99$ b of industry value added was produced by the manufacturing industry in 2006-07. The Primary metal and metal product manufacturing industry contributed the most significant amount with $\$ 15.2$ b (or $15 \%$ ).

In 2006-07, industry value added (IVA) went up by $\$ 8 \mathrm{~b}$ (9\%) compared to 2005-06.
Primary metal and metal product manufacturing contributed most to the increase with a rise

INDUSTRY VALUE ADDED
continued
in IVA of $\$ 4 \mathrm{~b}$ (35\%). IVA declined in two of the industries shown, namely Petroleum and coal product manufacturing (down $16 \%$ to $\$ 2.5$ b) and Pulp, paper and converted paper product manufacturing (down $9 \%$ to $\$ 2.7 \mathrm{~b}$ ).

DISTRIBUTION OF IVA ACROSS INDUSTRIES, 2005-06 AND 2006-07


Note: Industry subdivisions
11 Food product mfg
12 Beverage and tobacco product mfg
13 Textile, leather, clothing and footwear mfg
14 Wood product mfg
15 Pulp, paper and converted paper product mfg
16 Printing (including the reproduction of recorded media)
17 Petroleum and coal product mfg
18 Basic chemical and chemical product mfg
19 Polymer product and rubber product mfg
20 Non-metallic mineral product mfg
21 Primary metal and metal product mfg
22 Fabricated metal product mfg
23 Transport equipment mfg
24 Machinery and equipment mfg 25 Furniture and other mfg

FURTHER COMMENTARY

Please see:

- National data: Chapter 2, page 11
- States, territories and Australia: Chapter 3, page 34
- Exports: Chapter 4, page 42

KEY DATA, 2004-05 to 2006-07

|  | Employment at end of June(a) | Wages and salaries(b) | Sales and service income(c) | Total income | $\begin{array}{r} \text { Total } \\ \text { expenses } \end{array}$ | Earnings before interest, tax, depreciation and amortisation | Operating profit before tax | Industry value added |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no. | \$m | \$m | \$m | \$m | \$m | \$m | \$m |
|  |  |  | FOO | ODUCT |  |  |  |  |
| 2004-05 | ^197113 | 7619 | ^ 58553 | 59296 | 56584 | 4256 | ^2934 | ^ 13313 |
| 2005-06 | 202882 | 8165 | 59715 | 60294 | 58014 | 4302 | 2773 | 13956 |
| 2006-07 | 206328 | 8642 | 64807 | 65332 | 62754 | 4345 | 2638 | 14455 |

## BEVERAGE AND TOBACCO PRODUCT MFG

| $2004-05$ | 33040 | 1677 | 15216 | 15867 | 13420 | 3055 | 2466 | 5263 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2005-06$ | 32811 | 1740 | 15376 | 16003 | 13211 | 3185 | 2635 | 5339 |
| $2006-07$ | 33722 | 1758 | 17009 | 18056 | 14630 | 3671 | 3381 | 5787 |

TEXTILE, LEATHER, CLOTHING AND FOOTWEAR MFG

| $2004-05$ | 56948 | 1676 | 9357 | 9556 | 9022 | 702 | $* * 541$ | 2719 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2005-06$ | 53068 | 1584 | 8938 | 9100 | 8602 | 646 | 466 | 2536 |
| $2006-07$ | 53838 | 1685 | 9441 | 9623 | 9103 | 744 | ^582 | 2771 |

## WOOD PRODUCT MFG

| $2004-05$ | 55346 | 1997 | 12159 | 12302 | 11598 | 1298 | 898 | 4042 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2005-06$ | 54200 | 1998 | 12089 | 12246 | 11460 | 1219 | $\wedge 878$ | 3932 |
| $2006-07$ | 51919 | 2103 | 11783 | 11958 | 11179 | 1119 | 803 | 3940 |


| PULP, PAPER AND CONVERTED PAPER PRODUCT MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004-05 | 24359 | 1430 | 9557 | 9618 | 8857 | 1353 | 772 | 3031 |
| 2005-06 | 23510 | 1484 | 9555 | 9613 | 8981 | 1191 | 647 | 2926 |
| 2006-07 | 23801 | 1470 | 9605 | 9638 | 9235 | 947 | 428 | 2657 |

PRINTING (INCLUDING THE REPRODUCTION OF RECORDED MEDIA)

| $2004-05$ | 53203 | 2266 | 9137 | 9287 | 8648 | 1051 | 671 | 3698 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2005-06$ | 53098 | 2327 | 9442 | 9527 | 8919 | 1124 | $\wedge 599$ | 3822 |
| $2006-07$ | $\wedge$ | 50315 | $\wedge 2325$ | 9371 | 9479 | 8732 | 1192 | $\wedge 746$ |


| PETROLEUM AND COAL PRODUCT MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004-05 | 7164 | 589 | 23491 | 23566 | 23208 | 1546 | 1121 | 2276 |
| 2005-06 | 7354 | 634 | 30589 | 30911 | 29654 | 2228 | 2052 | 2999 |
| 2006-07 | 7846 | 711 | 36661 | 36791 | 35532 | 1643 | 1123 | 2506 |



POLYMER PRODUCT AND RUBBER PRODUCT MFG

| $2004-05$ | 58560 | 2599 | 14731 | 14956 | 13963 | 1572 | 1078 | 4712 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2005-06$ | 53599 | 2553 | 14521 | 14683 | 13710 | 1534 | 1015 | 4584 |
| $2006-07$ | 52531 | 2823 | 16004 | 16217 | 15039 | 1700 | 1254 | 5017 |

[^0]KEY DATA, 2004-05 to 2006-07 continued

| Employment | Sales and |  | Earnings before |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | interest, tax, depreciation | Operating | Industry |
| at end of | Wages and | service | Total | Total | and | profit | value |
| June(a) | salaries(b) | income(c) | income | expenses | amortisation | before tax | added |

no. $\$ \mathrm{~m}$

[^1]\$m
\$m \$m
\$m
\$m

NON-METALLIC MINERAL PRODUCT MFG

| $2004-05$ | 44867 | 2186 | 13827 | 14256 | 13074 | 1772 | 1262 | 4393 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2005-06$ | 46323 | 2337 | 14220 | 14629 | 13342 | 1810 | 1342 | 4582 |
| $2006-07$ | 46405 | 2613 | 15805 | 16176 | 14868 | 1965 | 1365 | 5019 |

PRIMARY METAL AND METAL PRODUCT MFG

| $2004-05$ | 58903 | 3860 | 42411 | 43752 | 38350 | 6534 | 5899 | 11192 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2005-06$ | 58875 | 3892 | 45679 | 46934 | 41727 | 6479 | 5516 | 11202 |
| $2006-07$ | 61815 | 4435 | 61406 | 62176 | 54775 | 9944 | 8178 | 15158 |

## FABRICATED METAL PRODUCT MFG

| $2004-05$ | 115846 | 4228 | 22419 | 22665 | 20839 | 2479 | 2084 | 7564 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2005-06$ | 115164 | 4652 | 24870 | 25143 | 22755 | 2908 | 2469 | 8423 |
| $2006-07$ | 114700 | 5145 | 27282 | 27615 | 25221 | 3023 | 2617 | 9076 |

TRANSPORT EQUIPMENT MFG

| $2004-05$ | 109699 | 5187 | 33028 | 33899 | 32512 | 2617 | 1534 | 8716 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2005-06$ | 107653 | 5527 | 33705 | 34464 | 33519 | 2112 | ^ 893 | 8593 |
| $2006-07$ | 105244 | 5869 | 33650 | 34409 | 33418 | 2185 | ^967 | 9003 |


| MACHINERY AND EQUIPMENT MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004-05 | 124237 | 5532 | 28000 | 28467 | 26736 | 2416 | 1946 | 9018 |
| 2005-06 | 118488 | 5680 | 29298 | 29819 | 27555 | 3012 | 2580 | 9704 |
| 2006-07 | 119477 | 6187 | 32583 | 33481 | 30604 | 3310 | 3280 | 10538 |


| FURNITURE AND OTHER MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2004-05 | 49360 | 1387 | 6854 | 6946 | 6524 | 550 | ^432 | 2215 |
| 2005-06 | 44116 | 1396 | 6827 | 6866 | 6432 | 573 | 437 | 2219 |
| 2006-07 | $\wedge 41030$ | 1501 | ^7751 | ^ 7847 | ^ 7362 | 577 | *453 | 2358 |
| TOTAL MANUFACTURING |  |  |  |  |  |  |  |  |
| 2004-05 | 1030417 | 44744 | 320323 | 326220 | 304111 | 33724 | 25091 | 87742 |
| 2005-06 | 1016249 | 46821 | 338136 | 343726 | 319835 | 35099 | 25938 | 91033 |
| 2006-07 | 1014080 | 50228 | 377930 | 384514 | 355131 | 39641 | 30738 | 98997 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
(a) Includes working proprietors.
(b) Excludes the drawings of working proprietors.
(c) Includes rent, leasing and hiring income.

|  |  | Wages and salaries <br> (a) | Employer contributions into superannuation funds | Workers' compensation premiums/ costs | Selected labour costs | Fringe benefits tax | Payroll tax | Total labour costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ind | ry subdivision | \$m | \$m | \$m | \$m | \$m | \$m | \$m |
| 11 | Food product mfg | 8642 | 721 | 338 | 9700 | 64 | 364 | 10128 |
| 12 | Beverage and tobacco product mfg | 1758 | 157 | 40 | 1955 | 50 | 94 | 2099 |
| 13 | Textile, leather, clothing and footwear mfg | 1685 | 152 | 68 | 1904 | 17 | 60 | 1981 |
| 14 | Wood product mfg | 2103 | 186 | 90 | 2379 | 12 | 75 | 2466 |
| 15 | Pulp, paper and converted paper product mfg | 1470 | 120 | 45 | 1634 | 16 | 73 | 1724 |
| 16 | Printing (incl. the reproduction of recorded media) | ^2325 | 204 | 50 | 2579 | 18 | 86 | 2683 |
| 17 | Petroleum and coal product mfg | 711 | 75 | 9 | 795 | 12 | 36 | 844 |
| 18 | Basic chemical and chemical product mfg | 2961 | 246 | 55 | 3262 | 53 | 151 | 3465 |
| 19 | Polymer product and rubber product mfg | 2823 | 239 | 88 | 3151 | 33 | 110 | 3294 |
| 20 | Non-metallic mineral product mfg | 2613 | 201 | 92 | 2907 | 32 | 117 | 3055 |
| 21 | Primary metal and metal product mfg | 4435 | 346 | 87 | 4868 | 40 | 197 | 5105 |
| 22 | Fabricated metal product mfg | 5145 | 447 | 187 | 5779 | 39 | 179 | 5997 |
| 23 | Transport equipment mfg | 5869 | 509 | 171 | 6550 | 52 | 263 | 6864 |
| 24 | Machinery and equipment mfg | 6187 | 539 | 142 | 6868 | 65 | 258 | 7192 |
| 25 | Furniture and other mfg | 1501 | 128 | 55 | 1684 | 9 | 43 | 1737 |
| 11 | Total manufacturing | 50228 | 4271 | 1516 | 56016 | 512 | 2108 | 58635 |

- estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution

|  |  | PLUS |  |  |  | LESS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sales and service income(a) | Government funding for operational costs | Capital work done for own use | Change in inventories | Purchases of goods and materials | Other intermediate input expenses | Industry value added |
| Industry | y subdivision | \$m | \$m | \$m | \$m | \$m | \$m | \$m |
| 11 | Food product mfg | 64807 | 27 | 93 | 60 | 37320 | 13213 | 14455 |
| 12 | Beverage and tobacco product mfg | 17009 | 21 | 33 | -45 | 7908 | 3323 | 5787 |
| 13 T | Textile, leather, clothing and footwear mfg | 9441 | 40 | 9 | 63 | 4772 | 2010 | 2771 |
| 14 | Wood product mfg | 11783 | 14 | 10 | 24 | 5653 | 2238 | 3940 |
| 15 P | Pulp, paper and converted paper product mfg | 9605 | 1 | 8 | 25 | 4947 | 2035 | 2657 |
| 16 | Printing (incl. the reproduction of recorded media) | 9371 | 2 | 5 | -1 | 3744 | 1753 | ^ 3881 |
| 17 | Petroleum and coal product mfg | 36661 | 16 | 8 | -137 | 31378 | 2665 | 2506 |
| 18 | Basic chemical and chemical product mfg | 24772 | 7 | 110 | -113 | 13028 | 4916 | 6831 |
| 19 P | Polymer product and rubber product mfg | 16004 | 16 | 19 | 75 | 8095 | 3003 | 5017 |
| 20 | Non-metallic mineral product mfg | 15805 | 4 | 20 | 57 | 6752 | 4116 | 5019 |
| 21 | Primary metal and metal product mfg | 61406 | 6 | 112 | 777 | 38527 | 8617 | 15158 |
| 22 | Fabricated metal product mfg | 27282 | 30 | 146 | 222 | 13345 | 5260 | 9076 |
| 23 | Transport equipment mfg | 33650 | 473 | 129 | -25 | 20181 | 5045 | 9003 |
| 24 | Machinery and equipment mfg | 32583 | 17 | 80 | 403 | 17052 | 5493 | 10538 |
| 25 | Furniture and other mfg | ^7751 | 25 | 10 | -32 | 3796 | 1600 | 2358 |
| 11-25 | Total manufacturing | 377930 | 699 | 793 | 1355 | 216495 | 65284 | 98997 |

- estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
(a) Includes rent, leasing and hiring income.


## chapter 2

Statistics in this publication relate to the manufacturing industry as defined by the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 edition. The data presented include all activities of manufacturing businesses, some of which may be activities other than manufacturing. Explanatory Notes paragraphs 4-18 provide further details.

The commentary refers mainly to the tables in this chapter, as well as to the employment data presented in table 1.1.

The commodity boom experienced by the mining sector has flowed downstream to the manufacturing sector with price increases in metals and petroleum a feature. Increases in the price of alumina, gold and nickel contributed to increases of $\$ 15.7 \mathrm{~b}$ (or $34 \%$ ) in sales and service income and $\$ 4.0$ b (or $35 \%$ ) in IVA in Primary metal and metal product manufacturing. Rising oil prices impacted strongly in petroleum and coal product manufacturing which experienced an increase of $\$ 6.1 \mathrm{~b}$ (or $20 \%$ ) in sales and service income, although both IVA and EBITDA experienced declines

In current price terms, most major indicators of activity for the Australian manufacturing industry increased during 2006-07: sales and service income (up 12\%), industry value added (IVA) (up 9\%), earnings before interest, tax, depreciation and amortisation (EBITDA) (up 13\%).

Sales and service income of manufacturing industry in Australia in 2006-07 was $\$ 377.9 \mathrm{~b}$, an increase of $\$ 39.8$ b (or $12 \%$ ) from 2005-06. The majority of manufacturing industries presented in this publication experienced an increase in sales and service income in 2006-07.

Three of the 15 industries for which data are shown reported a decline in sales and service income. Wood product manufacturing experienced a decrease of $\$ 0.3 \mathrm{~b}$ (or 3\%), Printing (including the reproduction of recorded media) reported a decrease of $\$ 0.07 \mathrm{~b}$ (or $1 \%$ ) and Transport equipment manufacturing experienced a decline of $\$ 0.06 \mathrm{~b}$ (or $0.2 \%$ ).

Conversely the industry which contributed the most to the increase in sales and service income was Primary metal and metal product manufacturing with an increase of $\$ 15.7 \mathrm{~b}$ (or $34 \%)$.

Employment in the Australian manufacturing industry at the end of June 2007 was estimated at $1,014,080$ persons, a decrease of $0.2 \%$ (or 2,169 persons) compared to the estimate for June 2006..

EMPLOYMENT SIZE

PROFITABILITY AND
EARNINGS

In 2006-07, businesses employing 100 or more persons accounted for $50 \%$ of total manufacturing employment in Australia and $62 \%$ of wages and salaries. Their contribution to sales and service income was 71\%, and to IVA 64\%..

CONTRIBUTION TO MANUFACTURING INDUSTRIES BY BUSINESSES EMPLOYING 100 OR MORE PERSONS, 2006-07


Note: Industry subdivisions
11 Food product mfg
12 Beverage and tobacco product mfg
13 Textile, leather, clothing and footwear mfg
14 Wood product mfg
15 Pulp, paper and converted paper product mfg
16 Printing (including the reproduction of recorded media)
17 Petroleum and coal product mfg
18 Basic chemical and chemical product mfg
19 Polymer product and rubber product mfg
20 Non-metallic mineral product mfg
21 Primary metal and metal product mfg
22 Fabricated metal product mfg
23 Transport equipment mfg
24 Machinery and equipment mfg
25 Furniture and other mfg

At the total manufacturing level, indicators of profitability showed similarly strong increases (in percentage terms) to the increase in IVA. This reflects the extent to which prices received rose by more than expenses. Earnings before interest, tax, depreciation and amortisation (EBITDA) increased in 2006-07 by $13 \%$, or $\$ 4.5$ b, with the majority of this growth driven by Primary metal and metal product manufacturing (up \$3.5b or 54\%).

The manufacturing industry improved its operating profit before tax (OPBT) returns by $19 \%$ (or $\$ 4.8$ b) during $2006-07$, earning $\$ 30.7$ b. Total trading profit for the manufacturing industry in $2006-07$ was $\$ 97.0$ b.

CAPITAL EXPENDITURE Net capital expenditure by manufacturing businesses in 2006-07 was $\$ 14.4 \mathrm{~b}$. The largest absolute contribution ( $\$ 3.5$ b, or $24 \%$ ) occurred in Primary metal and metal product manufacturing, followed by Food product manufacturing (\$1.9b, or $13 \%$ ) and Transport equipment manufacturing (\$1.7b, or 12\%).

A range of performance measures, mainly expressed as ratios, can be produced from the data available from businesses' financial statements. A selection of these are presented in this chapter for each manufacturing industry subdivision. Definitions are provided in the Glossary. Information about the uses and limitations of these measures can be found in Explanatory Notes paragraphs 35 to 40 .

The manufacturing industry's performance ratios for 2006-07, as set out in detail in table 2.1 are summarised as follows:

INDUSTRY PERFORMANCE MEASURES continued

INDUSTRY SUBDIVISION ANALYSIS

FOOD PRODUCT MANUFACTURING

Beverage and tobacco product MANUFACTURING

- The highest profit margins were recorded by Beverage and tobacco product manufacturing (20\%) and Primary metal and metal product manufacturing (13\%). Transport equipment manufacturing was the industry with the lowest profit margin in 2006-07 (3\%).
- The interest coverage in 2006-07 was highest for Primary metal and metal product manufacturing ( 12.5 times) and Fabricated metal product manufacturing ( 11.7 times).
- The highest value of IVA to selected labour costs occurred in the Petroleum and coal product manufacturing industry, where IVA exceeded selected labour costs by 3.2 times. The next highest value ( 3.1 times) occurred in Primary metal and metal product manufacturing. Transport equipment manufacturing and Furniture and other manufacturing shared the lowest value ( 1.4 times) for this ratio.
- Of all manufacturing industries shown, Petroleum and coal product manufacturing (at $\$ 101,000$ ) recorded the highest selected labour costs per person employed, followed by Primary metal and metal product manufacturing ( $\$ 79,000$ ). The industry with the lowest value for this ration was Textile, leather, clothing and footwear manufacturing ( $\$ 35,000$ ). For total manufacturing, the estimate was $\$ 55,000$.
: Basic chemical and chemical product manufacturing recorded the highest investment rate (value added) of $25.0 \%$ in 2006-07, slightly ahead of Primary metal and metal product manufacturing which recorded a value of $24.8 \%$. Furniture and other manufacturing, with an investment rate of $8.8 \%$, had the lowest value.

In 2006-07, Food product manufacturing was the largest manufacturing industry as measured by it's sales and service income (17\%), wages and salaries (17\%), employment (20\%) and labour costs (17\%). It also ranked second in IVA (15\%), EBITDA (11\%), and net capital expenditure (13\%).

The industry remains dominated by businesses employing 100 or more persons. These businesses contributed $73 \%$ of the subdivision's IVA, $73 \%$ of sales and service income, $72 \%$ of wages and salaries and $57 \%$ of employment.

Despite recording the third lowest contribution to employment (3\%), Beverage and tobacco product manufacturing was the second highest contributor to OPBT (11\%) and the third highest contributor to EBITDA (9\%) in 2006-07.

Overall the subdivision's sales and service income was up $11 \%$ and IVA was up $8 \%$. Businesses employing 1,000 or more persons in this industry are especially prominent as they contributed $52 \%$ of total sales and service income, $47 \%$ of wages and salaries, $47 \%$ of IVA and $39 \%$ of employment.

Textile, leather, clothing and footwear manufacturing is one of the smaller manufacturing subdivisions by several key measures presented in 2006-07. It made the third smallest contribution to sales and service income (2\%),OPBT (2\%), and EBITDA (4\%) and the second smallest contribution net capital expenditure (1\%). It also contributed $3 \%$ to IVA and $4 \%$ to wages and salaries.

Businesses employing 0-4 persons are still highly influential in this subdivision, accounting for $24 \%$ of total employment, $15 \%$ of IVA, $14 \%$ of sales and service income and $10 \%$ of wages and salaries. However the employment category having the biggest impact on most variables was businesses employing 20-49 persons.

Pulp, paper and converted PRODUCT MANUFACTURING

Printing (including the REPRODUCTION OF RECORDED MEDIA)

Petroleum and coal product MANUFACTURING

In 2006-07, Wood product manufacturing accounted for $5 \%$ of total manufacturing employment, 4\% of IVA and wages and salaries, $3 \%$ of sales and service income, EBITDA and OPBT, and $2 \%$ of net capital expenditure, the third lowest contribution for that particular variable.

Employment size is fairly well spread across Wood product manufacturing, however all businesses employing less than 100 persons contributed $67 \%$ of total employment, $58 \%$ of wages and salaries, $55 \%$ of IVA and $53 \%$ of sales and service income.

Pulp, paper and converted paper product manufacturing was one of the smallest manufacturing industries across all variables in 2006-07. It was the lowest contributor to OPBT, accounting for just $1 \%$ of the manufacturing total. It was also the second lowest contributor to employment (2\%), wages and salaries (3\%) and labour costs (3\%) and the third lowest contributor to IVA and EBITDA, accounting for $3 \%$ and $2 \%$ respectively.

Businesses employing 100 or more persons dominate this subdivision, accounting for $81 \%$ of IVA, $81 \%$ of sales and service income, $78 \%$ of wages and salaries and $62 \%$ of employment

In 2006-07, Printing (including the reproduction of recorded media) experienced declines in all key variables, with the exception of IVA, EBITDA and OPBT. In these particular variables the subdivision has contributed $4 \%$ to IVA, $3 \%$ to EBITDA and $2 \%$ to OPBT. Following the declines, Printing (including the reproduction of recorded media) accounted for $5 \%$ of total employment, $5 \%$ of wages \& salaries and $2 \%$ of sales and service income, the second lowest contribution of all manufacturing industries.

Employment size is fairly well spread across Printing (including the reproduction of recorded media). Businesses employing less than 100 persons and businesses greater than 100 persons contributed similar percentages to wages and salaries, sales and service income and IVA.

Petroleum and coal product manufacturing was the third highest contributor to sales and service income for all manufacturing, accounting for $10 \%$ of the total in 2006-07. It also contributed $4 \%$ to EBITDA and OPBT. Despite the high sales and service income figures, Petroleum and coal product manufacturing contributed the lowest amount to employment, wages and salaries and labour costs (all 1\%) and was also the second lowest contributor to IVA (3\%)

This industry is dominated by businesses employing 1,00 or more people. These businesses accounted for $84 \%$ of total wages and salaries, $77 \%$ of employment, $97 \%$ of sales and service income and 90\% of IVA.

In 2006-07, Basic chemical and chemical product manufacturing experienced modest gains across all key variables, accounting for $10 \%$ of total OPBT, $8 \%$ of EBITDA, $7 \%$ of sales and service income, $7 \%$ of IVA, $6 \%$ of wages and salaries and $4 \%$ of employment for all manufacturing

Businesses employing 1,000 or more persons are the most influential in Basic chemical and chemical product manufacturing. These businesses accounted for 31\% of total IVA, 27\% of wages and salaries and sales and service income, and $22 \%$ of employment.

Polymer product and rubber PRODUCT MANUFACTURING

Non-metallic mineral product MANUFACTURING

PRIMARY METAL AND METAL PRODUCT MANUFACTURING

Fabricated metal product MANUFACTURING

Transport equipment MANUFACTURING

Much like the Basic chemical and chemical product manufacturing industry, Polymer product and rubber product manufacturing has experienced solid gains across all key data items with the exception of employment which is down by just 1,068 persons (or 2\%). The subdivision contributed $5 \%$ to total employment. It also contributed $6 \%$ to total wages and salaries, $5 \%$ to IVA and $4 \%$ to sales and service income, EBITDA and OPBT.

Employment size in Polymer product and rubber product manufacturing is concentrated mainly between businesses employing 20-199 persons. These businesses account for $45 \%$ of total sales and service income, $42 \%$ of employment and IVA and $41 \%$ of wages and salaries.

A number of key variables for Non-metaliuc mineral product manufacturing showed little change in 2006-07. Employment, wages and salaries and OPBT remained particularly stagnant, accounting for $5 \%, 5 \%$ and $4 \%$ of total manufacturing respectively. Sales and service income (4\%), EBITDA and IVA (both 5\%) experienced larger rises but still contributed similar amounts to the total manufacturing estimate.

Businesses employing 1,000 persons or more clearly contribute most to key data items, accounting for $30 \%$ of total sales and service income, $29 \%$ of IVA, $28 \%$ of wages and salaries and $23 \%$ of employment.

In 2006-07, Primary metal and metal product manufacturing has been one of the strongest manufacturing industries, contributing the most to OPBT (27\%), EBITDA (25\%), net capital expenditure ( $24 \%$ ) and IVA (15\%). It was also the second highest contributor to sales and service income (16\%) but contributed less strongly to wages and salaries (9\%) and employment (6\%).

Businesses employing 1,000 persons or more are particularly influential in this subdivision. These businesses accounted for $53 \%$ of total wages and salaries, $44 \%$ of employment, $43 \%$ of IVA and $35 \%$ of sales and service income

Fabricated metal product manufacturing was the third highest contributor to employment (11\%) in 2006-07 for all manufacturing. This was despite a slight fall of 464 persons (or $0.4 \%$ ) from 2005-06. All other key data items have experienced slight increases although none are contributing significantly to the overall estimates. Wages and salaries are contributing $10 \%$, OPBT and IVA are contributing $9 \%$, EBITDA is contributing $8 \%$ and sales and service income is contributing $7 \%$.

Businesses employing less than 100 persons are having the largest impact in this industry. These businesses accounted for $68 \%$ of total employment, $59 \%$ of IVA and wages and salaries, and $57 \%$ of sales and service income.

In 2006-07, Transport equipment manufacturingwas the third highest contributor to wages and salaries, labour costs and net capital expenditure (all 12\%) for total manufacturing. For other key variables moderate increases or slight decreases have been experienced. Employment and sales and service income are down slightly on 2005-06 (2\% and 0.2\% respectively), with employment contributing just $10 \%$ and sales and service income only $9 \%$ to the total manufacturing estimate. All other key data items in this subdivision are also less influential with IVA contributing 9\%, EBITDA 6\% and OPBT 3\%.

Transport equipment MANUFACTURING continued

Machinery and equipment MANUFACTURING

FURNITURE AND OTHER MANUFACTURING

Businesses employing 1,000 or more persons had largest impact on the subdivision total. These businesses accounted for $51 \%$ of total sales and service income, $46 \%$ of total wages and salaries, $42 \%$ of IVA and $35 \%$ of employment.

Machinery and equipment manufacturing was the second highest contributor to employment, wages and salaries, and labour costs (all $12 \%$ ) and was also the third highest contributor to IVA and OPBT (both 11\%). Sales and service income and EBITDA contributed similar amounts to the manufacturing total of $9 \%$ and $8 \%$ respectively, making it one of the stronger industries.

Business size is reasonably spread but businesses employing 20-49 persons are the most dominant in Machinery and equipment manufacturing. These businesses accounted for 19\% of employment, $17 \%$ of wages and salaries, $15 \%$ of IVA and $15 \%$ of sales and service income.

In 2006-07, Furniture and other manufacturing is the smallest subdivision by most key measures presented. It has contributed the least to sales and service income, IVA (both $2 \%$ ), EBITDA and net capital expenditure (both 1\%). It was the third lowest contributor to wages and salaries and labour costs (both 3\%). Employment has contributed just 4\%.

Businesses employing 20-49 persons had the largest impact in this small subdivision. These businesses accounted for $30 \%$ of employment, $32 \%$ of wages and salaries, $27 \%$ of IVA and $25 \%$ of sales and service income of the industry total.

FINANCIAL PERFORMANCE

|  |  |  | Beverage and tobacco product mfg | Textile, leather, clothing and footwear $m f g$ | Wood product mfg | paper converted paper product mfg | Printing (including the reproduction of recorded media) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment at end of June(a) | no. | 206328 | 33722 | 53838 | 51919 | 23801 | ^ 50315 |
| Income |  |  |  |  |  |  |  |
| Sales of goods | \$m | 63639 | 16352 | 9114 | 11441 | 9494 | 8628 |
| Income from services | \$m | 1041 | 593 | 292 | 325 | 99 | 719 |
| Rent, leasing and hiring income | \$m | 128 | 64 | 34 | 18 | 12 | 23 |
| Funding from government for operational costs | \$m | 27 | 21 | 40 | 14 | 1 | 2 |
| Interest income | \$m | 187 | 429 | 34 | 44 | 14 | 44 |
| Other income | \$m | 310 | 597 | 108 | 118 | 17 | 62 |
| Total income | \$m | 65332 | 18056 | 9623 | 11958 | 9638 | 9479 |
| Expenses |  |  |  |  |  |  |  |
| Selected labour costs(b) | \$m | 9700 | 1955 | 1904 | 2379 | 1634 | ^2579 |
| Cost of sales | \$m | 50526 | 11331 | 6745 | 7903 | 6979 | 5539 |
| Depreciation and amortisation | \$m | 1405 | 499 | 181 | 314 | 403 | 397 |
| Interest expenses | \$m | 799 | 816 | 124 | 164 | 147 | 155 |
| Other expenses | \$m | 296 | 85 | 90 | 400 | 51 | 65 |
| Less |  |  |  |  |  |  |  |
| Capitalised wages and salaries | \$m | 32 | 12 | 3 | 5 | 4 | 3 |
| Total expenses | \$m | 62754 | 14630 | 9103 | 11179 | 9235 | 8732 |
| Change in inventories | \$m | 60 | -45 | 63 | 24 | 25 | -1 |
| Trading profit | \$m | 14281 | 5678 | 2696 | 3880 | 2626 | 3832 |
| Earnings before interest tax depreciation and amortisation | \$m | 4345 | 3671 | 744 | 1119 | 947 | 1192 |
| Operating profit before tax | \$m | 2638 | 3381 | ^ 582 | 803 | 428 | ^ 746 |
| Industry ratios |  |  |  |  |  |  |  |
| Profit margin | \% | 4.1 | 19.9 | 6.2 | 6.8 | 4.5 | 8.0 |
| Interest coverage | times | 5.4 | 4.5 | 6.0 | 6.8 | 6.5 | 7.7 |
| Investment rate (value added) | \% | 14.8 | 17.4 | 10.0 | 10.7 | 21.4 | 16.0 |
| Industry value added to selected labour costs | times | 1.5 | 3.0 | 1.5 | 1.7 | 1.6 | 1.5 |
| Selected labour costs per person employed(c) | \$'000 | 47 | 58 | 35 | 46 | 69 | 51 |
| Sales and service income per person employed(c) | \$'000 | 314 | 504 | 175 | 227 | 404 | 186 |
| Industry value added per person employed(c) | \$'000 | 70 | 172 | 51 | 76 | 112 | 77 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and
(b) Excludes the drawings of working proprietors
should be used with caution
(c) See Explanatory Notes paragraph 38.
(a) Includes working proprietors.

FINANCIAL PERFORMANCE continued


| Employment at end of June(a) | no. | 7846 | 45109 | 52531 | 46405 | 61815 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |  |  |
| Sales of goods | \$m | 36115 | 23900 | 15599 | 15062 | 58863 |
| Income from services | \$m | 429 | 592 | 373 | 703 | 2494 |
| Rent, leasing and hiring income | \$m | 117 | 280 | 32 | 40 | 50 |
| Funding from government for operational costs | \$m | 16 | 7 | 16 | 4 | 6 |
| Interest income | \$m | 43 | 134 | 50 | 68 | 192 |
| Other income | \$m | 71 | 804 | 147 | 298 | 572 |
| Total income | \$m | 36791 | 25717 | 16217 | 16176 | 62176 |
| Expenses |  |  |  |  |  |  |
| Selected labour costs(b) | \$m | 795 | 3262 | 3151 | 2907 | 4868 |
| Cost of sales | \$m | 34187 | 18056 | 11062 | 10843 | 46353 |
| Depreciation and amortisation | \$m | 394 | 877 | 425 | 642 | 1731 |
| Interest expenses | \$m | 240 | 414 | 219 | 324 | 799 |
| Other expenses | \$m | 52 | 213 | 116 | 103 | 274 |
| Less |  |  |  |  |  |  |
| Capitalised wages and salaries | \$m | 1 | 28 | 9 | 8 | 27 |
| Total expenses | \$m | 35532 | 22681 | 15039 | 14868 | 54775 |
| Change in inventories | \$m | -137 | -113 | 75 | 57 | 777 |
| Trading profit | \$m | 2474 | 6716 | 4941 | 4962 | 15053 |
| Earnings before interest tax depreciation and amortisation | \$m | 1643 | 3277 | 1700 | 1965 | 9944 |
| Operating profit before tax | \$m | 1123 | 2923 | 1254 | 1365 | 8178 |
| Industry ratios |  |  |  |  |  |  |
| Profit margin | \% | 3.1 | 11.8 | 7.8 | 8.6 | 13.3 |
| Interest coverage | times | 6.8 | 7.9 | 7.8 | 6.1 | 12.5 |
| Investment rate (value added) | \% | 21.5 | 25.0 | 12.4 | 19.6 | 24.8 |
| Industry value added to selected labour costs | times | 3.2 | 2.1 | 1.6 | 1.7 | 3.1 |
| Selected labour costs per person employed(c) | \$'000 | 101 | 72 | 60 | 63 | 79 |
| Sales and service income per person employed(c) | \$'000 | 4673 | 549 | 305 | 341 | 993 |
| Industry value added per person employed(c) | \$'000 | 319 | 151 | 96 | 108 | 245 |

[^2]FINANCIAL PERFORMANCE continued

|  |  | Fabricated metal product mfg | Transport equipment mfg | Machinery and equipment $m f g$ | Furniture and other mfg | Total manufacturing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment at end of June(a) | no. | 114700 | 105244 | 119477 | $\wedge 41030$ | 1014080 |
| Income |  |  |  |  |  |  |
| Sales of goods | \$m | 25277 | 28345 | 29261 | 7488 | 358577 |
| Income from services | \$m | 1720 | 5146 | 3124 | 241 | 17892 |
| Rent, leasing and hiring income | \$m | 286 | 159 | 197 | 22 | 1461 |
| Funding from government for operational costs | \$m | 30 | 473 | 17 | 25 | 699 |
| Interest income | \$m | 64 | 143 | 183 | 19 | 1648 |
| Other income | \$m | 240 | 142 | 698 | 53 | 4237 |
| Total income | \$m | 27615 | 34409 | 33481 | ^ 7847 | 384514 |
| Expenses |  |  |  |  |  |  |
| Selected labour costs(b) | \$m | 5779 | 6550 | 6868 | 1684 | 56016 |
| Cost of sales | \$m | 18359 | 25321 | 22244 | 5447 | 280895 |
| Depreciation and amortisation | \$m | 451 | 1148 | 578 | 131 | 9577 |
| Interest expenses | \$m | 259 | 356 | 333 | 65 | 5212 |
| Other expenses | \$m | 193 | 161 | 228 | 78 | 2404 |
| Less |  |  |  |  |  |  |
| Capitalised wages and salaries | \$m | 42 | 93 | 51 | 10 | 327 |
| Total expenses | \$m | 25221 | 33418 | 30604 | ^ 7362 | 355131 |
| Change in inventories | \$m | 222 | -25 | 403 | -32 | 1355 |
| Trading profit | \$m | 8923 | 8329 | 10339 | 2304 | 97035 |
| Earnings before interest tax depreciation and amortisation | \$m | 3023 | 2185 | 3310 | 577 | 39641 |
| Operating profit before tax | \$m | 2617 | ^ 967 | 3280 | *453 | 30738 |
| Industry ratios |  |  |  |  |  |  |
| Profit margin | \% | 9.6 | 2.9 | 10.1 | 5.8 | 8.1 |
| Interest coverage | times | 11.7 | 6.1 | 9.9 | 8.9 | 7.6 |
| Investment rate (value added) | \% | 10.3 | 19.8 | 11.6 | 8.8 | 17.0 |
| Industry value added to selected labour costs | times | 1.6 | 1.4 | 1.5 | 1.4 | 1.8 |
| Selected labour costs per person employed(c) | \$'000 | 50 | 62 | 57 | 41 | 55 |
| Sales and service income per person employed(c) | \$'000 | 238 | 320 | 273 | 189 | 373 |
| Industry value added per person employed(c) | \$'000 | 79 | 86 | 88 | 57 | 98 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution

* estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
(a) Includes working proprietors.
(b) Excludes the drawings of working proprietors
(c) See Explanatory Notes paragraph 38.

INDUSTRY CLASS

|  |  | Employment at end of June (a) | Wages and salaries (b) | Sales and service income (c) | Industry value added | Sales and service income per person employed | Industry value added per person employed at end of June |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | no. | \$m | \$m | \$m | \$'000 | \$'000 |
| FOOD PRODUCT MFG |  |  |  |  |  |  |  |
| 111 | Meat and meat product mfg |  |  |  |  |  |  |
| 1111 | Meat processing | 31026 | ^1358 | 12221 | 1973 | 394 | 64 |
| 1112 | Poultry processing | 18075 | 822 | 4123 | 1132 | 228 | 63 |
| 1113 | Cured meat and smallgoods mfg | ^9 780 | ^ 417 | 2593 | - 593 | 265 | 61 |
|  | Total | 58881 | 2597 | 18937 | 3698 | 322 | 63 |
| 112 | Seafood processing | 3027 | 120 | ^1396 | ^ 130 | 461 | 43 |
| 113 | Dairy product mfg |  |  |  |  |  |  |
| 1131 | Milk and cream processing | 6937 | 411 | 4350 | 820 | 627 | 118 |
| 1132 | Ice cream mfg | *1460 | *40 | ^ 297 | ^ 64 | 203 | 44 |
| 1133 | Cheese and other dairy product mfg | 10278 | 640 | 6866 | 1076 | 668 | 105 |
|  | Total | 18674 | 1090 | 11514 | 1959 | 617 | 105 |
| 114 | Fruit and vegetable processing | 14323 | 599 | 4325 | 1056 | 302 | 74 |
| 115 | Oil and fat mfg | 1982 | 119 | 1794 | 264 | 905 | 133 |
| 116 | Grain mill and cereal product mfg |  |  |  |  |  |  |
| 1161 | Grain mill product mfg | 3178 | 197 | 2501 | 463 | 787 | 146 |
| 1162 | Cereal, pasta and baking mix mfg | 4477 | 241 | 1565 | 461 | 350 | 103 |
|  | Total | 7655 | 438 | 4066 | 924 | 531 | 121 |
| 117 | Bakery product mfg |  |  |  |  |  |  |
| 1171 | Bread mfg (factory based) | 11806 | 430 | 2189 | 728 | 185 | 62 |
| 1172 | Cake and pastry mfg (factory based) | 8917 | 304 | 1288 | 399 | 144 | 45 |
| 1173 | Biscuit mfg (factory based) | 4820 | 227 | 987 | 424 | 205 | 88 |
| 1174 | Bakery product mfg (non-factory based) | 38922 | 696 | 2396 | 1111 | 62 | 29 |
|  | Total | 64466 | 1657 | 6859 | 2663 | 106 | 41 |
| 118 | Sugar and confectionery mfg |  |  |  |  |  |  |
| 1181 | Sugar mfg | 4929 | 277 | 2811 | 496 | 570 | 101 |
| 1182 | Confectionery mfg | 11747 | 743 | 4570 | 1529 | 389 | 130 |
|  | Total | 16676 | 1020 | 7380 | 2025 | 443 | 121 |
| 119 | Other food product mfg |  |  |  |  |  |  |
| 1191 | Potato, corn and other crisp mfg | np | np | np | np | np | np |
| 1192 | Prepared animal and bird feed mfg | np | np | np | np | np | np |
| 1199 | Other food product mfg n.e.c. | ^ 13022 | 612 | 4548 | ^1020 | 349 | 78 |
|  | Total | 20642 | 1001 | 8536 | 1737 | 414 | 84 |
| 11 | Total food product mfg | 206328 | 8642 | 64807 | 14455 | 314 | 70 |
|  | BEVERAGE AND TOBACCO PRODUCT MFG |  |  |  |  |  |  |
| 121 | Beverage mfg |  |  |  |  |  |  |
| 1211 | Soft drink, cordial and syrup mfg | 9197 | 464 | 4393 | 1526 | 478 | 166 |
| 1212 | Beer mfg | 4367 | 261 | 3891 | 1495 | 891 | 342 |
| 1213 | Spirit mfg | np | np | np | np | np | np |
| 1214 | Wine and other alcoholic beverage mfg | 17570 | 803 | 6297 | 1512 | 358 | 86 |
|  | Total | np | np | np | np | np | np |
| 122 | Cigarette and tobacco product mfg | np | np | np | np | np | np |
| 12 | Total beverage and tobacco product mfg | 33722 | 1758 | 17009 | 5787 | 504 | 172 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution

* estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
np not available for publication but included in totals where applicable, unless otherwise indicated
(a) Includes working proprietors.
(b) Excludes the drawings of working proprietors.
(c) Includes rent, leasing and hiring income.

INDUSTRY CLASS continued


|  | TEXTILE, LEATHER, CLOTHING AND FOOTWEAR MFG |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 131 | Textile mfg |  |  |  |  |  |  |
| 1311 | Wool scouring | 434 | 23 | ^ 181 | 24 | 416 | 55 |
| 1312 | Natural textile mfg | 2275 | 105 | 373 | 134 | 164 | 59 |
| 1313 | Synthetic textile mfg | 1034 | 51 | 373 | 84 | 361 | 81 |
|  | Total | 3743 | 179 | 927 | 242 | 248 | 65 |
| 132 | Leather tanning, fur dressing and leather product mfg | 2643 | 88 | 779 | 181 | 295 | 68 |
| 133 | Textile product mfg |  |  |  |  |  |  |
| 1331 | Textile floor covering mfg | 2378 | 126 | 854 | 188 | 359 | 79 |
| 1332 | Rope, cordage and twine mfg | ^ 557 | ^ 23 | 170 | 44 | 305 | 79 |
| 1333 | Cut and sewn textile product mfg | ヘ 12236 | 362 | 1877 | 601 | 153 | 49 |
| 1334 | Textile finishing and other textile product mfg | 3925 | 140 | 697 | 228 | 178 | 58 |
|  | Total | 19096 | 651 | 3598 | 1062 | 188 | 56 |
| 134 | Knitted product mfg | ^1974 | ^ 69 | ^279 | ^ 112 | 141 | 57 |
| 135 | Clothing and footwear mfg |  |  |  |  |  |  |
| 1351 | Clothing mfg | ^ 24326 | 617 | 3420 | 1043 | 141 | 43 |
| 1352 | Footwear mfg | 2056 | 81 | 438 | 131 | 213 | 64 |
|  | Total | ^ 26382 | 698 | 3858 | 1174 | 146 | 44 |
| 13 | Total textile, leather, clothing and footwear mfg | 53838 | 1685 | 9441 | 2771 | 175 | 51 |
|  | WOOD PRODUCT MFG |  |  |  |  |  |  |
| 141 | Log sawmilling and timber dressing |  |  |  |  |  |  |
| 1411 | Log sawmilling | 7416 | 254 | 1342 | 521 | 181 | 70 |
| 1412 | Wood chipping | 1644 | 78 | 865 | 233 | 526 | 142 |
| 1413 | Timber resawing and dressing | 6972 | 357 | 2323 | 809 | 333 | 116 |
|  | Total | 16032 | 689 | 4530 | 1563 | 283 | 98 |
| 149 | Other wood product mfg |  |  |  |  |  |  |
| 1491 | Prefabricated wooden building mfg | *459 | *11 | *84 | *27 | 184 | 58 |
| 1492 | Wooden structural fitting and component mfg | 25001 | 944 | 4622 | 1549 | 185 | 62 |
| 1493 | Veneer and plywood mfg | na | na | na | na | na | na |
| 1494 | Reconstituted wood product mfg | ~ 3544 | 200 | ^1159 | 375 | 327 | 106 |
| 1499 | Other wood product mfg n.e.c. | ^ 5092 | ヘ 176 | ~ 782 | ^ 283 | 154 | 56 |
|  | Total | 35886 | 1414 | 7254 | 2377 | 202 | 66 |
| 14 | Total wood product mfg | 51919 | 2103 | 11783 | 3940 | 227 | 76 |

- estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
* estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
na not available
(a) Includes working proprietors.
(b) Excludes the drawings of working proprietors.
(c) Includes rent, leasing and hiring income.

INDUSTRY CLASS continued


|  | PULP, PAPER AND CONVERTED PAPER PRODUCT MFG |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 151 | Pulp, paper and paperboard mfg | ^5963 | 342 | 2400 | 603 | 403 | 101 |
| 152 | Converted paper product mfg |  |  |  |  |  |  |
| 1521 | Corrugated paperboard and paperboard container mfg | 6370 | 474 | 3008 | 878 | 472 | 138 |
| 1522 | Paper bag mfg | ^1734 | ^93 | ^521 | ^ 144 | 300 | 83 |
| 1523 | Paper stationery mfg | 4966 | 222 | 1136 | 317 | 229 | 64 |
| 1524 | Sanitary paper product mfg | 3449 | 279 | 2205 | 624 | 639 | 181 |
| 1529 | Other converted paper product mfg | 1319 | 61 | 335 | 92 | 254 | 70 |
|  | Total | 17838 | 1129 | 7205 | 2054 | 404 | 115 |
| 15 | Total pulp, paper and converted paper product mfg | 23801 | 1470 | 9605 | 2657 | 404 | 112 |
|  | PRINTING (INCLUDING THE REPRODUCTION OF RECORDED MEDIA) |  |  |  |  |  |  |
| 161 | Printing and printing support services |  |  |  |  |  |  |
| 1611 | Printing | ^ 45281 | ^2 102 | ^ 8557 | ヘ 3482 | 189 | 77 |
| 1612 | Printing support services | ^2786 | ^ 110 | 338 | ^ 185 | 121 | 67 |
|  | Total | ^48066 | ^2212 | 8895 | ^3668 | 185 | 76 |
| 162 | Reproduction of recorded media | ^2249 | ^113 | $\wedge 476$ | 213 | 212 | 95 |
| 16 | Total printing (including the reproduction of recorded media) | ^ 50315 | ^2325 | 9371 | ^ 3881 | 186 | 77 |
|  | PETROLEUM AND COAL PRODUCT MFG |  |  |  |  |  |  |
| 170 | Petroleum and coal product mfg |  |  |  |  |  |  |
| 1701 | Petroleum refining and petroleum fuel mfg | 5760 | 560 | 35464 | 2183 | 6157 | 379 |
| 1709 | Other petroleum and coal product mfg | 2086 | 152 | 1198 | 323 | 574 | 155 |
|  | Total | 7846 | 711 | 36661 | 2506 | 4673 | 319 |
| 17 | Total petroleum and coal product mfg | 7846 | 711 | 36661 | 2506 | 4673 | 319 |
|  | BASIC CHEMICAL AND CHEMICAL PRODUCT MFG |  |  |  |  |  |  |
| 181 | Basic chemical mfg |  |  |  |  |  |  |
| 1811 | Industrial gas mfg | 3024 | 183 | 2237 | 754 | 740 | 249 |
| 1812 | Basic organic chemical mfg | 1825 | 126 | 1149 | 182 | 630 | 100 |
| 1813 | Basic inorganic chemical mfg | 3616 | 269 | 2756 | 668 | 762 | 185 |
|  | Total | 8465 | 578 | 6142 | 1604 | 726 | 189 |
| 182 | Basic polymer mfg |  |  |  |  |  |  |
| 1821 | Synthetic resin and synthetic rubber mfg | np | np | np | np | np | np |
| 1829 | Other basic polymer mfg | np | np | np | np | np | np |
|  | Total | 5307 | 363 | 3296 | 837 | 621 | 158 |
| 183 | Fertiliser and pesticide mfg |  |  |  |  |  |  |
| 1831 | Fertiliser mfg | 3330 | 238 | 2958 | 824 | 888 | 247 |
| 1832 | Pesticide mfg | 1452 | 104 | 833 | 177 | 574 | 122 |
|  | Total | 4782 | 342 | 3791 | 1000 | 793 | 209 |

[^3](a) Includes working proprietors.
(b) Excludes the drawings of working proprietors.
(c) Includes rent, leasing and hiring income.

INDUSTRY CLASS continued


|  | BASIC CHEMICAL AND CHEMICAL PRODUCT MFG cont. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 184 | Pharmaceutical and medicinal product mfg |  |  |  |  |  |  |
| 1841 | Human pharmaceutical and medicinal product mfg | 13375 | 945 | 6734 | 1706 | 503 | 128 |
| 1842 | Veterinary pharmaceutical and medicinal product mfg | 931 | 53 | 438 | 116 | 470 | 125 |
|  | Total | 14307 | 998 | 7172 | 1822 | 501 | 127 |
| 185 | Cleaning compound and toiletry preparation mfg |  |  |  |  |  |  |
| 1851 | Cleaning compound mfg | 4747 | 268 | 1917 | 609 | 404 | 128 |
| 1852 | Cosmetic and toiletry preparation mfg | 4471 | 195 | 989 | 313 | 221 | 70 |
|  | Total | 9219 | 463 | 2907 | 922 | 315 | 100 |
| 189 | Other basic chemical product mfg |  |  |  |  |  |  |
| 1891 | Photographic chemical product mfg | np | np | np | np | np | np |
| 1892 | Explosive mfg | np | np | np | np | np | np |
| 1899 | Other basic chemical product mfg n.e.c. | np | np | np | np | np | np |
|  | Total | 3030 | 217 | 1465 | 646 | 484 | 213 |
| 18 | Total basic chemical and chemical product mfg | 45109 | 2961 | 24772 | 6831 | 549 | 151 |
|  | POLYMER PRODUCT AND RUBBER PRODUCT MFG |  |  |  |  |  |  |
| 191 | Polymer product mfg |  |  |  |  |  |  |
| 1911 | Polymer film and sheet packaging material mfg | ^ 7535 | 444 | 2510 | 711 | 333 | 94 |
| 1912 | Rigid and semi-rigid polymer product mfg | 18849 | 910 | 5691 | 1779 | 302 | 94 |
| 1913 | Polymer foam product mfg | ^2320 | ^ 107 | ^ 677 | ^ 202 | 292 | 87 |
| 1914 | Tyre mfg | ヘ1722 | 90 | 374 | 141 | 217 | 82 |
| 1915 | Adhesive mfg | 1464 | 90 | 641 | 171 | 438 | 117 |
| 1916 | Paint and coatings mfg | 8107 | 553 | 3006 | 944 | 371 | 116 |
| 1919 | Other polymer product mfg | 9770 | 461 | ^2310 | ヘ 797 | 236 | 82 |
|  | Total | 49768 | 2655 | 15210 | 4745 | 306 | 95 |
| 192 | Natural rubber product mfg | 2763 | 168 | 794 | 272 | 287 | 98 |
| 19 | Total polymer product and rubber product mfg | 52531 | 2823 | 16004 | 5017 | 305 | 96 |
|  | NON-METALLIC MINERAL PRODUCT MFG |  |  |  |  |  |  |
| 201 | Glass and glass product mfg | 8398 | 450 | 2401 | 964 | 286 | 115 |
| 202 | Ceramic product mfg |  |  |  |  |  |  |
| 2021 | Clay brick mfg | 3219 | 194 | 968 | 454 | 301 | 141 |
| 2029 | Other ceramic product mfg | 2718 | - 140 | ^ 580 | ^ 213 | 213 | 79 |
|  | Total | 5937 | 335 | 1548 | 667 | 261 | 112 |

[^4]INDUSTRY CLASS continued


|  | NON-METALLIC MINERAL PRODUCT MFG cont. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 203 | Cement, lime, plaster and concrete product mfg |  |  |  |  |  |  |
| 2031 | Cement and lime mfg | 2879 | 232 | 1906 | 741 | 662 | 257 |
| 2032 | Plaster product mfg | 4935 | 259 | 1458 | 376 | 295 | 76 |
| 2033 | Ready-mixed concrete mfg | 8847 | 537 | 4647 | 937 | 525 | 106 |
| 2034 | Concrete product mfg | $\wedge 8990$ | ^ 483 | ^2331 | ^ 813 | 259 | 90 |
|  | Total | 25651 | 1512 | 10341 | 2868 | 403 | 112 |
| 209 | Other non-metallic mineral product mfg | 6419 | 316 | 1516 | 519 | 236 | 81 |
| 20 | Total non-metallic mineral product mfg | 46405 | 2613 | 15805 | 5019 | 341 | 108 |
|  | PRIMARY METAL AND METAL PRODUCT MFG |  |  |  |  |  |  |
| 211 | Basic ferrous metal mfg |  |  |  |  |  |  |
| 2110 | Iron smelting and steel mfg | 24548 | 1645 | 14049 | 3488 | 572 | 142 |
|  | Total | 24548 | 1645 | 14049 | 3488 | 572 | 142 |
| 212 | Basic ferrous metal product mfg |  |  |  |  |  |  |
| 2121 | Iron and steel casting | 6774 | 467 | 2007 | 889 | 296 | 131 |
| 2122 | Steel pipe and tube mfg | ヘ 4204 | ^212 | 1559 | 376 | 371 | 89 |
|  | Total | 10978 | 679 | 3566 | 1264 | 325 | 115 |
| 213 | Basic non-ferrous metal mfg |  |  |  |  |  |  |
| 2131 | Alumina production | 7957 | 858 | 8228 | 4393 | 1034 | 552 |
| 2132 | Aluminium smelting | 5854 | 511 | 8809 | 2277 | 1505 | 389 |
| 2133 | Copper, silver, lead and zinc smelting and refining | np | np | np | np | np | np |
| 2139 | Other basic non-ferrous metal mfg | np | np | np | np | np | np |
|  | Total | 19668 | 1788 | 40030 | 9895 | 2035 | 503 |
| 214 | Basic non-ferrous metal product mfg |  |  |  |  |  |  |
| 2141 | Non-ferrous metal casting | ^1062 | ^ 39 | ^ 161 | ^ 68 | 152 | 64 |
| 2142 | Aluminium rolling, drawing, extruding | 3582 | 184 | 1834 | 254 | 512 | 71 |
| 2149 | Other basic non-ferrous metal product mfg | ^1977 | ^100 | 1766 | ^ 188 | 893 | 95 |
|  | Total | 6621 | 323 | 3762 | 511 | 568 | 77 |
| 21 | Total primary metal and metal product mfg | 61815 | 4435 | 61406 | 15158 | 993 | 245 |
|  | FABRICATED METAL PRODUCT MFG |  |  |  |  |  |  |
| 221 | Iron and steel forging | 1349 | 87 | 575 | 170 | 426 | 126 |
| 222 | Structural metal product mfg |  |  |  |  |  |  |
| 2221 | Structural steel fabricating | 22087 | ^1139 | 6404 | ^2 098 | 290 | 95 |
| 2222 | Prefabricated metal building mfg | 4456 | 209 | 1589 | 512 | 357 | 115 |
| 2223 | Architectural aluminium product mfg | 17633 | 726 | 3571 | 1130 | 203 | 64 |
| 2224 | Metal roof and guttering mfg (except aluminium) | 1965 | 99 | 842 | 159 | 428 | 81 |
| 2229 | Other structural metal product mfg | 11809 | 493 | 2467 | 826 | 209 | 70 |
|  | Total | 57950 | 2665 | 14873 | 4725 | 257 | 82 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
np not available for publication but included in totals where applicable, unless otherwise indicated
(a) Includes working proprietors
(b) Excludes the drawings of working proprietors.
(c) Includes rent, leasing and hiring income.

INDUSTRY CLASS continued


FABRICATED METAL PRODUCT MFG cont.

| 223 | Metal container mfg |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2231 | Boiler, tank and other heavy gauge metal container mfg | 4956 | ^ 161 | 806 | 323 | 163 | 65 |
| 2239 | Other metal container mfg | 3869 | 238 | 1602 | 470 | 414 | 121 |
|  | Total | 8826 | 399 | 2409 | 793 | 273 | 90 |
| 224 | Sheet metal product mfg (except metal structural and container products) | 9217 | 406 | 1979 | 725 | 215 | 79 |
| 229 | Other fabricated metal product mfg |  |  |  |  |  |  |
| 2291 | Spring and wire product mfg | ^4132 | 206 | 1207 | 340 | 292 | 82 |
| 2292 | Nut, bolt, screw and rivet mfg | 1919 | 101 | 540 | 188 | 281 | 98 |
| 2293 | Metal coating and finishing | ^9 947 | ^ 435 | 1446 | ^ 693 | 145 | 70 |
| 2299 | Other fabricated metal product mfg n.e.c. | 21361 | 847 | ヘ 4253 | 1443 | 199 | 68 |
|  | Total | 37359 | 1589 | 7446 | 2663 | 199 | 71 |
| 22 | Total fabricated metal product mfg | 114700 | 5145 | 27282 | 9076 | 238 | 79 |
|  | TRANSPORT EQUIPMENT MFG |  |  |  |  |  |  |
| 231 | Motor vehicle and motor vehicle part mfg |  |  |  |  |  |  |
| 2311 | Motor vehicle mfg | 26135 | 1781 | 14023 | 2386 | 537 | 91 |
| 2312 | Motor vehicle body and trailer mfg | ^ 14344 | ^ 624 | ヘ 3168 | ^959 | 221 | 67 |
| 2313 | Automotive electrical component mfg | 4116 | 237 | 1462 | 414 | 355 | 100 |
| 2319 | Other motor vehicle parts mfg | 22789 | 1243 | 6074 | 2058 | 267 | 90 |
|  | Total | 67385 | 3884 | 24727 | 5816 | 367 | 86 |
| 239 | Other transport equipment mfg |  |  |  |  |  |  |
| 2391 | Shipbuilding and repair services | 8525 | 483 | 1826 | 713 | 214 | 84 |
| 2392 | Boatbuilding and repair services | 8516 | 295 | 1458 | 490 | 171 | 57 |
| 2393 | Railway rolling stock mfg and repair services | 7127 | 418 | 2378 | 612 | 334 | 86 |
| 2394 | Aircraft mfg and repair services | 13248 | 777 | 3182 | 1353 | 240 | 102 |
| 2399 | Other transport equipment mfg n.e.c. | 444 | ^12 | ^ 79 | 19 | 178 | 44 |
|  | Total | 37859 | 1985 | 8923 | 3187 | 236 | 84 |
| 23 | Total transport equipment mfg | 105244 | 5869 | 33650 | 9003 | 320 | 86 |
|  | MACHINERY AND EQUIPMENT MFG |  |  |  |  |  |  |
| $\begin{aligned} & 241 \\ & 2411 \end{aligned}$ | Professional and scientific equipment mfg |  |  |  |  |  |  |
|  | Photographic, optical and ophthalmic equipment mfg | 1971 | 82 | 286 | 117 | 145 | 60 |
| 2412 | Medical and surgical equipment mfg | 11699 | 583 | 2478 | 1140 | 212 | 97 |
| 2419 | Other professional and scientific equipment mfg | 8475 | 537 | 2055 | 833 | 242 | 98 |
|  | Total | 22146 | 1202 | 4820 | 2090 | 218 | 94 |
| $\begin{aligned} & 242 \\ & 2421 \end{aligned}$ | Computer and electronic equipment mfg |  |  |  |  |  |  |
|  | Computer and electronic office equipment mfg | ^ 4787 | ^ 212 | 1431 | ^ 302 | 299 | 63 |
| 2422 | Communication equipment mfg | ^4 444 | ^ 308 | ^1594 | ^ 641 | 343 | 138 |
| 2429 | Other electronic equipment mfg | 7199 | 461 | 1890 | 800 | 263 | 111 |
|  | Total | 16630 | 981 | 4915 | 1743 | 296 | 105 |

- estimate has a relative standard error of $10 \%$ to less than $25 \%$ and
(b) Excludes the drawings of working proprietors.
should be used with caution
(c) Includes rent, leasing and hiring income.
(a) Includes working proprietors.

INDUSTRY CLASS continued


## MACHINERY AND EQUIPMENT MFG cont.

| 243 | Electrical equipment mfg |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2431 | Electric cable and wire mfg | 2845 | 173 | 1778 | 376 | 625 | 132 |
| 2432 | Electric lighting equipment mfg | ^4348 | ^ 218 | 1127 | - 340 | 259 | 78 |
| 2439 | Other electrical equipment mfg | 11948 | 618 | 3744 | 1042 | 313 | 87 |
|  | Total | 19142 | 1009 | 6650 | 1757 | 347 | 92 |
| 244 | Domestic appliance mfg |  |  |  |  |  |  |
| 2441 | Whiteware appliance mfg | - 3313 | ^ 173 | ^1140 | ^ 239 | 344 | 72 |
| 2449 | Other domestic appliance mfg | 3598 | 162 | 1012 | 360 | 281 | 100 |
|  | Total | 6911 | 335 | 2152 | 598 | 311 | 87 |
| 245 | Pump, compressor, heating and ventilation equipment mfg |  |  |  |  |  |  |
| 2451 | Pump and compressor mfg | 4005 | 228 | 1185 | 405 | 296 | 101 |
| 2452 | Fixed space heating, cooling and ventilation equipment mfg | 4371 | 212 | 1020 | 308 | 233 | 70 |
|  | Total | 8376 | 440 | 2205 | 713 | 263 | 85 |
| 246 | Specialised machinery and equipment mfg |  |  |  |  |  |  |
| 2461 | Agricultural machinery and equipment mfg | 7015 | 273 | 1938 | 464 | 276 | 66 |
| 2462 | Mining and construction machinery mfg | ^ 11873 | 582 | ^3459 | 1054 | 291 | 89 |
| 2463 | Machine tool and parts mfg | ^5510 | *225 | *893 | *395 | 162 | 72 |
| 2469 | Other specialised machinery and equipment mfg | ^ 6387 | ^ 291 | 1273 | ^ 390 | 199 | 61 |
|  | Total | 30786 | 1370 | 7564 | 2303 | 246 | 75 |
| $\begin{aligned} & 249 \\ & 2491 \end{aligned}$ | Other machinery and equipment mfg |  |  |  |  |  |  |
|  | Lifting and material handling equipment mfg | 8137 | 456 | 2321 | 711 | 285 | 87 |
| 2499 | Other machinery and equipment mfg n.e.c. | ^7351 | ^ 394 | ^1958 | ^ 622 | 266 | 85 |
|  | Total | 15488 | 850 | 4279 | 1333 | 276 | 86 |
| 24 | Total machinery and equipment mfg | 119477 | 6187 | 32583 | 10538 | 273 | 88 |
|  | FURNITURE AND OTHER MFG |  |  |  |  |  |  |
| 251 | Furniture mfg |  |  |  |  |  |  |
| 2511 | Wooden furniture and upholstered seat mfg | *17327 | ^ 621 | ^2712 | ^ 944 | 157 | 55 |
| 2512 | Metal furniture mfg | *3079 | ^ 166 | **1275 | *322 | 414 | 104 |
| 2513 | Mattress mfg | ^2595 | ^114 | ^ 580 | 135 | 223 | 52 |
| 2519 | Other furniture mfg | ^2550 | ^118 | ^ 349 | ^156 | 137 | 61 |
|  | Total | ^25 550 | ^1020 | ^4916 | ^1558 | 192 | 61 |
| 259 | Other mfg |  |  |  |  |  |  |
| 2591 | Jewellery and silverware mfg | ^ 4394 | ^98 | ~ 753 | ^ 196 | 171 | 45 |
| 2592 | Toy, sporting and recreational product mfg | 3564 | ^96 | ^ 516 | 159 | 145 | 44 |
| 2599 | Other mfg n.e.c. | 7522 | 287 | ^1566 | 446 | 208 | 59 |
|  | Total | 15480 | 480 | 2835 | 800 | 183 | 52 |
| 25 | Total furniture and other mfg | ^41030 | 1501 | ^7751 | 2358 | 189 | 57 |
| 11-25 | TOTAL MANUFACTURING | 1014080 | 50228 | 377930 | 98997 | 373 | 98 |

- estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
* estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
** estimate has a relative standard error greater than $50 \%$ and is considered too unreliable for general use
(a) Includes working proprietors.
(b) Excludes the drawings of working proprietors.
(c) Includes rent, leasing and hiring income.

EMPLOYMENT SIZE(a)(b)


## FOOD PRODUCT MFG

| O-4 persons | 9.3 | 4.5 | 128 | 1.5 | 3075 | 4.7 | 321 | 2.2 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | 11.8 | 5.7 | 271 | 3.1 | 2417 | 3.7 | 489 | 3.4 |
| 10-19 persons | 24.3 | 11.8 | 537 | 6.2 | 2517 | 3.9 | 902 | 6.2 |
| 20-49 persons | 22.6 | 11.0 | 562 | 6.5 | 3363 | 5.2 | 949 | 6.6 |
| 50-99 persons | 21.3 | 10.3 | 907 | 10.5 | 6100 | 9.4 | 1265 | 8.8 |
| Total less than 100 persons | 89.4 | 43.3 | 2405 | 27.8 | 17471 | 27.0 | 3925 | 27.2 |
| 100-199 persons |  |  |  |  |  |  | 7.4 | 1140 |
| 200-499 persons | 14.1 | 6.8 | 664 | 7.7 | 4774 | 7.9 |  |  |
| 500-999 persons | 20.5 | 9.9 | 974 | 11.3 | 8398 | 13.0 | 1714 | 11.9 |
| 1 OO0 or more persons | 21.5 | 10.4 | 1152 | 13.3 | 10951 | 16.9 | 1873 | 13.0 |
| Total 100 or more persons | 60.9 | 29.5 | 3446 | 39.9 | 23213 | 35.8 | 5803 | 40.1 |
| Total | 117.0 | 56.7 | 6236 | 72.2 | 47336 | 73.0 | 10530 | 72.8 |


|  | BEVERAGE AND TOBACCO PRODUCT MFG |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-4 persons | 1.7 | 5.0 | 31 | 1.8 | 381 | 2.2 | 70 | 1.2 |
| 5-9 persons | 3.1 | 9.1 | 118 | 6.7 | 531 | 3.1 | 244 | 4.2 |
| 10-19 persons | 1.8 | 5.4 | 53 | 3.0 | 205 | 1.2 | 103 | 1.8 |
| 20-49 persons | 2.6 | 7.7 | 88 | 5.0 | 479 | 2.8 | 122 | 2.1 |
| 50-99 persons | 1.9 | 5.6 | 66 | 3.7 | 429 | 2.5 | 156 | 2.7 |
| Total less than 100 persons | 11.0 | 32.7 | 355 | 20.2 | 2025 | 11.9 | 695 | 12.0 |
| 100-199 persons | 2.0 | 5.9 | 105 | 6.0 | 802 | 4.7 | 208 | 3.6 |
| 200-499 persons | 2.1 | 6.3 | 118 | 6.7 | 1618 | 9.5 | 534 | 9.2 |
| 500-999 persons | 5.6 | 16.5 | 351 | 20.0 | 3782 | 22.2 | 1649 | 28.5 |
| 1000 or more persons | 13.0 | 38.5 | 829 | 47.2 | 8781 | 51.6 | 2701 | 46.7 |
| Total 100 or more persons | 22.7 | 67.3 | 1403 | 79.8 | 14984 | 88.1 | 5092 | 88.0 |
| Total | 33.7 | 100.0 | 1758 | 100.0 | 17009 | 100.0 | 5787 | 100.0 |

TEXTILE, LEATHER, CLOTHING AND FOOTWEAR MFG

| 0-4 persons | 12.8 | 23.8 | 170 | 10.1 | 1333 | 14.1 | 418 | 15.1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | 6.2 | 11.6 | 171 | 10.1 | 818 | 8.7 | 268 | 9.7 |
| 10-19 persons | 6.2 | 11.6 | 186 | 11.0 | 946 | 10.0 | 295 | 10.7 |
| 20-49 persons | 9.0 | 16.7 | 288 | 17.1 | 1587 | 16.8 | 470 | 17.0 |
| 50-99 persons | 6.2 | 11.5 | 274 | 16.3 | 1525 | 16.2 | 393 | 14.2 |
| Total less than 100 persons | 40.4 | 75.1 | 1089 | 64.7 | 6209 | 65.8 | 1845 | 66.6 |
| 100-199 persons |  |  |  |  |  |  |  |  |
| 200-499 persons | 5.3 | 9.8 | 243 | 14.4 | 1315 | 13.9 | 366 | 13.2 |
| 500-999 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 1 O00 or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total 100 or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total | 13.4 | 24.9 | 595 | 35.3 | 3232 | 34.2 | 926 | 33.4 |

np not available for publication but included in totals where applicable, unless otherwise indicated
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.
(a) See Explanatory Notes paragraphs 44 and 45.
(b) Relative standard errors have only been presented for subdivision totals in this table. For further details see Technical Note 1 paragraph 21
2.3

EMPLOYMENT SIZE(a)(b) continued

|  | Employm end of Ju |  | Wages and salaries(d) |  | Sales an income |  | Industry va |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size groups | '000 | \% | \$m | \% | \$m | \% | \$m | \% |

WOOD PRODUCT MFG

| 0-4 persons | 7.6 | 14.6 | 105 | 5.0 | 899 | 7.6 | 308 | 7.8 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | 5.0 | 9.6 | 206 | 9.8 | 812 | 6.9 | 355 | 9.0 |
| 10-19 persons | 8.0 | 15.5 | 339 | 16.1 | 1435 | 12.2 | 490 | 12.4 |
| 20-49 persons | 8.6 | 16.6 | 322 | 15.3 | 1590 | 13.5 | 541 | 13.7 |
| 50-99 persons | 5.7 | 10.9 | 248 | 11.8 | 1446 | 12.3 | 452 | 11.5 |
| Total less than 100 persons | 34.9 | 67.2 | 1219 | 58.0 | 6182 | 52.5 | 2146 | 54.5 |
| 100-199 persons |  |  |  |  |  |  |  |  |
| 200-499 persons | 3.4 | 6.5 | 145 | 6.9 | 630 | 5.3 | 213 | 5.4 |
| 500-999 persons | 6.0 | 11.5 | 296 | 14.1 | 2038 | 17.3 | 570 | 14.5 |
| 1 O00 or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total 100 or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total | 17.0 | 32.8 | 884 | 42.0 | 5601 | 47.5 | 1794 | 45.5 |


| PULP, PAPER AND CONVERTED PAPER PRODUCT MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-4 persons | 0.9 | 3.9 | 21 | 1.4 | 158 | 1.6 | 42 | 1.6 |
| 5-9 persons | 1.3 | 5.4 | 57 | 3.9 | 272 | 2.8 | 81 | 3.0 |
| 10-19 persons | 1.6 | 6.7 | 50 | 3.4 | 339 | 3.5 | 87 | 3.3 |
| 20-49 persons | 2.8 | 11.6 | 99 | 6.7 | 557 | 5.8 | 152 | 5.7 |
| 50-99 persons | 2.5 | 10.5 | 103 | 7.0 | 510 | 5.3 | 149 | 5.6 |
| Total less than 100 persons | 9.1 | 38.1 | 330 | 22.5 | 1835 | 19.1 | 510 | 19.2 |
| 100-199 persons | 1.2 | 4.9 | 67 | 4.6 | 435 | 4.5 | 123 | 4.6 |
| 200-499 persons | 4.3 | 17.9 | 254 | 17.3 | 1603 | 16.7 | 424 | 15.9 |
| 500-999 persons | np | np | np | np | np | np | np | np |
| 1000 or more persons | np | np | np | np | np | np | np | np |
| Total 100 or more persons | 14.7 | 61.9 | 1140 | 77.5 | 7771 | 80.9 | 2147 | 80.8 |
| Total | 23.8 | 100.0 | 1470 | 100.0 | 9605 | 100.0 | 2657 | 100.0 |

PRINTING (INCLUDING THE REPRODUCTION OF RECORDED MEDIA)

| O-4 persons | 5.8 | 11.4 | 98 | 4.2 | 697 | 7.4 | 284 | 7.3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 10-19 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 20-49 persons | 8.6 | 17.1 | 336 | 14.4 | 1323 | 14.1 | 529 | 13.6 |
| 50-99 persons | 4.9 | 9.8 | 238 | 10.2 | 1138 | 12.1 | 430 | 11.1 |
| Total less than 100 persons | 31.8 | 63.2 | 1168 | 50.2 | 4945 | 52.8 | 2069 | 53.3 |
| 100-199 persons |  |  |  |  |  |  |  |  |
| 200-499 persons | 9.9 | 19.7 | 569 | 24.5 | 1984 | 21.2 | 847 | 21.8 |
| 500-999 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 1 OOO or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total 100 or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total | 18.5 | 36.8 | 1158 | 49.8 | 4426 | 47.2 | 1811 | 46.7 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
np not available for publication but included in totals where applicable, unless otherwise indicated
(a) See Explanatory Notes paragraphs 44 and 45.
(b) Relative standard errors have only been presented for subdivision totals in this table. For further details see Technical Note 1 paragraph 21.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.

EMPLOYMENT SIZE(a)(b) continued

|  | Employment at end of June(c) |  | Wages and salaries(d) |  | Sales and service income(e) |  | Industry value added |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size groups | '000 | \% | \$m | \% | \$m | \% | \$m | \% |

## PETROLEUM AND COAL PRODUCT MFG

| 0-4 persons | 0.3 | 4.3 | 23 | 3.2 | 221 | 0.6 | 25 | 1.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 10-19 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 20-49 persons | 0.8 | 10.8 | 52 | 7.4 | 518 | 1.4 | 142 | 5.7 |
| 50-99 persons | 0.3 | 3.7 | 30 | 4.2 | 304 | 0.8 | 73 | 2.9 |
| Total less than 100 persons | 1.8 | 22.4 | 114 | 16.1 | 1138 | 3.1 | 255 | 10.2 |
| 100-199 persons |  |  |  |  |  |  |  |  |
| 200-499 persons | 0.6 | 8.0 | 47 | 6.6 | 353 | 1.0 | 68 | 2.7 |
| 500-999 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 1 OOO or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total 100 or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total | 6.1 | 77.6 | 597 | 83.9 | 35523 | 96.9 | 2251 | 89.8 |


| BASIC CHEMICAL AND CHEMICAL PRODUCT MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-4 persons | 1.6 | 3.5 | 37 | 1.3 | 809 | 3.3 | 312 | 4.6 |
| 5-9 persons | 2.0 | 4.3 | 77 | 2.6 | 444 | 1.8 | 98 | 1.4 |
| 10-19 persons | 2.9 | 6.3 | 119 | 4.0 | 687 | 2.8 | 219 | 3.2 |
| 20-49 persons | 5.8 | 12.8 | 289 | 9.8 | 1940 | 7.8 | 607 | 8.9 |
| 50-99 persons | 4.7 | 10.5 | 287 | 9.7 | 2536 | 10.2 | 681 | 10.0 |
| Total less than 100 persons | 16.9 | 37.4 | 810 | 27.4 | 6416 | 25.9 | 1917 | 28.1 |
| 100-199 persons | 4.1 | 9.2 | 283 | 9.5 | 3018 | 12.2 | 629 | 9.2 |
| 200-499 persons | 6.8 | 15.1 | 450 | 15.2 | 3081 | 12.4 | 852 | 12.5 |
| 500-999 persons | 7.4 | 16.4 | 630 | 21.3 | 5537 | 22.4 | 1335 | 19.5 |
| 1000 or more persons | 9.9 | 21.8 | 788 | 26.6 | 6719 | 27.1 | 2098 | 30.7 |
| Total 100 or more persons | 28.2 | 62.6 | 2151 | 72.6 | 18356 | 74.1 | 4914 | 71.9 |
| Total | 45.1 | 100.0 | 2961 | 100.0 | 24772 | 100.0 | 6831 | 100.0 |

POLYMER PRODUCT AND RUBBER PRODUCT MFG

|  | 3.2 | 6.2 | 95 | 3.4 | 608 | 3.8 | 166 | 3.3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| O-4 persons | 3.1 | 5.9 | 181 | 6.4 | 488 | 3.1 | 234 | 4.7 |
| 5-9 persons | 6.7 | 12.7 | 280 | 9.9 | 1415 | 8.8 | 466 | 9.3 |
| 10-19 persons | 7.3 | 14.0 | 388 | 13.7 | 2419 | 15.1 | 705 | 14.1 |
| 20-49 persons | 7.1 | 13.4 | 389 | 13.8 | 2243 | 14.0 | 671 | 13.4 |
| 50-99 persons | 27.4 | 52.2 | 1333 | 47.2 | 7172 | 44.8 | 2244 | 44.7 |
| Total less than 100 persons |  |  |  |  |  |  |  |  |
| 100-199 persons | 7.4 | 14.0 | 390 | 13.8 | 2449 | 15.3 | 691 | 13.8 |
| 200-499 persons | 6.4 | 12.2 | 371 | 13.2 | 2154 | 13.5 | 691 | 13.8 |
| 500-999 persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| 1 OOO or more persons | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ | $n p$ |
| Total 100 or more persons | 25.1 | 47.8 | 1490 | 52.8 | 8832 | 55.2 | 2774 | 55.3 |
| Total |  |  |  |  |  |  |  |  |

np not available for publication but included in totals where applicable, unless otherwise indicated
(a) See Explanatory Notes paragraphs 44 and 45.
(b) Relative standard errors have only been presented for subdivision totals in this table. For further details see Technical Note 1 paragraph 21 Note 1 paraph 21.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.
2.3

EMPLOYMENT SIZE(a)(b) continued

|  | Employment at end of June(c) |  | Wages and salaries(d) |  | Sales and service income(e) |  | Industry value added |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size groups | '000 | \% | \$m | \% | \$m | \% | \$m | \% |

## NON-METALLIC MINERAL PRODUCT MFG

| 0-4 persons | 4.8 | 10.4 | 108 | 4.1 | 641 | 4.1 | 211 | 4.2 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | 3.6 | 7.7 | 121 | 4.6 | 482 | 3.1 | 183 | 3.7 |
| 10-19 persons | 3.1 | 6.6 | 133 | 5.1 | 763 | 4.8 | 234 | 4.7 |
| 20-49 persons | 4.2 | 9.1 | 214 | 8.2 | 1478 | 9.3 | 411 | 8.2 |
| 50-99 persons | 4.1 | 8.7 | 230 | 8.8 | 1558 | 9.9 | 500 | 10.0 |
| Total less than 100 persons | 19.7 | 42.5 | 805 | 30.8 | 4921 | 31.1 | 1539 | 30.7 |
| 100-199 persons |  |  |  |  |  |  |  |  |
| 200-499 persons | 3.9 | 8.4 | 236 | 9.0 | 1421 | 9.0 | 370 | 7.4 |
| 500-999 persons | 5.9 | 12.8 | 391 | 15.0 | 1895 | 12.0 | 676 | 13.5 |
| 1 O00 or more persons | 6.1 | 13.2 | 459 | 17.6 | 2785 | 17.6 | 971 | 19.3 |
| Total 100 or more persons | 10.7 | 23.1 | 721 | 27.6 | 4783 | 30.3 | 1463 | 29.1 |
| Total | 26.7 | 57.5 | 1808 | 69.2 | 10884 | 68.9 | 3480 | 69.3 |


| PRIMARY METAL AND METAL PRODUCT MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-4 persons | 2.1 | 3.4 | 90 | 2.0 | 1700 | 2.8 | 590 | 3.9 |
| 5-9 persons | 5.7 | 9.2 | 255 | 5.7 | 1813 | 3.0 | 640 | 4.2 |
| 10-19 persons | 2.4 | 3.9 | 110 | 2.5 | 1818 | 3.0 | 1341 | 8.8 |
| 20-49 persons | 4.3 | 7.0 | 216 | 4.9 | 1272 | 2.1 | 477 | 3.1 |
| 50-99 persons | 4.2 | 6.8 | 219 | 4.9 | 1598 | 2.6 | 440 | 2.9 |
| Total less than 100 persons | 18.7 | 30.2 | 890 | 20.1 | 8201 | 13.4 | 3487 | 23.0 |
| 100-199 persons | 2.9 | 4.7 | 243 | 5.5 | 2647 | 4.3 | 356 | 2.4 |
| 200-499 persons | 4.3 | 6.9 | 274 | 6.2 | 14939 | 24.3 | 808 | 5.3 |
| 500-999 persons | 8.9 | 14.5 | 675 | 15.2 | 14414 | 23.5 | 3952 | 26.1 |
| 1000 or more persons | 27.0 | 43.7 | 2353 | 53.1 | 21205 | 34.5 | 6554 | 43.2 |
| Total 100 or more persons | 43.1 | 69.8 | 3545 | 79.9 | 53205 | 86.6 | 11671 | 77.0 |
| Total | 61.8 | 100.0 | 4435 | 100.0 | 61406 | 100.0 | 15158 | 100.0 |

FABRICATED METAL PRODUCT MFG

| 0-4 persons | 14.2 | 12.4 | 286 | 5.6 | 2186 | 8.0 | 746 | 8.2 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | 16.8 | 14.6 | 677 | 13.2 | 2772 | 10.2 | 1196 | 13.2 |
| 10-19 persons | 16.9 | 14.7 | 611 | 11.9 | 2680 | 9.8 | 934 | 10.3 |
| 20-49 persons | 17.6 | 15.3 | 788 | 15.3 | 4345 | 15.9 | 1393 | 15.3 |
| 50-99 persons | 11.9 | 10.4 | 614 | 11.9 | 3487 | 12.8 | 1115 | 12.3 |
| Total less than 100 persons | 77.4 | 67.5 | 2977 | 57.9 | 15469 | 56.7 | 5385 | 59.3 |
| 100-199 persons | 12.6 | 11.0 | 765 | 14.9 | 3471 | 12.7 | 1311 | 14.4 |
| 200-499 persons | 9.6 | 8.4 | 548 | 10.6 | 3579 | 13.1 | 1055 | 11.6 |
| 500-999 persons | 8.7 | 7.6 | 479 | 9.3 | 2651 | 9.7 | 762 | 8.4 |
| 1 O00 or more persons | 6.4 | 5.6 | 377 | 7.3 | 2111 | 7.7 | 563 | 6.2 |
| Total 100 or more persons | 37.3 | 32.5 | 2168 | 42.1 | 11813 | 43.3 | 3690 | 40.7 |
| Total |  |  |  |  |  |  |  |  |

(a) See Explanatory Notes paragraphs 44 and 45.
(b) Relative standard errors have only been presented for subdivision totals in this table. For further details see Technical Note 1 paragraph 21
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.
2.3

EMPLOYMENT SIZE(a)(b) continued

|  | Employ end of |  | Wages salarie |  | Sales and income(e) |  | Industry val |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size groups | '000 | \% | \$m | \% | \$m | \% | \$m | \% |

## TRANSPORT EQUIPMENT MFG

| 0-4 persons | 5.9 | 5.6 | 108 | 1.8 | 826 | 2.5 | 216 | 2.4 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 5-9 persons | 7.9 | 7.6 | 257 | 4.4 | 1076 | 3.2 | 451 | 5.0 |
| 10-19 persons | 8.2 | 7.8 | 334 | 5.7 | 1373 | 4.1 | 615 | 6.8 |
| 20-49 persons | 11.1 | 10.6 | 489 | 8.3 | 2500 | 7.4 | 761 | 8.5 |
| 50-99 persons | 5.6 | 5.3 | 274 | 4.7 | 1497 | 4.4 | 421 | 4.7 |
| Total less than 100 persons | 38.7 | 36.8 | 1461 | 24.9 | 7273 | 21.6 | 2464 | 27.4 |
| 100-199 persons |  |  |  |  |  |  | 7.4 | 8.0 |
| 200-499 persons | 7.9 | 7.5 | 421 | 7.2 | 2256 | 6.7 | 722 | 1088 |
| 500-999 persons | 11.9 | 11.3 | 766 | 13.0 | 3898 | 11.6 | 12.1 |  |
| 1 O00 or more persons | 10.3 | 9.7 | 550 | 9.4 | 3143 | 9.3 | 919 | 10.2 |
| Total 100 or more persons | 36.6 | 34.7 | 2672 | 45.5 | 17080 | 50.8 | 3810 | 42.3 |
| Total | 66.6 | 63.2 | 4408 | 75.1 | 26377 | 78.4 | 6539 | 72.6 |


| MACHINERY AND EQUIPMENT MFG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-4 persons | 11.3 | 9.4 | 351 | 5.7 | 2077 | 6.4 | 783 | 7.4 |
| 5-9 persons | 8.5 | 7.2 | 345 | 5.6 | 1791 | 5.5 | 574 | 5.4 |
| 10-19 persons | 13.7 | 11.5 | 575 | 9.3 | 2746 | 8.4 | 967 | 9.2 |
| 20-49 persons | 22.3 | 18.6 | 1049 | 17.0 | 4848 | 14.9 | 1626 | 15.4 |
| 50-99 persons | 13.4 | 11.2 | 719 | 11.6 | 4332 | 13.3 | 1225 | 11.6 |
| Total less than 100 persons | 69.3 | 58.0 | 3039 | 49.1 | 15793 | 48.5 | 5174 | 49.1 |
| 100-199 persons | 16.2 | 13.5 | 950 | 15.4 | 5455 | 16.7 | 1557 | 14.8 |
| 200-499 persons | 15.0 | 12.5 | 901 | 14.6 | 4790 | 14.7 | 1593 | 15.1 |
| 500-999 persons | 10.0 | 8.3 | 683 | 11.0 | 3932 | 12.1 | 1269 | 12.0 |
| 1000 or more persons | 9.1 | 7.6 | 614 | 9.9 | 2612 | 8.0 | 945 | 9.0 |
| Total 100 or more persons | 50.2 | 42.0 | 3148 | 50.9 | 16789 | 51.5 | 5364 | 50.9 |
| Total | 119.5 | 100.0 | 6187 | 100.0 | 32583 | 100.0 | 10538 | 100.0 |

FURNITURE AND OTHER MFG

| 0-4 persons | 9.4 | 22.9 | 229 | 15.3 | 1770 | 22.8 | 551 | 23.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9 persons | 3.9 | 9.5 | 134 | 8.9 | 833 | 10.7 | 212 | 9.0 |
| 10-19 persons | 5.8 | 14.3 | 228 | 15.2 | 1206 | 15.6 | 312 | 13.3 |
| 20-49 persons | 12.1 | 29.5 | 483 | 32.2 | 1928 | 24.9 | 639 | 27.1 |
| 50-99 persons | 5.7 | 13.8 | 208 | 13.9 | 882 | 11.4 | 322 | 13.7 |
| Total less than 100 persons | 36.9 | 90.0 | 1282 | 85.4 | 6619 | 85.4 | 2037 | 86.4 |
| 100-199 persons | 2.4 | 5.9 | 127 | 8.5 | 596 | 7.7 | 189 | 8.0 |
| 200-499 persons | 1.7 | 4.1 | 92 | 6.1 | 536 | 6.9 | 132 | 5.6 |
| 500-999 persons | - | - | - | - | - | - | - | - |
| 1000 or more persons | - | - | - | - | - | - | - | - |
| Total 100 or more persons | 4.1 | 10.0 | 219 | 14.6 | 1132 | 14.6 | 321 | 13.6 |
| Total | ^41.0 | 100.0 | 1501 | 100.0 | ^ 7751 | 100.0 | 2358 | 100.0 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution

- nil or rounded to zero (including null cells)
(a) See Explanatory Notes paragraphs 44 and 45.
(b) Relative standard errors have only been presented for subdivision totals in this table. For further details see Technical Note 1 paragraph 21.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.

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CHAPTER 2 • NATIONAL DATA
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2.3 EMPLOYMENT SIZE (a) (b) continued

|  | Employment at end of June(c) |  | Wages and salaries(d) |  | Sales and service income(e) |  | Industry value added |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment size groups | '000 | \% | \$m | \% | \$m | \% | \$m | \% |
| TOTAL MANUFACTURING |  |  |  |  |  |  |  |  |
| 0-4 persons | 90.9 | 9.0 | 1881 | 3.7 | 17379 | 4.6 | 5045 | 5.1 |
| 5-9 persons | 84.5 | 8.3 | 2973 | 5.9 | 15086 | 4.0 | 5227 | 5.3 |
| 10-19 persons | 108.7 | 10.7 | 3954 | 7.9 | 19475 | 5.2 | 7604 | 7.7 |
| 20-49 persons | 139.8 | 13.8 | 5662 | 11.3 | 30146 | 8.0 | 9524 | 9.6 |
| 50-99 persons | 99.5 | 9.8 | 4807 | 9.6 | 29584 | 7.8 | 8294 | 8.4 |
| Total less than 100 persons | 523.3 | 51.6 | 19278 | 38.4 | 111670 | 29.5 | 35694 | 36.1 |
| 100-199 persons | 93.8 | 9.2 | 5254 | 10.5 | 31606 | 8.4 | 8791 | 8.9 |
| 200-499 persons | 105.1 | 10.4 | 6040 | 12.0 | 59708 | 15.8 | 11601 | 11.7 |
| 500-999 persons | 94.1 | 9.3 | 6025 | 12.0 | 65833 | 17.4 | 15143 | 15.3 |
| 1000 or more persons | 197.7 | 19.5 | 13631 | 27.1 | 109113 | 28.9 | 27768 | 28.0 |
| Total 100 or more persons | 490.8 | 48.4 | 30950 | 61.6 | 266260 | 70.5 | 63303 | 63.9 |
| Total | 1014.1 | 100.0 | 50228 | 100.0 | 377930 | 100.0 | 98997 | 100.0 |

(a) See Explanatory Notes paragraphs 44 and 45.
(b) Relative standard errors have only been presented for subdivision totals in this table. For further details see Technical Note 1 paragraph 21.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
(a) Includes value of capital work done for own use reported in table 1.3. STATES, TERRITORIES AND AUSTRALIA

Table 3.1 illustrates each state or territory's share of economic aggregates relating to Australian manufacturing in 2006-07. The distribution was similar across all three variables presented, except for Western Australia where its share of sales and service income exceeded its share of employment and wages and salaries. Victoria's share of wages and salaries was greater than its share of sales and service income and employment.

KEY DATA continued

SALES AND SERVICE INCOME

EMPLOYMENT

STATE AND TERRITORY COMPOSITION

NEW SOUTH WALES

VICTORIA

QUEENSLAND

DISTRIBUTION OF EMPLOYMENT, WAGES AND SALARIES AND SALES AND SERVICE INCOME


In 2006-07, New South Wales accounted for $29 \%$ of sales and service income for all Australian manufacturing, ahead of Victoria (28\%), Queensland (19\%) and Western Australia (14\%).

Victoria and New South Wales each reported a $29 \%$ share of Australian manufacturing employment in 2006-07. They were followed by Queensland with $20 \%$, then South Australia and Western Australia (both 10\%).

An outline of the composition of manufacturing industry within each state, the Australian Capital Territory and the Northern Territory follows.

Food product manufacturing was the most dominant manufacturing industry in New South Wales, as measured by contribution to the state's employment (21\%), wages and salaries ( $18 \%$ ) and sales and service income (17\%) in 2006-07. Machinery and equipment manufacturing ranked second in employment (14\%) and wages and salaries (16\%).

Measured by sales and service income, businesses located in New South Wales topped eight of the 15 manufacturing industry subdivisions.

The largest manufacturing industry, in terms of sales and service income (20\%) and employment (19\%), was Food product manufacturing. Transport equipment manufacturing and Food product manufacturing were the most significant contributors to the state's wages and salaries ( $17 \%$ each). Transport equipment manufacturing ranked second in both sales and service income (15\%) and employment (14\%).

Victoria was the largest contributor to six industry subdivisions, as measured by sales and service income. The state accounted for $45 \%$ of national sales and service income for Transport equipment manufacturing.

In 2006-07, Food product manufacturing was the most dominant manufacturing industry in Queensland, as measured by employment (24\%), wages and salaries (21\%) and sales and service income (20\%). Ranking second in sales and service income (19\%) was Primary metal and metal product manufacturing, while Fabricated metal product manufacturing ranked second in wages and salaries (12\%).

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CHAPTER 3 • STATES, TERRITORIES AND AUSTRALIA
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| SOUTH AUSTRALIA | Transport equipment manufacturing was the largest contributor to sales and service income (22\%) and wages and salaries (19\%). |
| :---: | :---: |
| WESTERN AUSTRALIA | Primary metal and metal product manufacturing earned $43 \%$ of Western Australia's sales and service income in 2006-07. |
|  | Western Australia's contribution to sales and service income in Primary metal and metal product manufacturing was the largest of all states and territories at $37 \%$ of the national total. |
| TASMANIA | Food product manufacturing was the most significant contributor to manufacturing wages and salaries in Tasmania (24\%). Primary metal and metal product manufacturing ranked first in sales and service income (27\%), followed by Food product manufacturing (20\%) and Wood product manufacturing (10\%). |
| NORTHERN TERRITORY | The Northern Territory was second smallest contributor of all states and territories to total manufacturing sales and service income (0.7\%) and wages and salaries (0.6\%). It recorded the smallest employment, $0.5 \%$ of the national total. |
| AUSTRALIAN CAPITAL | The Australian Capital Territory was the smallest contributor at the national level to sales |
| TERRITORY | and service income ( $0.3 \%$ ) and wages and salaries ( $0.4 \%$ ). The territory was the second smallest employer, contributing $0.5 \%$ of total manufacturing's employment. |

STATES, TERRITORIES AND AUSTRALIA(a)(b)

| INDUSTRY SUBDIVISION |  | Employment at end of June(c) | Wages and <br> Salaries(d) | Sales and senvice income(e) | Sales and service income per person employed(f) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |  |
| Code | Description | no. | \$m | \$m | \$'000 |
| NEW SOUTH WALES |  |  |  |  |  |
| 11 | Food product mfg | 60297 | 2640 | 18975 | 315 |
| 12 | Beverage and tobacco product mfg | 9345 | 598 | 6099 | 653 |
| 13 | Textile, leather, clothing and footwear mfg | 17237 | 561 | 3276 | 190 |
| 14 | Wood product mfg | ^ 12158 | ~ 486 | ^2908 | 239 |
| 15 | Pulp, paper and converted paper product mfg | 6813 | 412 | 3560 | 522 |
| 16 | Printing (including the reproduction of recorded media) | ^ 21885 | ^944 | ^ 4068 | 186 |
| 17 | Petroleum and coal product mfg | 1903 | np | np | np |
| 18 | Basic chemical and chemical product mfg | 13667 | 893 | 8339 | 610 |
| 19 | Polymer product and rubber product mfg | ^14 486 | 762 | 4124 | 285 |
| 20 | Non-metallic mineral product mfg | 13384 | 780 | 4139 | 309 |
| 21 | Primary metal and metal product mfg | 17890 | 1317 | 13267 | 742 |
| 22 | Fabricated metal product mfg | 32339 | 1384 | 7453 | 230 |
| 23 | Transport equipment mfg | 17352 | 946 | 4745 | 273 |
| 24 | Machinery and equipment mfg | 41496 | 2326 | 12111 | 292 |
| 25 | Furniture and other mfg | 11030 | np | np | np |
| 11-25 | Total manufacturing | 291283 | 14712 | 111442 | 383 |


| VICTORIA |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | Food product mfg | 56557 | 2568 | 21165 | 374 |
| 12 | Beverage and tobacco product mfg | 7583 | 389 | 4242 | 559 |
| 13 | Textile, leather, clothing and footwear mfg | 19679 | 734 | 3946 | 201 |
| 14 | Wood product mfg | ^12 483 | ^ 578 | 3033 | 243 |
| 15 | Pulp, paper and converted paper product mfg | ^9 793 | 597 | 3485 | 356 |
| 16 | Printing (including the reproduction of recorded media) | ^13603 | ^ 788 | ^2839 | 209 |
| 17 | Petroleum and coal product mfg | 2979 | np | np | np |
| 18 | Basic chemical and chemical product mfg | 16576 | 1133 | 7951 | 480 |
| 19 | Polymer product and rubber product mfg | 19012 | 1091 | 6046 | 318 |
| 20 | Non-metallic mineral product mfg | 12830 | 713 | 3769 | 294 |
| 21 | Primary metal and metal product mfg | 8442 | 598 | 6358 | 753 |
| 22 | Fabricated metal product mfg | 30467 | 1451 | 7278 | 239 |
| 23 | Transport equipment mfg | 42017 | 2614 | 15302 | 364 |
| 24 | Machinery and equipment mfg | 27587 | 1446 | 8181 | 297 |
| 25 | Furniture and other mfg | 13580 | np | np | np |
| 11-25 | Total manufacturing | 293188 | 15422 | 104568 | 357 |

[^5]STATES，TERRITORIES AND AUSTRALIA（a）（b）continued

| INDUSTRY SUBDIVISION | Employment at end of June（c） | Wages and Salaries（d） | Sales and service income（e） | Sales and service income per person employed（f） |
| :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |
| Code Description | no． | \＄m | \＄m | \＄＇000 |

QUEENSLAND

| 11 | Food product mfg | 46970 | 1921 | 13942 | 297 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | Beverage and tobacco product mfg | 3420 | 152 | 2276 | 665 |
| 13 | Textile，leather，clothing and footwear mfg | ＊ 6100 | ＊165 | ＾ 994 | 163 |
| 14 | Wood product mfg | ＾ 13909 | ＾472 | ＾2501 | 180 |
| 15 | Pulp，paper and converted paper product mfg | 2586 | 142 | 986 | 381 |
| 16 | Printing（including the reproduction of recorded media） | ＾ 7083 | ＾294 | ＾1177 | 166 |
| 17 | Petroleum and coal product mfg | 1584 | np | np | np |
| 18 | Basic chemical and chemical product mfg | 5747 | 379 | 3030 | 527 |
| 19 | Polymer product and rubber product mfg | ＾9 230 | ＾ 531 | 3099 | 336 |
| 20 | Non－metallic mineral product mfg | 9860 | 550 | 3943 | 400 |
| 21 | Primary metal and metal product mfg | ＾ 17273 | 1072 | 13501 | 782 |
| 22 | Fabricated metal product mfg | 25725 | 1129 | 6148 | 239 |
| 23 | Transport equipment mfg | 22035 | ＾ 972 | 4923 | 223 |
| 24 | Machinery and equipment mfg | ＾ 21687 | 1026 | 5855 | 270 |
| 25 | Furniture and other mfg | 6368 | np | np | np |
| 11－25 | Total manufacturing | 199577 | 9185 | 70257 | 352 |


| 11 | Food product mfg | ヘ 18624 | ＾ 709 | ＾ 5124 | 275 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | Beverage and tobacco product mfg | 8054 | 424 | 2654 | 330 |
| 13 | Textile，leather，clothing and footwear mfg | ＊6 242 | ＊ 82 | ＾ 398 | 64 |
| 14 | Wood product mfg | ＾ 5706 | 283 | 1510 | 265 |
| 15 | Pulp，paper and converted paper product mfg | 2522 | 189 | 832 | 330 |
| 16 | Printing（including the reproduction of recorded media） | ＾ 3142 | ヘ 112 | ＾ 511 | 163 |
| 17 | Petroleum and coal product mfg | 319 | 28 | ＾26 | 82 |
| 18 | Basic chemical and chemical product mfg | ＾2398 | ＾ 118 | ＾1013 | 423 |
| 19 | Polymer product and rubber product mfg | ～ 4509 | へ 218 | ＾1195 | 265 |
| 20 | Non－metallic mineral product mfg | ＾2949 | ヘ 166 | 1357 | 460 |
| 21 | Primary metal and metal product mfg | 4200 | 261 | 2803 | 668 |
| 22 | Fabricated metal product mfg | ＾ 8863 | ヘ 377 | 2025 | 228 |
| 23 | Transport equipment mfg | 14058 | 893 | 6399 | 455 |
| 24 | Machinery and equipment mfg | 13817 | 632 | 2272 | 164 |
| 25 | Furniture and other mfg | ＊3650 | ＾97 | ＾ 467 | 128 |
| 11－25 | Total manufacturing | 99051 | 4590 | 28586 | 289 |

＾estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
＊estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
np not available for publication but included in totals where applicable，unless otherwise indicated
（a）See Explanatory Notes paragraph 43.
（b）See Technical Note 2 paragraph 8.
（c）Includes working proprietors．
（d）Excludes the drawings of working proprietors．
（e）Includes rent，leasing and hiring income．
（f）See Explanatory Notes paragraphs 37 and 38.

STATES, TERRITORIES AND AUSTRALIA(a)(b) continued


## WESTERN AUSTRALIA

| 11 | Food product mfg | ^15304 | 512 | 3941 | 257 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | Beverage and tobacco product mfg | ^4417 | ヘ 159 | 1502 | 340 |
| 13 | Textile, leather, clothing and footwear mfg | *2891 | *90 | ^598 | 207 |
| 14 | Wood product mfg | $\wedge 4573$ | ^ 181 | ^1016 | 222 |
| 15 | Pulp, paper and converted paper product mfg | ^1142 | ^ 56 | 387 | 338 |
| 16 | Printing (including the reproduction of recorded media) | ^ 3189 | ^ 127 | ^ 521 | 163 |
| 17 | Petroleum and coal product mfg | 979 | np | np | np |
| 18 | Basic chemical and chemical product mfg | 5501 | 358 | 3067 | 558 |
| 19 | Polymer product and rubber product mfg | - 4424 | ^ 191 | 1342 | 303 |
| 20 | Non-metallic mineral product mfg | ^ 5341 | ^ 305 | 2028 | 380 |
| 21 | Primary metal and metal product mfg | ^11078 | ^ 959 | 22622 | 2042 |
| 22 | Fabricated metal product mfg | 14647 | ^ 692 | 3739 | 255 |
| 23 | Transport equipment mfg | ^ 7286 | ^ 323 | 1775 | 244 |
| 24 | Machinery and equipment mfg | ^12035 | ^ 605 | 3217 | 267 |
| 25 | Furniture and other mfg | 4878 | np | np | np |
| 11-25 | Total manufacturing | 97684 | 4837 | 52220 | 535 |


| 11 | Food product mfg | ^ 6957 | 242 | 1401 | 201 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | Beverage and tobacco product mfg | ^ 789 | np | np | np |
| 13 | Textile, leather, clothing and footwear mfg | 1430 | 47 | 181 | 127 |
| 14 | Wood product mfg | ^2542 | 83 | 678 | 267 |
| 15 | Pulp, paper and converted paper product mfg | 907 | np | np | np |
| 16 | Printing (including the reproduction of recorded media) | *488 | *23 | *73 | 149 |
| 17 | Petroleum and coal product mfg | *72 | *4 | *28 | 387 |
| 18 | Basic chemical and chemical product mfg | *944 | ^ 56 | ^ 383 | 406 |
| 19 | Polymer product and rubber product mfg | ^ 717 | ^24 | ^ 157 | 219 |
| 20 | Non-metallic mineral product mfg | ^1179 | ^ 54 | ^ 255 | 216 |
| 21 | Primary metal and metal product mfg | *1853 | ^128 | 1901 | 1026 |
| 22 | Fabricated metal product mfg | ^1318 | ^55 | ^ 288 | 218 |
| 23 | Transport equipment mfg | ^1578 | 69 | 328 | 208 |
| 24 | Machinery and equipment mfg | ^1892 | ^ 86 | 622 | 329 |
| 25 | Furniture and other mfg | **1 028 | **26 | **123 | 119 |
| 11-25 | Total manufacturing | 23696 | 997 | 6931 | 292 |

- estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
* estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
** estimate has a relative standard error greater than $50 \%$ and is considered too unreliable for general use
np not available for publication but included in totals where applicable, unless otherwise indicated
(a) See Explanatory Notes paragraph 43.
(b) See Technical Note 2 paragraph 8.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.
(f) See Explanatory Notes paragraphs 37 and 38.

STATES, TERRITORIES AND AUSTRALIA(a)(b) continued

| INDUSTRY SUBDIVISION | Employment at end of June (c) | Wages and Salaries(d) | Sales and service income(e) | $\begin{array}{r} \text { Sales and } \\ \text { service } \\ \text { income } \\ \text { per person } \\ \text { employed(f) } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |
| Code Description | no. | \$m | \$m | \$'000 |

## NORTHERN TERRITORY

| 11 | Food product mfg | 526 | 22 | 75 | 143 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 12 | Beverage and tobacco product mfg | 70 | np | np | np |
| 13 | Textile, leather, clothing and footwear mfg | $* 123$ | $* 3$ | $* 24$ | 194 |
| 14 | Wood product mfg | $* 132$ | $\wedge 5$ | $\wedge 28$ | 210 |
| 15 | Pulp, paper and converted paper product mfg | np | np | np | np |
| 16 | Printing (including the reproduction of recorded media) | $* * 119$ | $* * 5$ | $* * 19$ | 161 |
| 17 | Petroleum and coal product mfg | np | np | np | np |
| 18 | Basic chemical and chemical product mfg | 190 | np | np | np |
| 19 | Polymer product and rubber product mfg | 43 | 2 | 16 | 377 |
| 20 | Non-metallic mineral product mfg | $\wedge 533$ | 30 | 201 | 376 |
| 21 | Primary metal and metal product mfg | 1050 | $n p$ | $n \mathrm{np}$ | np |
| 22 | Fabricated metal product mfg | $\wedge 656$ | $\wedge 30$ | $\wedge 172$ | 263 |
| 23 | Transport equipment mfg | $* 722$ | $* * 41$ | $* 136$ | 188 |
| 24 | Machinery and equipment mfg | $\wedge 283$ | 19 | 109 | 387 |
| 25 | Furniture and other mfg | $* * 168$ | $* * 3$ | $* * 13$ | 75 |
| $11-25$ | Total manufacturing | 4634 | 283 | 2765 | 597 |

## AUSTRALIAN CAPITAL TERRITORY

| 11 | Food product mfg | ^1092 | 28 | 185 | 170 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | Beverage and tobacco product mfg | ^ 43 | 3 | * 7 | 155 |
| 13 | Textile, leather, clothing and footwear mfg | ^136 | ^3 | ^24 | 175 |
| 14 | Wood product mfg | ^416 | $\wedge 16$ | 109 | 262 |
| 15 | Pulp, paper and converted paper product mfg | np | np | np | np |
| 16 | Printing (including the reproduction of recorded media) | ^ 806 | ^ 32 | *163 | 202 |
| 17 | Petroleum and coal product mfg | np | np | np | np |
| 18 | Basic chemical and chemical product mfg | 86 | np | np | np |
| 19 | Polymer product and rubber product mfg | 110 | 5 | 25 | 224 |
| 20 | Non-metallic mineral product mfg | 329 | 15 | 114 | 346 |
| 21 | Primary metal and metal product mfg | 30 | np | np | np |
| 22 | Fabricated metal product mfg | ^ 685 | ^27 | ^179 | 261 |
| 23 | Transport equipment mfg | ^197 | ^10 | ^42 | 214 |
| 24 | Machinery and equipment mfg | ^ 681 | 47 | 215 | 316 |
| 25 | Furniture and other mfg | **328 | **8 | **54 | 166 |
| 11-25 | Total manufacturing | 4967 | 203 | 1162 | 234 |

- estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
* estimate has a relative standard error of $25 \%$ to $50 \%$ and should be used with caution
** estimate has a relative standard error greater than $50 \%$ and is considered too unreliable for general use
$\mathrm{np} \quad$ not available for publication but included in totals where applicable, unless otherwise indicated
a) See Explanatory Notes paragraph 43.
(b) See Technical Note 2 paragraph 8.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.
(f) See Explanatory Notes paragraphs 37 and 38.

STATES, TERRITORIES AND AUSTRALIA(a)(b) continued

| INDUSTRY SUBDIVISION | Employment at end of June (c) | Wages and Salaries(d) | Sales and service income(e) | Sales and |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | service income per person employed(f) |
| ANZSIC |  |  |  |  |
| Code Description | no. | \$m | \$m | \$'000 |

AUSTRALIA

| 11 | Food product mfg | 206328 | 8642 | 64807 | 314 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 12 | Beverage and tobacco product mfg | 33722 | 1758 | 17009 | 504 |
| 13 | Textile, leather, clothing and footwear mfg | 53838 | 1685 | 9441 | 175 |
| 14 | Wood product mfg | 51919 | 2103 | 11783 | 227 |
| 15 | Pulp, paper and converted paper product mfg | 23801 | 1470 | 9605 | 404 |
| 16 | Printing (including the reproduction of recorded media) | 50315 | 2325 | 9371 | 186 |
| 17 | Petroleum and coal product mfg | 7846 | 711 | 36661 | 4673 |
| 18 | Basic chemical and chemical product mfg | 45109 | 2961 | 24772 | 549 |
| 19 | Polymer product and rubber product mfg | 52531 | 2823 | 16004 | 305 |
| 20 | Non-metallic mineral product mfg | 46405 | 2613 | 15805 | 341 |
| 21 | Primary metal and metal product mfg | 61815 | 4435 | 61406 | 993 |
| 22 | Fabricated metal product mfg | 114700 | 5145 | 27282 | 238 |
| 23 | Transport equipment mfg | 105244 | 5869 | 33650 | 320 |
| 24 | Machinery and equipment mfg | 119477 | 6187 | 32583 | 273 |
| 25 | Furniture and other mfg | 41030 | $\wedge 1501$ | 7751 | 189 |
| $11-25$ | Total manufacturing | 1014080 | 50228 | 377930 | 373 |

^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
(a) See Explanatory Notes paragraph 43
(b) See Technical Note 2 paragraph 8.
(c) Includes working proprietors.
(d) Excludes the drawings of working proprietors.
(e) Includes rent, leasing and hiring income.
(f) See Explanatory Notes paragraphs 37 and 38.

## CHAPTER

## INTRODUCTION

INDUSTRY COMPARISON

VALUE OF EXPORTS

This chapter illustrates the extent and importance of export activity by Australian manufacturing businesses. Table 4.1 presents estimates of the value of exports by Australian manufacturing businesses of goods that they produced by employment size. Table 4.2 categorises businesses by their involvement in exporting, and presents estimates of the contribution of each category to industry aggregates. For information about how these data have been derived, please see Explanatory Notes paragraphs 46 to 50. Even though, as explained there, the exports data presented in these tables are not directly comparable with the ABS's overseas trade series, the commentary below also uses the trade series to illustrate some characteristics of Australian manufacturing export performance.

Data contained in International Trade in Goods and Services, June 2007 (ABS cat. no. 5368.0; Table 32) shows that, on an industry of origin basis, Australia exported $\$ 85.4 \mathrm{~b}$ of manufactured goods, which was $51 \%$ of the value of all goods exported in 2006-07. Manufacturing was followed by Mining (37\%) with Agriculture, forestry and fishing (5\%) the next highest. In industry of origin statistics, data for a commodity are allocated to an ANZSIC industry of origin category, based on the industry which predominantly produces that commodity in Australia, as defined by the ANZSIC.

In 2006-07, the Economic Activity Survey indicated that Australian manufacturers directly exported $\$ 52.0 \mathrm{~b}$ worth of the goods they produced, which represented $61 \%$ of manufactured goods exports as reported in the ABS's overseas trade series. This amounted to $16 \%$ of their value of sales of goods produced.


## VALUE OF EXPORTS

continued

EMPLOYMENT SIZE OF EXPORTING BUSINESSES

CONTRIBUTION OF
BUSINESSES THAT
EXPORT

Primary metal and metal product manufacturing was Australia's most heavily export-oriented manufacturing industry. In 2006-07, 39\% of its sales of goods produced were exported. Businesses exporting more than $50 \%$ of sales contributed $34 \%$ of sales and service income and $22 \%$ of industry value added (IVA) of total Primary metal and metal product manufacturing, significantly higher than such businesses in any other manufacturing subdivision. The least export-oriented Australian manufacturing industry in 2006-07, in terms of the proportion of its value of sales and goods produced, was Non-metallic mineral PRODUCT MANUFACTURING (2\%).

In 14 of the 15 manufacturing industry subdivisions, the value of exports of goods produced by businesses employing 100 or more persons exceeded that of businesses employing fewer than 100 persons. The exception was Furniture and other manufacturing.

Businesses employing 100 or more persons contributed most significantly to total exports at the subdivision level in Pulp, paper and converted paper manufacturing (89\%, or $\$ 0.5 \mathrm{~b}$ ) and Petroleum and coal manufacturing ( $89 \%$, or $\$ 0.9 \mathrm{~b}$ ). Furniture and other manufacturing was the subdivision with the lowest proportion $(9 \%$, or $\$ 26 \mathrm{~m})$ of exports produced by businesses employing 100 or more persons.

Depending on the measure selected, businesses that do not export accounted for between $49 \%$ and $63 \%$ of activity at the total manufacturing level in 2006-07. The percentage contribution of non-exporting businesses was greatest, across all variables presented, in Printing (including the reproduction of recorded media) and Furniture and other manufacturing.

Pulp, paper and converted paper product manufacturing was the industry in which businesses which export up to and including $50 \%$ of their sales of goods produced made the greatest contribution to IVA, sales and service income employment and wages and salaries.

At the total manufacturing level, businesses which exported more than $50 \%$ of their sales of goods produced tended to contribute a higher proportion to sales and service income and industry value added than to employment and wages and salaries. This pattern differed among individual industries but was most prevalent in Primary metal and metal PRODUCT MANUFACTURING.

| INDUSTRY SUBDIVISION |  | $\begin{array}{r} \text { Sales of } \\ \text { goods } \\ \text { produced }(\mathrm{b}) \end{array}$ | Amount exported by this business | Exports as a proportion of sales of goods produced |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| ANZSIC |  |  |  |  |
| Code | Description | \$m | \$m | \% |
| $0-49$ PERSONS |  |  |  |  |
| 11 | Food product mfg | 9414 | 784 | 8.3 |
| 12 | Beverage and tobacco product mfg | 1268 | 240 | 18.9 |
| 13 | Textile, leather, clothing and footwear mfg | 3128 | 286 | 9.1 |
| 14 | Wood product mfg | 4078 | 157 | 3.9 |
| 15 | Pulp, paper and converted paper product mfg | 965 | 64 | 6.7 |
| 16 | Printing (including the reproduction of recorded media) | 3145 | 21 | 0.7 |
| 17 | Petroleum and coal product mfg | 604 | 59 | 9.7 |
| 18 | Basic chemical and chemical product mfg | 3238 | 701 | 21.6 |
| 19 | Polymer product and rubber product mfg | 4059 | 60 | 1.5 |
| 20 | Non-metallic mineral product mfg | 2791 | 96 | 3.5 |
| 21 | Primary metal and metal product mfg | 5821 | 3462 | 59.5 |
| 22 | Fabricated metal product mfg | 9370 | 152 | 1.6 |
| 23 | Transport equipment mfg | 3879 | 186 | 4.8 |
| 24 | Machinery and equipment mfg | 7445 | 868 | 11.7 |
| 25 | Furniture and other mfg | 4518 | 172 | 3.8 |
| 11-25 | Total manufacturing | 63725 | 7307 | 11.5 |


| $50-99$ PERSONS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 11 | Food product mfg | 5716 | 1359 | 23.8 |
| 12 | Beverage and tobacco product mfg | 205 | 82 | 39.9 |
| 13 | Textile, leather, clothing and footwear mfg | 1244 | 98 | 7.9 |
| 14 | Wood product mfg | 1303 | 130 | 10.0 |
| 15 | Pulp, paper and converted paper product mfg | 388 | 2 | 0.6 |
| 16 | Printing (including the reproduction of recorded media) | 950 | 33 | 3.5 |
| 17 | Petroleum and coal product mfg | 288 | 57 | 19.9 |
| 18 | Basic chemical and chemical product mfg | 2205 | 1149 | 52.1 |
| 19 | Polymer product and rubber product mfg | 1933 | 137 | 7.1 |
| 20 | Non-metallic mineral product mfg | 1402 | 14 | 1.0 |
| 21 | Primary metal and metal product mfg | 1358 | 516 | 38.0 |
| 22 | Fabricated metal product mfg | 3063 | 87 | 2.8 |
| 23 | Transport equipment mfg | 863 | 42 | 4.8 |
| 24 | Machinery and equipment mfg | 3137 | 876 | 27.9 |
| 25 | Furniture and other mfg | 747 | 87 | 11.7 |
| 11-25 | Total manufacturing | 24802 | 4669 | 18.8 |

(a) See paragraphs 46-50 of the Explanatory Notes.
(b) Sales of goods produced by the business, including goods produced for it on a commission basis.

EXPORTED AND TOTAL PRODUCTION(a), Employment size continued

| INDUSTRY SUBDIVISION |  | $\begin{array}{r} \text { Sales of } \\ \text { goods } \\ \text { produced(b) } \end{array}$ | Amount exported by this business | Exports as a proportion of sales of goods produced |
| :---: | :---: | :---: | :---: | :---: |
| ANZSIC |  |  |  |  |
| Code | Description | \$m | \$m | \% |
| 100 OR MORE PERSONS |  |  |  |  |
| 11 | Food product mfg | 44528 | 9631 | 21.6 |
| 12 | Beverage and tobacco product mfg | 14149 | 847 | 6.0 |
| 13 | Textile, leather, clothing and footwear mfg | 2635 | 661 | 25.1 |
| 14 | Wood product mfg | 4864 | 736 | 15.1 |
| 15 | Pulp, paper and converted paper product mfg | 7386 | 530 | 7.2 |
| 16 | Printing (including the reproduction of recorded media) | 3983 | 163 | 4.1 |
| 17 | Petroleum and coal product mfg | 25474 | 910 | 3.6 |
| 18 | Basic chemical and chemical product mfg | 15914 | 1891 | 11.9 |
| 19 | Polymer product and rubber product mfg | 8054 | 784 | 9.7 |
| 20 | Non-metallic mineral product mfg | 10055 | 207 | 2.1 |
| 21 | Primary metal and metal product mfg | 49772 | 18112 | 36.4 |
| 22 | Fabricated metal product mfg | 9821 | 484 | 4.9 |
| 23 | Transport equipment mfg | 20737 | 1727 | 8.3 |
| 24 | Machinery and equipment mfg | 13432 | 3299 | 24.6 |
| 25 | Furniture and other mfg | 907 | 24 | 2.7 |
| 11-25 | Total manufacturing | 231710 | 40006 | 17.3 |


| TOTAL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 11 | Food product mfg | 59657 | 11774 | 19.7 |
| 12 | Beverage and tobacco product mfg | 15622 | 1168 | 7.5 |
| 13 | Textile, leather, clothing and footwear mfg | 7008 | 1045 | 14.9 |
| 14 | Wood product mfg | 10245 | 1023 | 10.0 |
| 15 | Pulp, paper and converted paper product mfg | 8740 | 597 | 6.8 |
| 16 | Printing (including the reproduction of recorded media) | 8078 | 216 | 2.7 |
| 17 | Petroleum and coal product mfg | 26366 | 1027 | 3.9 |
| 18 | Basic chemical and chemical product mfg | 21357 | 3740 | 17.5 |
| 19 | Polymer product and rubber product mfg | 14046 | 980 | 7.0 |
| 20 | Non-metallic mineral product mfg | 14249 | 318 | 2.2 |
| 21 | Primary metal and metal product mfg | 56951 | 22090 | 38.8 |
| 22 | Fabricated metal product mfg | 22254 | 723 | 3.2 |
| 23 | Transport equipment mfg | 25480 | 1955 | 7.7 |
| 24 | Machinery and equipment mfg | 24014 | 5043 | 21.0 |
| 25 | Furniture and other mfg | 6172 | 284 | 4.6 |
| 11-25 | Total manufacturing | 320238 | 51982 | 16.2 |

(a) See paragraphs 46-50 of the Explanatory Notes.
(b) Sales of goods produced by the business, including goods produced for it on a commission basis.

CONTRIBUTION OF EXPORTING AND NON-EXPORTING BUSINESSES (a)

| INDUSTRY SUBDIVISION |  | Employment at end of June(b) | Wages and salaries(c) | Sales and service income | Industry value added |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| ANZSIC |  |  |  |  |  |
| Code | Description | \% | \% | \% | \% |
| DO NOT EXPORT |  |  |  |  |  |
| 11 | Food product mfg | 58.8 | 49.3 | 38.8 | 47.9 |
| 12 | Beverage and tobacco product mfg | 59.5 | 62.2 | 68.6 | 66.9 |
| 13 | Textile, leather, clothing and footwear mfg | 65.8 | 54.3 | 49.0 | 55.2 |
| 14 | Wood product mfg | 72.6 | 65.9 | 59.8 | 58.7 |
| 15 | Pulp, paper and converted paper product mfg | np | np | np | np |
| 16 | Printing (including the reproduction of recorded media) | 82.5 | 76.5 | 79.0 | 77.2 |
| 17 | Petroleum and coal product mfg | np | np | np | np |
| 18 | Basic chemical and chemical product mfg | 41.5 | 36.5 | 39.1 | 41.1 |
| 19 | Polymer product and rubber product mfg | 54.6 | 48.1 | 46.2 | 45.8 |
| 20 | Non-metallic mineral product mfg | 69.9 | 66.8 | 69.2 | 65.3 |
| 21 | Primary metal and metal product mfg | 60.7 | 58.9 | 41.3 | 54.6 |
| 22 | Fabricated metal product mfg | 77.7 | 74.6 | 72.3 | 73.7 |
| 23 | Transport equipment mfg | 66.7 | 65.3 | 64.6 | 65.3 |
| 24 | Machinery and equipment mfg | 46.2 | 43.1 | 37.6 | 40.9 |
| 25 | Furniture and other mfg | 80.9 | 78.4 | 76.4 | 79.5 |
| 11-25 | Total manufacturing | 62.6 | 57.2 | 49.2 | 55.4 |

EXPORTS UP TO AND INCLUDING 50\% OF SALES

| 11 | Food product mfg | 30.2 | 39.3 | 44.7 | 41.5 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 12 | Beverage and tobacco product mfg | 33.3 | 30.4 | 25.4 | 30.0 |
| 13 | Textile, leather, clothing and footwear mfg | 29.3 | 38.4 | 41.0 | 37.8 |
| 14 | Wood product mfg | 24.7 | 30.6 | 33.5 | 35.4 |
| 15 | Pulp, paper and converted paper product mfg | 52.4 | 61.1 | 69.0 | 69.6 |
| 16 | Printing (including the reproduction of recorded media) | np | np | np | np |
| 17 | Petroleum and coal product mfg | 37.8 | 37.9 | 60.8 | 55.6 |
| 18 | Basic chemical and chemical product mfg | 49.8 | 52.7 | 48.8 | 48.5 |
| 19 | Polymer product and rubber product mfg | np | np | np | np |
| 20 | Non-metallic mineral product mfg | 29.2 | 32.3 | 29.7 | 34.1 |
| 21 | Primary metal and metal product mfg | 32.2 | 33.9 | 24.9 | 23.5 |
| 22 | Fabricated metal product mfg | 21.7 | 24.6 | 26.9 | 25.6 |
| 23 | Transport equipment mfg | 27.7 | 28.6 | 31.2 | 29.3 |
| 24 | Machinery and equipment mfg | 41.7 | 43.5 | 47.5 | 42.7 |
| 25 | Furniture and other mfg | 16.3 | 18.2 | 19.0 | 17.3 |
| $11-25$ | Total manufacturing | 31.2 | 36.1 | 38.9 | 35.7 |

## EXPORTS MORE THAN 50\% OF SALES

| 11 | Food product mfg | 11.0 | 11.5 | 16.5 | 10.6 |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 12 | Beverage and tobacco product mfg | 7.1 | 7.4 | 6.0 | 3.0 |
| 13 | Textile, leather, clothing and footwear mfg | 4.9 | 7.3 | 10.0 | 7.0 |
| 14 | Wood product mfg | 2.7 | 3.5 | 6.6 | 5.9 |
| 15 | Pulp, paper and converted paper product mfg | np | np | np | np |
| 16 | Printing (including the reproduction of recorded media) | np | np | np | np |
| 17 | Petroleum and coal product mfg | np | np | np | np |
| 18 | Basic chemical and chemical product mfg | 8.7 | 10.8 | 12.1 | 10.4 |
| 19 | Polymer product and rubber product mfg | np | np | np | np |
| 20 | Non-metallic mineral product mfg | 0.9 | 0.9 | 1.1 | 0.6 |
| 21 | Primary metal and metal product mfg | 7.0 | 7.2 | 33.8 | 21.9 |
| 22 | Fabricated metal product mfg | 0.6 | 0.8 | 0.8 | 0.8 |
| 23 | Transport equipment mfg | 5.6 | 6.1 | 4.2 | 5.4 |
| 24 | Machinery and equipment mfg | 12.1 | 13.4 | 14.9 | 16.5 |
| 25 | Furniture and other mfg | 2.9 | 3.5 | 4.6 | 3.2 |
| $11-25$ | Total manufacturing | 6.2 | 6.7 | 12.0 | 8.9 |

np not available for publication but included in totals where
(b) Includes working proprietors. applicable, unless otherwise indicated
(c) Excludes the drawings of working proprietors.
(a) See paragraphs 46-50 of the Explanatory Notes.

## EXPLANATORY NOTES

1 This publication, Manufacturing Industry, Australia, 2006-07 (cat. no. 8221.0), presents data of the economic and financial performance of the manufacturing industry.

2 Manufacturing, as specified in Division C of the 2006 edition of the Australian and New Zealand Standard Industrial Classification (ANZSIC) (cat. no. 1292.0), relates to the physical or chemical transformation of materials, substances or components into new products (except agriculture and construction). The materials, substances or components transformed by units in this division are raw materials that are products of agriculture, foresty, fishing and mining, or products of other manufacturing units.

3 This publication represents the first release of these estimates using the 2006 edition of ANZSIC. Because of the combined effect of this new classification and methodological changes, a new series has commenced with the 2006-07 data. See Technical Note 1 for further details.

4 Statistical units are those entities from which statistics are collected, or about which statistics are compiled. In ABS economic statistics, the statistical unit is generally the business. All businesses in the EAS are recorded on the ABS Business Register (ABSBR).

5 The ABS uses an economic statistics units model on the ABSBR to describe the characteristics of businesses, and the structural relationships between related businesses. Within large and diverse business groups, the units model is used also to define reporting units that can provide data to the ABS at suitable levels of detail.

6 This units model allocates businesses to one of two sub-populations:

- Most businesses and organisations in Australia need to obtain an Australian Business Number (ABN). The vast majority of these businesses are simple in structure and are allocated to the population which is maintained by the ATO. These are termed (by the ABS) ABN units.
- The remaining businesses are in the ABS maintained population, and are termed type of activity units, or TAUs.

7 Together, these two sub-populations (of ABN units and TAUs) make up the ABSBR population, from which the EAS samples are taken.
8 For details about the ABSBR and how ABN units and TAUs contribute to the industry statistics in this publication, see Technical Note 1.

9 The manufacturing industry collection was conducted as a component of the ABS's Economic Activity Survey (EAS). The scope of the 2006-07 manufacturing collection comprises all businesses (including non-employing businesses) on the ABS Business Register (ABSBR) at time of selection, whose industry is classified to ANZSIC Division C Manufacturing. However, some categories of business are excluded. The ABSBR includes information supplied from the Australian Taxation Office (ATO) which assists in determining the scope of ABS collections. Using this, businesses in the following two categories have been excluded from the scope of this collection with effect from 2006-07 (although they were included in previous years):

- businesses which have an Income Tax Instalment Provision (ITIP) taxation 'role' but no other taxation role;
- long term non-remitters of Business Activity Statement (BAS) data.

10 For details of the structure of this division, please consult the 2006 edition of the Australian and New Zealand Standard Industrial Classification (ANZSIC) (cat. no. 1292.0), which is also available through the ABS web site [http://www.abs.gov.au](http://www.abs.gov.au) (using the Home page Search facility to find Division C).

11 The frame used for the survey of the manufacturing industry, like most ABS economic surveys, was taken from the ABSBR. The ABSBR is updated monthly to take account of new businesses and businesses which have ceased operating.

12 The ANZSIC-based industry statistics presented in this publication are compiled differently from activity statistics. Each ABN unit or TAU on the ABSBR has been classified (by the ATO and the ABS respectively) to a single industry irrespective of any diversity of activities undertaken. The industry class allocated is the one which relates to those activities that provide the main source of income. A manufacturing industry business is one predominantly engaged in manufacturing activities, but the data collected for it cover all activities of the business (including any non-manufacturing activities). Conversely, there are some businesses predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities; these are excluded from the collection.

13 Some manufacturing businesses engage, to a significant extent, in activities which are normally carried out by different industries. For example, a predominantly manufacturing business may also undertake significant amounts of wholesaling. Similarly, a manufacturing business may produce significant volumes of goods which are normally produced in different manufacturing industries. However, where a business makes a significant economic contribution to industries classified to different ANZSIC subdivisions, the ABS includes the business in the ABS maintained population, and 'splits' the TAU's reported data between the industries involved. Significance is determined using total income.

14 A TAU's reported data will be split if the inclusion of data relating to the secondary activity in the statistics for the industry of the primary activity distorts (by overstating or understating) either the primary or secondary industry statistics at the ANZSIC subdivision level by:

- $3 \%$ or more, where the industries of the primary and secondary activities are in the same ANZSIC division
- $2 \%$ or more, where the industries of the primary and secondary activities are in different ANZSIC divisions.

15 Unincorporated joint ventures (UJVs) within the manufacturing industry are arrangements which allow the sharing of expertise, resources and risk associated with specific projects. This occurs through the participation of a number of organisations (by investment) in a specific operation. Some of these organisations may not otherwise be involved in that industry.

16 The manufacturing collection includes such businesses which are operators and/or participants in UJVs. Generally, each participant supplies data of its share of income, while the operator reports all expenses and employment.

17 The ABS attempts to maintain a current understanding of the structure of the large, complex and diverse business groups that form the ABS maintained population on the ABSBR, through direct contact with those businesses. Resultant changes in their structures on the ABSBR can affect:

- the availability of such businesses (or units within them) for inclusion in the annual economic collections
- the delineation of the units, within those groups, for which data are to be reported.

18 The ABS attempts to obtain data for those businesses which ceased operation during the year, but it is not possible to obtain data for all of them.

19 Data in this publication have been adjusted to allow for lags in processing new businesses to the ABSBR. The effect of these adjustments is an increase of $1.4 \%$ on the Australian estimate of sales and service income for total Manufacturing.

20 The estimates in this publication are based on ANZSIC06. Data in previous issues were based on the 1993 version of the ANZSIC (ANZSIC93). ANZSIC06 was adopted to provide a more contemporary industrial classification system, taking into account issues such as changes in the structure and composition of the economy, changing user demands and compatibility with international classification standards.
21 There has been an increase from nine Manufacturing subdivisions under ANZSIC93 to fifteen under ANZSIC06, whereas the number of industry classes within the division has decreased marginally.

22 As a result of these changes, some businesses, classified to ANZSIC93 Division C Manufacturing are not classified to Division C Manufacturing under ANZSIC06. Similarly some businesses which were not classified to ANZSIC93 Division C Manufacturing are now classified to ANZSIC06 Division C Manufacturing. Changes include units primarily engaged in publishing or the combined activity of publishing and printing now classified under Division J Information Media and Teleommunications and units mainly engaged in repairing and/or maintaining equipment and machinery now classified under the Repars and maintenance subdivision within Division S Other Services. For further details, see Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (cat. no. 1292.0).

23 To provide comparability with the 2006-07 estimates, the estimates for 2004-05 and 2005-06 presented in table 1.1 take into account the various changes in collection design, estimation methodology and scope, as well as the introduction of ANZSIC06. Although systems were primarily designed to produce estimates at industry subdivision level for the key data variables contained in table 1.1, additional information may be available on request. For further information on the process of producing these historical estimates please see Technical Note 1 paragraph 22.

24 The manufacturing collection was conducted as a component of the ABS's Economic Activity Survey (EAS):

25 A sample of 6,368 manufacturing businesses were asked by the ABS to provide employment details and data obtained from their financial statements, mainly via mail out questionnaires. Businesses were also asked to supply key details of their operations by state and territory, enabling the production of the state/territory estimates contained in table 3.1.
26 Auxiliary information about wages and salaries and turnover for 96,066 manufacturing industry businesses (including those sampled), sourced from Australian Tax Office (ATO) Business Activity Statement (BAS) data, were used to improve the estimates produced from the survey data. Section 16(4)(ga) of the Income Tax Assessment Act 1936 provides for the ATO to pass information to the Australian Statistician for the purposes of the Census and Statistics Act 1905.

27 The period covered by the collection is, in general, the 12 months ended 30 June. Where businesses are unable to supply information on this basis, an accounting period for which data can be provided is used for data other than that relating to employment. Such businesses make a substantial contribution to some of the estimates presented in this publication. As a result, the estimates can reflect trading conditions that prevailed in periods outside the twelve months ended June in the relevant year.

28 Although financial data estimates relate to the full twelve months, employment estimates relate to the last pay period ending in June of the given year. As such, any estimates of wages and salaries per person employed can be affected by any fluctuations in employment during the reference period.

29 Financial data presented incorporate all units in scope of the manufacturing collection that were at the production stage at any time during the year. They also include any temporarily inactive units, i.e. those units which were in the development stage or which were not in production, but which still existed and held assets and liabilities and/or incurred some non-operating expenses (e.g. depreciation, administration costs).

30 In an estimate based on a sample survey there are two types of error possible: sampling error and non-sampling error.

31 Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all businesses in the survey is given by the standard error. 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 all businesses had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors. Standard errors for the current estimates of key variables are shown in Technical Note 2.

32 Non-sampling error arises from inaccuracies in collecting, recording and processing the data. The most significant of these errors are: misreporting of data items; deficiencies in coverage; non-response; and processing errors. Every effort is made to minimise reporting error by the careful design of questionnaires and efficient data processing procedures.

33 For more detailed information about this subject, see Technical Note 2.
34 In the 2006-07 survey of the manufacturing industry, there was a $93.1 \%$ response rate from all businesses that were surveyed and found to be operating during the reference period. Data were imputed for the remaining $6.9 \%$ of operating businesses. This imputation contributed $5.2 \%$ to the estimate of sales and service income for the manufacturing industry.

35 Differences in accounting policy and practices across businesses and industries can lead to some inconsistencies in the data input to the statistics. Although much of the accounting process is subject to standards, there is still a great deal of flexibility left to managers and accountants in the accounting policy and practices they adopt. For example, the way profit is measured is affected by management policy on such issues as depreciation rates, bad debt provisions and write off, and goodwill write off. The varying degree to which businesses consolidate their accounts may also affect any industry performance measures calculated.
36 A range of performance measures, usually expressed as ratios, can be produced from the data available from businesses' financial statements. Others, relating to labour inputs, can be derived by expressing financial or economic variables on a per person employed basis. This issue presents a selection of such measures. They comprise:

- profitability ratios, which measure the rate of profit on sales
- debt ratios, which indicate the ability of businesses to meet the cost of debt financing
- labour measures, which relate output, labour costs and employment
- capital expenditure ratios, which indicate the extent of business investment in capital assets.

INDUSTRY PERFORMANCE MEASURES continued

INTERNATIONAL FINANCIAL REPORTING STANDARDS

STATE AND TERRITORY ESTIMATES

37 A further explanation of each ratio can be found in the Glossary.
38 Those ratios compiled from a combination of flow (whole period) and level (beginning or end of period) items need to be treated with additional caution. Ratios which include both level and flow items in their derivation may be volatile due to the timing and other differences involved. In particular, this should be taken into account when considering those measures expressed as values per person employed.

39 Similarly, the extent of change in inventories is a component of several of the measures of industry output and earnings. Although the closing inventories held by businesses in an industry in one period should, in concept, equate to its opening inventories in the next period, differences will be observed in many cases. These differences can arise from re-selection of the sample between years and/or changes in the structure of businesses selected, as well as revaluations of inventories in businesses' accounts.

40 The above limitations are not meant to imply that analysis based on these data should be avoided, only that they should be borne in mind when interpreting the data presented in this publication.

41 The new Australian equivalents to International Financial Reporting Standards (AIFRS) began to be progressively implemented in Australia from 1 January 2005. As a result, a number of items in the financial accounts of Australian businesses have been affected by changed definitions, which have in turn affected both Income Statements and Balance Sheets. A range of ABS economic collections source data from financial accounts of businesses, and use those data to derive economic statistics. There have been no changes in the associated economic definitions.

42 After monitoring data items since March quarter 2005 it has been concluded that most affected published data series have been affected by data breaks, but that the magnitude of such breaks cannot be determined without imposing disproportionate load upon data providers to ABS surveys and other administratively collected data. ABS will continue to monitor developments and report any significant identified impacts or changes in methodology as a result of AIFRS.

43 State and territory summary estimates for manufacturing subdivisions are presented in table 3.1. To enable the production of these estimates, businesses included in the mail out survey were asked to report data for employment, wages and salaries, and sales of goods and services, for each state and/or territory in which they operated, if more than one. For more detail see paragraph 19 of Technical Note 1. The relevant data for all other businesses, including those whose contribution was sourced from BAS data, were allocated to their state/territory of operations as recorded on the ABSBR.

44 The treatment of unincorporated joint ventures (UJVs) under the ABS economic statistics model has an effect on data classified by employment size. This is because each of the joint venture participants reports details of its share of the sales of goods and services, but generally they have few or no employees or operating expenses. The labour for such operations is usually employed and paid for by the joint venture operator. Similarly, the operating expenses are usually reported by the joint venture operator. The number of UJVs in manufacturing industry is small, and at the aggregate level all activity is covered in the statistics.

45 However, this treatment does affect the employment size tables 2.3 and 4.1, as UJV participants with potentially significant sales of goods and services are included in the $0-4$ persons category. These effects are particularly evident in the estimates for the Primary metal and metal product manufacturing industry.

46 All businesses which received an ABS mail out survey were asked whether they exported and, if so, what percentage of their sales of goods produced was exported by the business or by an agent on its behalf. Because the ATO data do not contain this information, businesses whose contribution to manufacturing estimates was sourced from BAS data do not contribute to the export tables included in this publication. The effect of the exclusion of these businesses is likely to be minimal, in view of their small contribution to overall estimates.

47 The data presented in table 4.1 are derived by applying the percentage of exports reported for each exporting unit and then aggregating that figure. These data also exclude any contribution by those businesses which operated during 2006-07, but were not operating at 30 June 2007.

48 For the purposes of table 4.2, manufacturing businesses have been categorised by the extent (if any) of their involvement in exporting. For each such category, the tables present its share (relative to total Australian manufacturing) of the four key data items: employment at end of June, sales and service income, wages and salaries, and industry value added.

49 The statistics presented in table 4.1, relating to the value of exports by manufacturers or their agents, are not intended to be directly comparable with the value of exports classified by manufacturing industry of origin as published by the ABS in international trade statistics. These latter statistics are intended to measure total exports regardless of which business or organisation does the exporting (and to identify the probable industry from which the goods originated), whereas the statistics in this publication's tables only relate to exports directly undertaken by the manufacturer or by its agent. The exports data in table 4.1 can, therefore, be expected to show a much lower value than the exports data from the international trade series. The main reason is that for many exports of goods manufactured in Australia, the actual exporting activity is undertaken by a business other than the manufacturer.
50 Also, the value of goods produced on a commission or fee basis for non-manufacturing businesses and which are then exported is not included in any of these data. Examples of relevant commission arrangements are the slaughtering fee charged by an abattoir for processing livestock owned by a meat exporter, and the tolling fee charged by an aluminium smelter to process ores owned by other (e.g. mining) businesses. Also excluded from these tables are any exports by manufacturers of goods which were not produced by that manufacturer. These and other goods exported (e.g. re-exports) are included in the international trade data. Finally, differences in valuation of exports arise because the value of exports in the international trade series would include the value to the manufacturer plus profit margins for the exporter and for any intermediaries between the manufacturer and the exporter.

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

52 The ABS produces industry estimates for a range of selected industries (including manufacturing) and these results will be available in Australian Industry, 2006-07 (cat. no. 8155.0), scheduled to be released in September 2008. National estimates of income, output, expenditure and associated ratios will be available at the ANZSIC division level (with a greater range of data available via the ABS web site in spreadsheet form).

RELATED PUBLICATIONS continued

ABS DATA AVAILABLE ON REQUEST

BACK SERIES AND
ADDITIONAL DATA

53 For a list of publications and electronic releases that present data about the manufacturing industry using ANZSIC93, please refer to the 2005-06 edition of this publication.

54 Current publications and other products released by the ABS are available from the Statistics View on the ABS web site. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.

55 As well as the statistics included in this and related publications, the ABS may have other relevant data available on request and for a charge. Inquiries should be made to the National Information and Referral Service on 1300135070.

56 The ABS has data stored electronically from earlier manufacturing surveys collected using different statistical infrastructures. For relevant data, see the data cubes and spreadsheets released in conjunction with the 1999-2000, 2000-01 and 2005-06 issues of this publication. The publication text also provides useful descriptions of these changed collection arrangements. These publications and datasets are all available on the ABS web site.

57 By definition, these data series are not directly comparable with the current statistical series.

58 For more information, please contact Phillip Lui on (02) 92684269.
59 Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS Business Register (see paragraph 19), this 'rounding rule' also applies to employment estimates.
60 Proportions, ratios and other calculated figures shown in this publication have been calculated using unrounded estimates and may be different from, but are more accurate than, calculations based on the rounded estimates.

## APPENDIX

DATA ITEMS, 2006-07

INTRODUCTION

AVAILABILITY OF DATA

1 This Appendix lists items included in the 2006-07 manufacturing collection, and selected items derived from those directly collected.

2 Owing to the design of this collection, the majority of information available is at the Australian level, with limited information available for states and territories. The following restrictions apply to the availability of data for dissemination:

- National estimates at the industry class level are potentially available for the data items listed below. The industry level at which these items are disseminated will be decided on a case by case basis, conditional upon confidentiality and data quality constraints.
- Businesses selected to participate in the 2006-07 survey (the direct collect sample) were requested to provide details of employment, wages and salaries, and sales of goods and services, for each state and/or territory in which they operated. This has enabled the production of state/territory estimates of employment, sales and service income, and wages and salaries, at the industry subdivision level. However, it is not possible to produce state/territory data by employment size or in relation to exported production.

DATA ITEMS, COLLECTED AND DERIVED, 2006-07

| Employment | Expense items |
| :--- | :---: |
| Total employment at end of June | Labour costs |
| Income items | Wages and salaries (including provisions for |
| employee entitlements) |  |
| Sales of goods | Employer contributions into superannuation |
| Produced by this business (or for it | (excluding salary sacrifice) |
| on commission) | Salary sacrificed earnings paid on behalf |
| Not produced by this business | of employees |
| Income from services | Employee share based payments and stock |
| Provided on a commission basis | options, expensed to businesses |
| (excluding sales and agency commissions) | for renumerating employees, accrued |
| Repair and maintenance services | during the current period |
| Delivery charges separately invoiced | Workers' compensation premiums/costs |
| to customers | Fringe benefits tax |
| Other services | Payroll tax (excluding Pay As You Go |
| Rent, leasing and hiring income | withholding tax) |
| Land, buildings and other structures | Payments to employment agencies for staff |
| Plant, machinery and equipment | Land tax and land rates |
| Other rent, leasing and hiring income | Insurance premiums |
| Interest income | Interest expenses |
| Funding from federal, state and/or | Bank charges other than interest |
| local government | Depreciation and amortisation |
| Funding for operational costs | Bad and doubtful debts |
| (e.g. wages and salaries, rent, food) | Purchases |
| Funding provided for specific capital items | Materials, components, containers, |
| Royalties income | packaging materials, electricity, |
| Natural resource royalties income | fuels and water |
| Other royalties income | Finished goods for resale |
| Other income | Royalties expenses |
| Total income | Natural resource royalties expenses |
| Other royalties expenses |  |

## Expense items cont.

Motor vehicle running expenses
Freight and cartage expenses
Repair and maintenance expenses
Rent, leasing and hiring expenses
Land, buildings and other structures
Motor vehicles
Plant, machinery and equipment
Other rent, leasing and hiring expenses
Postal, mailing and courier services
Telecommunication services
Paper, printing and stationery expenses
Audit and other accounting expenses
Legal expenses
Cleaning services provided by other businesses
Training provided by other businesses
Advertising expenses
Travelling, accommodation and
entertainment expenses
Other management and administrative services
Other contract, sub-contract and
commission expenses
Sales commission expenses
Commission expenses for work performed using materials provided by this business
Other contract, sub-contract and commission expenses not included elsewhere
Computer software expensed
Other operating expenses
Total expenses

## Inventories

## Opening inventories

Raw materials, fuels, containers, etc.
Work-in-progress less progress payments billed
Finished goods (including inventories for resale)
Total opening inventories
Closing inventories
Raw materials, fuels, containers, etc.
Work-in-progress less progress payments billed
Finished goods (including inventories for resale)
Total closing inventories

## Capital expenditure and disposal of assets

Capital work done by own employees for own use or for rental or lease
Capitalised wages and salaries
Capitalised purchases of materials
Capital expenditure (including capitalised work done by own employees as listed above) Road vehicles
Other transport equipment Industrial machinery and equipment
Computer software capitalised
Computers and computer peripherals
Electronic equipment and electrical machinery

Capital expenditure and disposal of assets cont.
Capital expenditure (including capitalised work done by own employees as listed above) cont.

Communications equipment
Other plant and equipment
Land
Dwellings, other buildings and structures Intangible assets
Disposal of selected assets Plant, machinery and equipment (including motor vehicles) Land
Dwellings, other buildings and structures
Intangible assets

## Selected derived data items

Income and expense items
Sales and service income (including rent, leasing and hiring income and royalties other than natural resources royalties)
Value of sales of goods exported by the business or its agent
Cost of sales
Trading profit
Earnings before interest, tax, depreciation and amortisation
Operating profit before tax
Economic values
Purchases of goods and materials (including capitalised purchases)
Other intermediate input expenses- i.e. other than purchases of goods and materials
Change in inventories
Industry value added
Labour costs
Selected labour costs
Total labour costs
Capital expenditure on
Plant, machinery and equipment
Dwellings, other buildings and structures
Other (including land and intangible assets)
Total acquisitions
Disposal of assets
Net capital expenditure
Gross fixed capital formation
Ratios
Sales and service income (including rent, leasing and hiring income and royalties other than natural resource royalties) per person employed at the end of June
Exports as a proportion of sales of goods produced
Industry value added per person employed at the end of June
Industry value added to selected labour costs
Wages and salaries per person employed at the end of June
Selected labour costs per person employed at the end of June
Profit margin
Interest coverage
Investment rate (value added)

## TECHNICAL NOTE 1 METHODOLOGY

INTRODUCTION<br>STATISTICAL UNITS DEFINED ON THE ABS BUSINESS REGISTER

ATO MAINTAINED
POPULATION

ABS MAINTAINED POPULATION

1 The industry estimates in this publication are produced using a combination of ABS directly collected data and Business Activity Statement (BAS) tax data sourced from the Australian Taxation Office (ATO).

2 The directly collected data have been reported by a sample of manufacturing businesses, as recorded on the ABS Business Register (ABSBR). The ABS uses an economic statistics units model on the ABSBR to describe the characteristics of businesses, and the structural relationships between related businesses. Within large and diverse business groups, the units model is used also to define reporting units that can provide data to the ABS at suitable levels of detail.

3 The current economic statistics units model was introduced in mid 2002, to better use the information available as a result of The New Tax System (TNTS). This units model allocates businesses to one of two sub-populations. The vast majority of businesses are in what is called the ATO maintained population, while the remaining businesses are in the ABS maintained population. Together, these two sub-populations make up the ABSBR population.

4 Most businesses and organisations in Australia need to obtain an Australian Business Number (ABN). They are then included on the whole-of-government register of businesses, the Australian Business Register (ABR), which is maintained by the ATO. Most of these businesses have simple structures; therefore, the unit registered for an ABN will satisfy ABS statistical requirements. For these businesses, the ABS has aligned its statistical units structure with the ABN unit. The businesses with simple structures constitute the ATO maintained population, and the ABN unit is used as the statistical unit for all ABS economic collections.

5 For the population of businesses where the ABN unit is not suitable for ABS statistical requirements, the ABS maintains its own units structure through direct contact with the business. These businesses constitute the ABS maintained population. This population consists typically of large, complex and diverse businesses. The statistical units model described below caters for such businesses.

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 (as amended by the Corporations Legislation Amendment Act 1991), including legal entities such as companies, trusts and partnerships. Majority ownership is not required for control to be exercised.

Enterprise: An institutional unit comprising:
(i) a single legal entity or business entity, or
(ii) more than one legal entity or business entity within the same enterprise group and in the same institutional sub-sector (i.e. they are all classified to a single Standard Institutional Sector Classification of Australia (SISCA) sub-sector).

Type of activity unit (TAU): The TAU comprises one or more business entities, sub-entities or branches of a business entity within an enterprise group that can report production and employment data for similar economic activities. When a minimum set of data items are available, a TAU is created which covers all the operations within an industry subdivision (and the TAU is classified to the relevant subdivision of the ANZSIC). Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry subdivision.

6 TAUs: All units in the ABS maintained population (i.e. TAUs) classified to manufacturing were eligible to be selected for direct collection. Direct collection of data from these units is necessary because:

- many large and complex employing businesses have more than one legal entity, making it difficult to identify all legal entities for that business in the BAS data.
- BAS data do not include all of the detailed information that the ABS requires from large and complex businesses
- 'tax exempt' businesses that are not required to complete business income tax returns would otherwise not contribute to the statistics.

7 ABN units: The balance of units on the ABSBR classified to manufacturing were ABN units, from the ATO maintained population.

8 An indication of the importance of these populations to the data can be gained from their contribution to the national estimate of sales and service income for Total Manufacturing. The following table shows their proportional contributions to sales and service income

CONTRIBUTION TO SALES AND SERVICE INCOME

|  | $A B N$ |  |  |
| :---: | :---: | :---: | :---: |
|  | TAU | unit | Total |
|  | \% | \% | \% |
| 11 Food product mfg | 72 | 28 | 100 |
| 12 Beverage and tobacco product mfg | 86 | 14 | 100 |
| 13 Textile, leather, clothing and footwear mfg | 28 | 72 | 100 |
| 14 Wood product mfg | 47 | 53 | 100 |
| 15 Pulp, paper and converted paper product mfg | 78 | 22 | 100 |
| 16 Printing (including the reproduction of recorded media) | 40 | 60 | 100 |
| 17 Petroleum and coal product mfg | 97 | 3 | 100 |
| 18 Basic chemical and chemical product mfg | 76 | 24 | 100 |
| 19 Polymer product and rubber product mfg | 52 | 49 | 100 |
| 20 Non-metallic mineral product mfg | 70 | 30 | 100 |
| 21 Primary metal and metal product mfg | 92 | 8 | 100 |
| 22 Fabricated metal product mfg | 39 | 61 | 100 |
| 23 Transport equipment mfg | 71 | 29 | 100 |
| 24 Machinery and equipment mfg | 43 | 57 | 100 |
| 25 Furniture and other mfg | 14 | 86 | 100 |
| 11-25 Total manufacturing | 69 | 31 | 100 |

9 In order to decrease the statistical reporting load placed on providers while maintaining the range and quality of information available to users of statistical data, the strategy for this survey was to adopt the use of directly collected data from a smaller sample of businesses, in combination with information sourced from the ATO. The frame (from which the direct collect sample was selected) was stratified using information held on the ABS Business Register. Businesses eligible for selection in the direct collect sample were then selected from the frame using stratified random sampling techniques.

10 Businesses were selected to participate in the survey (the direct collect sample) only if they met two criteria: their turnover exceeded a threshold level and the business was identified as having been an employing business (based on ATO information) during the reference period. Turnover thresholds were set for each ANZSIC class so that the contribution of surveyed businesses accounted for $97.5 \%$ of total industry class turnover as determined by ATO Business Activity Statement data.

11 Businesses which met neither of these criteria are referred to as 'micro non-employing businesses'. These businesses were not eligible for selection in the sample. For these units, BAS data were obtained and annualised, then added to the directly collected estimates to produce the statistics in this publication. The total estimated value of annual turnover of micro non-employing manufacturing businesses during the 2006-07 reference year, as determined by ATO Business Activity Statement data, was $\$ 2.5$ b.

12 Estimates from previous iterations of this survey were produced using number raised estimation methodology. The 2006-07 survey used generalised regression estimation.This estimation method enables maximum use of observed linear relationships between data directly collected from businesses in the survey and auxiliary information. When the auxiliary information is strongly correlated with data items collected in a survey, the generalised regression estimation methodology will improve the accuracy of the estimates. The auxiliary variables used in this survey were turnover and wages sourced from ATO Business Activity Statement data.

13 The following diagram illustrates the ways in which Australian businesses contribute to the estimates in this publication.

Summary of Data Sources, 2006-07


Completely Enumerated (CE) Stream:

Generalised regression
(GREG) estimation Stream:

Business Activity Statement
(BAS) Stream:

STATE ESTIMATES

EMPLOYMENT ESTIMATES

EMPLOYMENT SIZE
ESTIMATES

14 For the purpose of compiling the estimates in this publication, data for businesses as recorded on the ABSBR contribute via one of three categories (or 'streams') in accordance with significance and collection-related characteristics.

15 The CE stream consists of directly collected survey data for those units recorded on the ABSBR as having employment greater than 300, plus additional 'significant' units in the ABS maintained population and units significant to small state estimates.

16 The GREG stream comprises directly collected data for those sampled units which are not in the CE stream and have turnover, in aggregate, above the bottom 2.5 percentile of BAS sales for that industry. The accuracy of the estimates produced from this data is then improved by using wages and turnover data sourced from businesses' BAS data.

17 The BAS stream comprises data for those businesses in the ATO maintained population whose turnover, in aggregate, is below the bottom 2.5 percentile of BAS sales for that industry.

18 Estimates for each of the selected industries were produced by aggregating the contributing data streams.

19 Estimates of state data in this survey were produced using data from pre-identified sample selections that operated in more than one state. All other sampled units had all their reported data allocated to their main state of operation.

20 One implication of the use of BAS data in these statistics is that no direct measure of employment is available for those units which contribute to the estimates solely through the BAS source. This is because the ATO does not collect information about employment numbers. Unlike financial variables, which have a direct relationship to the data available from the BAS files, employment data are not amenable to being modelled using the same techniques. Hence a different methodology is used in order to estimate employment for those units whose data are sourced solely from the BAS files. For each such business, the number of employees is assumed to be zero. For each unincorporated business an estimate of its number of working proprietors or partners is used as the estimate of its total employment. These estimates are then aggregated to the directly collected data to produce the estimates in this publication.

21 For consistency, employment size estimates in table 2.3 have been presented using identical size categories as in previous issues. A result of the methodological changes introduced in 2006-07 is that the stratification boundaries no longer align as closely with these size ranges. The cut off for completely enumerated (CE) businesses was for any business with employment of 50 or more persons. This meant that employment size categories for 50 and above persons employed were CE'd and had the associated level of precision. The cut off for CE'd units in the 2006-07 survey was units with employment of 300 or more persons which meant sampling variability was introduced for units above 49 persons employed that was not present before. The sample stratification boundaries for sampled units also changed in 2006-07 and the correlation to existing size boundaries is not as strong as in previous years. As a consequence the relative standard errors (RSE) for employment size will be higher than previously. The RSE's can be made available on request.

22 Data collected for 2004-05 and 2005-06 (under ANZSIC93) have been updated to take account of any revisions to the data since they were published in the previous issue of this publication. The data so revised have then been mapped to ANZSIC06, and further adjusted to incorporate the scope changes outlined in Explanatory Notes paragraph 9 and the methodological changes discussed in this chapter. This process is known as 'bridging' and was used to create the key data items presented in Table 1.1.

## TECHNICAL NOTE 2 DATA RELIABILITY

1 For 2006-07, the manufacturing collection was, in part, a sample survey designed primarily to deliver national estimates at the industry class level. Industry subdivision estimates for states and territories are also produced for key data items, but the survey was not specifically designed for these purposes.

2 The majority of data in this publication have been obtained from a sample of manufacturing businesses. As such, these data are subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all manufacturing businesses in the population. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units.

3 There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.

4 The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error (RSE).

5 RSEs at the industry subdivision level for Australia for selected data items representing the full range of data contained in this publication are shown in the table below. Detailed RSEs can be made available on request.

6 To illustrate the above, the estimate of sales and service income for total manufacturing in 2006-07 was $\$ 377,930 \mathrm{~m}$. The RSE of this estimate is shown as $0.7 \%$, giving a standard error of approximately $\$ 2,646 \mathrm{~m}$ (rounded). This implies that there are two chances in three that, if all units had been included in the survey, an estimate in the range of $\$ 375,284 \mathrm{~m}$ to $\$ 380,576 \mathrm{~m}$ would have been obtained. Similarly, it implies that there are 19 chances in 20 (i.e., a confidence interval of $95 \%$ ) that the estimate would have been within the range of $\$ 372,638 \mathrm{~m}$ to $\$ 383,222 \mathrm{~m}$.

7 The size of the RSE may be a misleading indicator of the reliability of some of the estimates for trading profit, OPBT, EBITDA and IVA. Estimates of these variables may legitimately include positive and negative values, reflecting the financial performance of individual businesses. In these cases the aggregated estimate can be small relative to the contribution of individual businesses, resulting in a standard error which is large relative to the estimate.

| INDUSTRY SUBDIVISION |  | Employment at end of June(a) | $\begin{array}{r} \text { Wages } \\ \text { and } \\ \text { salaries } \end{array}$ | Sales and service income | Industry value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (b) | (c) | added |
| ANZSIC |  |  |  |  |  |
| code | Description |  | \% | \% | \% | \% |
| 11 | Food product mfg | 1.8 | 1.7 | 1.8 | 1.3 |
| 12 | Beverage and tobacco product mfg | 2.9 | 2.1 | 1.6 | 1.8 |
| 13 | Textile, leather, clothing and footwear mfg | 5.8 | 3.4 | 3.2 | 3.5 |
| 14 | Wood product mfg | 4.4 | 4.0 | 3.9 | 3.9 |
| 15 | Pulp, paper and converted paper product mfg | 6.1 | 3.2 | 2.6 | 3.0 |
| 16 | Printing (including the reproduction of recorded media) | 10.8 | 10.2 | 9.1 | 10.1 |
| 17 | Petroleum and coal product mfg | 2.4 | 1.3 | 0.2 | 1.0 |
| 18 | Basic chemical and chemical product mfg | 2.5 | 1.7 | 1.5 | 1.6 |
| 19 | Polymer product and rubber product mfg | 4.1 | 3.8 | 3.3 | 3.5 |
| 20 | Non-metallic mineral product mfg | 3.0 | 3.1 | 3.1 | 2.5 |
| 21 | Primary metal and metal product mfg | 2.8 | 2.2 | 0.7 | 1.1 |
| 22 | Fabricated metal product mfg | 2.5 | 2.9 | 2.8 | 3.1 |
| 23 | Transport equipment mfg | 2.2 | 1.9 | 1.5 | 2.2 |
| 24 | Machinery and equipment mfg | 2.2 | 1.8 | 1.6 | 1.7 |
| 25 | Furniture and other mfg | 12.7 | 8.7 | 16.1 | 7.0 |
| 11-25 | Total manufacturing | 1.0 | 0.7 | 0.7 | 0.6 |

(a) Includes working proprietors.
(b) Excludes the drawings of working proprietors.
(c) Includes rent, leasing and hiring income.

8 The design of the manufacturing survey included consideration of RSE's for state and territory estimates. The size of the RSE's for the survey was greater than expected or designed for, and users are advised to apply caution when using state estimates at the ANZSIC subdvision level. The method for compiling the estimates is explained in Technical Note 1, paragraph 19. More detail concerning RSE's can be made available on request.

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

11 For the purpose of compiling the estimates in this publication, businesses in the ATO maintained population (see Technical Note 1) are coded to ANZSIC industry classes on the basis of the activity reported to the ATO when they registered for an ABN. There are a number of reasons why a business classified to any given ANZSIC industry on the ABS Business Register may not have been mainly engaged in activities associated with that industry during the 2006-07 reference year. This may be because of inaccurate or incomplete information at the time the business was registered or it may be because the business has changed activity, either temporarily or permanently.

12 Although it is not possible to quantify non-sampling error, every effort is made to reduce it to a minimum. Collection forms are designed to be easy to complete and assist businesses to report accurately. Efficient and effective operating procedures and systems are used to compile the statistics. The ABS compares data from different ABS (and non-ABS) sources relating to the one industry, to ensure consistency and coherence.

## GLOSSARY

Data presented in this publication have been compiled from the standard financial accounts of businesses; therefore, the definition of each reported item aligns closely with that adopted in standard business accounting practice. Definitions of particular terms, as used in this publication, are also included.

ABN unit The statistical unit used by the ABS to represent businesses, and for which statistics are reported, in most cases. The ABN unit is the business unit which has registered for an ABN, and thus appears on the ATO administered Australian Business Register. In most cases, the ABN unit represents the legal entity. This unit is suitable for ABS statistical needs when the business is simple in structure. For more significant and diverse businesses where the ABN unit is not suitable for ABS statistical needs, the statistical unit used is the type of activity unit (TAU).

## Acquisitions

Amount exported by this business or its agent

Bad and doubtful debts

## billion

Business A business is generally considered to be a person, partnership, or corporation engaged in business or commerce; for example, a textile product manufacturing business.

In this publication, the term represents the ABN unit or type of activity unit (TAU), which are the two standard statistical units for the 2006-07 manufacturing collection (these two units are explained under separate entries). For details, see Explanatory Notes paragraphs 4-8.

Represented by the form item G1 Total sales on businesses' Business Activity Statements, supplied by them to the ATO. This item comprises all payments and other consideration (including GST) received during the nominated tax period for supplies made in the course of business.
See the various capital expenditure entries.
This represents the sales value of goods produced by the business (or for it on commission) that are exported (or are intended for export) outside Australia by the business or by its agent.

Represents the amount of bad and doubtful debts written-off, net of bad and doubtful debts previously written-off but recovered.

## Businesses that do not export

Businesses that export more than $50 \%$ of sales

Businesses that export up to and including $50 \%$ of sales

Capital expenditure on dwellings, other buildings and
structures
Business Activity Statement (BAS) total sales

Businesses that reported no exports (either by their business or for them by an agent) of goods that they produced.

Businesses that reported exports (either by their business or for them by an agent) of more than $50 \%$ of sales of goods that they produced.

Businesses that reported exports (either by their business or for them by an agent) of up to and including $50 \%$ of sales of goods that they produced.

Capital expenditure incurred acquiring dwellings, other buildings and structures, including roads, factories, warehouses, offices, and bridges. Includes expenses (except capitalised interest) incurred during the year in acquiring such assets.

Capital expenditure on other assets (including land and intangible assets)

Capital expenditure on plant, machinery and equipment

## Capital work done for own use

Capitalised purchases Change in inventories Closing inventories

## Commission manufacturing

## Commission expenses

Cost of sales

Capital expenditure incurred acquiring other assets (including land and intangible assets). Intangible asset purchases may include items such as patents, licences and goodwill. Also included is computer software capitalised, including capitalised computer software licence fees, installation costs, the purchase or development of large databases, software developed in-house (but excluded is software maintenance expenditure), and capitalised payments to contractors and consultants for software development. Note that if the cost of software and hardware cannot be separated, the total cost is included in acquisition of plant, machinery and equipment.

Capital expenditure incurred acquiring plant, machinery and other equipment, including motor vehicles. Includes expenses (except capitalised interest) incurred during the year in acquiring such assets.

Capitalised work done by the employees or proprietors of a business in manufacturing, constructing, installing or repairing assets, and the in-house development of computer software, for use by the business or for rental or lease. This work is valued at the capitalised costs of the materials and the wages and salaries involved.

Conceptually, under the current international standards, this item should also include own account mineral exploration and own account production of literary, entertainment or artistic originals. However, these activities are relatively unimportant for manufacturers and have not been measured for manufacturing industries.

Goods drawn from inventories for use as fixed tangible assets in capital work done by the employees or proprietors of a business for use by the business or for rental or lease.

The value of total closing inventories less total opening inventories
The value of all inventories of finished goods (including inventories for resale), work-in-progress (less progress payments billed), raw materials, fuels, and containers, at the end of the reporting period.

Significant amounts of manufacturing are undertaken on a commission basis by one manufacturer on behalf of another or on behalf of a non-manufacturer for a fee. Typically, commission manufacturing involves a client commissioning the production of goods utilising materials provided by the client. Ownership of these materials remains with the client. Similarly, the goods made using these materials are owned by the client.

For the purposes of the estimates in this publication, the producing business reports the commission fee as service income and the wages and salaries and any other expenses incurred.

If the client is also a manufacturing business then, in addition to data for its own manufacturing operations, the client reports

- the sales and inventories of the commissioned goods,
- the cost of the materials provided to the producing business,
- the commission fee paid, and
- the value of any other intermediate inputs related to the commission transaction.

If the client is not a manufacturing business, no data are reported by the client as it is excluded from the manufacturing collection.

Payments to other businesses and self-employed persons for work done or sales made on a contract or commission basis using materials supplied by the business. Payments to persons paid by commission without a retainer are also included. Excludes commissions paid to persons who receive a retainer, commission paid to the business' own employees, and in-house printing expenses.

The sum of purchases, selected expenses and opening inventories less closing inventories. Any capitalised purchases are excluded.

# Current prices <br> Depreciation and amortisation 

Disposal of assets

Earnings before interest, tax, depreciation and amortisation (EBITDA)

## Employer contributions into

 superannuation
## Employment at end of June

Exports as a proportion of sales of goods produced

Estimates at current prices are valued at the prices of the period to which the observation relates. For example, estimates for 2006-07 are valued using 2006-07 prices. This contrasts to chain volume measures, where the prices used in valuation refer to the prices of a previous period.

Depreciation/amortisation allowed on tangible and intangible assets. Includes, for lessees only, depreciation/amortisation in respect of finance leases.

Proceeds from the sale of tangible assets (plant, machinery, equipment, land, dwellings, other buildings and structures), and intangible assets (such as patents, licences and goodwill).

Profit prior to the deduction of net interest (interest income minus interest expenses), income tax, depreciation and amortisation. Items classifiable to other income are also excluded.

Includes all employer contributions to superannuation funds (including the employer productivity contribution) and provisions for employer contributions to superannuation funds. Also includes expenses relating to employer funded defined benefit schemes. Employee contributions and salary sacrifice contributions are excluded. Note that salary sacrifice contributions were included in estimates of this item in previous issues of this publication.

Number of persons working for manufacturing businesses during the last pay period ending in June of the given year. Includes working proprietors and partners, employees absent on paid or prepaid leave, employees on workers' compensation who continue to be paid through the payroll, and contract workers paid through the payroll. Excludes persons paid by commission only, non-salaried directors, volunteers and self-employed persons such as consultants and contractors.

In order to produce data by state and territory, businesses which received mail out questionnaires were also asked to report employment (as well as wages and salaries, and sales of goods and services) for each state and/or territory in which they operated. For details, see Explanatory Notes paragraph 43.

For details of how employment estimates have been derived, see Technical Note 1 paragraph 19.

## Enterprise An institutional unit comprising:

- a single legal entity or business entity; or
- more than one legal entity or business entity within the same enterprise group and in the same institutional sub-sector (i.e. they are all classified to a single Standard Institutional Sector Classification of Australia (SISCA) sub-sector).

A unit covering all the operations in Australia of one or more legal entities under common ownership and/or control. It covers all the operations in Australia of legal entities which are related in terms of the current Corporations Law (as amended by the Corporations Legislation Amendment Act 1991), including legal entities such as companies, trusts and partnerships. Majority ownership is not required for control to be exercised.

For an individual business, this represents the percentage of sales of goods produced by the business (or for it on commission) which are exported (or are intended for export) outside Australia by the business or by its agent. (In table 4.1, the proportion is calculated by dividing the value of goods exported by the value of sales of goods produced by all manufacturing businesses, not just the aggregated value for those units which exported.)
Because the ATO data do not contain this export information, businesses whose contribution to manufacturing estimates was sourced from BAS data do not contribute to these export data. The effect of the exclusion of these businesses is likely to be minimal, in view of their small contribution to overall estimates.

Exports as a proportion of sales of goods produced continued

Freight and cartage expenses

## Fringe benefits tax

Funding from government for operational costs

Gross fixed capital formation

These data also exclude those businesses which operated during the given reference year but were not operating at 30 June of that reference year.

Excludes the cost of delivery by own vehicles and employees, as well as overseas freight and cartage on goods exported, and payments to couriers.

Fringe benefits tax is payable by employers when certain benefits in excess of normal wages or salaries (e.g. free or discounted goods or services) are received by their employees (or associates of employees) in connection with their employment.

Funding from federal, state and/or local government for operational costs (e.g. wages and salaries, rent, food). Includes bounties, subsidies, export grants, apprenticeship and traineeship schemes, and amounts reimbursed under the Australian Government's Energy Grants (Fuel Tax Credits) Scheme. Excludes funding from government for specific capital items.

Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the reference period, plus certain additions to the value of non-produced assets realised bythe productive activity of institutional units.

Fixed assets are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly or continuously in other processes of production for more than one year.

The derivation of GFCF is as follows:
Acquisition of
Road vehicles
plus Other transport equipment
Industrial machinery and equipment
Computer software capitalised
Computers and computer peripherals
Electronic equipment and electrical machinery
Communications equipment
Other plant and equipment
Dwellings, other buildings and structures
Computer software expensed
less Disposal of plant, machinery and equipment (including motor vehicles)
Disposal of dwellings, other buildings and structures
equals GFCF

Industry class The structure of ANZSIC comprises four levels, ranging from industry division (broadest level) to industry class (finest level). Activities are narrowly defined within the industry class level, which is identified by a four-digit code, e.g. Industry Class 1351 Clothing manufacturing. Usually, an activity is primarily defined to one class. However, some activities may be primary to more than one class.

Industry division The structure comprises four levels, ranging from industry division (broadest level) to the industry class (finest level). The main purpose of the industry division level is to provide a limited number of categories which give a broad overall picture of the economy. There are 19 divisions within ANZSIC, each identified by an alphabetical letter, that is, 'A' for Agriculture, forestry and fishing, 'B' for Mining, 'C' for Manufacturing, etc.

Industry group This is the intermediate level within each industry division of ANZSIC and is identified by a three-digit code, e.g. Industry Group 135 for Clothing and footwear manufacturing. It gives more detail than the industry subdivision, and is created in a way that groups like industry classes together. person employed

Industry value added to selected labour costs

This is the broadest level category within each industry division of ANZSIC and is identified by a two-digit code, e.g. Industry Subdivision 13 for Textile, leather, clothing and Footwear manufacturing. Industry subdivisions are built up from industry groups which, in turn, are built up from industry classes. The manufacturing industry subdivisions are:

Food product mfg
Beverage and tobacco product mfg
Textile, leather, clothing and footwear mfg
Wood product mfg
Pulp, pater and converted paper product mfg
Printing (including the reproduction of recorded media)
Petroleum and coal product mfg
Basic chemical and chemical product mfg
Polymer product and rubber product mfg
Non-metallic mineral product mfg
Primary metal and metal product mfg
Fabricated metal product mfg
Transport equipment mfg
Machinery and equipment mfg
Furniture and other manufacturing
IVA represents the value added by an industry to the intermediate inputs used by the industry. IVA is the measure of the contribution by manufacturing businesses to gross domestic product.

The derivation of IVA is as follows:
Sales and service income
plus Funding from federal, state and/or local government for operational costs
plus Capital work done for own use
plus Closing inventories
less Opening inventories
less Purchases of goods and materials
less Other intermediate input expenses (for details, see the entry for total expenses)
equals IVA

However, it should be noted that IVA is a measure of economic activity and is not equivalent to operating profit before tax (OPBT). Wage and salary expenses and most other labour costs are not taken into account in its calculation, and nor are most insurance premiums, interest expenses or depreciation and a number of lesser expenses (see the entry for total expenses for further details). On the income side, OPBT includes total income whereas IVA only includes sales and service income.

Industry value added is related to, but different from, the national accounting variable gross value added.

For national accounts purposes, gross value added is calculated by adjusting industry value added to include General Government units and to also account for some other effects.

IVA of manufacturing businesses which operated during the given year ended 30 June divided by the number of persons employed by manufacturing businesses during the last pay period ending in June of that same year.

IVA of manufacturing businesses which operated during the year ended 30 June 2007 divided by their selected labour costs, i.e. industry value added / selected labour costs.

Insurance premiums

Interest coverage

Interest expenses

Interest income

## Intermediate input expenses

 Intermediate inputsInventories - opening/closing

Investment rate (value added)

Labour costs

Manufacturing business

Motor vehicle running expenses

Net capital expenditure Opening inventories

Operating profit before tax
(OPBT)

Premiums for fire, general, accident, public liability, optional third-party and comprehensive motor vehicle insurance, professional indemnity insurance and common law liability. Excludes workers' compensation insurance premiums/costs (included in selected labour costs) and compulsory third party motor vehicle insurance premiums (included in motor vehicle running expenses).

The number of times that businesses can meet their interest expenses from their earnings before net interest, tax, depreciation and amortisation (EBITDA), i.e. earnings before interest, tax, depreciation and amorisation / interest expenses.

Includes interest paid on loans from banks, finance companies, partners, and related or unrelated businesses, and in respect of finance leases. Also includes interest equivalents such as hedging costs and expenses associated with discounted bills. Excludes bank charges other than interest and capital repayments.

Includes interest received from deposits in banks and non-bank financial institutions, loans, advances, finance leases and earnings on discounted bills. Excludes capital repayments received.

For details, see the entry for total expenses.
Intermediate inputs consist of materials and certain services which are used up in the production process.

The calculation is:

## Intermediate input expenses

 (for details, see the entry for total expenses)plus Opening inventories
less Closing inventories
equals Intermediate inputs

The value of all inventories of finished goods (including inventories for resale), work-in-progress (less progress payments billed), raw materials, fuels, and containers, at the beginning and end of the reporting period respectively.

The proportion of industry value added (IVA) used to acquire capital, i.e. (capital expenditure / IVA) x 100 .

| Labour costs | For the purposes of table 1.2, comprises wages and salaries, employer contributions into <br> superannuation, workers' compensation premiums/costs, fringe benefits tax and payroll <br> tax. |
| :---: | :--- |
| Manufacturing business | An ABN unit / TAU predominantly engaged in manufacturing activities. The data <br> collected for such units cover all activities of the business (including non-manufacturing <br> activities). |
| Motor vehicle runningexpenses | Includes expenditure on registration fees, compulsory third-party insurance premiums, <br> fuel, and repair and maintenance expenses. Excludes expenses for off-road motor <br> vehicles (e.g. forklifts, mobile plant) and lease payments, optional third party and |
| Net capital expenditure | Comprehensive motor vehicle insurance premiums, and depreciation. |
| Opening inventories | The value of total capital expenditure less proceeds received from the disposal of assets. <br> work-in-progress (less progress payments billed), raw materials, fuels, and containers, at |
| Operating profit before tax |  |
| (OPBT) | Profit before extraordinary items are brought to account and prior to the deduction of <br> the beginning of the reporting period. <br> income tax and appropriations to owners (e.g. dividends paid), <br> i.e. total income - total expenses + change in inventories. |

## Other income

## Other intermediate input <br> expenses

Other selected expenses

Reference period

Rent, leasing and hiring
expenses

Rent, leasing and hiring income

Repair and maintenance expenses

## Purchases and selected <br> Purchases and selected expenses <br> Purchases of goods and materials

Includes dividend income and other income such as net profit (or loss) on the sale of fixed tangible assets, net profit (or loss) resulting from variations in foreign exchange rates/transactions, and funding from federal, state and/or local government for specific capital items. It excludes extraordinary profits or losses, i.e. those not associated with the normal operations of the business and of a non-recurring nature.

Comprises intermediate input expenses less current purchases of goods and materials used in production (i.e. excludes any capitalised purchases). Further detail is included in the entry for total expenses.

Includes expenditure on management fees/charges paid to related and unrelated businesses, bank charges other than interest, audit and other accounting expenses, legal fees, advertising expenses, postal and telecommunication expenses, office supplies and printing expenses, travelling, accommodation and entertainment expenses, staff training, payments for royalties from intellectual property (e.g. patents and copyrights), payments to employment agencies for staff, payroll tax, fringe benefits tax, land tax and land rates, and computer software expenses not capitalised. Some of these expense items are treated as intermediate input expenses in the calculation of industry value added. For details, see the entry for total expenses.

Payroll tax A tax levied by state and territory governments on the amount of wages and salaries paid by a business. Excludes Pay as You Go withholding tax.
Profit margin The percentage of sales and service income available as operating profit before tax (OPBT), i.e. (OPBT / sales and service income) x 100 .

Purchases of goods and materials, rent, leasing and hiring expenses, freight and cartage expenses, motor vehicle running expenses, repair and maintenance expenses, contract, subcontract and commission expenses, and other selected expenses.

Purchases of materials, components, containers, packaging materials, fuels, electricity and water, and purchases of finished goods for resale. Also includes capitalised purchases. Excludes purchases of parts and fuels for motor vehicles but includes fuels for off-road vehicles, such as forklifts and mobile plant.

For each collection year, businesses are asked to report data for the financial year ended 30 June. However, if a business has a different financial year, it is asked to report (apart from employment) for the 12 month period which ends between 1 October of the previous year and 30 September of the current year. This period is then used as a substitute for the financial year ended 30 June. For example, for the 2006-07 collection, a business may have reported data for the year ended 31 December 2006.

Payments for the rent, leasing and hiring of land, dwellings, other buildings and structures, motor vehicles, plant, machinery and other equipment (including telecommunication equipment). Includes operating lease payments; excludes finance lease payments.

See the entry for sales and service income.

Includes repair and maintenance of computer and communications software and hardware, and repair and maintenance of off-road motor vehicles. Excludes wages and salaries of own employees and the repair and maintenance costs of on-road motor vehicles.

Sales and service income per person employed Sales of goods produced Selected expenses

Selected labour costs
Selected labour costs per person employed

## Includes:

## Sales of goods

- whether or not manufactured by the business (including goods produced for the business on a commission basis). Includes export sales, sales or transfers to related businesses or to overseas branches of the business, progress payments relating to long term contracts if they are billed in the period, and delivery charges not separately invoiced to customers. Excludes excise and duties received on behalf of the government, sales of assets, interest income, delivery charges separately invoiced to customers, and rent, leasing and hiring income. Exports are valued free on board (f.o.b.), i.e. export freight charges are excluded.


## Income from services

- includes income from consulting services, repair, maintenance and service income and fees, contract, subcontract and commission income, management fees/charges from related and unrelated businesses, installation charges, delivery charges separately invoiced to customers, royalties from intellectual property (e.g. patents and copyrights) and natural resource royalties income. Excludes interest income, and delivery charges not separately invoiced to customers. Under the current international standards, rent, leasing and hiring income (except from finance leases) is also classified as service income.


## Rent, leasing and hiring income

- derived from the ownership of land, dwellings, buildings and other structures, motor vehicles, plant, machinery and other equipment. Excludes royalties from mineral leases, income from finance leases and payments received under hire purchase arrangements. This item is included in sales and service income, but is not separately published.

These are valued net of discounts given and exclusive of goods and services tax (GST). Extraordinary items are also excluded.

In order to produce data by state and territory, selected businesses which received mail out questionnaires were also asked to report sales of goods and services (as well as employment and wages and salaries) for each state and/or territory in which they operated. For details, see Explanatory Notes paragraph 43.

The value of sales and service income of manufacturing businesses which operated during the given year end 30 June divided by the number of persons employed by manufacturing businesses during the last pay period ending June of that same year.

Sales of goods produced (manufactured) by the business (including goods produced for the business on a commission basis). Includes export sales, sales or transfers to related businesses or to overseas branches of the business, progress payments relating to long term contracts if they are billed in the period, and delivery charges not separately invoiced to customers. Excludes excise and duties received on behalf of the Government, sales of assets, interest income, and delivery charges separately invoiced to customers. Exports are valued free on board (f.o.b.), i.e. export freight charges are excluded.

See the entry for purchases and selected expenses.
See the entry for total expenses.
The value of selected labour costs paid by manufacturing businesses which operated during the given year ended 30 June divided by the number of persons employed by manufacturing businesses during the last pay period ending in June of that same year.

## Standard Institutional Sector Classification of Australia (SISCA)

The SISCA is the central classification among ABS Standard Economic Sector Classifications. It is based on the System of National Accounts 1993 (SNA93) institutional sector classification, and comprises the sectors: non-financial corporations, financial corporations, general government, households, non-profit institutions serving households, and rest of the world (which includes only non-resident units, these being excluded from all other sectors). For more information, users should refer to Standard Economic Sector Classifications of Australia (SESCA) (cat. no. 1218.0).

## Superannuation

Total acquisitions

Total expenses
See the entry for employer contributions into superannuation.
The total capital expenditure on the acquisition of plant, machinery and equipment, dwellings, other buildings and structures, and of other assets (including land and intangible assets). Also included is capital work done for own use.

For the purposes of calculating economic and accounting variables, expenses incurred by
businesses are divided into several categories. However, some expenses are excluded entirely from all such calculations: excluded are capital repayments, costs associated with the transfer of real estate, dividends, donations, export freight charges, extraordinary losses, foreign exchange losses, goods and services tax (GST), excise and duties payable to governments, income tax and other direct taxes, losses on asset sales, and unrealised gains/losses from revaluations of assets.

Those expenses used for calculations are categorised as follows:

## Intermediate input expenses

This category covers the major expenses incurred by businesses in producing and distributing goods and services (except labour costs), and comprises two sub-categories of operating expenses:
Purchases of goods, materials and services used in production, which include:

- purchases of materials, components, containers and packaging materials, electricity, fuels and water
- purchases of goods for resale (without any further processing or assembly)
- motor vehicle running expenses
- freight and cartage expenses
- repair and maintenance expenses
- rent, leasing and hiring expenses (excluding finance lease payments)
- contract, subcontract and commission expenses.

Expenses related to the sale of goods and administrative expenses, which include:

- management fees/charges paid to related and unrelated businesses
- bank charges other than interest
- audit and other accounting expenses
- legal fees
- advertising expenses
- postal and telecommunication expenses
- office supplies and printing expenses
- travelling, accommodation and entertainment expenses
- staff training
- payments for royalties from intellectual property (e.g. patents and copyrights)
- payments to employment agencies for staff.

Excluded from intermediate input expenses are selected labour costs and other operating expenses as detailed below.

## Selected labour costs

- wages and salaries (including provisions for employee entitlements, salary sacrificed earnings, share based payments and stock options)
- employer contributions into superannuation
- workers' compensation premiums/costs.


## Total expenses continued

## Other operating expenses

Some expenses are excluded from the calculation of intermediate input expenses and selected labour costs, but are included in the calculation of the accounting variable operating profit before tax (OPBT). These expenses include:

- bad and doubtful debts
- computer software expenses not capitalised by businesses
- depreciation and amortisation
- insurance premiums (except workers' compensation and compulsory third party motor vehicle insurance premiums)
- interest expenses
- land tax and land rates
- other expenses not capitalised by businesses
- natural resource royalties expenses
- payroll tax and fringe benefits tax

Total income Comprises sales and service income, interest income, funding from government for operational costs, and other income (for details, see the entries for these items).

Trading profit A measure of profit directly attributable to trading in goods and services. It is derived by subtracting the cost of sales from the value of sales and service income.

It should not be inferred that all of this profit is available as surplus, as other expenses such as selected labour costs, depreciation, insurance premiums, natural resource royalties, bad debts and interest have not been taken into account. Also, other income items such as funding from government and interest income have not been included.

## Type of activity unit (TAU)

Wages and salaries
The TAU is the statistical unit used by the ABS to represent businesses, and for statistics are reported, in cases where the ABN unit is not suitable for ABS statistical needs.

The TAU comprises one or more business entities, sub-entities or branches of a business entity within an enterprise group that can report production and employment data for similar economic activities. When a minimum set of data items are available, a TAU is created which covers all the operations within an industry subdivision (and the TAU is classified to the relevant subdivision of the ANZSIC). Where a business cannot supply adequate data for each industry, a TAU is formed which contains activity in more than one industry subdivision.

The gross wages and salaries (including capitalised wages and salaries) of all employees of the business. The item includes severance, termination and redundancy payments, salaries and fees of directors and executives, retainers and commissions of persons who received a retainer, bonuses, and annual and other types of leave. Provision expenses for employee entitlements (e.g. provisions for annual leave and leave bonus, long service leave, sick leave, and severance, termination and redundancy payments) are also included, as are salary sacrificed earnings and remuneration of employees in the form of share based payments and stock options. (Note that in previous issues of this publication, salary sacrificed earnings and remuneration of employees in the form of share based payments and stock options were reported under related expense items. For example, salary sacrificed for superannuation was included in employer contributions into superannuation).

Payments related to salary sacrifice and payments to self-employed persons such as consultants, contractors and persons paid solely by commission without a retainer are excluded. The drawings of working proprietors and partners are also excluded.

In order to produce data by state and territory, selected businesses which received mail out questionnaires were also asked to provide wages and salaries (as well as employment and sales of goods and services) for each state and/or territory in which they operated For details, see Explanatory Notes paragraph 43.

Wages and salaries per person employed

The value of wages and salaries paid by manufacturing businesses which operated during the given year ended 30 June divided by the number of persons employed by manufacturing businesses during the last pay period ending in June of the same year.

Workers' compensation premiums/costs

Workers' compensation is a compulsory insurance cover to be taken out by all employers, except for self-insured workers, according to legislative schemes to cover employees suffering injury or disease in the course of or arising out of employment.

## FOR MORE INFORMATION

INTERNET
www.abs.gov.au the ABS website is the best place for data from our publications and information about the ABS.

## INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our website. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

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## FREE ACCESS TO STATISTICS

All statistics on the ABS website can be downloaded free of charge.

WEB ADDRESS www.abs.gov.au


[^0]:    ^ estimate has a relative standard error of $10 \%$ to less than $25 \%$
    (a) Includes working proprietors. and should be used with caution
    (b) Excludes the drawings of working proprietors.
    ** estimate has a relative standard error greater than $50 \%$ and is considered too unreliable for general use
    (c) Includes rent, leasing and hiring income.

[^1]:    \$m

[^2]:    (a) Includes working proprietors
    (c) See Explanatory Notes paragraph 38.
    (b) Excludes the drawings of working proprietors

[^3]:    ^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
    np not available for publication but included in totals where applicable, unless otherwise indicated

[^4]:    ^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
    np not available for publication but included in totals where applicable, unless otherwise indicated
    (a) Includes working proprietors
    (b) Excludes the drawings of working proprietors.
    (c) Includes rent, leasing and hiring income.

[^5]:    ^ estimate has a relative standard error of $10 \%$ to less than $25 \%$ and should be used with caution
    (b) See Technical Note 2 paragraph 8.
    p not available for publication but included in totals where
    c) Includes working proprietors.
    d) Excludes the drawings of working proprietors.
    (e) Includes rent, leasing and hiring income.
    a) See Explanatory Notes paragraph 43.
    (f) See Explanatory Notes paragraphs 37 and 38.

