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# Information Paper

## **The Expanded Use of Business Income Tax Data in ABS Economic Statistics**

**Experimental Estimates for Selected Industries  
1994–95 and 1995–96**



New  
Issue

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## **The Expanded Use of Business Income Tax Data in ABS Economic Statistics**

**Experimental Estimates for Selected Industries  
1994–95 and 1995–96**

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## PREFACE

The Australian Bureau of Statistics (ABS) is committed to a program of continual improvement in the statistics it produces. It strives to increase the range and quality of data it provides to users while at the same time reducing the reporting burden placed on businesses. This paper describes an important initiative in this regard which is being implemented with the help of the Australian Taxation Office (ATO).

This initiative has come about as the combined result of:

- changes in ATO forms, procedures and systems made as part of its 'modernisation' program over the past decade;
- the increasing significance of and interest in the service industries sector of the Australian economy; and
- increasing concerns about the government reporting burden placed on businesses (as illustrated by the terms of reference and recommendations of the 1996 Small Business Deregulation Task Force).

The ABS and ATO have been working closely together for many years in an effort to improve the quality of Australia's economic statistics. While the legislation under which the ABS operates (the *Census and Statistics Act 1905*) does not allow it to provide the ATO with data reported by individual businesses, the *Income Tax Assessment Act 1986* enables the ATO to provide the ABS with such data, for statistical purposes only.

This information paper summarises the outcome of one aspect of this work. It provides annual statistics for selected industries, primarily service industries, for 1994–95 and 1995–96 using a combination of data from the ABS's annual Economic Activity Survey and business income tax data provided to ATO.

The ABS is currently processing similar data for 1996–97 and plans to release estimates for subsequent years on a regular basis. Details of the proposed annual cycle of releases are outlined in section 6 of this publication.

We would welcome any comments on the data contained in this information paper. If you wish to make comments, contact details are provided in section 7.

W. McLennan  
Australian Statistician

SYMBOLS AND  
OTHER USAGES

ABS	Australian Bureau of Statistics
ANA	Australian National Accounts
ANZSIC	Australian and New Zealand Standard Industrial Classification
ATO	Australian Taxation Office
CSA	Census and Statistics Act
EAS	Economic Activity Survey
n.a.	not applicable





## SECTION 1

## INTRODUCTION

**1.1** Since 1968–69, the ABS has conducted a program of integrated economic censuses and surveys aimed at covering most of the statistically significant sectors of the Australian economy on a regular basis.

During the 1970s and 1980s, this mainly involved annual censuses for Agriculture, Mining, Manufacturing, and Electricity, gas and water, with censuses/surveys covering other significant industries (e.g. Construction, Wholesale trade, Retail trade, Transport) being conducted on a periodic basis. ‘Significance’ was mainly determined by the contribution of the industries to key Australian National Accounts (ANA) statistics.

**1.2** The growing interest in and significance of these service industries resulted in a number of changes to the ABS economic statistics strategy, including the development of the Economic Activity Survey (EAS) to cover all industries, in broad terms, on an annual basis, beginning with 1990–91. The annual and periodic program for conducting more detailed, industry specific surveys has been greatly expanded for service industries, but traditional industry censuses have become less frequent. Nevertheless, large scale surveys continue to be conducted on an annual basis in respect of Agriculture, Mining, Manufacturing and Electricity, gas and water.

**1.3** This publication deals with the supplementation of the relatively small scale survey the ABS conducts in respect of selected industries with business income tax data provided by the ATO. ‘Selected industries’ includes: Construction, Wholesale trade, Retail trade, Accommodation, cafes and restaurants, Transport and Storage, Communication services, Property and business services, Cultural and recreational services, and Personal and other services. The significance of these industries in the Australian economy, as a group is briefly discussed in section 2.

**1.4** In summary, statistics for these industries have been improved by the use of business income tax data:

- extending the coverage to include the non-employed business sector (see section 3);
- improving the quality of data available regarding small and medium employing businesses (see section 4); and
- improving the quality of data available regarding the inputs of all sizes of business (see section 5).

**1.5** In undertaking this work, the ABS has been mindful of three factors. First, the work should provide significant benefits to users of industry and national accounts statistics. Second, there should be no overall increase in the government statistical reporting burden placed on businesses. Third, it should involve minimal additional costs to the ABS and ATO.

**1.6** These improvements will be of substantial benefit to analysts and decision makers (including businesses themselves) who require finer levels of detail regarding business operations and industry performance than previously available. Users of macro-economic statistics will also benefit from the improvements in the quality of national accounts estimates that will result from the use of this finer level of detail in the compilation of the accounts (see Appendix 1 for further details).

**1.7** To achieve comparable improvements without the use of income tax data would have cost many millions of dollars and imposed an additional statistical reporting burden on businesses totalling some 142,000 hours per year (an increase of around 22% on the current level of reporting burden imposed by the ABS on business).

**1.8** The methodology used to achieve these improvements is simple in concept but operationally complex. It involves the use of ABS-collected data for the relatively few large and complex business units, supplemented with ATO-collected data for the many small, simply structured businesses. Some of these small businesses are also approached by the ABS to obtain data not available from the ATO. The methodology used to compile these statistics is described in Appendix 2.

**1.9** As the methodology used to compile these estimates is still subject to evaluation and possible further change, these estimates are considered to be experimental at this stage. They nevertheless give a good indication of the improvements likely to be forthcoming in annual economic statistics by extending the use of data available from the ATO.

**1.10** Current plans for extending the use the ABS makes of ATO income tax data and details of releases that will contain these data are outlined in section 6. Suggestions and comments from users of these data would be most welcome. Contact details are provided in section 7 of this paper.

## SECTION 2

### THE AUSTRALIAN BUSINESS SECTOR

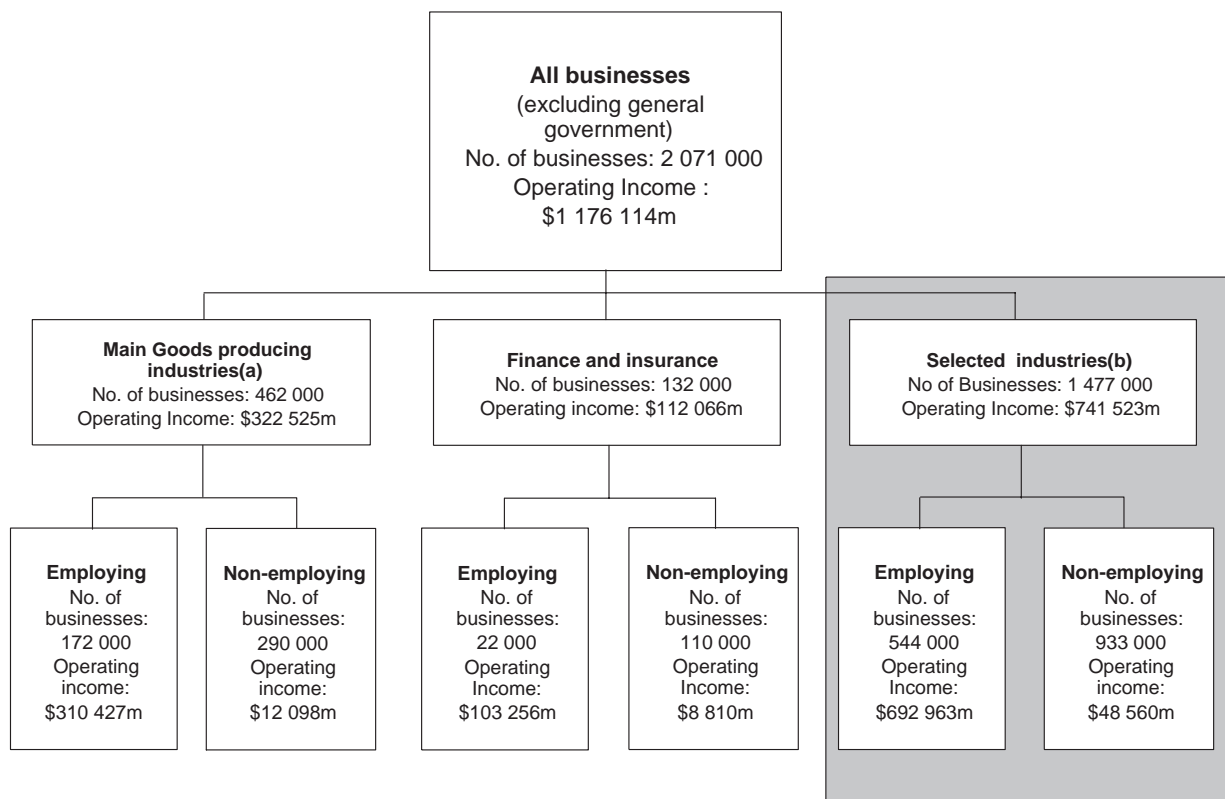
**2.1** Based on a combination of ABS and ATO sources, it is estimated that around 2,071,000 private and public trading businesses operated in Australia for at least some time during 1995–96.

**2.2** This figure is significantly higher than estimates previously published by the ABS because of the broader definition of business which is possible through the use of income tax records.

**2.3** For example, the estimate of 1,051,900 businesses published in *Small Business in Australia, 1997* (ABS Cat. no. 1321.0) does not include:

- non-employing incorporated businesses;
- businesses not considered to be the first or second job of the operator;
- businesses which were operated for only part of the year; and
- some businesses set up as partnerships and trusts.

**2.4** The statistics presented in this paper include these types of business, as well as other business types as more traditionally defined in other ABS publications. The basic structure of the Australian business sector is summarised in diagram 2.1.



(a) i.e. Agriculture, forestry and fishing, Mining, Manufacturing and Electricity, gas and water.

(b) i.e. Construction, Wholesale trade, Retail trade, Accommodation, cafes and restaurants, Transport and storage, Communication services, Property and business services, Education, Health and community services, Cultural and recreational services and Personal and other services.

Source: ABS, *Business Operations and Industry Performance, Australia, 1995–96* (ABS Cat. no. 8140.0); and ATO *Business Income Tax Files*.

**2.5** In 1995–96, businesses in the main goods-producing industries accounted for around 22% of the number of private and public trading businesses in Australia and around 27% of the total operating income of these businesses.

**2.6** Businesses classified to Finance and insurance accounted for around 6%, by number, and 10%, by operating income, of all private and public trading businesses.

**2.7** Businesses in the selected industries accounted for around 71% of the number of businesses and 63% of total operating income, highlighting the importance of this diverse sector to the Australian economy.

**2.8** The estimates contained in the remainder of this paper relate to the activities of all private and public trading businesses classified to the selected industries (i.e. the area shaded in diagram 2.1).

## SECTION 3

## NON-EMPLOYING BUSINESSES IN SELECTED INDUSTRIES

**3.1** In 1995–96, there were around 1,477,000 businesses operating in the selected industries, 544,000 employing and 933,000 non-employing businesses.

3.1 COUNTS OF BUSINESSES, BY INDUSTRY AND EMPLOYING STATUS  
—1995–96

<i>Industry</i>	<i>Employing</i>	<i>Non-employing</i>	<i>Total</i>
	<i>'000</i>	<i>'000</i>	<i>'000</i>
Construction	88	254	342
Wholesale trade	48	33	81
Retail trade	115	121	236
Accommodation, cafes and restaurants	33	14	47
Transport and storage	31	69	100
Communication services	2	19	21
Property and business services	122	242	364
Education	9	14	23
Health and community services	42	43	85
Cultural and recreational services	18	54	72
Personal and other services	37	70	107
<b>Selected industries</b>	<b>544</b>	<b>933</b>	<b>1 477</b>

Source: ABS, *Business Operations and Industry Performance, Australia, 1995–96* (ABS Cat. no. 8140.0); and ATO *Business Income Tax Files*.

**3.2** While non-employing businesses are quite numerous, their overall contribution to the economic activity of selected industries, in terms of operating income, is only around 7%. However as table 3.2 shows, non-employing businesses are much more significant than this in some industries, notably Other transport (where they contribute 42% of operating income), Libraries, museums and the arts (25%), Construction trade services (23%), Property services (22%), Personal services (16%), Other services (13%), Road transport (13%) and Health services (12%).

**3.3** While the tables presented in this section use total income as an indicator of economic activity, other variables are available from business income tax data, for example, sales, profit, wages and other expenses.

## 3.2 OPERATING INCOME BY INDUSTRY AND EMPLOYING STATUS—1995–96

<i>Industry</i>	<i>Employing businesses</i>	<i>Employing businesses</i>	<i>Non-employed businesses</i>	<i>Non-employed businesses</i>	<i>Total</i>
	<i>\$m</i>	<i>%</i>	<i>\$m</i>	<i>%</i>	
General construction	36 608	90.6	3 776	9.4	40 384
Construction trade services	26 997	76.6	8 262	23.4	35 259
<i>Total construction</i>	<i>63 605</i>	<i>84.1</i>	<i>12 038</i>	<i>15.9</i>	<i>75 643</i>
Basic material wholesaling	71 846	99.0	717	1.0	72 563
Machinery and motor vehicle wholesaling	73 244	98.9	816	1.1	74 060
Personal and household good wholesaling	60 350	97.3	1 651	2.7	62 001
<i>Total wholesale trade</i>	<i>205 441</i>	<i>98.5</i>	<i>3 183</i>	<i>1.5</i>	<i>208 624</i>
Food retailing	50 120	94.7	2 816	5.3	52 936
Personal and household good retailing	58 654	92.4	4 854	7.6	63 508
Motor vehicle retailing and services	56 115	96.6	1 969	3.4	58 084
<i>Total retail trade</i>	<i>164 889</i>	<i>94.5</i>	<i>9 639</i>	<i>5.5</i>	<i>174 528</i>
Accommodation, cafes and restaurants	27 424	96.4	1 037	3.6	28 461
Road transport	18 377	87.2	2 686	12.8	21 063
Rail transport	5 983	100.0	1	0.0	5 984
Water transport	4 025	98.5	60	1.5	4 085
Air and space transport	12 491	99.3	83	0.7	12 574
Other transport	719	57.9	522	42.1	1 241
Services to transport	14 035	96.3	536	3.7	14 571
Storage	2 134	98.6	29	1.4	2 163
<i>Total transport and storage</i>	<i>57 764</i>	<i>93.6</i>	<i>3 917</i>	<i>6.4</i>	<i>61 681</i>
Communication services	22 667	97.5	590	2.5	23 257
Property services	17 535	77.9	4 979	22.1	22 514
Business services	70 557	91.3	6 716	8.7	77 273
<i>Total property and business services</i>	<i>88 091</i>	<i>88.3</i>	<i>11 694</i>	<i>11.7</i>	<i>99 785</i>
Education	6 779	96.9	216	3.1	6 995
Health services	20 157	87.6	2 861	12.4	23 018
Community services	4 911	96.7	165	3.3	5 076
<i>Total health and community services</i>	<i>25 068</i>	<i>89.2</i>	<i>3 026</i>	<i>10.8</i>	<i>28 094</i>
Motion picture, radio and television services	6 144	97.2	175	2.8	6 319
Libraries, museums and the arts	1 303	74.8	438	25.2	1 741
Sport and recreation	11 232	95.6	514	4.4	11 746
<i>Total cultural and recreation services</i>	<i>18 680</i>	<i>94.3</i>	<i>1 127</i>	<i>5.7</i>	<i>19 807</i>
Personal services	6 281	84.1	1 188	15.9	7 469
Other services	6 275	87.4	906	12.6	7 181
<i>Total personal and other services</i>	<i>12 556</i>	<i>85.7</i>	<i>2 093</i>	<i>14.3</i>	<i>14 649</i>
<b>Selected industries</b>	<b>692 963</b>	<b>93.5</b>	<b>48 560</b>	<b>6.5</b>	<b>741 523</b>

Source: ABS, *Business Operations and Industry Performance, Australia, 1995–96* (ABS Cat. no. 8140.0); and ATO, *Business Income Tax Files*.

**3.4** As well as being significant contributors to the overall level of economic activity in some industries, non-employing businesses are sometimes a major influence on the changes from year to year in the performance of many industries. Table 3.3 shows the movements in operating income of non-employing businesses between 1994–95 and 1995–96. While operating income for employing businesses in the selected industries increased by 9% between 1994–95 and 1995–96, operating income for non-employing businesses only increased by 2.5%. Non-employers in some industries experienced more significant growth rates, most notably Communication services (18%), Personal and other services (17%) and Health and community services (14%), while other industries experienced declines, e.g. Cultural and recreational services (–25%) and Wholesale trade (–6%).

3.3 NON-EMPLOYING BUSINESS—OPERATING INCOME BY INDUSTRY

	1994–95	1995–96	Change	
	\$m	\$m	\$m	%
Construction	11 768	12 038	270	2.3
Wholesale trade	3 385	3 183	–202	–6.0
Retail trade	9 234	9 639	405	4.4
Accommodation, cafes and restaurants	978	1 037	59	6.0
Transport and storage	3 676	3 917	241	6.6
Communication services	500	590	90	18.0
Property and business services	11 716	11 694	–22	–0.2
Education	209	216	7	3.3
Health and community services	2 644	3 026	382	14.4
Cultural and recreational services	1 495	1 127	–368	–24.6
Personal and other services	1 793	2 093	300	16.7
<b>Selected industries</b>	<b>47 398</b>	<b>48 560</b>	<b>1 162</b>	<b>2.5</b>

Source: ATO, Business Income Tax Files, 1994–95 and 1995–96.

**3.5** While some of the movement between the years can be attributed to non-employing businesses moving into the employing category, and vice versa, the changes in the fortunes of non-employers between 1994–95 and 1995–96 indicate that non-employers can have significant impact on overall industry growth rates. The effects of higher entry and exit rates among non-employing businesses and relatively higher volatility in their respective fortunes from year to year combine to produce patterns sometimes significantly different from that experienced by employing businesses.

**3.6** This suggests that a longstanding assumption in compiling economic statistics, that the performance of non-employing businesses was highly correlated with the performance of employing businesses through the business cycle, may not be appropriate. Through the expanded use of ATO data described in this publication, the ABS and its clients have access to a regular and relatively reliable source of information to monitor the changing contribution of this significant sector of the Australian economy.

## SECTION 4

### SMALL AND MEDIUM EMPLOYING BUSINESSES

**4.1** In 1995–96, there were around 449,000 simply structured small and medium employing businesses in the selected industries. Around 8,000 (2%) of these businesses were included in the ABS' annual EAS. A sample of this size is sufficient to produce reasonably reliable estimates for most key variables at national and broad industry (i.e. Australian and New Zealand Standard Industrial Classification (ANZSIC) Division) levels only. By supplementing this sample with up to 81,000 ATO records, reasonably reliable estimates can be produced at finer levels of industry classification (i.e. ANZSIC Subdivision).

**4.2** Table 4.1 compares two sets of estimates of operating income for all businesses (including non-employers) by ANZSIC Subdivision. The first estimate, Estimate 1, is obtained by summing estimates for large and complex businesses (obtained from the EAS), estimates for small and medium businesses (obtained from the smaller EAS sample) and estimates for non-employers (obtained from tax data). The second estimate, Estimate 2, is obtained by summing estimates for large and complex businesses (obtained from the EAS), estimates for simply structured small and medium businesses (obtained from the much larger tax sample) and estimates for non-employers. The difference between these two estimates is effectively the difference between the EAS and tax-based estimates for simply structured small and medium businesses.

**4.3** While the tables presented in this section use total income as an indicator of economic activity, other variables are available from business income tax data, for example, sales, profit, wages and other expenses.



4.1 OPERATING INCOME, BY INDUSTRY AND SOURCE—1995–96

<i>Industry</i>	<i>Large and complex businesses (EAS)</i>	<i>Simple small and medium businesses (EAS)</i>	<i>Simple small and medium businesses (TAX)</i>	<i>Non-employing businesses (TAX)</i>	<i>All businesses (Estimate 1)</i>	<i>All Businesses (Estimate 2)</i>	<i>Difference</i>	<i>Difference</i>
	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>\$m</i>	<i>%</i>
General construction	15 502	16 177	21 106	3 776	35 455	40 384	4 929	14
Construction trade services	5 924	18 450	21 073	8 262	32 636	35 259	2 623	8
Basic material wholesaling	38 518	30 400	33 328	717	69 635	72 563	2 928	4
Machinery and motor vehicle wholesaling	32 423	31 247	40 821	816	64 486	74 060	9 574	15
Household good wholesaling	24 136	35 449	36 214	1 651	61 236	62 001	765	1
Food retailing	32 324	18 628	17 795	2 816	53 768	52 935	-833	-2
Household good retailing	25 494	30 370	33 159	4 854	60 718	63 507	2 789	5
Motor vehicle retailing and services	17 685	42 452	38 430	1 969	62 106	58 084	-4 022	-6
Accommodation, cafes and restaurants	13 566	13 964	13 858	1 037	28 567	28 461	-106	-0
Road transport	6 463	9 171	11 914	2 686	18 320	21 063	2 743	15
Rail transport	5 964	10	19	1	5 975	5 984	9	0
Water transport	3 161	360	864	60	3 581	4 085	504	14
Air and space transport	11 366	547	1 125	83	11 996	12 574	578	5
Other transport	489	164	230	522	1 175	1 241	66	6
Services to transport	5 409	5 007	8 627	536	10 952	14 572	3 620	33
Storage	1 170	561	963	29	1 760	2 162	402	23
Communication services	21 659	853	1 008	590	23 102	23 257	155	1
Property services	6 791	8 236	10 744	4 979	20 006	22 514	2 508	13
Business services	32 155	29 418	38 402	6 716	68 289	77 273	8 984	13
Education(a)	6 779	n.a.	n.a.	216	6 995	6 995	n.a.	n.a.
Health services	9 113	8 679	11 044	2 861	20 653	23 018	2 365	11
Community services(a)	4 910	n.a.	n.a.	165	5 075	5 075	n.a.	n.a.
Motion picture, radio and television services	4 021	1 526	2 124	175	5 722	6 320	598	10
Libraries, museums and the arts	599	708	703	438	1 745	1 740	-5	-0
Sport and recreation	8 877	1 992	2 356	514	11 383	11 747	364	3
Personal services	1 655	3 986	4 626	1 188	6 829	7 469	640	9
Other services(a)	6 275	n.a.	n.a.	906	7 181	7 181	n.a.	n.a.
<b>Selected industries</b>	<b>342 428</b>	<b>308 355</b>	<b>350 533</b>	<b>48 560</b>	<b>699 346</b>	<b>741 524</b>	<b>42 178</b>	<b>6</b>

(a) Business income tax records are not used for these industries due to the high proportion of not-for-profit businesses.

Source: ABS, *Business Operations and Industry Performance, Australia, 1995–96* (ABS Cat. no. 8140.0); and ATO, *Business Income Tax Files*.

**4.4** For the estimator of operating income in Table 4.1, overall, Estimate 2 is around 6% higher than Estimate 1. Estimate 1 is higher than Estimate 2 in only four ANZSIC Subdivisions. Investigations to date have identified that for the most part this is due to systemic differences in business economic data reported to the ABS from that reported to the ATO.

**4.5** For example, annual economic activity data are usually reported to the ABS during the period September to December following the reference year when accounts of many small businesses are not yet finalised. The ABS accepts 'careful estimates' in such instances. Small businesses have up until March of the following year to submit their annual income tax returns to the ATO, by which time their accounts are finalised and more items of income and expenditure are brought to account.

**4.6** The ABS is conducting ongoing research into differences between data reported for the EAS direct collection and data sourced from business income tax returns. As a part of this research, data for a small number of businesses that reported significantly different data for the EAS direct collection compared to that provided on their business income tax files were investigated. In the greater number of these cases, the data sourced from business income tax data has been found to be more correct, mainly because of the timing differences noted above.

**4.7** The timing and other deficiencies identified in EAS small and medium business economic data does not apply to larger business data due to the earlier finalisation of accounts for these businesses.

**4.8** There is a further reason why Estimate 2 is considered to be more accurate than Estimate 1.

**4.9** Estimate 1 is generally subject to much higher sampling variability than Estimate 2. Sampling variability is traditionally measured by estimates of relative standard error. Table 4.2 shows that estimates of the relative standard error for the second estimate of operating income are significantly lower than those for the first estimate for almost all of the ANZSIC Subdivisions. Overall, the standard error for the second estimate is 0.7% compared to 1.2% for the first. In the few cases where the relative standard error for Estimate 1 is lower than that for Estimate 2, this is due to the higher variability among businesses selected in the larger sample for the second estimate.

4.2 RELATIVE STANDARD ERRORS, OPERATING INCOME — BY  
SUBDIVISION, 1995–96

	<i>Estimate 1</i>	<i>Estimate 2</i>
	%	%
General construction(a)	4.6	2.6
Construction trade(a)	5.4	2.0
Material wholesaling	4.0	2.7
Machinery and vehicle wholesaling	5.2	3.7
Personal and household good wholesaling	6.2	2.4
Food retailing	4.6	2.0
Personal and household goo retailing	4.9	2.2
Motor vehicle retailing and services	5.5	3.4
Accommodation, cafes and restaurants	4.0	3.3
Road transport	3.5	2.1
Rail transport	0.0	0.0
Water transport	1.5	2.9
Air and space transport	3.0	2.8
Other transport	1.8	1.9
Services to transport	5.0	3.2
Storage	8.8	6.5
Communication services	5.0	0.7
Property services	5.3	3.4
Business services	4.8	3.1
Education(a)(b)	2.9	2.9
Health services(a)	4.4	2.0
Community services(a)(b)	4.2	4.2
Motion picture, radio and television services	5.4	3.5
Libraries, museums and the arts	6.8	3.8
Sport and recreation	3.7	3.0
Personal services	3.6	2.1
Other services (b)	4.6	4.6
Selected industries	1.2	0.7

(a) Industries with significant economic activity by general government sector.

(b) Business income tax records are not used for these industries due to the high proportion of not-for-profit businesses.

**4.10** The ABS has recently assessed both Estimate 1 and Estimate 2 for their suitability for use in National Accounts tables. This ongoing assessment work includes comparing the two estimates to other data sources for the same industries. Some of the above industries have significant contributions by general government (footnote (a)) and/or not-for-profit businesses (footnote (b)) and are therefore considered at this stage to be less suited to having data sourced from business income tax records. For the remaining 21 industries listed above, Estimate 2 has been recently assessed as providing the better measure of business financial activity and is used in the production of National Account tables.

## SECTION 5

### BUSINESS INPUT COSTS

**5.1** Use of ATO data in combination with ABS data enables production of a much finer dissection of business input costs by data item and industry than has been feasible in the past.

**5.2** Data for 38 expense items are collected from around 3,200 businesses included in the ABS' annual EAS collections. The strong correlation that exists between data items collected from this sample of businesses and those data items available from business income tax records, means that the data collected from the much larger ATO sample can be used to improve accuracy of the estimates for many of the data items of interest. Details are provided in Appendix 2.

**5.3** All businesses utilise a combination of labour, capital, and goods and services provided by other businesses to produce their outputs. While similar usage patterns tend to exist within industries, there are some significant differences across industries, as the data in table 5.1 clearly show.

**5.4** Overall, in 1995–96, businesses in the selected industries spent around 50% of their total operating expenditure on the purchase of goods, materials and fuels. Not surprisingly, industries earning a significant proportion of their income from the sale of goods had a higher proportion of their expenses devoted to these purchases. These included Wholesale and Retail trade, which indicated around 75% of their expenses was spent on total purchases and around 70% was spent on purchases of finished goods for resale.

**5.5** Some industries earning a small proportion of their income from sales of goods, nevertheless reported significant proportions of their expenditure on purchases. Examples include Communication services (22%), and Transport and storage (16%).

**5.6** Next to purchases of goods, materials and fuels, the most significant input into the selected industries was labour, which accounted for around 18% of overall expenses in 1995–96. The proportion of total expenses spent on labour costs was much higher in Education (68%), and Health and community services (49%).

**5.7** On average, businesses in the selected industries allowed around 3% of their total budgets for depreciation of fixed assets. More capital-intensive industries reported significantly higher proportions (e.g. Communication services 14%) than in most other industries.

**5.8** Around 4% of expenditure was on financial services. However, Property and business services reported around 10% of its total expenditure went on financial services.

**5.9** On average, motor vehicle running expenses cost the selected industries around 2% of their total expenditure. Businesses in Transport and storage, however, reported around 5%.

**5.10** Table 5.1 contains details of operating expenses by broad industry (i.e. ANZSIC Division). Table 5.2 contains an example of details of expenses by Subdivision, for the Wholesale trade industry.

5.1 DETAILS OF OPERATING EXPENSES, BY INDUSTRY—1995–96

	Construction		Wholesale trade		Retail trade		Accommodation, cafes and restaurants	
	\$m	%	\$m	%	\$m	%	\$m	%
Wages and salaries	9 800	14.2	14 344	7.1	6 245	23.2	6 245	23.2
Superannuation	866	1.3	1 207	0.6	355	1.3	355	1.3
Workers' compensation costs	423	0.6	213	0.1	140	0.5	140	0.5
Payroll tax	266	0.4	725	0.4	175	0.7	175	0.7
Fringe benefits tax	105	0.2	454	0.2	23	0.1	23	0.1
Staff training expenses	39	0.1	167	0.1	30	0.1	30	0.1
<b>Labour costs</b>	<b>11 500</b>	<b>16.6</b>	<b>17 110</b>	<b>8.5</b>	<b>6 968</b>	<b>25.9</b>	<b>6 968</b>	<b>25.9</b>
Purchase of finished goods	4 217	6.1	142 041	70.2	6 932	25.7	6 932	25.7
Purchase of materials	24 899	36.0	4 381	2.2	2 583	9.6	2 583	9.6
Petroleum products expenses	640	0.9	3 883	1.9	515	1.9	515	1.9
Electricity and gas expenses	214	0.3	740	0.4	666	2.5	666	2.5
Other fuels expenses	0	0.0	6	0.0	12	0.0	12	0.0
<b>Purchases of goods, etc</b>	<b>29 969</b>	<b>43.4</b>	<b>151 050</b>	<b>74.6</b>	<b>10 708</b>	<b>39.7</b>	<b>10 708</b>	<b>39.7</b>
Rent—land, buildings and other structures	586	0.8	2 486	1.2	1 202	4.5	1 202	4.5
Rent—motor vehicles	205	0.3	493	0.2	42	0.2	42	0.2
Rent—other expenses	404	0.6	291	0.1	66	0.2	66	0.2
<b>Rent, leasing &amp; hiring expenses</b>	<b>1 196</b>	<b>1.7</b>	<b>3 270</b>	<b>1.6</b>	<b>1 310</b>	<b>4.9</b>	<b>1 310</b>	<b>4.9</b>
<b>Depreciation</b>	<b>1 439</b>	<b>2.1</b>	<b>1 857</b>	<b>0.9</b>	<b>1 020</b>	<b>3.8</b>	<b>1 020</b>	<b>3.8</b>
Bad debts	108	0.2	272	0.1	12	0.0	12	0.0
Interest expenses	1 112	1.6	2 271	1.1	997	3.7	997	3.7
Bank charges other than interest	136	0.2	873	0.4	156	0.6	156	0.6
Insurance premiums	471	0.7	408	0.2	207	0.8	207	0.8
<b>Financial expenses</b>	<b>1 826</b>	<b>2.6</b>	<b>3 824</b>	<b>1.9</b>	<b>1 372</b>	<b>5.1</b>	<b>1 372</b>	<b>5.1</b>
<b>Motor vehicle running expenses</b>	<b>1 918</b>	<b>2.8</b>	<b>1 584</b>	<b>0.8</b>	<b>190</b>	<b>0.7</b>	<b>190</b>	<b>0.7</b>
Postal expenses	35	0.1	243	0.1	42	0.2	42	0.2
Telecommunication services	436	0.6	1 448	0.7	225	0.8	225	0.8
<b>Postal &amp; telecommunication expenses</b>	<b>472</b>	<b>0.7</b>	<b>1 691</b>	<b>0.8</b>	<b>267</b>	<b>1.0</b>	<b>267</b>	<b>1.0</b>
Advertising expenses	265	0.4	4 300	2.1	558	2.1	558	2.1
Freight and cartage expenses	139	0.2	3 473	1.7	75	0.3	75	0.3
Commission expenses on own materials	5 095	7.4	510	0.3	13	0.0	13	0.0
Repair and maintenance expenses	604	0.9	857	0.4	583	2.2	583	2.2
Other management and administrative expenses	392	0.6	1 176	0.6	263	1.0	263	1.0
Travel and accommodation	340	0.5	1 499	0.7	324	1.2	324	1.2
Sales commission expenses	113	0.2	838	0.4	202	0.8	202	0.8
Paper, printing and stationery expenses	118	0.2	651	0.3	126	0.5	126	0.5
Audit and other accounting expenses	151	0.2	650	0.3	114	0.4	114	0.4
Cleaning expenses	29	0.0	318	0.2	284	1.1	284	1.1
Royalties expenses	25	0.0	448	0.2	54	0.2	54	0.2
Land tax and rates	57	0.1	207	0.1	241	0.9	241	0.9
Legal expenses	58	0.1	140	0.1	24	0.1	24	0.1
Data processing expenses	19	0.0	177	0.1	11	0.0	11	0.0
Other expenses	13 353	19.3	6 733	3.3	2 240	8.3	2 240	8.3
<b>Total expenses</b>	<b>69 078</b>	<b>100.0</b>	<b>202 365</b>	<b>100.0</b>	<b>26 950</b>	<b>100.0</b>	<b>26 950</b>	<b>100.0</b>

Source: ABS, Economic Activity Survey, 1995–96; and ATO, Business Income Tax Files.

5.1 DETAILS OF OPERATING EXPENSES, BY INDUSTRY—1995–96—continued

	Transport and storage		Communication services		Property and business		Education	
	\$m	%	\$m	%	\$m	%	\$m	%
Wages and salaries	11 453	19.9	5 727	29.0	22 830	26.6	4 043	60.9
Superannuation	930	1.6	519	2.6	1 972	2.3	289	4.4
Workers compensation costs	549	1.0	52	0.3	340	0.4	46	0.7
Payroll tax	776	1.3	100	0.5	1 120	1.3	99	1.5
Fringe benefits tax	176	0.3	42	0.2	517	0.6	29	0.4
Staff training expenses	108	0.2	46	0.2	367	0.4	27	0.4
<b>Labour costs</b>	<b>13 992</b>	<b>24.3</b>	<b>6 486</b>	<b>32.9</b>	<b>27 146</b>	<b>31.7</b>	<b>4 533</b>	<b>68.2</b>
Purchase of finished goods	1 323	2.3	3 207	16.3	4 142	4.8	13	0.2
Purchase of materials	4 073	7.1	1 017	5.2	1 602	1.9	148	2.2
Petroleum products expenses	3 003	5.2	0	0.0	52	0.1	1	0.0
Electricity and gas expenses	427	0.7	28	0.1	751	0.9	59	0.9
Other fuels expenses	318	0.6	0	0.0	0	0.0	0	0.0
<b>Purchases of goods, etc</b>	<b>9 144</b>	<b>15.9</b>	<b>4 252</b>	<b>21.6</b>	<b>6 547</b>	<b>7.6</b>	<b>221</b>	<b>3.3</b>
Rent—land, buildings and other structures	1 547	2.7	330	1.7	6 434	7.5	83	1.2
Rent—motor vehicles	790	1.4	70	0.4	367	0.4	5	0.1
Rent—other expenses	1 011	1.8	57	0.3	1 617	1.9	11	0.2
<b>Rent leasing &amp; hiring</b>	<b>3 348</b>	<b>5.8</b>	<b>457</b>	<b>2.3</b>	<b>8 418</b>	<b>9.8</b>	<b>99</b>	<b>1.5</b>
<b>Depreciation</b>	<b>3 615</b>	<b>6.3</b>	<b>2 827</b>	<b>14.3</b>	<b>3 007</b>	<b>3.5</b>	<b>282</b>	<b>4.2</b>
Bad debts	58	0.1	117	0.6	333	0.4	16	0.2
Interest expenses	1 745	3.0	735	3.7	7 076	8.3	106	1.6
Bank charges other than interest	189	0.3	23	0.1	605	0.7	17	0.3
Insurance premiums	601	1.0	17	0.1	703	0.8	51	0.8
<b>Financial expenses</b>	<b>2 593</b>	<b>4.5</b>	<b>892</b>	<b>4.5</b>	<b>8 717</b>	<b>10.2</b>	<b>190</b>	<b>2.9</b>
<b>Motor vehicle running expenses</b>	<b>3 061</b>	<b>5.3</b>	<b>338</b>	<b>1.7</b>	<b>1 419</b>	<b>1.7</b>	<b>48</b>	<b>0.7</b>
Postal expenses	205	0.4	39	0.2	613	0.7	18	0.3
Telecommunication services	725	1.3	1 164	5.9	3 029	3.5	59	0.9
<b>Postal &amp; telecommunication expenses</b>	<b>930</b>	<b>1.6</b>	<b>1 203</b>	<b>6.1</b>	<b>3 642</b>	<b>4.2</b>	<b>77</b>	<b>1.2</b>
Advertising expenses	739	1.3	430	2.2	2 115	2.5	23	0.3
Freight and cartage expenses	6 245	10.8	11	0.1	246	0.3	7	0.1
Commission exp on own materials	1 025	1.8	221	1.1	100	0.1	10	0.2
Repair and maintenance expenses	1 725	3.0	335	1.7	1 287	1.5	178	2.7
Other management and administrative expenses	475	0.8	46	0.2	2 034	2.4	90	1.4
Travelling and accommodation expenses	569	1.0	268	1.4	2 479	2.9	73	1.1
Sales commission expenses	2 057	3.6	0	0.0	1 218	1.4	4	0.1
Paper, printing and stationery expenses	280	0.5	100	0.5	1 400	1.6	107	1.6
Audit and other accounting expenses	163	0.3	26	0.1	419	0.5	23	0.3
Cleaning expenses	375	0.7	10	0.1	399	0.5	92	1.4
Royalties expenses	33	0.1	15	0.1	332	0.4	2	0.0
Land tax and rates	93	0.2	8	0.0	318	0.4	16	0.2
Legal expenses	81	0.1	77	0.4	311	0.4	9	0.1
Data processing expenses	106	0.2	11	0.1	95	0.1	12	0.2
Other expenses	6 928	12.0	1 708	8.7	14 118	16.5	547	8.2
<b>Total expenses</b>	<b>57 577</b>	<b>100.0</b>	<b>19 721</b>	<b>100.0</b>	<b>85 767</b>	<b>100.0</b>	<b>6 643</b>	<b>100.0</b>

Source: ABS, unpublished data, Economic Activity Survey, 1995–96; and ATO, Business Income Tax Files.

...continued

## 5.1

## DETAILS OF OPERATING EXPENSES, BY INDUSTRY—1995–96—continued

	Health and community services		Cultural and recreational services		Personal and other services		Selected service industries	
	\$m	%	\$m	%	\$m	%	\$m	%
Wages and salaries	10 680	42.9	3 244	18.1	3 642	27.9	108 716	15.7
Superannuation	967	3.9	245	1.4	235	1.8	8 779	1.3
Workers' compensation costs	246	1.0	56	0.3	80	0.6	2 484	0.4
Payroll tax	72	0.3	158	0.9	169	1.3	4 229	0.6
Fringe benefits tax	137	0.5	64	0.4	34	0.3	1 690	0.2
Staff training expenses	56	0.2	28	0.2	61	0.5	1 018	0.1
<b>Labour costs</b>	<b>12 158</b>	<b>48.8</b>	<b>3 795</b>	<b>21.2</b>	<b>4 222</b>	<b>32.4</b>	<b>126 916</b>	<b>18.3</b>
Purchase of finished goods	670	2.7	1 435	8.0	1 129	8.7	282 310	40.8
Purchase of materials	1 692	6.8	630	3.5	650	5.0	49 757	7.2
Petroleum products expenses	5	0.0	100	0.6	100	0.8	8 765	1.3
Electricity and gas expenses	301	1.2	259	1.4	171	1.3	4 794	0.7
Other fuels expenses	0	0.0	2	0.0	1	0.0	343	0.0
<b>Purchases of goods, etc</b>	<b>2 667</b>	<b>10.7</b>	<b>2 426</b>	<b>13.5</b>	<b>2 051</b>	<b>15.7</b>	<b>345 969</b>	<b>49.9</b>
Rent—land, buildings and other structures	1 165	4.7	657	3.7	1 016	7.8	22 514	3.2
Rent—motor vehicles	301	1.2	55	0.3	137	1.0	2 697	0.4
Rent—other expenses	150	0.6	475	2.7	70	0.5	4 351	0.6
<b>Rent leasing &amp; hiring</b>	<b>1 616</b>	<b>6.5</b>	<b>1 187</b>	<b>6.6</b>	<b>1 223</b>	<b>9.4</b>	<b>29 562</b>	<b>4.3</b>
<b>Depreciation</b>	<b>753</b>	<b>3.0</b>	<b>928</b>	<b>5.2</b>	<b>755</b>	<b>5.8</b>	<b>18 350</b>	<b>2.6</b>
Bad debts	27	0.1	33	0.2	23	0.2	1 112	0.2
Interest expenses	542	2.2	477	2.7	330	2.5	17 455	2.5
Bank charges other than interest	81	0.3	85	0.5	75	0.6	2 602	0.4
Insurance premiums	220	0.9	121	0.7	164	1.3	3 379	0.5
<b>Financial expenses</b>	<b>870</b>	<b>3.5</b>	<b>717</b>	<b>4.0</b>	<b>592</b>	<b>4.5</b>	<b>24 548</b>	<b>3.5</b>
<b>Motor vehicle running expenses</b>	<b>476</b>	<b>1.9</b>	<b>254</b>	<b>1.4</b>	<b>539</b>	<b>4.1</b>	<b>11 045</b>	<b>1.6</b>
Postal expenses	126	0.5	64	0.4	147	1.1	1 658	0.2
Telecommunication services	268	1.1	335	1.9	212	1.6	8 488	1.2
<b>Postal &amp; telecommunication expenses</b>	<b>395</b>	<b>1.6</b>	<b>399</b>	<b>2.2</b>	<b>359</b>	<b>2.8</b>	<b>10 146</b>	<b>1.5</b>
Advertising expenses	186	0.7	545	3.0	243	1.9	11 655	1.7
Freight and cartage expenses	16	0.1	75	0.4	62	0.5	11 102	1.6
Commission exp on own materials	243	1.0	174	1.0	26	0.2	8 093	1.2
Repair and maintenance expenses	502	2.0	388	2.2	325	2.5	7 513	1.1
Other management and administrative expenses	2 418	9.7	208	1.2	240	1.8	7 826	1.1
Travelling and accommodation expenses	171	0.7	286	1.6	248	1.9	6 525	0.9
Sales commission expenses	1	0.0	933	5.2	56	0.4	5 623	0.8
Paper, printing and stationery expenses	274	1.1	203	1.1	211	1.6	3 816	0.6
Audit and other accounting expenses	501	2.0	80	0.4	140	1.1	2 574	0.4
Cleaning expenses	125	0.5	94	0.5	77	0.6	2 085	0.3
Royalties expenses	1	0.0	581	3.2	11	0.1	1 788	0.3
Land tax and rates	29	0.1	115	0.6	98	0.7	1 511	0.2
Legal expenses	33	0.1	86	0.5	78	0.6	983	0.1
Data processing expenses	21	0.1	21	0.1	50	0.4	673	0.1
Other expenses	1 449	5.8	4 412	24.6	1 429	11.0	54 440	7.9
<b>Total expenses</b>	<b>24 905</b>	<b>100.0</b>	<b>17 907</b>	<b>100.0</b>	<b>13 039</b>	<b>100.0</b>	<b>692 743</b>	<b>100.0</b>

Source: ABS, unpublished data, Economic Activity Survey, 1995–96; and ATO, Business Income Tax Files.

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	<i>Basic material wholesaling</i>		<i>Machinery and motor vehicle wholesaling</i>		<i>Personal and household good wholesaling</i>		<i>Total wholesale</i>	
	\$m	%	\$m	%	\$m	%	\$m	%
Wages and salaries	3 402	4.8	6 454	9.1	4 489	7.4	14 344	7.1
Superannuation	287	0.4	525	0.7	394	0.7	1 207	0.6
Workers' compensation costs	58	0.1	81	0.1	74	0.1	213	0.1
Payroll tax	113	0.2	436	0.6	175	0.3	725	0.4
Fringe benefits tax	81	0.1	254	0.4	119	0.2	454	0.2
Staff training expenses	25	0.0	117	0.2	25	0.0	167	0.1
<b>Labour costs</b>	<b>3 967</b>	<b>5.6</b>	<b>7 868</b>	<b>11.1</b>	<b>5 276</b>	<b>8.7</b>	<b>17 110</b>	<b>8.5</b>
Purchase of finished goods	49 558	69.9	47 296	66.5	45 189	74.9	142 041	70.2
Purchase of materials	663	0.9	2 621	3.7	1 096	1.8	4 381	2.2
Petroleum products expenses	3 845	5.4	13	0.0	24	0.0	3 883	1.9
Electricity and gas expenses	504	0.7	150	0.2	86	0.1	740	0.4
Other fuels expenses	1	0.0	4	0.0	1	0.0	6	0.0
<b>Purchases of goods, etc.</b>	<b>54 571</b>	<b>77.0</b>	<b>50 084</b>	<b>70.4</b>	<b>46 397</b>	<b>76.9</b>	<b>151 050</b>	<b>74.6</b>
Rent—land, buildings and other structures	577	0.8	1 327	1.9	582	1.0	2 486	1.2
Rent—motor vehicles	88	0.1	298	0.4	107	0.2	493	0.2
Rent—other expenses	70	0.1	166	0.2	55	0.1	291	0.1
<b>Rent, leasing and hiring expenses</b>	<b>735</b>	<b>1.0</b>	<b>1 791</b>	<b>2.5</b>	<b>744</b>	<b>1.2</b>	<b>3 270</b>	<b>1.6</b>
<b>Depreciation</b>	<b>651</b>	<b>0.9</b>	<b>667</b>	<b>0.9</b>	<b>540</b>	<b>0.9</b>	<b>1 857</b>	<b>0.9</b>
Bad debts	77	0.1	95	0.1	101	0.2	272	0.1
Interest expenses	921	1.3	768	1.1	582	1.0	2 271	1.1
Bank charges other than interest	482	0.7	141	0.2	249	0.4	873	0.4
Insurance premiums	150	0.2	123	0.2	135	0.2	408	0.2
<b>Financial expenses</b>	<b>1 631</b>	<b>2.3</b>	<b>1 128</b>	<b>1.6</b>	<b>1 067</b>	<b>1.8</b>	<b>3 824</b>	<b>1.9</b>
<b>Motor vehicle running expenses</b>	<b>556</b>	<b>0.8</b>	<b>595</b>	<b>0.8</b>	<b>434</b>	<b>0.7</b>	<b>1 584</b>	<b>0.8</b>
Postal expenses	44	0.1	129	0.2	71	0.1	243	0.1
Telecommunication services	438	0.6	781	1.1	228	0.4	1 448	0.7
<b>Postal &amp; telecommunication expenses</b>	<b>482</b>	<b>0.7</b>	<b>910</b>	<b>1.3</b>	<b>299</b>	<b>0.5</b>	<b>1 691</b>	<b>0.8</b>
Advertising expenses	1 943	2.7	1 452	2.0	905	1.5	4 300	2.1
Freight and cartage expenses	1 292	1.8	1 077	1.5	1 105	1.8	3 473	1.7
Commission expenses on own materials	17	0.0	112	0.2	381	0.6	510	0.3
Repair and maintenance expenses	432	0.6	262	0.4	163	0.3	857	0.4
Other management and administrative expenses	191	0.3	481	0.7	504	0.8	1 176	0.6
Travelling and accommodation expenses	270	0.4	914	1.3	314	0.5	1 499	0.7
Sales commission expenses	101	0.1	601	0.8	135	0.2	838	0.4
Paper, printing and stationery expenses	183	0.3	343	0.5	126	0.2	651	0.3
Audit and other accounting expenses	439	0.6	113	0.2	99	0.2	650	0.3
Cleaning expenses	203	0.3	81	0.1	34	0.1	318	0.2
Royalties expenses	37	0.1	168	0.2	243	0.4	448	0.2
Land tax and rates	110	0.2	62	0.1	36	0.1	207	0.1
Legal expenses	24	0.0	60	0.1	56	0.1	140	0.1
Data processing expenses	34	0.0	84	0.1	58	0.1	177	0.1
Other expenses	2 995	4.2	2 283	3.2	1 450	2.4	6 733	3.3
<b>Total expenses</b>	<b>70 864</b>	<b>100.0</b>	<b>71 136</b>	<b>100.0</b>	<b>60 366</b>	<b>100.0</b>	<b>202 365</b>	<b>100.0</b>

Source: ABS, *Business Operations and Industry Performance, Australia, 1995–96* (ABS Cat. no. 8140.0); and ATO, *Business Income Tax Files*.



## SECTION 6

### FUTURE PLANS

**6.1** The proposed timetable for processing and release of statistics from the 1996–97 round of EAS follows. Releases in the form of publications and special data services are highlighted in bold type. Releases which incorporate business income tax data for the latest year are indicated by \*.

30 June 1997	End of financial year
August 1997	Dispatch of EAS forms by ABS
March 1998	Deadline for small business to provide income tax returns to the ATO
<b>May 1998</b>	Preliminary results for 1996–97, by ANZSIC Division <i>Business Operations and Industry Performance, Australia, Preliminary</i> (ABS Cat. no. 8142.0)
<b>May 1998</b>	*Unpublished data produced (available upon request)
<b>March 1999</b>	*Final results for 1996–97, by ANZSIC Division <i>Business Operations and Industry Performance, Australia</i> (ABS Cat no. 8140.0)
<b>March 1999</b>	*Unpublished data at finer levels of classification produced (available upon request)
<b>June 2000</b>	*Final input output tables <i>Australian National Accounts: Input-Output Tables</i> (ABS Cat. no. 5209.0)

6.2 The 1997–98 release of *Business Operations and Industry Performance, Australia, Preliminary* (ABS Cat. no. 8142.0) will incorporate business income tax data for years up to 1996–97. The 1997–98 release of *Business Operations and Industry Performance, Australia* (ABS Cat no. 8140.0) will be brought forward by two to three months. Further improvements in timing may be possible in the future.

**6.3** The potential also exists to satisfy several other areas of unmet demand by extending the use of ATO data at even more detailed levels than described in the foregoing sections. Use of ATO data, in the compilation of economic statistics, could enable the following developments:

- finer industry analyses, e.g. down to ANZSIC Class level;
- geographic analyses, e.g. by State and Territory supported by planned collection of State dissections for employment, wages and salaries and sales;
- analyses by size of business, e.g. based on turnover or asset value ranges;
- analyses of growth and performance, e.g. performance ratios, quantile analysis, longitudinal studies; or
- combinations of the above.

**6.4** The ABS continually strives to find ways of expanding the range and improving the quality of its statistics without placing an undue reporting burden on businesses. The most important source of data about businesses, other than survey collections undertaken by the ABS, is the business financial data reported on income tax forms. As an indication of the growing ABS commitment to use of business income tax data, the ABS will be using a compilation methodology similar to that described in this paper for the 1998–99 Wholesale and Retail Industry Surveys.

## SECTION 7

## USER COMMENTS AND FURTHER INFORMATION

Related Publications Users may also wish to refer to the following publications:

*Australian National Accounts: National Income, Expenditure and Product* (ABS Cat. no. 5206.0)—issued quarterly.

*Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993* (ABS Cat. no. 1292.0)—issued on an irregular basis.

*Standard Economic Sector Classifications of Australia (SESCA), 1997* (ABS Cat. no. 1218.0)—issued on an irregular basis.

*Business Exits, Australia, 1994–95 and 1995–96* (ABS Cat. no. 8144.0)—issued on an irregular basis.

*Business Operations and Industry Performance, Australia* (ABS Cat. no. 8140.0).

*Characteristics of Small Business, Australia, 1997* (ABS Cat. no. 8127.0)—issued every two years.

*Australian National Accounts, Concepts Sources and Methods, 1989* (ABS Cat. no. 5216.0)—issued on an irregular basis.

*Information Paper: Implementation of Revised International Standards in the Australian National Accounts, 1997* (ABS Cat. no. 5251.0)—issued on an irregular basis.

*Information Paper: Upgraded Australian National Accounts, 1998* (ABS Cat. no. 5253.0)

Both the methodology used to compile estimates in this information paper and the plans for extending the use the ABS makes of ATO business income tax data are subject to further evaluation. Suggestions and comments from users of these data would be most welcome and should be addressed to:

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More detailed information than is contained in this publication can also be made available through this contact.

## APPENDIX 1

### A BRIEF HISTORY OF ABS USE OF ATO DATA

**1** The ABS has been using ATO data to compile economic statistics, in one form or another, for many years. The use it has made of these data has varied as a consequence of such things as changes to international statistical standards, changes to Australian economic statistics strategy, and changes to Australian taxation law and administration. Following is a brief outline of the changes which have occurred from the 1960s to the present.

**2** During the 1960s, the ABS used business income tax data, in aggregated form, for compiling and benchmarking some of the series that make up the Australian National Accounts (ANA). Specifically, these data were used for compiling gross operating surplus of incorporated enterprises and non-farm unincorporated enterprises, and also for private gross fixed capital expenditure on equipment.

**3** In 1968–69, the ABS began a program of integrated economic censuses and surveys aimed at covering most of the statistically significant sectors of the Australian economy on a regular basis. During the 1970s and 1980s, this mainly involved annual censuses for goods producing industries (i.e. Agriculture, Mining, Manufacturing, and Electricity, gas and water) with periodic censuses/surveys for other significant industries (i.e. Construction, Wholesale trade, Retail trade, Transport).

**4** Shortly thereafter, the ABS gained access to unidentifiable business income tax records and these data were increasingly used in conjunction with the results of censuses and surveys for benchmarking and compiling the national accounts, although the lack of identification of these records severely complicated the integration of ATO data with ABS sources.

**5** In 1986, the Income Tax Assessment Act was amended to enable the ATO to provide the ABS with identifiable information in respect of businesses to be used for the purposes of the Census and Statistics Act. Since then, identifiable ATO data has flowed to the ABS on a regular basis in two main and distinct streams: basic information about the composition of the Australian business population; and financial data for Australian businesses. Business financial data flows to the ABS from the ATO's income tax system. The ABS regularly receives datasets containing records in respect of Company, Trust, Partnership and Individual income tax returns which have declared business income and expenses.

**6** Unit record data in respect of companies have been used for many purposes including:

- to distinguish data relating to public enterprises (these need to be excluded as ABS public finance data are used for these enterprises);
- to enable adjustments to capital expenditure on equipment to fully account for finance leasing (which is not recorded by the lessee in ATO data and not always by the lessor either);
- to estimate balance date adjustments;
- to estimate for significant missing returns; and
- to adjust for large extraordinary losses and/or gains for particular enterprises.

**7** Basic information about the Australian business population is used to maintain and update the ABS Business Register, which is used as a framework for most ABS business collections. In recent years, this register has increasingly relied on data available from the ATO's Group Employer system.

**8** The growing interest in and significance of service industries resulted in a number of changes to the ABS economic statistics strategy, including the development of an annual Economic Activity Survey (EAS) to include goods producing industries and service industries. The EAS has been conducted since 1990–91 and covers employing businesses in all non-government service industries of the economy. The EAS includes, on average, between 10,000 and 15,000 employing businesses in the service sector each year. Such a sample is sufficient to produce reliable national estimates of broad income and expense items by broad industry for employing businesses. Its primary purpose is to provide information for annual benchmarking of the ANA, but it also is used by clients of the ABS to monitor business operations and comparative industry performance over time.

**9** Data from annual censuses and surveys of goods producing industries are combined with data collected via the EAS and the results are released in *Business Operations and Industry Performance, Australia* (ABS Cat. no. 8140.0).

**10** Since the early 1990s, the ABS has been improving and extending the ANA through the adoption of new international standards and the full integration of input-output tables with national income, expenditure and production accounts.

**11** The ABS has commenced integrating the annual national income, expenditure and production accounts to the input-output tables from reference year 1994–95. In order to achieve this, it has taken steps to harmonise sources and methods in compiling national income, expenditure and production accounts and input-output tables. It is also progressively extending and improving the quality of the source data required for compilation of the input-output tables on an annual basis.

**12** The move to compiling national income, expenditure and production accounts using an input-output approach requires a finer level dissection of income and expense data items and finer industry classification of the data than previously available from surveys such as the EAS. To meet these additional requirements, significant changes in approach are required for both employing businesses in the service industries and for non-employing businesses generally, including the expanded use of income tax data described in this paper.

**13** The first release of national accounts estimates based on the data described in this paper was on 11 November 1998. This was in the form of an information paper entitled *Information Paper: Upgraded Australian National Accounts* (ABS Cat. no. 5253.0) which included a re-issue of the June quarter 1998 adjusted for all the changes described in *Information Paper: Implementation of Revised International Standards in the Australian National Accounts* (ABS Cat. no. 5251.0).

## APPENDIX 2

## METHODOLOGY

**1** The introduction section of this paper discussed the need for inclusion of many more businesses in the Economic Activity Survey (EAS) collection than are currently directly collected. Business income tax data has been identified as the most cost effective source, both for businesses and for the ABS, to provide the additional information.

**2** The main financial data items on business income tax forms are conceptually similar to the like items collected on the EAS survey forms. With some minor adjustments, business income tax data are suitable for use in producing economic statistics for both employing businesses and for non-employing businesses. However, not all business activity data required for ABS purposes (e.g. detailed information about business inputs and outputs for the past year) are available from business income tax returns. Additionally, it is not possible to obtain data for all types of businesses from business income tax returns. Diagram A2.1 below, is a summary of the different sources and methods used for different types of businesses.

### A2.1 SUMMARY OF DATA SOURCES

		Selected industries			
Type of business		Large businesses	Complex small & medium employing businesses	Simple small & medium employing businesses	Non-employing businesses
The source used to identify businesses of each type		ABS Business Register	ABS Business Register	ABS Business Register	ATO income tax files
The number of each type of businesses		3 000	92 000	449 000	933 000
The number of businesses that are selected to provide data		3 000	2 000	81 000	933 000
Source of data		ABS survey	ABS survey	ATO business income tax returns(a)	ATO business income tax returns
Contribution to total business income for service industries		33%	13%	47%	7%

(a) Approximately 8,000 of these businesses also receive an EAS survey form.

Source: ABS, unpublished data, Economic Activity Survey, 1995-96; ATO, Business Income Tax Files, 1995-96

**3** The compilation methodology for each of the different types of business is discussed below following an explanation of the statistical unit and choice of population frame.

Statistical unit and population frame

**4** The statistical unit for the EAS direct collection is the management unit (this is the primary statistical unit on the ABS business register). Business income tax returns are submitted for Legal Entities. Management units are generally made up of one or more legal entities, but it is also possible for legal entities to be made up of one or more management units.

**5** The ABS Business Register is used to provide the population frame for the EAS direct collection. The ABS Business Register was also chosen to provide the population frame for the additional employing businesses (those that are to be selected to have their business financial data sourced from ATO business income tax returns). The reasons for this choice were mainly: it is simpler if a consistent frame is used for all employing businesses; to achieve greater consistency with most other ABS economic collections; the business register provided the better coverage of the business population of the two sources; it is not currently possible to identify all legal entities for large management units on the business income tax files and coding of industry classification is more accurate on the business register than on the income tax files. For non-employing businesses, which are not included on the ABS Business Register, ATO business income tax records are used as the population frame.

Large businesses

**6** The majority of large employing businesses (management units with 200+ employees) have more than one legal entity, making it difficult to identify all legal entities for that business on the tax file. Additionally, business income tax data do not include all of the detailed information that the ABS requires from large businesses. As a result, and since large businesses with more than 200 employees are relatively few in number, business financial data for these units is sourced from the EAS direct collection.

Complex small and medium employing businesses

**7** Similarly, it is not appropriate to source business financial data from ATO business income tax returns for all small and medium employing businesses. Some small and medium businesses have more than one legal entity while not-for-profit businesses are not required to complete business income tax returns. For this paper, these types of businesses are collectively termed 'Complex small and medium businesses' and are both sourced from the EAS direct collection.



Simple small and medium  
employing businesses

**8** However, the small and medium employing businesses that have simple structures (i.e. management units with one legal entity) are better suited to having their data sourced from their business income tax returns. There were approximately 449,000 simple small and medium employing businesses on the ABS Business Register as at June 30 1996. Of these, 81,000 were selected to have their data sourced from their business income tax returns. A sampling methodology is used in preference to a full census because of the need to give adequate attention to the detection and treatment of non-sampling errors for these businesses and to keep processing costs down to acceptable levels.

**9** The selected businesses have to be identified on the business income tax files to obtain their business financial data. To successfully achieve this requires the identification of the ATO Reference Number for each selected business. The ABS and the ATO have been collectively working towards having the ATO reference Number for each employing business on the ABS Business Register. This work has not yet been concluded and it was only possible to identify the required information for 85 % of selected businesses for the 1995–96 year.

**10** Those businesses that have the required information are then matched to the business income tax files. In an effort to produce timely data, the ABS uses business income tax files that are generated 12 months after the end of the financial year. Not all businesses would have provided their income tax returns by that date (indications are that income tax returns for 5% of businesses would still be outstanding). Additionally, a proportion of businesses that are included on the ABS Business Register would not have traded for the year in question. This is estimated to be somewhere between 20 and 25 per cent. After taking these factors into account, it is estimated that data for between 15 and 20 per cent of live businesses selected in the sample were not available for processing when estimates were produced. Data for these businesses were imputed as part of the estimation process.

**11** The more detailed information presented in section 5 is derived by using a two phase estimation technique. In effect, the main business income and expense items, sourced from the business income tax records, are pro-rated along the same proportions as for the average for businesses from similar industries and broad size groupings from the EAS direct collection.

Non-employing businesses

**12** The ABS Business Register is primarily sourced from ATO Group Employer registrations. Therefore, most economic collections that use the Business Register as a frame, including the EAS collection, exclude non-employing businesses. Contrastingly, the business income tax files do include non-employing businesses, providing a rich new source of data for the non-employing sector.

**13** It is not currently possible to identify all of those businesses that are not on the ABS business register. The ABS uses a set of defining characteristics (i.e. based on reported values for wages and salaries, employee superannuation expenses and size of reported income and expenses) to identify non-employing businesses on the business income tax files. These characteristics, along with the industry classifications provided on the business income tax returns, are used to identify non-employing businesses for each of the selected industries. For 1995–96, 7% of non-employing businesses had either illegal, missing or ‘dump’ industry classifications (the data for those businesses were apportioned across all industries).

**14** It is recognised that the current set of defining characteristics leaves open the possibility for some businesses to be included both in the population of employing businesses as well as the population of non-employing businesses. Additionally, other businesses could be excluded from both of these populations. However, the indications are that these overlaps and gaps are not significant. The ABS is currently reviewing the set of defining characteristics to further reduce the effect of these overlaps and gaps on ABS economic statistics.

**15** As is done for employing businesses, the more detailed information presented in section 5 is derived by using information from similar types of businesses that are included in the EAS direct collection. The main business income and expense items, sourced from the business income tax records, are pro-rated along the same proportions as for the average for businesses from similar industries from the EAS direct collection.

**16** Estimates for the whole of the selected industries are constructed by adding together the three streams that represent the various types of businesses (discussed above). To construct economy wide statistics, the data for the selected industries can be added to estimates produced by various ABS collections of goods producing industries, for Finance and insurance and for General government.

## GLOSSARY

**Australian National Accounts** National accounts are designed to provide a systematic assessment of national economic activity. At their summary level, the national income, expenditure and product accounts record the essential elements of the Australian market economy: production, the distribution of incomes, consumption, saving, the accumulation of assets and liabilities, and wealth. At their more detailed level, they are designed to present a statistical picture of the structure of the economy and the detailed processes that make up domestic production and its distribution. The national accounts include many detailed classifications (e.g. by industry, by purpose, by commodity, by State and Territory, and by asset type) relating to major economic aggregates.

A detailed presentation of the concepts underlying the national accounts is provided in *Australian National Accounts: Concepts, Sources and Methods, 1989* (ABS Cat. no. 5216.0). This publication, updated in 1996, forms part of the *Statistical Concepts Reference Library, 1997* (ABS Cat. no. 1361.0.30.001) on CD-ROM.

**Not-for-profit institutions** Not-for-profit institutions are legal or social entities created for the purpose of producing goods and services whose status does not permit them to be a source of income, profit or other financial gain for the units that establish them. Inevitably their productive activities must generate either surpluses or deficits but any surpluses cannot be appropriated by other institutional units. The articles of association by which they are established are drawn up in such a way that the institutional units which control or manage them are not entitled to a share in any profits or other income which they receive. For this reason they are frequently exempted from various kinds of taxes.

**Operating expenses** The total expenses of a business excluding extraordinary items.

**Operating income** The total income of a business excluding extraordinary items.

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