



Information Paper

Experimental Estimates for the Manufacturing Industry

Australia

2006–07 and 2007–08

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CONTENTS



	<i>page</i>
Abbreviations	vi
CHAPTERS	
1 Introduction	1
2 Concepts and methods	3
3 Summary of Data	9
4 Reliability of the experimental estimates	11
ADDITIONAL INFORMATION	
Appendix : Experimental estimates	14
Glossary	19



ABBREVIATIONS

\$m	million dollars
ABN	Australian Business Number
ABR	Australian Business Register
ABS	Australian Bureau of Statistics
ABSBR	Australian Bureau of Statistics Business Register
ABSMP	Australian Bureau of Statistics maintained population
ANZSIC	Australian and New Zealand Standard Industrial Classification
ATO	Australian Taxation Office
ATOMP	Australian Taxation Office maintained population
BAS	Business Activity Statement
EAS	Economic Activity Survey
GST	goods and services tax
IVA	industry value added
mfg	manufacturing
nec	not elsewhere classified
OPBT	operating profit before tax
RSE	relative standard error
SESCA	Standard Economic Sector Classification of Australia
SISCA	Standard Institutional Sector Classification of Australia

1. INTRODUCTION

INTRODUCTION

This information paper contains experimental estimates for the Australian manufacturing industry for the 2006–07 and 2007–08 reference periods.

Historically, the Australian Bureau of Statistics (ABS) collected manufacturing data at the class level of the *Australian and New Zealand Standard Industrial Classification 2006* (ANZSIC), using survey methodology based on direct collection of data. The latest estimates produced by this methodology are published in *Manufacturing Industry, Australia, 2006–07* (cat. no. 8221.0). Changes in the ABS economic surveys work program no longer supports this level of disaggregation for the manufacturing industry from data collected using direct collection survey methods.

This paper presents an experimental methodology being investigated to produce manufacturing estimates at the ANZSIC class level which is not based predominantly on survey data. This development should be of substantial benefit to analysts and decision makers (including businesses themselves) who require finer levels of detail regarding industry classification than is currently released in *Australian Industry* (cat. no. 8155.0).

These experimental estimates use a combination of data directly collected in ABS surveys and Business Activity Statement (BAS) data sourced from the Australian Taxation Office (ATO). Modelling techniques are applied to combine these two data sources in order to produce experimental estimates at the ANZSIC class level. The methodology used to compile these statistics is described in Chapter 2.

Experimental estimates presented in this paper are produced at the ANZSIC class level for a select number of data items where ABS data and BAS data are well correlated. The data items are wages and salaries, sales and service income and industry value added (IVA). Two reference years of data are presented, 2006–07 and 2007–08, enabling level and movement analysis.

Chapter 3 presents a summary of data from analysis of the table of experimental estimates contained in the Appendix. Information about the reliability of the experimental estimates is included in Chapter 4.

The estimates in this publication are considered experimental and should be used with caution. Care should be taken when using these experimental estimates as modelling may introduce non-sampling error. This is further described in Chapter 4.

The methodology used to compile these experimental estimates is subject to continued evaluation and possible further change, thus the ANZSIC class estimates for 2006–07 published in *Manufacturing Industry, Australia, 2006–07* (cat. no. 8221.0) are the official ABS statistics.

FUTURE PLANS

The ABS intends to release modelled, ANZSIC class level estimates for the manufacturing industry on an annual basis commencing with the 2008–09 reference period, in the absence of directly collected data. The estimates will be published after the publication of *Australian Industry, 2008–09* (cat. no. 8155.0).

The ABS is investigating extending the use of this methodology to satisfy other areas of unmet demand. The following areas are being considered subject to rigorous evaluation:

- ANZSIC class level estimates for other industries
- State and territory breakdown by industry subdivision

1. INTRODUCTION *continued*

FUTURE PLANS *continued*

- Additional data items such as profit measures and employment.

USER COMMENTS AND FURTHER INFORMATION

Both the methodology used to compile the experimental estimates in this information paper and the plans for extending the use the ABS makes of ATO BAS data are subject to further evaluation. The ABS is very interested in feedback from users of these statistics. Users are invited to provide comments to the ABS on any aspect of this release, including particular experimental estimates contained within. Please contact Annual Integrated Collections on (02) 9268 4269 or client.services@abs.gov.au to provide feedback or seek further information about the methodology used in these experimental estimates.

ABS DATA AVAILABLE ON REQUEST

There are no further experimental estimates, based on this alternative methodology, available for the manufacturing industry for 2006–07 and 2007–08 or earlier years.

RELATED PUBLICATIONS

Other ABS publications and products which may be of interest are listed below. These publications are available free of charge from the ABS website www.abs.gov.au.

Australian Industry, 2007–08 (cat no. 8155.0), issued annually

Manufacturing Industry, Australia, 2006–07 (cat. no. 8221.0)

2. CONCEPTS AND METHODS

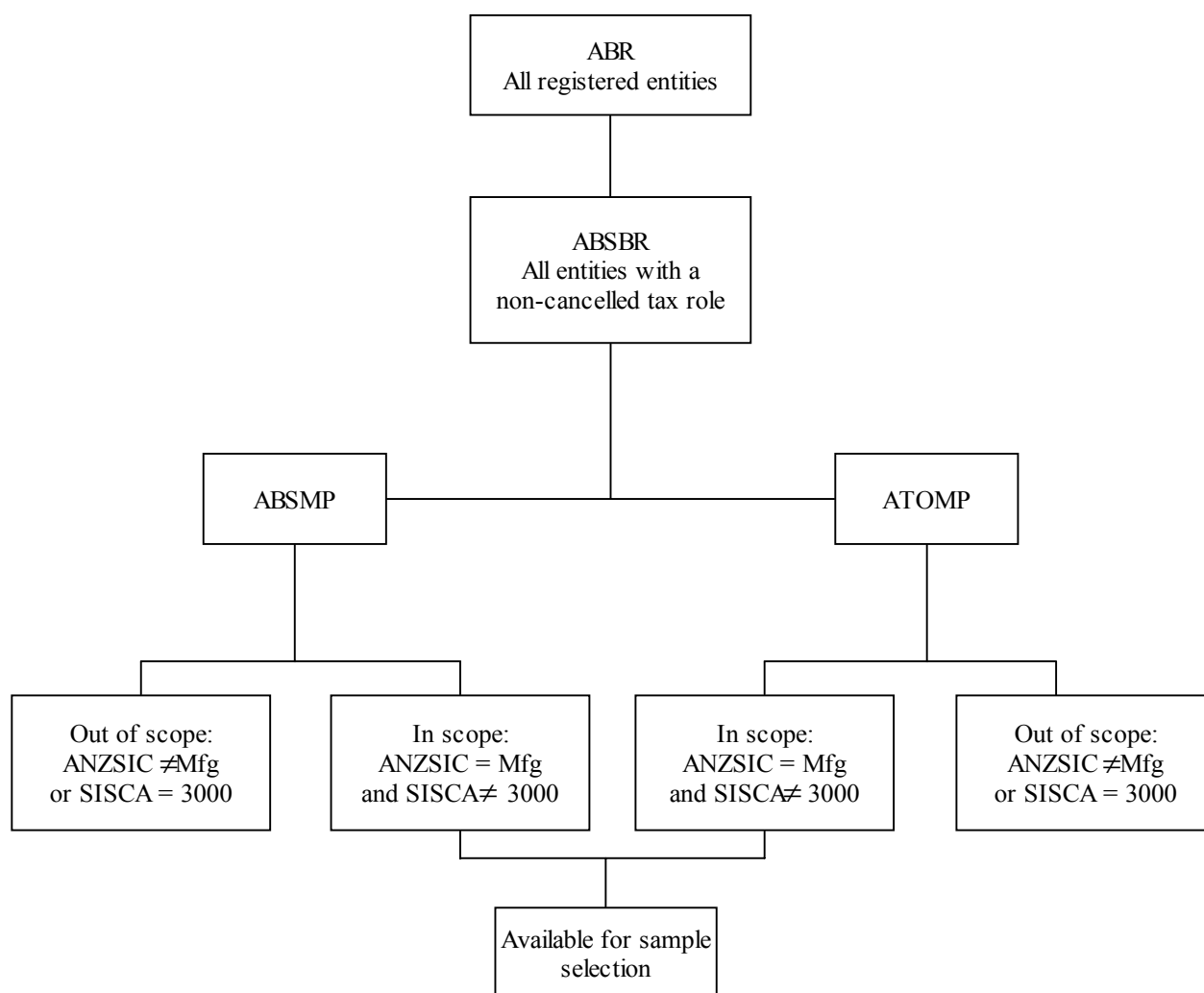
SCOPE AND POPULATION

The experimental estimates in this publication are based on the 2006 edition of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (cat. no. 1292.0) and by institutional sector, in accordance with the *Standard Institutional Sector Classification of Australia (SISCA)*, which is detailed in *Standard Economic Sector Classifications of Australia (SESCA)* (cat.no. 1218.0).

The scope of the experimental estimates in this publication is based on the scope used for *Australian Industry* (cat. no. 8155.0). It includes all business entities in the Australian economy which are classified on the ABS Business Register (ABSR), to ANZSIC Division C MANUFACTURING and excludes any entities classified to SISCA Sector 3 GENERAL GOVERNMENT. Note that government-owned or controlled Public Non-Financial Corporations are included.

STATISTICAL UNITS DEFINED ON THE ABS BUSINESS REGISTER

The experimental estimates in this publication have been created from businesses recorded on the ABSR. The economic statistics units model used by the ABS allocates businesses on the ABSR to one of two sub-populations. The vast majority of businesses are in what is called the ATO maintained population (ATOMP), while the remaining businesses are in the ABS maintained population (ABSMP).



2. CONCEPTS AND METHODS *continued*

ATOMP

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.

The ATOMP is composed of those businesses on the ABR with simple structures (i.e. primarily comprised of a single ABN), and the ABN unit is used as the statistical unit for all ABS economic collections (in this case, the ABS has aligned its statistical units structure with the ABN unit).

ABSMP

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, which constitutes the ABSMP. This population consists typically of large, complex and diverse businesses.

METHODOLOGY

The experimental estimates in this release were produced using a combination of Economic Activity Survey (EAS) data collected directly by the ABS and BAS data obtained from the ATO.

EAS Collection Design

In order to decrease the statistical reporting load placed on providers, the collection strategy for the EAS is to use directly collected data from a sample of businesses, in combination with BAS data sourced from the ATO.

Businesses in the ABSMP which have employment greater than 300, or are deemed to be 'significant', are completely enumerated via directly collected survey data.

Other businesses are available for random sample selection only if their business is identified as being an employing business (based on ATO records) or their turnover exceeds a threshold level. Turnover thresholds are set for each ANZSIC class so that the contribution of surveyed businesses accounts for 97.5% of total industry class turnover as determined by BAS data. Data for businesses selected from this part of the sample are obtained via direct collection.

Businesses which meet neither of these criteria are referred to as 'micro non-employing businesses' and are not eligible for selection in the EAS sample. For these units, BAS data are obtained and added to the directly collected estimates (with no modelling applied).

More detailed information about the EAS collection design can be found in *Australian Industry* (cat. no. 8155.0), Technical Note 1.

The Experimental Manufacturing Class Estimates Model

The estimation method used to create the experimental estimates makes use of observed linear relationships between data collected from businesses in the EAS and auxiliary information available from BAS data. Where the auxiliary information is strongly correlated with data items collected in the EAS, this information has been used to create predicted values for ATOMP businesses that were not selected in the survey. The auxiliary variables used to create predicted values were:

- BAS Turnover (to model sales and service income)
- BAS Wages and Salaries (to model wages and salaries and industry value added).

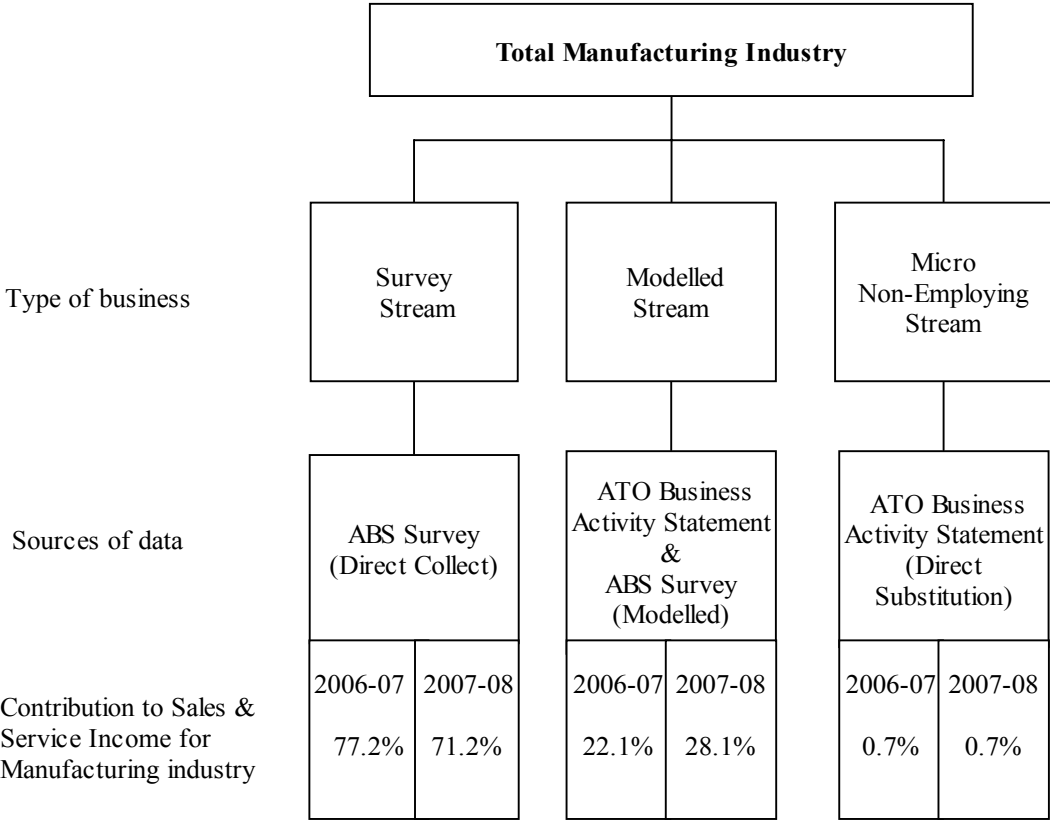
2. CONCEPTS AND METHODS *continued*

The Experimental Manufacturing Class Estimates Model continued

The ANZSIC class experimental estimates for 2006–07 and 2007–08 were created subject to the constraint of being additive to ANZSIC subdivision estimates for 2006–07 and 2007–08, as published in the 2007–08 issue of *Australian Industry* (cat. no. 8155.0). In spite of this requirement, however, the experimental estimates presented at subdivision level in this publication do not exactly match those in *Australian Industry* owing to two main factors. The first is post-release editing of the directly collected data at a finer level of ANZSIC detail than required for *Australian Industry*. The second factor is a correction of the definition of IVA. The discrepancy between subdivision level estimates is explained in further detail in the section "Comparison with other ABS data"

For the purpose of compiling experimental ANZSIC class estimates for Division C MANUFACTURING in this publication, data for businesses are contributed via one of three categories (or 'streams') in accordance with significance and collection-related characteristics. The following diagram illustrates the ways in which the data streams contribute to the experimental estimates for the manufacturing industry.

SUMMARY OF DATA STREAMS



The Survey Stream

The survey stream consists of units with directly collected EAS data. Note that there was a significant reduction in the number of businesses in the survey stream between 2006–07 and 2007–08 due to changes in the ABS Economic survey program.

2. CONCEPTS AND METHODS *continued*

The Modelled Stream

The modelled stream includes employing businesses, not in the survey stream, whose turnover was higher than the threshold set for their ANZSIC class (where the threshold was set so that the contribution of surveyed businesses would account for 97.5% of total industry class turnover). Within this stream, data were modelled from auxiliary information available from BAS data. The BAS data were found to have a high correlation with corresponding data from the EAS. Modelling was used on the BAS data rather than directly substituting it as the BAS data items did not map directly to their corresponding EAS data item definitions.

Modelled data were created through the use of a robust, trimmed regression estimator, which uses survey data regressed against BAS data. The regression factor was obtained by utilising the sampled units in the ATOMP and comparing their reported survey data with their matching BAS data. The regression factor was created at the ANZSIC subdivision level. Sales and service income was modelled using BAS Turnover as the auxiliary variable; whilst wages and salaries and IVA were modelled using BAS Wages and Salaries. For most businesses in the modelled stream, predicted values for the three variables were created by multiplying their BAS data by the calculated regression factor.

A different methodology was used for ABSMP units which were not directly surveyed and had employment of 20 or more. These units were modelled from data from surveyed ABSMP units.

Micro Non-Employing Stream

This stream includes units in the ATOMP, which are non-employing businesses and whose turnover for each ANZSIC class was below the turnover threshold. For these units BAS data were obtained and directly added into the experimental estimates (with no modelling applied).

PRODUCING THE MANUFACTURING EXPERIMENTAL ESTIMATES

Initial experimental estimates for the manufacturing industry were produced by aggregating the contributing data streams, which were then adjusted so that the classes summed to the national subdivision estimates published in the 2007–08 issue of *Australian Industry* (cat. no. 8155.0). This adjustment removed some of the non-sampling error introduced through the regression modelling (see chapter 4 for discussion of modelling bias). This adjustment was obtained by first calculating the difference between the national subdivision estimates and the initial experimental subdivision estimates and then prorating the difference across the classes within the subdivision. The level of proration for each class was determined by the size of the modelled stream. Thus, proration has a stronger impact on those classes with a larger modelled stream.

2. CONCEPTS AND METHODS *continued*

ASSUMPTIONS IN THE MODEL

The modelling methodology used to create the experimental estimates presented in this publication is based on the following assumptions:

- the published ANZSIC subdivision estimates were of sufficient quality to warrant disaggregation at ANZSIC class level;
- it was valid to distribute the difference between *Australian Industry* subdivision estimates and the experimental subdivision estimates across the industry classes based on the size of the modelled stream;
- the relationship between the EAS data items and the BAS data items is meaningful and consistent. Analysis supports this assumption, with the correlation being of consistent quality to produce reliable estimates;
- the auxiliary (BAS) data was of high quality; and
- the industry coding was accurate on both the ATO maintained ABR and the ABSBR.

COMPARISON WITH OTHER ABS DATA

Following is a comparison of the manufacturing experimental estimates with manufacturing data presented in other ABS publications:

Australian Industry, 2007–08 (cat. no. 8155.0)

The manufacturing subdivision estimates presented in this publication do not exactly match those in the 2007–08 issue of *Australian Industry* (cat. no. 8155.0). This discrepancy is due to two factors.

Firstly, the process of producing the experimental ANZSIC class estimates resulted in editing the EAS data at finer levels than was required for the ANZSIC sub-division estimates in *Australian Industry*.

The second factor relates to a correction of the definition of IVA. In *Australian Industry, 2007–08* payroll tax and land tax were included in intermediate input expenses, a component of IVA. However, for this information paper and future issues of *Australian Industry*, payroll tax and land tax is removed from the intermediate input expenses component of IVA. This definition change resulted in the experimental IVA estimates for manufacturing being approximately 2% greater than the IVA figures published in *Australian Industry*.

Manufacturing Industry, Australia, 2006–07, (cat. no. 8221.0)

Manufacturing Industry, Australia, 2006–07 published ANZSIC class estimates for the manufacturing industry. The experimental class estimates in this information paper will differ from those published under *Manufacturing Industry* primarily due to differences in methodology (e.g. the use of modelling for the modelled stream). It is important to note that estimates produced in this information paper are considered experimental and the ANZSIC class estimates for 2006–07 contained in *Manufacturing Industry* are the official ABS statistics.

Additionally, the ANZSIC subdivision estimates for *Manufacturing Industry* and *Australian Industry* differ slightly. The 2006–07 issue of *Manufacturing Industry* was released before the 2006–07 issue of *Australian Industry*. The discrepancy was due to additional survey information being received after publication of *Manufacturing Industry* and the resulting additional editing applied to *Australian Industry* prior to its publication.

2. CONCEPTS AND METHODS *continued*

Manufacturing Census, 2006–07

Data from the 2006–07 manufacturing census was published in the data cubes associated with the *Manufacturing Industry, Australia, 2006–07* (cat no. 8221.0). The manufacturing census provides finer geographical data at a state and statistical division level. Aggregates in the census will differ from these other releases, as well as the experimental estimates in this publication, due to sampling error, methodological changes and definitional differences. For further information on the methodology used in the manufacturing census see the data cube (i-note) under *Manufacturing Industry, 2006–07*, Explanatory Notes.

3. SUMMARY OF DATA

INDUSTRY VALUE ADDED (IVA)

The Australian manufacturing industry produced \$107.3b of IVA in 2007–08. The FOOD PRODUCT MANUFACTURING subdivision contributed the most significant amount with \$16.1b, followed by PRIMARY METAL AND METAL PRODUCT MANUFACTURING with \$15.6b. From a finer level perspective, of the classes available for publication, IRON SMELTING AND STEEL MANUFACTURING contributed the most at \$4.5b followed by ALUMINIA PRODUCTION at \$4.3b.

In 2007–08, IVA for the manufacturing industry went up by \$5.5b (5.4%) compared to 2006–07. The FOOD PRODUCT MANUFACTURING subdivision contributed most to the increase with a rise in IVA of \$1.2b (7.8%). The classes available for publication that drove the increase were IRON SMELTING AND STEEL MANUFACTURING with \$699m (18.6%), followed by PETROLEUM REFINING AND PETROLEUM FUEL MANUFACTURING with \$670m (29.3%) increase.

The class available for publication with the strongest IVA decline from 2006–07 to 2007–08 was ALUMINA PRODUCTION with a decrease of \$157m (-3.5%), followed by ALUMINIUM SMELTING with a decrease of \$150m (-6.6%).

SALES AND SERVICE INCOME

In Australia, the manufacturing industry produced \$395.7b Sales and Service Income in 2007–08 with the FOOD PRODUCT MANUFACTURING (\$67.7b) and PRIMARY METAL AND METAL PRODUCT MANUFACTURING (\$65.7b) subdivisions being the highest contributors. The largest contributors, available for publication, at the finer class level were PETROLEUM REFINERY AND PETROLEUM FUEL MANUFACTURING (\$36.5b) and OTHER BASIC NON-FERROUS METAL PRODUCT MANUFACTURING (\$18.2b).

Between 2006–07 and 2007–08 Sales and Service Income for the manufacturing industry increased by \$18.4b (or 4.9%). The subdivision which contributed most to this increase was PRIMARY METAL AND METAL PRODUCT MANUFACTURING with an increase of \$4.4b (or 7.2%). The classes available for publication driving the increase were IRON SMELTING AND STEEL MANUFACTURING with an increase of \$2.6b (or 18.2%) and CHEESE AND OTHER DAIRY PRODUCT MANUFACTURING with an increase of \$1.2b (or 14.4%).

Conversely, there was only one subdivision which reported a decrease in Sales and Services Income, namely BEVERAGE AND TOBACCO PRODUCT MANUFACTURING with a negative movement of \$929m or (-5.5%). The two classes available for publication which reported the largest decrease were WINE AND OTHER ALCOHOLIC BEVERAGE MANUFACTURING with a decrease of \$1.0b (or -16.5%) and SUGAR MANUFACTURING with a decrease of \$0.7b (or -24.8%).

WAGES AND SALARIES

The Australian manufacturing industry outlayed \$52.7b in Wages and Salaries during 2007–08. The FOOD PRODUCT MANUFACTURING subdivision accounted for \$9.4b, followed by MACHINERY AND EQUIPMENT MANUFACTURING subdivision with \$6.3b. This was driven by the available classes of PRINTING (\$2.2b) and IRON SMELTING AND STEEL MANUFACTURING (\$1.7b).

Wages and Salaries rose by \$2.6b (or 5.1%) between 2006–07 and 2007–08, driven by the FOOD PRODUCT MANUFACTURING subdivision which increased \$781m (or 9.0%). Of the classes available for publication, the largest increase was recorded by STRUCTURAL STEEL FABRICATING with \$251m (or 22.5%), followed by BAKERY PRODUCT MANUFACTURING (non-factory based) with \$133m (or 18.1%).

3. SUMMARY OF DATA *continued*

WAGES AND SALARIES
continued

The largest decline in a class available for publication between 2006–07 and 2007–08 was recorded by MOTOR VEHICLE MANUFACTURING down \$98m (or -5.54%) followed by GLASS AND GLASS PRODUCT MANUFACTURING down \$65m (or -16.0%).

4. RELIABILITY OF THE EXPERIMENTAL ESTIMATES

DATA QUALITY

When interpreting the experimental estimates it is important to take into account factors that may effect the reliability of the experimental estimates.

The quality of the experimental estimates is limited by:

- the validity of the assumptions underpinning the modelling; and
- the accuracy of the data used in the production of the experimental estimates.

The assumptions used in the production of the experimental estimates were outlined in Chapter 2. Users should consider the suitability of these assumptions when interpreting the experimental estimates.

Examination of the following quality indicators will also assist users in determining fitness for purpose of the experimental estimates of the manufacturing industry.

DATA USED IN THE CALCULATION OF THE EXPERIMENTAL ESTIMATES

The experimental estimates presented in this publication were obtained using a combination of data directly collected in EAS and Business Activity Statement (BAS) data. Modelling techniques were applied to combine these two data sources in order to produce the experimental estimates at the class level, as described in Chapter 2.

The EAS uses a sample of businesses, rather than full enumeration (i.e. a census) and is subject to sampling error. The resultant estimates obtained from the regression model may be different if survey information was available for all businesses. The experimental estimates presented in this paper therefore have an associated sampling error.

The experimental ANZSIC class estimates also have additional associated sampling error as a result of constraining these experimental estimates to aggregate to ANZSIC subdivision estimates obtained from the EAS and published in *Australian Industry. 2007–08* (cat. no. 8155.0).

SAMPLING ERROR

One measure of sampling variability is given by the standard error which indicates the extent to which an estimate might have varied by chance because only a sample of businesses was included. 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 a census was conducted, and about 19 chances in 20 that the difference will be less than two standard errors.

Sampling variability can also be measured by the relative standard error (RSE) which is obtained by expressing the standard error as a percentage of the estimate to which it refers. The RSE is a useful measure in that it provides an indication of the sampling error in percentage terms, and this avoids the need to refer also to the size of the estimate.

Approximate RSEs for the manufacturing industry experimental estimates have been created using a replicate method. This method uses replicate final estimates created using sub-samples of reported data to estimate the variance of the estimate.

Distribution of Manufacturing ANZSIC Class Experimental Estimates RSEs

Below is a table which compares the distribution of MANUFACTURING ANZSIC class experimental estimate RSEs for 2006–07 and 2007–08. Note that due to the larger sample for 2006–07, the RSEs for this year are, in general, smaller than 2007–08. The majority of the ANZSIC class RSEs are less than 15%, with the exceptions being 2006–07 Sales and Service Income (4 ANZSIC classes with RSE in the 15-25% range) and 2007–08 IVA (5

4. RELIABILITY OF THE EXPERIMENTAL ESTIMATES *continued*

*Distribution of
Manufacturing ANZSIC
Class Experimental
Estimates RSEs continued*

ANZSIC classes with RSE in the 15-25% range). No ANZSIC class has a RSE of greater than 25%.

RSEs for individual experimental estimates greater than 10% are footnoted in the table in Appendix: Experimental Estimates.

	Relative Standard Error							Total Number of ANZSIC classes
	< 1%	1- 2%	2 - 5%	5 - 10%	10 - 15%	15 - 25%	>25+%	
2006–07								
Wages experimental estimates	34	32	53	20	4	0	0	143
Sales experimental estimates	36	38	48	15	2	4	0	143
IVA experimental estimates	38	32	49	22	2	0	0	143
2007–08								
Wages experimental estimates	16	25	60	39	3	0	0	143
Sales experimental estimates	28	23	52	29	11	0	0	143
IVA experimental estimates	18	16	44	47	13	5	0	143

NON-SAMPLING ERROR

There are a range of other potential errors that are not caused by sampling and can occur in any statistical collection, whether it is modelled based on full enumeration or a sample. Non-sampling error may be due to inadequacies in available sources from which the population frame was compiled, imperfections in reporting by providers, errors made in collections such as recording and coding data, and errors made in processing data. Inaccuracies of this kind may occur in any enumeration, whether a full census or a sample.

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.

If non-sampling error is systematic (not random) then the estimates will be distorted in one direction and therefore will be unrepresentative of the target population. Systematic error results in bias.

MODEL BIAS

The use of a regression model to generate the experimental estimates may introduce bias. This bias arises from imperfections in the relationship between the EAS data and BAS data. While it is not possible to calculate the size of the modelling bias for these experimental estimates, a comparison of 2006-07 experimental ANZSIC class estimates with ANZSIC class estimates published in *Manufacturing Industry, Australia, 2006-07* (cat.no. 8221.0) did not indicate obvious systematic error or bias.

4. RELIABILITY OF THE EXPERIMENTAL ESTIMATES *continued*

VALIDATION OF THE METHODOLOGY

For the 2006–07 EAS, the sample size was increased to enable ANZSIC class data to be published in *Manufacturing Industry, Australia, 2006–07* (cat. no. 8221.0). These data have provided a valuable source of comparison for the experimental estimates.

To enable an objective assessment of the validity of the methodology, the experimental estimates for 2006–07 were reproduced based on the reduced sample (i.e. disregarding the increase in sample required to publish ANZSIC class data in *Manufacturing Industry, Australia, 2006–07*). Experimental estimates generated from the reduced sample compared favourably to the *Manufacturing Industry, Australia, 2006–07* estimates, further supporting the use of this methodology. Note that to maintain consistency with estimates published in *Australian Industry, 2007–08* (cat. no. 8155.0), the full (increased) sample of units was used to generate the 2006–07 experimental estimates contained in this information paper.

REFERENCE PERIOD

The experimental estimates in this publication relate to manufacturing businesses in Australia during each of the years ended June 2007 and June 2008. Experimental estimates included the activity of any business that ceased or commenced operations during the relevant year. Where businesses were unable to supply information via the EAS on this basis, an alternative accounting period was used for which data could be provided. Such businesses made a substantial contribution to some of the experimental estimates presented in this publication. As a result, the experimental estimates can reflect trading conditions that prevailed in periods outside the twelve months ended June in the relevant year. This had the most impact on the manufacturing ANZSIC subdivision 17 PETROLEUM AND COAL PRODUCT MANUFACTURING.

APPENDIX EXPERIMENTAL ESTIMATES

EXPERIMENTAL ESTIMATES, MANUFACTURING INDUSTRY BY ANZSIC CLASS

	WAGES AND SALARIES		SALES AND SERVICE INCOME		INDUSTRY VALUE ADDED	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
	\$m	\$m	\$m	\$m	\$m	\$m
Manufacturing	50 190	52 745	377 246	395 667	101 815	107 331
11 Food product manufacturing	8 637	9 417	64 720	67 717	14 910	16 069
111 Meat and meat product manufacturing	2 492	2 711	18 408	18 574	3 749	4 144
1111 Meat processing	1 260	1 385	11 654	11 362	2 004	2 135
1112 Poultry processing	839	911	4 170	4 560	1 183	1 379
1113 Cured meat and smallgoods manufacturing	393	415	2 585	2 651	563	630
112 Seafood processing	116	112	1 330	1 212	152	155
1120 Seafood processing	116	112	1 330	1 212	152	155
113 Dairy product manufacturing	1 075	1 211	11 338	13 571	1 976	2 367
1131 Milk and cream processing	204	254	2 340	3 244	413	598
1132 Ice cream manufacturing	46	62	331	413	73	96
1133 Cheese and other dairy product manufacturing	824	895	8 667	9 914	1 490	1 673
114 Fruit and vegetable processing	653	676	4 738	4 867	1 169	1 336
1140 Fruit and vegetable processing	653	676	4 738	4 867	1 169	1 336
115 Oil and fat manufacturing	120	124	1 783	2 091	258	254
1150 Oil and fat manufacturing	120	124	1 783	2 091	258	254
116 Grain mill and cereal product manufacturing	438	520	4 150	4 904	917	949
1161 Grain mill product manufacturing	190	209	2 452	2 844	451	460
1162 Cereal, pasta and baking mix manufacturing	248	311	1 698	2 060	466	489
117 Bakery product manufacturing	1 693	1 939	7 068	7 231	2 795	3 140
1171 Bread manufacturing (factory based)	445	530	2 250	2 344	768	901
1172 Cake and pastry manufacturing (factory based)	284	301	1 232	1 226	417	506
1173 Biscuit manufacturing (factory based)	232	243	1 019	1 078	426	456
1174 Bakery product manufacturing (non-factory based)	732	865	2 567	2 584	1 184	1 277
118 Sugar and confectionery manufacturing	1 015	1 050	7 397	6 991	2 079	1 966
1181 Sugar manufacturing	275	303	2 783	2 093	510	491
1182 Confectionery manufacturing	740	748	4 614	4 898	1 569	1 475
119 Other food product manufacturing	1 034	1 074	8 507	8 276	1 814	1 758
1191 Potato, corn and other crisp manufacturing	np	164	np	769	np	258
1192 Prepared animal and bird feed manufacturing	np	276	np	3 162	np	452
1199 Other food product manufacturing n.e.c.	648	634	4 575	4 345	1 106	1 047
12 Beverage and tobacco product manufacturing	1 760	1 799	16 969	16 040	5 834	5 811
121 Beverage manufacturing	np	np	np	np	np	np
1211 Soft drink, cordial and syrup manufacturing	470	492	4 389	4 365	1 586	1 524
1212 Beer manufacturing	260	280	np	3 871	np	1 436
1213 Spirit manufacturing	np	np	np	np	np	np
1214 Wine and other alcoholic beverage manufacturing	797	737	6 248	5 219	1 455	1 347
122 Cigarette and tobacco product manufacturing	np	np	np	np	np	np
1220 Cigarette and tobacco product manufacturing	np	np	np	np	np	np
13 Textile, leather, clothing and footwear manufacturing	1 684	1 693	9 491	9 930	2 842	3 001
131 Textile manufacturing	126	130	752	776	178	213
1311 Wool scouring	20	22	163	132	22	29
1312 Natural textile manufacturing	57	60	221	239	70	92
1313 Synthetic textile manufacturing	50	48	369	405	85	92
132 Leather tanning, fur dressing and leather product manufacturing	90	101	734	777	173	194
1320 Leather tanning, fur dressing and leather product manufacturing	90	101	734	777	173	194
133 Textile product manufacturing	682	680	3 753	3 890	1 138	1 184
1331 Textile floor covering manufacturing	143	132	1 076	1 004	235	228
1332 Rope, cordage and twine manufacturing	21	19	157	165	40	41
1333 Cut and sewn textile product manufacturing	375	378	1 864	2 022	633	656
1334 Textile finishing and other textile product manufacturing	143	151	657	699	231	259

APPENDIX EXPERIMENTAL ESTIMATES *continued*

EXPERIMENTAL ESTIMATES, MANUFACTURING INDUSTRY BY ANZSIC CLASS *continued*

	WAGES AND SALARIES		SALES AND SERVICE INCOME		INDUSTRY VALUE ADDED	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
	\$m	\$m	\$m	\$m	\$m	\$m
Manufacturing <i>cont.</i>	50 190	52 745	377 246	395 667	101 815	107 331
13 Textile, leather, clothing and footwear manufacturing <i>cont.</i>	1 684	1 693	9 491	9 930	2 842	3 001
134 Knitted product manufacturing	72	65	267	265	115	112
1340 Knitted product manufacturing	72	65	267	265	115	112
135 Clothing and footwear manufacturing	713	717	3 983	4 221	1 239	1 297
1351 Clothing manufacturing	626	630	3 535	3 751	1 088	1 148
1352 Footwear manufacturing	87	86	448	470	151	149
14 Wood product manufacturing	2 082	2 246	11 589	13 099	4 020	4 421
141 Log sawmilling and timber dressing	703	751	4 523	5 145	1 572	1 740
1411 Log sawmilling	270	303	1 430	1 633	521	533
1412 Wood chipping	72	68	825	883	220	270
1413 Timber resawing and dressing	361	379	2 268	2 630	831	937
149 Other wood product manufacturing	1 379	1 496	7 065	7 954	2 448	2 680
1491 Prefabricated wooden building manufacturing	19	24	147	171	35	42
1492 Wooden structural fitting and component manufacturing	937	1 021	4 626	5 236	1 637	1 816
1493 Veneer and plywood manufacturing	59	61	414	477	104	124
1494 Reconstituted wood product manufacturing	201	205	1 111	1 118	387	368
1499 Other wood product manufacturing n.e.c.	163	184	767	952	285	330
15 Pulp, paper and converted paper product manufacturing	1 470	1 530	9 589	9 904	2 755	2 953
151 Pulp, paper and paperboard manufacturing	354	369	2 582	2 763	648	671
1510 Pulp, paper and paperboard manufacturing	354	369	2 582	2 763	648	671
152 Converted paper product manufacturing	1 116	1 161	7 007	7 141	2 107	2 282
1521 Corrugated paperboard and paperboard container manufacturing	472	492	2 980	3 185	898	1 072
1522 Paper bag manufacturing	72	54	393	260	112	78
1523 Paper stationery manufacturing	218	248	1 090	1 165	334	354
1524 Sanitary paper product manufacturing	284	291	2 175	2 147	652	667
1529 Other converted paper product manufacturing	70	76	370	383	110	110
16 Printing (including the reproduction of recorded media)	2 321	2 447	9 361	9 429	3 979	4 072
161 Printing and printing support services	2 223	2 327	8 903	8 871	3 777	3 851
1611 Printing	2 116	2 231	8 616	8 590	3 603	3 687
1612 Printing support services	107	96	287	281	174	165
162 Reproduction of recorded media	98	120	458	559	202	220
1620 Reproduction of recorded media	98	120	458	559	202	220
17 Petroleum and coal product manufacturing	703	748	36 661	37 820	2 575	3 288
170 Petroleum and coal product manufacturing	703	748	36 661	37 820	2 575	3 288
1701 Petroleum refining and petroleum fuel manufacturing	578	618	35 478	36 471	2 285	2 954
1709 Other petroleum and coal product manufacturing	125	130	1 183	1 349	290	334
18 Basic chemical and chemical product manufacturing	2 960	3 149	24 762	27 699	7 016	7 594
181 Basic chemical manufacturing	570	633	6 087	6 651	1 648	1 877
1811 Industrial gas manufacturing	184	187	2 250	2 453	772	887
1812 Basic organic chemical manufacturing	123	129	1 148	1 058	185	157
1813 Basic inorganic chemical manufacturing	263	317	2 690	3 140	692	833
182 Basic polymer manufacturing	345	364	3 208	3 363	835	881
1821 Synthetic resin and synthetic rubber manufacturing	np	345	np	3 218	np	849
1829 Other basic polymer manufacturing	np	19	np	145	np	32
183 Fertiliser and pesticide manufacturing	355	426	3 967	5 170	990	1 205
1831 Fertiliser manufacturing	257	331	3 121	4 327	817	1 024
1832 Pesticide manufacturing	97	94	846	843	174	180

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

APPENDIX EXPERIMENTAL ESTIMATES *continued*

EXPERIMENTAL ESTIMATES, MANUFACTURING INDUSTRY BY ANZSIC CLASS *continued*

	WAGES AND SALARIES		SALES AND SERVICE INCOME		INDUSTRY VALUE ADDED	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
	\$m	\$m	\$m	\$m	\$m	\$m
Manufacturing <i>cont.</i>	50 190	52 745	377 246	395 667	101 815	107 331
18 Basic chemical and chemical product manufacturing <i>cont.</i>	2 960	3 149	24 762	27 699	7 016	7 594
184 Pharmaceutical and medicinal product manufacturing	1 009	1 074	7 179	7 953	1 925	2 032
1841 Human pharmaceutical and medicinal product manufacturing	956	1 016	6 757	7 523	1 807	1 885
1842 Veterinary pharmaceutical and medicinal product manufacturing	53	58	423	430	118	148
185 Cleaning compound and toiletry preparation manufacturing	466	431	2 861	2 945	962	960
1851 Cleaning compound manufacturing	280	272	1 932	2 059	654	666
1852 Cosmetic and toiletry preparation manufacturing	186	159	929	886	308	^ 294
189 Other basic chemical product manufacturing	215	221	1 459	1 617	656	638
1891 Photographic chemical product manufacturing	np	np	np	np	np	np
1892 Explosive manufacturing	np	204	np	1 499	np	603
1899 Other basic chemical product manufacturing n.e.c.	np	np	np	np	np	np
19 Polymer product and rubber product manufacturing	2 837	2 872	16 033	17 318	5 178	5 909
191 Polymer product manufacturing	2 681	2 701	15 263	16 480	4 913	5 584
1911 Polymer film and sheet packaging material manufacturing	433	451	2 604	2 872	758	901
1912 Rigid and semi-rigid polymer product manufacturing	1 028	1 043	5 932	6 456	1 978	2 231
1913 Polymer foam product manufacturing	114	114	611	656	207	233
1914 Tyre manufacturing	95	100	461	481	159	171
1915 Adhesive manufacturing	105	104	653	694	190	204
1916 Paint and coatings manufacturing	511	505	2 905	3 084	916	1 039
1919 Other polymer product manufacturing	395	385	2 097	2 237	705	^ 804
192 Natural rubber product manufacturing	156	171	770	838	265	325
1920 Natural rubber product manufacturing	156	171	770	838	265	325
20 Non-metallic mineral product manufacturing	2 616	2 557	15 808	16 840	5 185	5 419
201 Glass and glass product manufacturing	405	340	2 142	1 917	890	817
2010 Glass and glass product manufacturing	405	340	2 142	1 917	890	817
202 Ceramic product manufacturing	338	333	1 587	1 593	704	681
2021 Clay brick manufacturing	187	188	960	965	462	442
2029 Other ceramic product manufacturing	151	145	626	629	242	239
203 Cement, lime, plaster and concrete product manufacturing	1 537	1 561	10 392	11 579	2 995	3 280
2031 Cement and lime manufacturing	233	241	1 905	2 101	757	785
2032 Plaster product manufacturing	307	309	1 695	1 890	485	678
2033 Ready-mixed concrete manufacturing	536	530	4 495	4 892	948	934
2034 Concrete product manufacturing	461	481	2 296	2 696	805	882
209 Other non-metallic mineral product manufacturing	336	323	1 687	1 751	595	640
2090 Other non-metallic mineral product manufacturing	336	323	1 687	1 751	595	640
21 Primary metal and metal product manufacturing	4 429	4 872	61 316	65 742	15 616	15 560
211 Basic ferrous metal manufacturing	1 632	1 744	14 387	17 006	3 753	4 452
2110 Iron smelting and steel manufacturing	1 632	1 744	14 387	17 006	3 753	4 452
212 Basic ferrous metal product manufacturing	717	784	3 690	4 144	1 441	1 357
2121 Iron and steel casting	507	533	2 107	2 305	1 017	978
2122 Steel pipe and tube manufacturing	210	251	1 583	1 839	423	379
213 Basic non-ferrous metal manufacturing	1 762	1 995	39 654	40 796	9 892	9 267
2131 Alumina production	858	973	8 228	7 758	4 438	4 281
2132 Aluminium smelting	511	562	8 659	9 638	2 290	2 140
2133 Copper, silver, lead and zinc smelting and refining	np	232	np	5 196	np	587
2139 Other basic non-ferrous metal manufacturing	np	229	np	18 204	np	2 260
214 Basic non-ferrous metal product manufacturing	319	349	3 586	3 797	530	483
2141 Non-ferrous metal casting	33	^ 36	113	131	61	^ 47
2142 Aluminium rolling, drawing, extruding	193	214	1 869	1 992	286	267
2149 Other basic non-ferrous metal product manufacturing	93	99	1 603	1 674	183	169

APPENDIX EXPERIMENTAL ESTIMATES *continued*

EXPERIMENTAL ESTIMATES, MANUFACTURING INDUSTRY BY ANZSIC CLASS *continued*

	WAGES AND SALARIES		SALES AND SERVICE INCOME		INDUSTRY VALUE ADDED	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
	\$m	\$m	\$m	\$m	\$m	\$m
Manufacturing <i>cont.</i>	50 190	52 745	377 246	395 667	101 815	107 331
22 Fabricated metal product manufacturing	5 155	5 693	27 333	28 605	9 347	9 806
221 Iron and steel forging	84	94	566	652	176	194
2210 Iron and steel forging	84	94	566	652	176	194
222 Structural metal product manufacturing	2 622	2 946	14 601	15 502	4 648	4 937
2221 Structural steel fabricating	1 115	1 366	6 136	6 918	2 001	2 243
2222 Prefabricated metal building manufacturing	207	241	1 631	1 804	488	535
2223 Architectural aluminium product manufacturing	705	804	3 490	3 796	1 162	1 295
2224 Metal roof and guttering manufacturing (except aluminium)	103	108	846	773	171	140
2229 Other structural metal product manufacturing	491	426	2 498	2 211	825	724
223 Metal container manufacturing	437	436	2 429	2 381	855	896
2231 Boiler, tank and other heavy gauge metal container manufacturing	201	220	867	904	371	417
2239 Other metal container manufacturing	236	216	1 562	1 477	485	480
224 Sheet metal product manufacturing (except metal structural and container products)	419	443	2 087	2 015	790	741
2240 Sheet metal product manufacturing (except metal structural and container products)	419	443	2 087	2 015	790	741
229 Other fabricated metal product manufacturing	1 593	1 773	7 649	8 055	2 878	3 038
2291 Spring and wire product manufacturing	207	212	1 277	1 348	368	355
2292 Nut, bolt, screw and rivet manufacturing	98	104	547	591	183	181
2293 Metal coating and finishing	425	465	1 625	1 649	754	757
2299 Other fabricated metal product manufacturing n.e.c.	863	992	4 201	4 467	1 572	1 745
23 Transport equipment manufacturing	5 864	6 078	33 672	34 939	9 300	9 815
231 Motor vehicle and motor vehicle part manufacturing	3 861	3 823	24 326	25 540	5 997	6 176
2311 Motor vehicle manufacturing	1 792	1 694	13 824	14 656	2 510	2 415
2312 Motor vehicle body and trailer manufacturing	625	757	3 184	3 691	1 024	1 285
2313 Automotive electrical component manufacturing	247	234	1 476	1 568	426	454
2319 Other motor vehicle parts manufacturing	1 198	1 139	5 842	5 625	2 036	2 022
239 Other transport equipment manufacturing	2 003	2 255	9 345	9 399	3 303	3 638
2391 Shipbuilding and repair services	472	527	1 777	1 954	np	np
2392 Boatbuilding and repair services	336	376	1 688	1 829	578	677
2393 Railway rolling stock manufacturing and repair services	415	488	2 412	2 694	631	940
2394 Aircraft manufacturing and repair services	765	849	3 394	2 843	1 332	1 577
2399 Other transport equipment manufacturing n.e.c.	15	^ 15	74	^ 79	np	np
24 Machinery and equipment manufacturing	6 166	6 316	32 122	32 516	10 823	10 941
241 Professional and scientific equipment manufacturing	1 152	1 150	4 811	4 767	2 064	2 161
2411 Photographic, optical and ophthalmic equipment manufacturing	82	90	296	393	121	127
2412 Medical and surgical equipment manufacturing	527	504	2 482	2 348	1 084	1 122
2419 Other professional and scientific equipment manufacturing	543	555	2 034	2 025	858	912
242 Computer and electronic equipment manufacturing	991	1 078	4 967	4 766	1 756	1 748
2421 Computer and electronic office equipment manufacturing	225	250	1 462	1 241	349	299
2422 Communication equipment manufacturing	324	305	1 628	1 551	600	520
2429 Other electronic equipment manufacturing	442	523	1 878	1 973	806	929
243 Electrical equipment manufacturing	1 034	1 035	6 493	6 473	1 807	1 741
2431 Electric cable and wire manufacturing	179	159	1 811	1 817	384	322
2432 Electric lighting equipment manufacturing	234	219	1 132	1 089	379	330
2439 Other electrical equipment manufacturing	621	658	3 550	3 566	1 044	1 090

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APPENDIX EXPERIMENTAL ESTIMATES *continued*

EXPERIMENTAL ESTIMATES, MANUFACTURING INDUSTRY BY ANZSIC CLASS *continued*

	WAGES AND SALARIES		SALES AND SERVICE INCOME		INDUSTRY VALUE ADDED	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
	\$m	\$m	\$m	\$m	\$m	\$m
Manufacturing <i>cont.</i>	50 190	52 745	377 246	395 667	101 815	107 331
24 Machinery and equipment manufacturing <i>cont.</i>	6 166	6 316	32 122	32 516	10 823	10 941
244 Domestic appliance manufacturing	330	340	2 103	2 378	604	707
2441 Whiteware appliance manufacturing	172	156	1 083	1 244	243	313
2449 Other domestic appliance manufacturing	158	184	1 019	1 134	360	394
245 Pump, compressor, heating and ventilation equipment manufacturing	434	464	2 191	2 228	719	815
2451 Pump and compressor manufacturing	213	217	1 134	1 124	380	406
2452 Fixed space heating, cooling and ventilation equipment manufacturing	221	247	1 056	1 104	339	410
246 Specialised machinery and equipment manufacturing	1 387	1 360	7 320	7 752	2 460	2 366
2461 Agricultural machinery and equipment manufacturing	300	293	1 722	1 908	492	500
2462 Mining and construction machinery manufacturing	554	570	3 255	3 623	np	np
2463 Machine tool and parts manufacturing	244	224	934	873	np	np
2469 Other specialised machinery and equipment manufacturing	289	273	1 409	1 348	476	466
249 Other machinery and equipment manufacturing	837	890	4 237	4 153	1 414	1 402
2491 Lifting and material handling equipment manufacturing	441	495	2 161	2 243	731	745
2499 Other machinery and equipment manufacturing n.e.c.	396	396	2 075	1 909	683	657
25 Furniture and other manufacturing	1 509	1 328	^ 7 821	^ 8 069	2 435	^ 2 676
251 Furniture manufacturing	np	np	^ 5 043	^ 5 263	1 611	^ 1 777
2511 Wooden furniture and upholstered seat manufacturing	np	np	^ 3 137	^ 3 244	1 049	^ 1 158
2512 Metal furniture manufacturing	np	np	^ 1 078	^ 1 129	330	^ 353
2513 Mattress manufacturing	np	np	508	566	138	168
2519 Other furniture manufacturing	np	np	^ 320	^ 323	94	^ 98
259 Other manufacturing	np	np	^ 2 778	^ 2 806	825	^ 899
2591 Jewellery and silverware manufacturing	np	np	^ 810	^ 847	224	^ 256
2592 Toy, sporting and recreational product manufacturing	np	np	^ 511	^ 453	158	^ 163
2599 Other manufacturing n.e.c.	np	np	^ 1 456	^ 1 506	442	^ 480

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

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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.

Australian Business Number (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).
Business Activity Statement (BAS) total sales	Represented by the form item G1 Total sales on businesses' BASs, supplied by them to the ATO. This item comprises all payments and other considerations (including GST) received during the nominated tax period for supplies made in the course of business.
Business Activity Statement (BAS) wages and salaries	Represented by the form item W1 Total salary, wages and other payments on businesses' BASs, supplied by them to the ATO. This item comprises all total gross payments for which a business is required to withhold amounts from during the nominated tax period.
Industry class	The structure of the ANZSIC classification comprises a hierarchy of 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.
Industry subdivision	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.
Industry value added (IVA)	IVA represents the value added by an industry to the intermediate inputs used by the industry. IVA is the measure of the contribution by businesses in the selected industry, to gross domestic product.

The derivation of IVA for market producers is as follows:

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

However, it should be noted that IVA is a measure of economic activity and is not equivalent to operating profit before tax (OPBT). Wages and salary expenses and most other labour costs are not taken into account in its calculation for market producers, and

GLOSSARY *continued*

Industry value added (IVA) <i>continued</i>	<p>nor are most insurance premiums, interest expenses or depreciation and a number of lesser expenses. On the income side, OPBT includes total income, whereas IVA only includes sales and service income.</p> <p>IVA is related to, but different from, the national accounting variable gross value added. For national accounts purposes, gross value added is calculated by adjusting IVA to include General Government units and to also account for some other effects.</p>
Reference period	<p>For each collection year, businesses are asked to report data to the EAS for the financial year ended 30 June. However, if a business has a different financial year, it is asked to report for the 12 month period which ends between 1 October of the previous year and 30 September of the current year. This period is then used as a substitute for the financial year ended 30 June. For example, for the 2007–08 collection, a business may have reported data for the year ended 31 December 2007.</p>
Sales and Services income	<p>This item includes:</p> <p><i>Sales of goods:</i></p> <ul style="list-style-type: none"> ■ whether or not produced 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, delivery charges not separately invoiced to customers, sales of goods produced by the business from crude materials purchased, and income from 'specific' rates (e.g. water, sewerage, irrigation and drainage rates). Excludes excise and duties received on behalf of the government, sales of assets, natural resource royalties income, 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. <p><i>Income from services</i></p> <ul style="list-style-type: none"> ■ including 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. <p><i>Rent, leasing and hiring income</i></p> <ul style="list-style-type: none"> ■ 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. <p>These component items are valued net of discounts given and exclude goods and services tax (GST). Extraordinary items are also excluded.</p>
Standard Institutional Sector Classification of Australia (SISCA)	<p>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, please refer to the <i>Standard Economic Sector Classifications of Australia (SESCA)</i> (cat. no. 1218.0)</p>
Wages and Salaries	<p>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</p>

GLOSSARY *continued*

Wages and Salaries *continued* included, as are salary sacrificed earnings and remuneration of employees in the form of share based payments and stock options.

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.

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