



# MANUFACTURING INDUSTRY

AUSTRALIA  
PRELIMINARY

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## CONTENTS

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

### TABLE

|   |   |
|---|---|
| 1 Manufacturing management units, summary ..... | 5 |
|---|---|

### ADDITIONAL INFORMATION

|  |    |
|--|----|
| Explanatory notes .....                | 8  |
| Appendix: 2000–01 survey changes ..... | 13 |

- For further information about these and related statistics, contact John Ridley on Sydney 02 9268 4541 or the National Information and Referral Service on 1300 135 070.

# NOTES

## ANNUAL MANUFACTURING INDUSTRY COLLECTION

The 2000–01 collection was a survey of approximately 9,500 manufacturing management units. All selected manufacturing management units were asked to provide data on employment, wages and salaries, detailed structural and performance data, value of sales for commodities produced, and whether their products were exported. This publication provides preliminary estimates of employment, wages and salaries, sales and service income, and industry value added (IVA). Information in respect of all the data items collected will be released in either *Manufacturing Industry, Australia, 2000–01* (Cat. no. 8221.0), other Australian Bureau of Statistics (ABS) publications, or will be available on request and for a charge.

## ABOUT THIS ISSUE

This is the first publication in this series to present data for manufacturing management units. In previous years, data related to manufacturing establishments. For more details, see the Appendix.

Since this is the first year that this publication contains data collected from management units, it is not possible to provide any specific guidance regarding the relationship between these results and the final estimates. However, such comparisons in previous years, for data collected from establishments, have shown that preliminary estimates are generally slightly higher than final estimates, typically by about 1%.

## MANUFACTURING PUBLICATIONS

The 2000–01 final manufacturing industry publication *Manufacturing Industry, Australia, 2000–01* (Cat. no. 8221.0) will be released in September 2002. State publications (Cat. nos 8221.1 to 8221.6) will not be produced for 2000–01; see the Appendix for more details. *Manufacturing, Australia, 2002* (Cat. no. 8225.0), a compendium publication, is to be released in December 2002.

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## ABBREVIATIONS

|        |   |
|--------|---|
| ABS    | Australian Bureau of Statistics                               |
| ANZSIC | Australian and New Zealand Standard Industrial Classification |
| ATO    | Australian Taxation Office                                    |
| f.o.b. | free on board   |
| GE     | group employer  |
| GST    | goods and services tax  |
| IVA    | industry value added  |
| mfg    | manufacturing   |
| OPBT   | operating profit before tax                                   |
| PAYE   | pay as you earn   |
| PAYGW  | pay as you go withholding                                     |

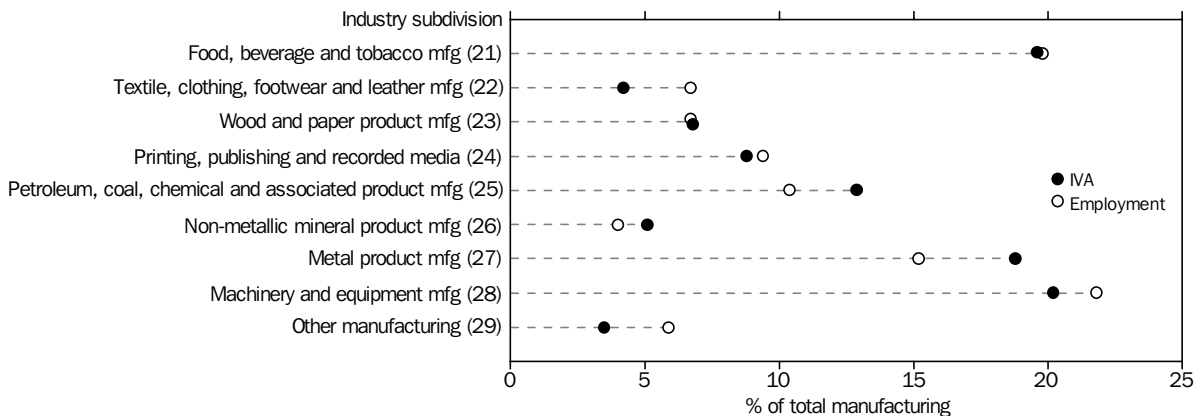
Dennis Trewin  
Australian Statistician

## MAIN FEATURES

### OVERVIEW

Sales and service income (see paragraphs 16 and 17 of the Explanatory Notes for the definition) for the year 2000–01 by manufacturing management units operating in Australia was \$253,938m, which resulted in an industry value added (IVA) for the year of \$74,640m. In current price terms, this represents a 6% increase in sales and service income from the \$239,673m recorded for 1999–2000 and an increase of 5% in IVA. However, using volume measures to remove the effects of price changes (see paragraphs 21 and 22 of the Explanatory Notes), IVA increased by 1%. Manufacturing management units employed 985,700 persons at the end of June 2001 and paid \$39,536m in wages and salaries in 2000–01.

DISTRIBUTION OF IVA AND EMPLOYMENT ACROSS INDUSTRIES



### EMPLOYMENT

Australian manufacturing employment increased between June 2000 and June 2001 (up 3% from 956,800 persons to 985,700 persons). The industry subdivision with the largest percentage increase in employment was OTHER MANUFACTURING (up 9% or 4,600 persons). The other subdivisions to record increases were MACHINERY AND EQUIPMENT MANUFACTURING (up 7% or 14,200 persons), METAL PRODUCT MANUFACTURING (up 5% or 7,600 persons), FOOD, BEVERAGE AND TOBACCO MANUFACTURING (up 4% or 7,900 persons) and WOOD AND PAPER PRODUCT MANUFACTURING (up 3% or 1,800 persons). Employment in the TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING, PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING and NON-METALLIC MINERAL PRODUCT MANUFACTURING subdivisions remained steady. The only industry subdivision to record a decrease was PRINTING, PUBLISHING AND RECORDED MEDIA (down 8% or 7,800 persons).

### SALES AND SERVICE INCOME

Sales and service income rose, in current price terms, by \$14,264m to \$253,938m for 2000–01. This represents a 6% increase on the \$239,673m recorded for 1999–2000.

Seven of the nine manufacturing industry subdivisions recorded an increase in sales and service income between 1999–2000 and 2000–01. The largest percentage increases between 1999–2000 and 2000–01 were recorded by PETROLEUM, COAL, CHEMICAL AND ASSOCIATED PRODUCT MANUFACTURING and OTHER MANUFACTURING (both up 11%), METAL PRODUCT MANUFACTURING (up 10%), MACHINERY AND EQUIPMENT MANUFACTURING (up 9%) and TEXTILE, CLOTHING, FOOTWEAR AND LEATHER MANUFACTURING (up 7%). PRINTING, PUBLISHING AND RECORDED MEDIA (down 9%) and NON-METALLIC MINERAL PRODUCT MANUFACTURING (down 3%) were the two industry subdivisions to record a fall in sales and service income. The largest dollar increase between 1999–2000 and 2000–01 was recorded by MACHINERY AND EQUIPMENT

## MAIN FEATURES *continued*

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### SALES AND SERVICE INCOME *continued*

MANUFACTURING (up \$4,312m). FOOD, BEVERAGE AND TOBACCO MANUFACTURING (\$56,080m) remained the largest contributor to total manufacturing sales and service income.

### INDUSTRY VALUE ADDED

IVA rose, in current price terms, by \$3,559m to \$74,640m for 2000–01. This represents a 5% increase on the \$71,081m recorded for 1999–2000.

Five industry subdivisions recorded an increase in current price measures of IVA over the period 1999–2000 to 2000–01. The largest percentage increases were recorded by METAL PRODUCT MANUFACTURING (up 20%), OTHER MANUFACTURING (up 19%) and MACHINERY AND EQUIPMENT MANUFACTURING (up 14%). The largest percentage decrease was recorded by PRINTING, PUBLISHING AND RECORDED MEDIA (down 12%) with this subdivision also recording a decrease using volume measures (down 11%). The largest percentage increases using volume measures were recorded by METAL PRODUCT MANUFACTURING, MACHINERY AND EQUIPMENT MANUFACTURING and OTHER MANUFACTURING (all up 6%).

## MANUFACTURING MANAGEMENT UNITS(a), Summary—States, Territories &amp; Australia

| INDUSTRY SUBDIVISION |  | Employment<br>at end of<br>June(b) | Wages<br>and<br>salaries<br>(c) | Sales and<br>service<br>income<br>(d) | Industry<br>value<br>added |
|----------------------|--|------------------------------------|---------------------------------|---------------------------------------|----------------------------|
| ANZSIC<br>code       | Description  | '000                               | \$m                             | \$m                                   | \$m                        |
| NEW SOUTH WALES      |  |                                    |                                 |                                       |                            |
| 21                   | Food, beverage and tobacco mfg                       | 55.4                               | 2 287                           | 17 262                                | 4 789                      |
| 22                   | Textile, clothing, footwear and leather mfg          | 17.5                               | 567                             | 2 904                                 | 835                        |
| 23                   | Wood and paper product mfg                           | 20.2                               | 776                             | 4 864                                 | 1 580                      |
| 24                   | Printing, publishing and recorded media              | 35.3                               | 1 612                           | 6 798                                 | 2 665                      |
| 25                   | Petroleum, coal, chemical and associated product mfg | 36.2                               | 1 683                           | 14 764                                | 3 315                      |
| 26                   | Non-metallic mineral product mfg                     | 12.1                               | 545                             | 3 556                                 | 1 315                      |
| 27                   | Metal product mfg                                    | 53.0                               | 2 314                           | 14 941                                | 4 703                      |
| 28                   | Machinery and equipment mfg                          | 59.4                               | 2 607                           | 12 568                                | 4 681                      |
| 29                   | Other manufacturing                                  | 17.5                               | 535                             | 2 275                                 | 835                        |
| 21–29                | <i>Total manufacturing</i>                           | 306.7                              | 12 926                          | 79 930                                | 24 718                     |
| VICTORIA             |  |                                    |                                 |                                       |                            |
| 21                   | Food, beverage and tobacco mfg                       | 54.2                               | 2 204                           | 17 344                                | 4 423                      |
| 22                   | Textile, clothing, footwear and leather mfg          | 32.7                               | 1 019                           | 5 084                                 | 1 611                      |
| 23                   | Wood and paper product mfg                           | 19.6                               | 759                             | 5 035                                 | 1 493                      |
| 24                   | Printing, publishing and recorded media              | 30.1                               | 1 173                           | 4 956                                 | 1 979                      |
| 25                   | Petroleum, coal, chemical and associated product mfg | 39.6                               | 2 100                           | 17 148                                | 3 748                      |
| 26                   | Non-metallic mineral product mfg                     | 10.6                               | 447                             | 2 415                                 | 915                        |
| 27                   | Metal product mfg                                    | 39.0                               | 1 592                           | 9 594                                 | 3 373                      |
| 28                   | Machinery and equipment mfg                          | 73.1                               | 3 193                           | 21 835                                | 5 488                      |
| 29                   | Other manufacturing                                  | 20.1                               | 573                             | 2 748                                 | 900                        |
| 21–29                | <i>Total manufacturing</i>                           | 319.0                              | 13 060                          | 86 158                                | 23 930                     |
| QUEENSLAND           |  |                                    |                                 |                                       |                            |
| 21                   | Food, beverage and tobacco mfg                       | 42.6                               | 1 451                           | 11 168                                | 2 567                      |
| 22                   | Textile, clothing, footwear and leather mfg          | 5.7                                | 143                             | 706                                   | 230                        |
| 23                   | Wood and paper product mfg                           | 12.1                               | 417                             | 2 206                                 | 771                        |
| 24                   | Printing, publishing and recorded media              | 11.7                               | 451                             | 1 700                                 | 800                        |
| 25                   | Petroleum, coal, chemical and associated product mfg | 11.9                               | 505                             | 5 811                                 | 1 127                      |
| 26                   | Non-metallic mineral product mfg                     | 7.5                                | 287                             | 1 909                                 | 609                        |
| 27                   | Metal product mfg                                    | 24.1                               | 965                             | 7 651                                 | 2 672                      |
| 28                   | Machinery and equipment mfg                          | 31.2                               | 1 083                           | 5 207                                 | 1 620                      |
| 29                   | Other manufacturing                                  | 9.6                                | 290                             | 1 190                                 | 441                        |
| 21–29                | <i>Total manufacturing</i>                           | 156.5                              | 5 591                           | 37 548                                | 10 837                     |
| SOUTH AUSTRALIA      |  |                                    |                                 |                                       |                            |
| 21                   | Food, beverage and tobacco mfg                       | 21.1                               | 720                             | 5 027                                 | 1 495                      |
| 22                   | Textile, clothing, footwear and leather mfg          | 4.5                                | 152                             | 939                                   | 252                        |
| 23                   | Wood and paper product mfg                           | 5.9                                | 247                             | 1 507                                 | 524                        |
| 24                   | Printing, publishing and recorded media              | 5.0                                | 179                             | 796                                   | 375                        |
| 25                   | Petroleum, coal, chemical and associated product mfg | 7.2                                | 322                             | 1 755                                 | 572                        |
| 26                   | Non-metallic mineral product mfg                     | 2.8                                | 123                             | 896                                   | 282                        |
| 27                   | Metal product mfg                                    | 12.9                               | 488                             | 2 577                                 | 814                        |
| 28                   | Machinery and equipment mfg                          | 33.9                               | 1 419                           | 8 673                                 | 2 145                      |
| 29                   | Other manufacturing                                  | 4.6                                | 119                             | 565                                   | 191                        |
| 21–29                | <i>Total manufacturing</i>                           | 97.9                               | 3 768                           | 22 736                                | 6 651                      |

(a) See paragraph 4 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) See paragraphs 16 and 17 of the Explanatory Notes.

| INDUSTRY SUBDIVISION |  | Employment<br>at end of<br>June(b) | Wages<br>and<br>salaries<br>(c) | Sales and<br>service<br>income<br>(d) | Industry<br>value<br>added |
|----------------------|--|------------------------------------|---------------------------------|---------------------------------------|----------------------------|
| ANZSIC<br>code       | Description  | '000                               | \$m                             | \$m                                   | \$m                        |
| WESTERN AUSTRALIA    |  |                                    |                                 |                                       |                            |
| 21                   | Food, beverage and tobacco mfg                       | 14.2                               | 496                             | 3 787                                 | 936                        |
| 22                   | Textile, clothing, footwear and leather mfg          | 4.0                                | 103                             | 494                                   | 164                        |
| 23                   | Wood and paper product mfg                           | 4.4                                | 157                             | 887                                   | 323                        |
| 24                   | Printing, publishing and recorded media              | 6.9                                | 264                             | 1 030                                 | 547                        |
| 25                   | Petroleum, coal, chemical and associated product mfg | 6.9                                | 333                             | 4 155                                 | 740                        |
| 26                   | Non-metallic mineral product mfg                     | 4.9                                | 245                             | 1 535                                 | 532                        |
| 27                   | Metal product mfg                                    | 15.2                               | 743                             | 5 276                                 | 1 929                      |
| 28                   | Machinery and equipment mfg                          | 13.4                               | 561                             | 2 622                                 | 857                        |
| 29                   | Other manufacturing                                  | 5.8                                | 155                             | 700                                   | 244                        |
| 21-29                | <i>Total manufacturing</i>                           | 75.8                               | 3 058                           | 20 487                                | 6 273                      |
| TASMANIA             |  |                                    |                                 |                                       |                            |
| 21                   | Food, beverage and tobacco mfg                       | 6.6                                | 201                             | 1 296                                 | 372                        |
| 22                   | Textile, clothing, footwear and leather mfg          | 1.3                                | 43                              | 163                                   | 61                         |
| 23                   | Wood and paper product mfg                           | 3.4                                | 131                             | 1 146                                 | 340                        |
| 24                   | Printing, publishing and recorded media              | 1.4                                | 52                              | 168                                   | 81                         |
| 25                   | Petroleum, coal, chemical and associated product mfg | 0.9                                | 50                              | 372                                   | 138                        |
| 26                   | Non-metallic mineral product mfg                     | 0.8                                | 40                              | 254                                   | 106                        |
| 27                   | Metal product mfg                                    | 4.0                                | 164                             | 1 752                                 | 497                        |
| 28                   | Machinery and equipment mfg                          | 2.8                                | 105                             | 304                                   | 168                        |
| 29                   | Other manufacturing                                  | 0.4                                | 9                               | 40                                    | 12                         |
| 21-29                | <i>Total manufacturing</i>                           | 21.8                               | 795                             | 5 497                                 | 1 775                      |
| NORTHERN TERRITORY   |  |                                    |                                 |                                       |                            |
| 21                   | Food, beverage and tobacco mfg                       | 0.5                                | 20                              | 118                                   | 32                         |
| 22                   | Textile, clothing, footwear and leather mfg          | 0.1                                | np                              | np                                    | np                         |
| 23                   | Wood and paper product mfg                           | 0.2                                | 3                               | 19                                    | 6                          |
| 24                   | Printing, publishing and recorded media              | 0.4                                | 13                              | 56                                    | 31                         |
| 25                   | Petroleum, coal, chemical and associated product mfg | 0.1                                | 4                               | 26                                    | 6                          |
| 26                   | Non-metallic mineral product mfg                     | 0.3                                | 20                              | 133                                   | 29                         |
| 27                   | Metal product mfg                                    | 1.3                                | np                              | np                                    | np                         |
| 28                   | Machinery and equipment mfg                          | 0.7                                | 21                              | 93                                    | 34                         |
| 29                   | Other manufacturing                                  | 0.1                                | 3                               | 13                                    | 6                          |
| 21-29                | <i>Total manufacturing</i>                           | 3.7                                | 165                             | 869                                   | 165                        |

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) See paragraph 4 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) See paragraphs 16 and 17 of the Explanatory Notes.

| INDUSTRY SUBDIVISION         |  | Employment<br>at end of<br>June(b) | Wages<br>and<br>salaries<br>(c) | Sales and<br>service<br>income<br>(d) | Industry<br>value<br>added |
|------------------------------|--|------------------------------------|---------------------------------|---------------------------------------|----------------------------|
| ANZSIC<br>code               | Description  | '000                               | \$m                             | \$m                                   | \$m                        |
| .....                        |  |                                    |                                 |                                       |                            |
| AUSTRALIAN CAPITAL TERRITORY |  |                                    |                                 |                                       |                            |
| 21                           | Food, beverage and tobacco mfg                       | 0.5                                | 16                              | 78                                    | 27                         |
| 22                           | Textile, clothing, footwear and leather mfg          | 0.2                                | np                              | np                                    | np                         |
| 23                           | Wood and paper product mfg                           | 0.3                                | 12                              | 67                                    | 26                         |
| 24                           | Printing, publishing and recorded media              | 1.8                                | 67                              | 256                                   | 125                        |
| 25                           | Petroleum, coal, chemical and associated product mfg | —                                  | 2                               | 9                                     | 3                          |
| 26                           | Non-metallic mineral product mfg                     | 0.1                                | 14                              | 82                                    | 25                         |
| 27                           | Metal product mfg                                    | 0.3                                | np                              | np                                    | np                         |
| 28                           | Machinery and equipment mfg                          | 0.8                                | 41                              | 111                                   | 52                         |
| 29                           | Other manufacturing                                  | 0.3                                | 8                               | 33                                    | 11                         |
| 21–29                        | <b>Total manufacturing</b>                           | <b>4.4</b>                         | <b>173</b>                      | <b>713</b>                            | <b>290</b>                 |
| .....                        |  |                                    |                                 |                                       |                            |
| AUSTRALIA                    |  |                                    |                                 |                                       |                            |
| 21                           | Food, beverage and tobacco mfg                       | 195.1                              | 7 395                           | 56 080                                | 14 643                     |
| 22                           | Textile, clothing, footwear and leather mfg          | 65.9                               | 2 031                           | 10 306                                | 3 159                      |
| 23                           | Wood and paper product mfg                           | 66.2                               | 2 501                           | 15 731                                | 5 063                      |
| 24                           | Printing, publishing and recorded media              | 92.7                               | 3 811                           | 15 760                                | 6 603                      |
| 25                           | Petroleum, coal, chemical and associated product mfg | 103.0                              | 4 999                           | 44 040                                | 9 650                      |
| 26                           | Non-metallic mineral product mfg                     | 39.3                               | 1 722                           | 10 780                                | 3 813                      |
| 27                           | Metal product mfg                                    | 149.8                              | 6 356                           | 42 263                                | 14 025                     |
| 28                           | Machinery and equipment mfg                          | 215.3                              | 9 030                           | 51 412                                | 15 044                     |
| 29                           | Other manufacturing                                  | 58.5                               | 1 692                           | 7 565                                 | 2 641                      |
| <b>21–29</b>                 | <b>Total manufacturing</b>                           | <b>985.7</b>                       | <b>39 536</b>                   | <b>253 938</b>                        | <b>74 640</b>              |

np not available for publication but included in totals where applicable, unless otherwise indicated

— nil or rounded to zero (including null cells)

(a) See paragraph 4 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes the drawings of working proprietors.

(d) See paragraphs 16 and 17 of the Explanatory Notes.

## EXPLANATORY NOTES

### INTRODUCTION

**1** This preliminary publication presents the first set of statistics compiled from the 2000–01 manufacturing collection, where the management unit was the sole statistical unit used to collect data. In previous years, the collection was largely based on establishment statistics with some information collected from a small sample of management units. While establishment data are no longer available, the new arrangements provide a substantial improvement in the quality of management unit data. For more information about these changed collection arrangements and how they affect data outputs, see the Appendix.

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

**3** The manufacturing collection is conducted on an annual basis. For the 2000–01 collection, a sample of approximately 9,500 manufacturing management units was asked to provide data on employment, wages and salaries, detailed structural and performance data, value of sales for commodities produced, and whether their products were exported. Data on industry value added (IVA) are also available from this collection. Approximately 400 of these management units were also asked for details of their operations by State and Territory to facilitate the production of the State/Territory estimates contained in this publication.

### SCOPE AND COVERAGE

**4** The business unit for which statistics are presented in this publication is the management unit. A manufacturing management unit is one predominantly engaged in manufacturing activities, but the data collected for it cover all activities of the management unit (including non-manufacturing activities). Conversely, there are some management units predominantly engaged in non-manufacturing activities which also undertake limited manufacturing activities; these are excluded from the collection.

**5** Some manufacturing management units engage, in a significant way, in activities which are normally carried out by different industries. For example, a predominantly manufacturing management unit may also undertake significant amounts of wholesaling. Similarly, a manufacturing management unit may produce significant volumes of goods which are normally produced in different manufacturing industries. For 2000–01 and prior years, no management units have been 'split' to allocate significant secondary activities in another industry to a separate unit.

**6** The statistics in this publication exclude some very small manufacturers. Those excluded are manufacturers not employing staff at 30 June 2001 (such as sole proprietorships or family partnerships) which had not registered with the Australian Taxation Office's (ATO's) pay as you go withholding (PAYGW) scheme (and prior to 1 July 2000 its group employer (GE) scheme). Though a substantial number, these businesses would contribute only marginally to aggregate data were they to be included. In addition, the ABS attempts to obtain data for those businesses which ceased operation during the year, but it is not possible to obtain data for all of them.

### DATA ADJUSTED

**7** The annual manufacturing industry collection, like most ABS economic collections, takes its frame from the ABS business register. The register provides a list of employing businesses and is primarily based on registrations to the ATO's PAYGW scheme (and prior to 1 July 2000 its GE scheme). The register is updated regularly to take account of new businesses, businesses which have ceased employing, changes in employment levels, changes in industry and other general business changes.



## EXPLANATORY NOTES *continued*

### DATA ADJUSTED *continued*

**8** Businesses which have ceased employing are identified when the ATO cancels their PAYGW registration (or previously their GE registration). In addition, from 1998–99, businesses which did not remit under the GE scheme for the previous five quarters were removed from the register. A similar process will be adopted to remove businesses which do not remit under the PAYGW scheme.

**9** The introduction of The New Tax System has a number of significant implications for ABS economic collections. These are discussed in *Information Paper: ABS Statistics And The New Tax System* (Cat. no. 1358.0). The replacement of the GE registration process by PAYGW registration resulted in a number of changes to the population frames used for most economic collections. However, adjustments have been made to the estimates so that these changes do not affect the statistics in this publication.

**10** As in past years, data in this issue have been adjusted to allow for lags in processing new businesses to the ABS business register, i.e. adjustments have been made to allow for new businesses which had commenced operations but for which details had not been processed to the ABS business register in time for inclusion in the annual manufacturing industry collection. Adjustments of this type will continue to be applied in future periods. The majority of businesses affected by these lags are small in size. The effect of these adjustments on 2000–01 Australian estimates are increases of 2.8% for employment and 1.3% for sales and service income. Most States and Territories and most industries were affected to a similar degree.

### CHANGES FROM 2001–02 COLLECTION

**11** As from the 2001–02 collection, the annual manufacturing survey will move to a new collection strategy utilising the greater availability of taxation data. This will result in a new suite of annual publications which will be further described in *Manufacturing Industry, Australia* (Cat. no. 8221.0) which is scheduled for release in September 2002.

### UNIT DEFINITIONS

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

**13** *Establishment.* The establishment is the smallest accounting unit of a business, within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data.

### DATA ITEM DEFINITIONS

**14** *Employment at end of June.* The number of working proprietors and partners, plus all employees during the last pay period ending in June 2001. Non-salaried directors, self-employed persons such as consultants and contractors, persons paid by commission only and volunteers are excluded. Businesses with significant activities in more than one State/Territory were asked to report employment at the end of June for each State/Territory in which the business operated.

**15** *Wages and salaries.* The gross wages and salaries (including capitalised wages and salaries) of all employees of the management unit. The item includes severance, termination and redundancy payments, salaries and fees of directors and executives, retainers and commissions of persons who received a retainer,

## EXPLANATORY NOTES *continued*

### DATA ITEM DEFINITIONS

*continued*

bonuses, and recreation and other types of leave. Provision expenses for employee entitlements (e.g. provisions for recreation leave and leave bonus, long service leave, sick leave, and severance, termination and redundancy payments) are also included. Payments for 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. Businesses with significant activities in more than one State/Territory were asked to report wages and salaries for each State/Territory in which the business operated.

**16** *Sales and service income.* Sales of goods whether or not produced by the business (including goods produced for the business on a commission basis) and income from service activities. Both are valued net of discounts given and exclusive of Goods and Services Tax (GST). Sales of goods includes progress payments relating to long term contracts if they are billed in the period and delivery charges not separately invoiced to customers, but excludes excise and duties receivable on behalf of the Government. Exports are valued free on board (f.o.b.) (i.e. export freight charges are excluded). Service income includes income from work done or sales made on a commission basis, income from repair, maintenance or servicing, advertising income, installation and delivery charges separately invoiced to customers, and management fees/charges received from related and unrelated businesses. Businesses with significant activities in more than one State/Territory were asked to report sales and service income for each State/Territory in which the business operated.

**17** Under the current international standards, income from intellectual property royalties and rent, leasing and hiring income (except from finance leases) are also classified as service income. Rent, leasing and hiring income is income derived from the ownership of land, buildings, vehicles, machinery or equipment, excluding income from finance leases.

**18** *Turnover.* Sales and service income, funding by Federal, State or Local Governments for operational costs, and capitalised work done by the business' own employees or proprietors for use by the business unit or for rental or lease to other businesses. Excluded from turnover are interest income, income from natural resource royalties, funding by Federal, State or Local Governments for specific capital items, dividends, and receipts from the sale of fixed tangible assets. Conceptually, turnover also includes transfers out of goods by establishments. From the 2000–01 collection, data are no longer collected from establishments. Hence, the previously published turnover data item has been replaced by the sales and service income data item.

**19** *Industry value added (IVA).* IVA represents the value added by an industry to the intermediate inputs used by the industry. The derivation of IVA is as follows:

|               |                             |
|---------------|-----------------------------|
|               | Turnover                    |
| <i>plus</i>   | Closing inventories         |
| <i>less</i>   | Opening inventories         |
| <i>less</i>   | Intermediate input expenses |
| <i>equals</i> | IVA                         |

**20** However, it should be noted that IVA is not a measure of operating profit before tax. Wage and salary expenses and most other labour costs are not taken into account in its calculation nor are most insurance premiums, interest expenses or depreciation and a number of lesser expenses.

## EXPLANATORY NOTES *continued*

### CHAIN VOLUME MEASURES

**21** Chain volume measures are included in this publication as a measure of growth in volume.

**22** Chain volume measures compiled by the ABS are annually reweighted chain Laspeyres volume measures. They are formed in a multi-stage process of which the major steps are described in Chapter 10 of the *Australian System of National Accounts: Concepts, Sources and Methods, 2000* (Cat. no. 5216.0). Chain volume measures used in this publication have 1999–2000 as the base year.

### RELIABILITY OF ESTIMATES

**23** Data in this publication are based on information obtained from a sample of manufacturers. As such, these data are subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all manufacturers in the population. The measure of the likely difference as used by the ABS is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.

**24** The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error. The relative standard errors for the data in this publication are nearly all 3% or less for Australian estimates. Relative standard errors across all States and Territories are generally higher. Detailed estimates of relative standard errors can be made available on request.

**25** The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of inadequacies in available sources from which the population frame was compiled, imperfections in reporting by providers, errors made in collection such as in recording and coding data, and errors made in processing data. Inaccuracies of this kind are referred to collectively as non-sampling error and they may occur in any enumeration, whether it be a census or a sample. Every effort is made to reduce non-sampling error to a minimum by the careful design of forms and the use of efficient and effective operating procedures and systems.

### ACKNOWLEDGMENT

**26** 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*.

### RELATED PUBLICATIONS

**27** More detailed manufacturing industry statistics will be released in the publication *Manufacturing Industry, Australia, 2000–01* (Cat. no. 8221.0), which will be released in September 2002. State publications (Cat. nos 8221.1–8221.6 inclusive) will not be produced for the 2000–01 survey — see the Appendix for more information. *Manufacturing Industry, Australia, 2000–01* (Cat. no. 8221.0) will contain details of employment, wages and salaries, sales and service income and IVA classified by ANZSIC class, as well as ANZSIC subdivision data classified by employment size and data relating to exporting activity. It will also contain details classified by ANZSIC subdivision of the components of IVA, on the acquisition and disposal of assets, and for selected labour costs. *Manufacturing, Australia, 2002* (Cat. no. 8225.0), a compendium publication, is to be released in December 2002. In general, preliminary 2000–01 data for all variables and table formats can now be made available on a consultancy basis.

## EXPLANATORY NOTES *continued*

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### RELATED PUBLICATIONS

*continued*

**28** The ABS produces industry estimates for a range of selected industries (including Manufacturing) and these results are available in *Australian Industry* (Cat. no. 8155.0). State and Territory estimates of these data have recently been produced in *Experimental Estimates, Australian Industry, a State Perspective* (Cat. no. 8156.0). These data are considered experimental at this stage while the methodology used to produce them is reviewed and improved. The estimates are available at the ANZSIC industry subdivision level for total operating income, total operating expenses, operating profit before tax (OPBT) and labour costs.

### ROUNDING

**29** Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. However, estimates of change shown in the Main Features have been calculated using unrounded estimates and may be different from, but are more accurate than, movements obtained from the rounded estimates.

## APPENDIX 2000–01 SURVEY CHANGES

### FUNDAMENTAL CHANGES TO THE ANNUAL MANUFACTURING COLLECTION

#### MANUFACTURING MANAGEMENT UNIT COLLECTION

**1** This publication, *Manufacturing Industry, Australia, Preliminary, 2000–01* (Cat. no. 8201.0), is the first to present manufacturing industry data based on information collected solely from manufacturing businesses (i.e. manufacturing management units). Prior to the 2000–01 survey, data were primarily collected from manufacturing establishments.

**2** This represents a fundamental shift in the statistical unit from which data are primarily being sought and published (for the definitions of management units and establishments, see paragraphs 12 and 13 of the Explanatory Notes). *As such, this publication of data for manufacturing management units represents a break in series from the data previously published for manufacturing establishments.*

**3** Although, prior to 2000–01, the annual manufacturing collection has primarily collected data from manufacturing establishments, it has also collected data from a relatively small sample of manufacturing management units. This annual sample of approximately 5,000 manufacturing businesses has provided data on employment, wages and salaries, sales and service income, purchases, inventories, capital expenditure and detailed information required to derive operating profit before tax (OPBT). Information from this sample of manufacturing management units has generally been available at the Australian level for industry groups and selected industry classes on request and for a charge.

#### MANUFACTURING CENSUS

**4** Every fifth year, the annual ABS manufacturing collection is expanded from a survey to a census. It is proposed to retain this cycle with the shift to manufacturing management unit based collections. The next manufacturing census will be conducted in respect of 2001–02.

#### AUSTRALIAN LEVEL DATA

**5** This publication presents data down to the industry subdivision level only for Australia (and States and Territories). However, later this year, it is intended to publish in *Manufacturing Industry, Australia, 2000–01* (Cat. no. 8221.0) most, if not all, of the previously published tables but now on a management unit basis. The approximately 9,500 businesses included will provide a sample large enough to support manufacturing management unit based data at the industry class level for Australia.

**6** The 2000–01 issue of *Manufacturing Industry, Australia* (Cat. no. 8221.0) will draw on summary of operations data collected previously from manufacturing management units to provide a time series, at the industry subdivision level, from 1998–99. This publication will also contain a table for 1999–2000 showing both manufacturing establishment data and manufacturing management unit data for employment, wages and salaries, turnover, sales and service income and IVA. This table will be designed to provide a bridge between the existing establishment based series and the new manufacturing management unit based series.

#### STATE AND TERRITORY DATA

**7** Management units do not normally apportion activity by State and Territory, as was the case for establishments. However, in order to ensure that reliable data by State and Territory are available, approximately 400 businesses (i.e. those that have significant operations in more than one State or Territory) have been requested to provide additional details on employment, wages and salaries and sales of goods and services for each State and/or Territory in which

STATE AND TERRITORY DATA  
*continued*

they operate. This information will be used to synthesise on a pro-rata basis all other data reported for the whole business to each State and/or Territory in which they operate. This will enable the production of State/Territory data for employment, wages and salaries, sales and service income and IVA at the industry subdivision level. However, it will not be possible to produce data by employment size or data relating to exported production.

**8** State publications, *Manufacturing Industry, [State]*, (Cat. nos 8221.1–8221.6), will not be produced for 2000–01. However, it is intended that they next be produced for 2001–02, that is, for the next census year. The publication *Manufacturing Industry, Australia* (Cat. no. 8221.0) will continue to publish in all years State and Territory data for employment, wages and salaries, sales and service income and IVA at the industry subdivision level.

**9** The ABS produces industry estimates for a range of selected industries (including Manufacturing) and these results are available in *Australian Industry* (Cat. no. 8155.0). These results are derived using a combination of data from the annual economic activity survey (EAS) and business income tax data provided to the Australian Taxation Office (ATO). State and Territory estimates of these data have recently been produced in *Experimental Estimates, Australian Industry, a State Perspective* (Cat. no. 8156.0). These data are considered experimental at this stage while the methodology used to produce them is reviewed and improved. The estimates are available at the ANZSIC industry subdivision level for total operating income, total operating expenses, OPBT and labour costs.

REGIONAL DATA

**10** Regional or sub-State data will not be available from the 2000–01 manufacturing survey. This is a direct result of moving to a manufacturing management unit based collection for 2000–01; see paragraphs 1 and 2. However, it is proposed to make available sub-State data from information collected from the 2001–02 manufacturing census. Further investigations will be undertaken to decide if it is possible to produce some sub-State estimates in survey collection years from 2002–03.



## FOR MORE INFORMATION...

- INTERNET* **www.abs.gov.au** the ABS web site is the best place to start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a statistical profile.
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