

## **MINING OPERATIONS**

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) FRI 27 OCT 2006

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### INQUIRIES

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

### NOTES

ABOUT THIS PUBLICATION

This publication presents estimates from the annual Economic Activity Survey, of the economic and financial performance of the Australian mining industry for 2004–05 together with data on a comparable basis from 2001–02 and intervening years.

Details of Australia's mining commodities produced shown in Chapter 4 are obtained from the various state and Northern Territory government departments responsible for the collection of these statistics. See Explanatory Notes paragraphs 38–41 for more detail.

CHANGES TO THIS PUBLICATION

Estimates in this publication of the value of mineral commodity production are presented using a new framework for categorising products of the mining industry. Summary data for each state and the Northern Territory are shown on this basis, in a time series starting from 2001–02.

REVISIONS

Estimates for earlier years have been revised since the previous issue of this publication. The revisions are incorporated in this publication and in the extended data spreadsheets available free on-line.

The effect of these revisions on the 2003–04 national estimates of key variables for the Mining industry has been a decrease of 0.6% (or \$338m) in sales and service income, an increase of 0.04% (\$3m) in wages and salaries paid, and an increase of 0.1% (\$30m) in industry value added. Effects may be greater at lower levels of the industry classification and/or for other variables.

INFORMATION AVAILABLE ON-LINE

The text components of this publication are available free on-line. A PDF publication and extended data spreadsheets are also available free on-line.

Other information is also available via the *Mining Statistics* theme page. To access the theme page, go to the ABS web site home page <a href="http://abs.gov.au">http://abs.gov.au</a>. Access the *Themes* page by either opening the *Themes* hotlink from the top menu bar or opening the *Industry* hotlink shown under *Themes*, in the left-side navigator. Then open the *Mining* hotlink shown under *Industry*.

Dennis Trewin Australian Statistician

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## ABBREVIATIONS .....

- '000 thousand
  - **\$b** billion (thousand million) dollars
- **\$m** million dollars
- ABARE Australian Bureau of Agricultural and Resource Economics
  - ABN Australian Business Number
  - ABR Australian Business Register
  - ABS Australian Bureau of Statistics
- ABSBR Australian Bureau of Statistics Business Register
- ANZSIC Australian and New Zealand Standard Industrial Classification
  - ATO Australian Taxation Office
  - Aust. Australia
  - BAS Business Activity Statement
  - BIT business income tax
  - EAS Economic Activity Survey
  - EBIT earnings before interest and tax
  - f.o.b. free on board
  - GST goods and services tax
  - IVA industry value added
  - JPDA Joint Petroleum Development Area
  - LNG liquefied natural gas
  - n.e.c. not elsewhere classified
  - NSW New South Wales
    - NT Northern Territory
  - OPBT operating profit before tax
    - Qld Queensland
    - RSE relative standard error
    - SA South Australia
  - SISCA Standard Institutional Sector Classification of Australia
    - Tas. Tasmania
    - TAU type of activity unit
  - TNTS The New Tax System
    - UJV unincorporated joint venture
    - Vic. Victoria
    - WA Western Australia

### CHAPTER 1

### SUMMARY .....

#### INTRODUCTION

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

This industry is specified in Division B of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, 1993 edition. Please see paragraph 2 of the Explanatory Notes for a full definition.

KEY DATA

Table 1.1 presents a time series for selected items, from 2001-02 to 2004-05. All value data in this table are shown at current prices.

In each of the four major aggregates presented, the Australian mining industry showed significant growth in 2004–05 when compared to 2003–04. Sales and service income increased by 18% and industry value added increased by 16%, while employment and wages and salaries both increased by 7%. Commentary on these items is presented in Chapter 2.

For information about survey methodology, see Technical Note 1.

The Glossary provides definitions for terms used.

### GROSS VALUE ADDED

Table 1.2 illustrates the growth of Australian industries over time using chain volume measures of their gross value added. Chain volume measures take into account the effects of price changes.

Of the seventeen industries shown in table 1.2, Mining recorded the fourth highest growth (4.9%) in 2004–05. It ranked fourteenth in its average annual growth rate over the past 10 years and fifth over the past 25 years, with increases of 2.6% and 3.9% respectively. By comparison, the highest growth rates were recorded by Communication services, with annualised rates of 5.9% and 7.0% for the 10 year and 25 year periods. Cultural and recreational services recorded the highest growth rate in 2004–05, of 7.9%.

#### FURTHER COMMENTARY

#### Please see:

- Financial operations: Chapter 2, page 9
- State/territory summary: Chapter 3, page 25
- Commodities produced: Chapter 4, page 30

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	Employment at end of June(a)	Wages and salaries(b)	Sales and service income(c)	Industry value added	Wages and salaries per person employed(d)	Wages and salaries to sales and service income
Industry / Reference year	no.	\$m	\$m	\$m	\$'000	ratio
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • •	• • • • • • • • •	• • • • • • •
11 Coal mining						
2001–02	15 661	1 579	14 920	7 550	100.8	0.11
2002–03 2003–04	18 444	1 910	16 695	8 124	103.6	0.11
2003–04	18 992 21 511	2 019 2 022	15 355 20 332	6 629 10 146	106.3 94.0	0.13 0.10
	21 311	2 022	20 332	10 140	34.0	0.10
12 Oil and gas extraction 2001–02	7 437	706	17 330	15 123	94.9	0.04
2002-03	7 596	758	17 021	15 293	99.7	0.04
2003–04	7 750	844	15 802	13 860	108.9	0.05
2004–05	8 074	879	17 797	14 349	108.9	0.05
1311 Iron ore mining						
2001–02	4 740	410	5 461	4 036	86.5	0.08
2002–03	4 903	499	5 347	3 566	101.7	0.09
2003–04	5 391	519	5 922	3 694	96.2	0.09
2004–05	6 197	585	8 014	4 942	94.4	0.07
1313 Copper ore mining						
2001–02	2 783	215	2 379	1 037	77.2	0.09
2002-03	2 941	215	2 311	809	73.1	0.09
2003–04 2004–05	3 129 3 246	237 295	1 892	686 1 248	75.6 91.0	0.13 0.12
	3 240	295	2 439	1 248	91.0	0.12
1314 Gold ore mining	0.470	500	4.002	4 740	50.0	0.40
2001–02 2002–03	9 470	566	4 893	1 716	59.8	0.12
2002-03	9 166 9 397	667 663	5 823 5 073	2 601 2 002	72.8 70.6	0.11 0.13
2004–05	9 707	681	5 305	1 451	70.0	0.13
1315 Mineral sand mining						
2001–02	1 855	107	881	400	57.8	0.12
2002–03	1 723	106	979	381	61.5	0.11
2003–04	1 760	107	941	336	60.6	0.11
2004–05	1 960	153	1 053	490	78.2	0.15
1317 Silver-lead-zinc ore mining						
2001–02	1 694	249	1 700	346	147.3	0.15
2002–03	1 771	216	1 776	668	122.0	0.12
2003–04	2 080	190	1 987	950	91.3	0.10
2004–05	2 378	210	2 293	1 136	88.1	0.09
1312, 1316 and 1319 Bauxite mining,						
nickel ore mining and metal ore mining n.e.c.		205	0.500	4 000	00.0	0.11
2001–02	3 207	265	2 502	1 292	82.6	0.11
2002–03 2003–04	3 414 3 869	238 248	2 679 3 358	1 431 1 882	69.7 64.1	0.09 0.07
2003-04	4 167	304	3 968	2 202	73.0	0.07
13 Total metal ore mining	,			<b>-</b>		
2001–02	23 749	1 813	17 817	8 827	76.3	0.10
2002-03	23 918	1 942	18 916	9 456	81.2	0.10
2003–04	25 628	1 963	19 174	9 550	76.6	0.10
2004–05	27 655	2 229	23 072	11 468	80.6	0.10

<sup>(</sup>a) Includes working proprietors.

<sup>(</sup>c) Includes rent, leasing and hiring income.(d) See Explanatory Notes paragraph 24.

<sup>(</sup>b) Excludes the drawings of working proprietors.

						Wages and
					Wages and	salaries to
	Employment		Sales and	Industry	salaries	sales and
	at end of	Wages and	service	value	per person	service
	June(a)	salaries(b)	income(c)	added	employed(d)	income
Industry / Reference year	no.	\$m	\$m	\$m	\$'000	ratio
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •
11–13 Total coal mining, oil and gas extraction and metal ore mining						
2001–02	46 847	4 098	50 067	31 500	87.5	0.08
2002–03	49 958	4 610	52 632	32 873	92.3	0.09
2003–04	52 369	4 826	50 330	30 039	92.1	0.10
2004–05	57 240	5 130	61 201	35 963	89.6	0.08
14 Other mining						
2001–02	**10 859	**467	**3 285	**1 528	43.0	0.14
2002–03	11 077	493	3 794	1 784	44.5	0.13
2003–04	11 196	534	3 929	1 853	47.7	0.14
2004–05	11 143	541	3 695	1 406	48.6	0.15
15 Services to mining						
2001–02	**25 169	**1 530	**6 252	**2 336	60.8	0.24
2002–03	22 682	1 504	6 368	2 363	66.3	0.24
2003–04	23 406	1 598	6 132	2 589	68.3	0.26
2004–05	24 721	1 781	6 150	2 576	72.1	0.29
11–15 Total mining						
2001–02	^ 82 875	^6 094	59 604	35 364	73.5	0.10
2002–03	83 717	6 607	62 794	37 021	78.9	0.11
2003–04	86 971	6 958	60 391	34 481	80.0	0.12
2004–05	93 105	7 452	71 046	39 945	80.0	0.10

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

(a) Includes working proprietors.

Excludes the drawings of working proprietors. \*\* estimate has a relative standard error of 10% to less than 2013 should be used with caution

(b) Excludes the drawings of working propried standard error greater than 50% and is

(c) Includes rent, leasing and hiring income.

(d) See Explanatory Notes paragraph 24.



# PRODUCTION VOLUMES(a), Gross value added

				AVERA								
				ANNUAL								
	CHAIN VOL	.UME	Change	CHANGE								
	MEASURES	6	from	OVER I	AST							
	••••••	••••••	2003-04	••••••	•••••							
			to	10	25							
	2003-04	2004-05	2004-05	years	years							
	2000 0.	200.00	2007.00	, ou. o	y ca.c							
Industry	\$m	\$m	%	%	%							
Agriculture, forestry and fishing	27 010	26 718	-1.1	4.5	2.5							
Mining	34 366	36 045	4.9	2.6	3.9							
Manufacturing	97 103	96 013	-1.1	1.7	1.5							
Electricity, gas and water supply	18 816	18 943	0.7	1.1	2.4							
Construction	51 117	53 568	4.8	5.4	3.7							
Wholesale trade	40 675	42 066	3.4	4.1	3.1							
Retail trade	50 278	52 414	4.2	4.3	3.5							
Accommodation, cafes and restaurants	17 560	18 359	4.6	4.1	3.7							
Transport and storage	36 851	38 688	5.0	4.4	3.9							
Communication services	22 756	23 790	4.5	5.9	7.0							
Finance and insurance	57 496	58 567	1.9	3.8	4.2							
Property and business services	97 997	99 020	1.0	4.9	5.0							
Government administration and defence	32 392	33 526	3.5	2.5	2.8							
Education	36 530	37 005	1.3	1.9	2.4							
Health and community services	49 509	52 032	5.1	4.3	4.1							
Cultural and recreational services	10 901	11 765	7.9	4.0	3.7							
Personal and other services	14 834	15 012	1.2	3.4	3.1							
Total all industries	696 191	713 531	2.5	3.6	3.4							

<sup>(</sup>a) Reference year for chain volume measures is 2004–05.

Note: The volume estimates contained in this table are derived from quarterly business surveys.

Source: Australian National Accounts: National Income and Expenditure and Product, March Quarter 2006 (cat. no. 5206.0), table 45.

### CHAPTER 2

### FINANCIAL OPERATIONS ......

INTRODUCTION

Statistics in this Chapter relate to all subdivisions of the mining industry as classified by the Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993 edition. These data are presented at the ABN unit / TAU level (see the Glossary for definitions) and, therefore, can contain data about activities normally associated with industries other than mining. Explanatory Notes paragraphs 6–21 provide further details. The commentary refers mainly to the tables in this chapter, as well as to the employment data presented in table 1.1.

MARKET CONDITIONS

The Minerals Council of Australia's *Minerals Industry Survey Report, 2005* reported that average US dollar world mineral prices rose by 33% in 2004–05. Average prices for most mineral commodities increased significantly compared to the previous year, largely the result of economic growth in Asia, particularly China. However, US dollar price gains were moderated in Australian dollar terms due to the appreciation of the Australian dollar by around 6%. Reserve Bank of Australia data shows a 24% increase in the Australian dollar non-rural commodity price index for 2004–05. This compares to a 5% fall in 2003–04, when a 22% appreciation of the Australian dollar exceeded increases in the US dollar prices of minerals.

As reported in ABARE's *Australian Mineral Statistics*, mine production volume increased by around 5% in 2004–05. Export volumes and revenue also increased for most minerals. Export earnings for black coal rose by 57%, reflecting increases of 45% in the average Australian dollar export price of steaming coal and 48% for coking coal. The volume of coking coal exported increased by 12%, while exports of steaming coal remained steady.

Iron ore export earnings increased by 54%. The volume of iron ore exported increased by 17% and the average Australian dollar export price increased by 31%, partly reflecting the outcome of iron ore price negotiations announced in January 2005.

Crude oil export earnings increased by 25% in 2004–05. A 12% decline in production, attributed mainly to the natural depletion of mature fields, and appreciation of the Australian dollar, were offset by increased prices. Strong global demand, rapid growth in consumption by newly industrialised countries and uncertainty of supply resulted in the world trade weighted average price of crude oil being \$US54.77 per barrel in 2004–05. This represented an increase of 40% over 2003–04, and an increase of 33% in Australian dollar terms. In contrast to crude oil, natural gas production increased by 12% during 2004–05. The export volume of LNG rose by 34% and export revenue by 47%. Commissioning of the North West Shelf LNG train 4 was completed in August 2004.

Higher average US dollar prices for uranium (up 49%), lead (up 38%), copper (35%), nickel (22%) and zinc (22%), contributed to increased export earnings for these commodities.

# MARKET CONDITIONS continued

It should be noted that a number of large mining businesses report in the Economic Activity Survey for financial years ending on dates other than 30 June. For this reason, these changes in market conditions may not be directly reflected in the data of financial and economic performance. See Explanatory Notes paragraphs 22 and 23, where the contribution of such businesses is quantified.

# SALES AND SERVICE INCOME

Sales and service income for total mining was \$71.0b in 2004–05, an increase of \$10.7b (18%) over the previous year. Sales and service income for the 'core' mining industries of Coal mining, Oil and gas extraction, and Metal ore mining increased by \$10.9b (22%) to \$61.2b in \$2004–05.

Major contributors to the increase were Coal mining, Oil and Gas extraction, and Iron ore mining. The only decrease, from among the industries presented, was a 6% (\$ 234m) decline for Other mining.

The largest contributor to sales and service income was Coal MINING at \$20.3b. This was an increase of \$5b (or 32%). According to ABARE, average coal prices rose significantly in 2004–05 (coking coal by 48% and steaming coal by 45%). Prices were not as favourable for businesses reporting for the year ended 31 December 2004 (see Explanatory Notes paragraphs 22 and 23 for more details), when the average price of steaming coal increased by 32% and coking coal by only 9%.

Sales and service income for the Oil and gas extraction industry increased by \$2.0b (13%) to \$17.8b, despite declining crude oil production. The US dollar world trade weighted average price of crude oil increased by 40% in 2004–05. The effect of this increase was tempered by a 6% appreciation of the Australian dollar. Businesses reporting for the 2004 calendar year experienced less buoyant market conditions, with a 27% increase in the US dollar price of oil being significantly eroded by a 12% appreciation of the Australian dollar. For the first time in the four years covered by these data, Coal mining's sales and service income exceeds that of Oil and gas extraction.

Iron ore mining recorded the largest percentage increase in sales and service income (35%, or 2.1b). The average Australian dollar export price for iron ore increased by 31% in 2004–05. ABARE reported a 17% increase in the volume of iron ore exports.

#### INDUSTRY VALUE ADDED

In 2004–05, national production of the mining industry as measured by IVA increased by \$5.5b (16%) to \$39.9b. Coal mining was the largest source of the increase, its IVA rising by \$3.5b (53%). IVA of Iron ore mining increased by \$1.2b (from \$3.7b, up 34%). The only mining industries shown in which IVA decreased in 2004–05 were Gold ore mining (down 28% to \$1.5b) and Other mining (down 24%, to \$1.4b).

Contributing 36% (or \$14.3b), the Oil and gas extraction industry was the most significant source of IVA in 2004–05.

In terms of IVA components, the main source of the increase in IVA for total mining was a \$10.7b (18%) increase in sales and service income. Propelled by higher prices received for several major commodities, this increase more than doubled the \$5.0b (26%) increase in other intermediate input expenses. Purchases of goods and materials rose by 5% (\$0.4b). The increase in other intermediate input expenses reflected principally an

INDUSTRY VALUE ADDED continued

increase of \$3.5b (46%) in other selected expenses, as well as smaller increases in most other component items.

**EMPLOYMENT** 

Employment in the Australian mining industry at the end of June 2005 was estimated at 93,100 persons, an increase of 7% (or 6,100 persons) compared to the estimate for June 2004. The major sources of this increase were Coal mining (up by 2,500 persons), Metal ore mining (by 2,000 persons) and Services to mining (by 1,300 persons). Employment increased in all constituent industries for which data are shown, except for Other mining which decreased slightly. Employment in the 'core' mining industries of Coal mining, Oil and Gas extraction and Metal ore mining increased by 9% overall.

At the industry subdivision level, 23% of mining employment at the end of June 2005 was in Coal mining, 9% in Oil and gas extraction, 30% in Metal ore mining, 12% in Other mining, and 27% in Services to mining. These proportions are quite stable over the four years presented in table 1.1.

The mining industry employed 12% (or 10,200) more people at the end of June 2005 compared to four years earlier. Coal mining (where employment grew by 37% over this period) accounted for 5,900 of this increase, and Metal ore mining a further 3,900 (a 16% increase over 2001–02).

WAGES AND SALARIES

The Australian mining industry paid \$7.5b in wages and salaries in 2004–05, an increase of 7% (or \$494m) on the previous year. All industries for which data are shown incurred higher wages and salaries costs than in 2003–04. The 'core' mining industries of Coal mining, Oil and gas extraction and Metal ore mining recorded a 6% (\$304m) increase in wages and salaries overall.

At the industry subdivision level, 27% of the value of wages and salaries for total mining in 2004–05 were paid in Coal mining, 12% in Oil and gas extraction, 30% in Metal ore mining, 7% in Other mining, and 24% in Services to mining. As with their shares of employment, these proportions are quite stable over the four years presented in table 1.1.

Because employment and wages and salaries paid increased by the same percentage at the total mining level, the estimate of wages and salaries per person employed was unchanged, at \$80,000, between 2003–04 and 2004–05. A 5% (\$4,000) increase for Metal Ore mining was outweighed by a decrease of 12% (\$12,300) in the value for Coal MINING.

It should be noted that employment is measured at a point in time, i.e. end of June 2005, whereas wages and salaries relate to a twelve month period. In times of significant change in the performance of the industry, as is the case in 2004-05, changes in wages and salaries may not be as great as changes in employment. This will be exacerbated by the effect of those businesses (refer paragraphs 22 and 23 of the Explanatory Notes) that report on a December year end basis, where employment will be reported as at June 2005 while wages and salaries will be in respect of the twelve months ended December 2004.

# WAGES AND SALARIES continued

Unlike in 2003–04, the value of contract mining expenses (\$2.3b) was less than selected labour costs (\$2.5b) in Metal ore mining. This implies greater use of employed rather than contract labour during 2004–05. Across the mining industry, about 90% of the value of selected labour costs is represented by wages and salaries.

## PROFITABILITY AND EARNINGS

Total trading profit for the mining industry in 2004–05 was \$37.6b, an increase of \$5.9b (19%) over the previous year. The main contributors to this improved result were Coal mining, where trading profit rose by \$3.7b (or 62%), and Iron ore mining, which recorded an increase of \$1.3b (or 37%). Gold ore mining, Other mining and Services to mining were the only industries in which trading profit fell, by 28%, 22% and 3% respectively. Trading profit in Gold ore mining was depressed by an increase of \$1.0b in other selected expenses.

Earnings Before Interest and Tax (EBIT) rose more strongly, by 26% or \$4.9b. Again, the largest increases in dollar terms occurred in Coal mining and Iron ore mining.

In terms of Operating Profit Before Tax (OPBT), the mining industry improved its returns by 31% (or \$5.0b) during 2004-05, earning \$21.0b. An increase of \$10.4b (16%) in total income substantially exceeded the \$5.9b (12%) increase in total expenses. Coal mining was responsible for \$3.0b of the increased OPBT, and a further \$1.2b was attributable to Iron ore mining.

#### CAPITAL EXPENDITURE

Net capital expenditure by the mining industry in 2004–05 was \$14.2b, which was 23% (\$2.6b) higher than the previous year. The largest increase occurred in COAL MINING (up \$1.4b, or 93%), which dominated a diversity of movements in the other mining industries.

By asset type, the increase reflected outlays on plant, machinery and equipment (up \$0.2b, or 3%), dwellings, other buildings and structures (up \$1.5b, or 33%) and other assets (up \$1.2b, or 33%).

## INDUSTRY PERFORMANCE MEASURES

A range of performance measures, mainly expressed as ratios, can be produced from the data available from businesses' financial statements. A selection of these are presented in this Chapter for the various mining industries. Information about the uses and limitations of these measures can be found in Explanatory Notes paragraphs 27–32.

#### Performance ratios

The following summarises the mining industry's performance ratios for 2004–05, which appear in detail in table 2.5:

- The highest profit margin (52%) was earned by Oil and Gas extraction. Gold ore mining was the lowest (-8%). The profit margin of the Coal mining industry almost doubled between 2003–04 and 2004–05, and the profitability of Copper mining and Silver-lead-zinc mining also substantially improved. Note that this ratio is based on OPBT, whereas previous issues of this publication presented trading profit margin.
- The interest coverage ratios of most of the industries presented improved between 2003–04 and 2004–05, the exceptions being Gold ore mining, Other mining and Services to mining.

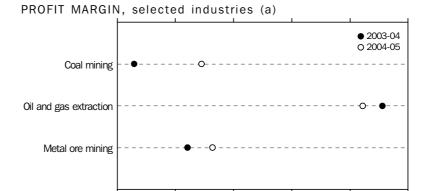
Performance ratios continued

- The highest value of IVA to selected labour costs occurs in the Oil and gas extraction industry, where IVA exceeds selected labour costs by 14.5 times. This is almost identical to 2003–04 and is almost double the next highest value, which relates to Iron ore mining. The Services to mining industry shows the lowest value (1.3 times) for this ratio.
- Of all mining industries shown, Oil and gas extraction (at \$122,200) recorded the highest selected labour costs per person employed, followed by Coal mining (\$106,500). For total mining, the estimate was stable.
- GOLD ORE MINING was the only mining industry in which acquisition of assets exceeded IVA, resulting in an investment rate (value added) of greater than 100% in both 2003–04 and 2004–05. In 2004–05 Services to mining recorded the next highest value, at 61.6%.

40

50

60



(a) ANZSIC subdivisions 11-13

10

## SUMMARY, Financial performance and capital expenditure, 2003-04 and 2.1 2004-05

			EARNING	iS							
			BEFORE		OPERATI	NG					
			INTERES	Τ	PROFIT				NET CAP	ITAL	
	TRADING		AND TAX			BEFORE TAX		ACQUISITIONS		EXPENDITURE	
	03–04	04–05	03–04	04–05	03–04	04–05	03–04	04–05	03–04	04–05	
Industry	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • •	
11 Coal mining	5 930	9 636	2 884	5 912	1 986	4 975	2 280	3 060	1 486	2 870	
12 Oil and gas extraction	13 059	13 666	9 633	9 937	8 789	9 304	3 915	5 211	3 780	4 454	
13 Metal ore mining											
1311 Iron ore mining	3 470	4 743	2 840	3 927	2 532	3 728	1 642	1 763	1 594	1 713	
1313 Copper ore mining	636	1 171	-31	551	-199	436	542	399	535	372	
1314 Gold ore mining	1 559	1 127	*648	**39	*444	^-409	2 063	1 964	2 044	1 782	
1315 Mineral sand mining	311	471	125	207	98	174	182	154	177	145	
1317 Silver-lead-zinc ore mining	909	1 063	-117	546	-138	533	190	245	132	241	
1312, 1316 and 1319 Bauxite											
mining, nickel ore mining and											
metal ore mining n.e.c.	1 813	2 123	1 530	1 665	1 491	1 623	480	827	476	779	
Total metal ore mining	8 697	10 698	4 994	6 934	4 229	6 085	5 099	5 352	4 957	5 031	
11–13 Total coal mining, oil and gas											
extraction and metal ore mining	27 686	34 000	17 512	22 783	15 004	20 365	11 295	13 624	10 223	12 355	
14 Other mining	1 695	1 315	739	^ 600	^ 597	*427	443	493	376	443	
15 Services to mining	2 335	2 273	^ 477	**278	^ 410	**175	1 186	1 586	947	1 379	
11–15 Total mining	31 716	37 588	18 728	23 661	16 010	20 967	12 924	15 702	11 546	14 177	

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

 $<sup>^{\</sup>star}$  estimate has a relative standard error of 25% to 50% and should be used with caution

 $<sup>^{\</sup>star\star}$   $\,\,$  estimate has a relative standard error greater than 50% and is considered too unreliable for general use



# **2.2** FINANCIAL PERFORMANCE, 2003–04 and 2004–05

	COAL MIN	ING				IRON ORE MINING		COPPER ORE MINING		RE
	03-04	04-05	03-04	04–05	03-04	04–05	03-04	04–05	03-04	04–05
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •		• • • • • • •	• • • • • •
Sales and service income(a)	15 355	20 332	15 802	17 797	5 922	8 014	1 892	2 439	5 073	5 305
Less Purchases of goods and materials	2 632	3 218	300	522	735	699	406	421	1 082	1 019
Rent, leasing and hiring expenses	^ 220	233	243	227	62	65	22	24	101	87
Freight and cartage expenses	2 061	1 697	177	179	187	327	102	69	^83	87
Motor vehicle running expenses	8	25	4	6	15	22	2	3	^ 17	24
Repair and maintenance expenses	850	1 030	242	104	175	211	37	127	165	101
Contract mining expenses Other contract, subcontract	^1 282	1 749	257	193	714	845	191	135	965	744
and commision expenses	779	781	142	306	89	95	286	135	183	121
Other selected expenses	1 807	2 561	1 333	2 657	590	584	268	435	1 084	2 089
Purchases and selected expenses	9 639	11 320	2 697	4 195	2 567	3 341	1 314	1 348	3 680	4 399
Plus										
Opening inventories Less	1 011	911	499	480	425	468	287	402	454	410
Closing inventories	996	1 235	451	527	450	522	332	420	494	502
Less							4.0		400	400
Capitalised purchases	230	300	^3	17	90	17	13	62	126	128
Cost of sales	9 425	10 697	2 743	4 131	2 452	3 271	1 256	1 267	3 514	4 178
Trading profit	5 930	9 636	13 059	13 666	3 470	4 743	636	1 171	1 559	1 127
Plus										
Funding from government										
Energy grants credits	248	309	13	7	46	64	21	21	135	88
For other operational costs	1	_	1	_	_	1	_	_	1	_
Interest income	129	88	228	223	700	670	3	3	*31	^ 50
Other income	970	857	1 863	1 543	-8	170	11	130	^814	^ 532
Total income	16 702	21 586	17 906	19 571	6 659	8 918	1 926	2 592	6 053	5 976
Less										
Wages and salaries(b)	2 019	2 022	844	879	519	585	237	295	663	681
Employer contributions										
into superannuation	178	177	101	103	51	53	29	32	52	58
Workers' compensation premiums/costs	105	92	3	4	1	3	9	7	13	11
Selected labour costs	2 301	2 292	948	986	570	641	274	335	728	750
	2 301	2 232	340	300	370	041	214	333	720	750
Less	4 00=				450			070	4 0 4 0	0.40
Depreciation and amortisation	1 367	1 547	2 320	2 909	459	604	357	370	1 040	848
Insurance premiums  Natural resource royalty expenses	142 788	126 1 016	110 2 231	111 1 657	28 339	36 450	39 35	35 56	32 136	34 145
Bad and doubtful debts	1	**7	2 231	1 057	339	450 —	_	_	*4	**1
Plus  Capitalised wages and salaries	207	9	80	162	29	10	3	22	50	20
Earnings before interest and tax	2 884	5 912	9 633	9 937	2 840	3 927	<b>-31</b>	551	*648	**39
_	£ 004	3 312	<i>3</i> 033	3 331	2 040	3 321	-31	331	040	39
Less Interest expenses	899	937	844	633	308	198	168	114	203	447
Interest expenses										
Total expenses	14 701	16 935	9 069	10 313	4 152	5 244	2 170	2 174	5 648	6 476
Operating profit before tax	1 986	4 975	8 789	9 304	2 532	3 728	-199	436	*444	^-409

should be used with caution

estimate has a relative standard error of 25% to 50% and should be used with caution

estimate has a relative standard error of 10% to less than 25% and
\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

 <sup>—</sup> nil or rounded to zero (including null cells)

<sup>(</sup>a) Includes rent, leasing and hiring income.

<sup>(</sup>b) Excludes the drawings of working proprietors.



# **2.2** FINANCIAL PERFORMANCE, 2003-04 and 2004-05 continued .....

			SILVER-					
	MINERA	L	LEAD-ZI	NC			TOTAL M	ETAL
	SAND N	IINING	ORE MII	VING	OTHER(	a)	ORE MIN	IING
	03-04	04-05	03-04	04-05	03-04	04-05	03-04	04-05
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • • •	• • • • • •	• • • • •	• • • • • •	• • • • •	• • • • • • •	• • • • •
Sales and service income(b)	941	1 053	1 987	2 293	3 358	3 968	19 174	23 072
Less Purchases of goods and materials	220	352	387	441	802	692	3 632	3 625
Rent, leasing and hiring expenses	11	11	10	23	24	28	230	238
Freight and cartage expenses	42	43	106	112	56	81	574	719
Motor vehicle running expenses	2	2	1	3	4	5	42	60
Repair and maintenance expenses	44	17	45	103	99	127	566	686
Contract mining expenses	167	24	156	99	345	439	2 537	2 286
Other contract, subcontract								
and commision expenses	8	143	217	137	138	92	922	723
Other selected expenses	173	63	210	380	373	503	2 698	4 055
Purchases and selected expenses	667	658	1 131	1 299	1 841	1 978	11 201	13 024
Plus								
Opening inventories	178	177	100	115	430	466	1 873	2 037
Less								
Closing inventories	190	218	130	122	492	557	2 087	2 341
<del>-</del>	190	210	130	122	432	551	2 081	2 341
Less	0.4	0.5	00	00	004	10	E40	0.40
Capitalised purchases	24	35	22	62	234	42	510	346
Cost of sales	631	583	1 078	1 229	1 545	1 846	10 476	12 374
Trading profit	311	471	909	1 063	1 813	2 123	8 697	10 698
Plus								
Funding from government								
Energy grants credits	2	1	21	32	31	29	255	235
For other operational costs	_	_	_	_	_	_	1	1
Interest income	5	6	2	11	12	20	753	760
Other income	82	84	23	5	509	412	1 430	1 332
Total income	1 030	1 145	2 034	2 340	3 910	4 429	21 613	25 400
Less								
Wages and salaries(c)	107	153	190	210	248	304	1 963	2 229
Employer contributions								
into superannuation	13	24	14	15	26	40	183	222
Workers' compensation	_		_	_	_	_		
premiums/costs	2	1	7	5	5	5	38	32
Selected labour costs	122	178	211	229	278	349	2 184	2 483
Less								
Depreciation and amortisation	119	139	810	270	384	370	3 170	2 601
Insurance premiums	7	7	12	12	22	23	140	147
Natural resource royalty expenses	29	34	41	57	150	181	730	924
Bad and doubtful debts	_	_	_	_	_	2	*5	**3
Plus								
Capitalised wages and salaries	3	3	1	4	1	6	87	65
Earnings before interest and tax	125	207	-117	546	1 530	1 665	4 994	6 934
Less								
Interest expenses	27	34	21	13	39	42	765	849
Total expenses	944	1 013	2 203	1 815	2 480	2 898	17 597	19 619
•								
Operating profit before tax	98	174	-138	533	1 491	1 623	4 229	6 085

estimate has a relative standard error of 25% to 50% and (a) Comprises Bauxite mining, nickel ore mining and Metal ore

should be used with caution
estimate has a relative standard error greater than 50%
and is considered too unreliable for general use

MINING N.E.C.

(b) Includes rent, leasing and hiring income.

Excludes the drawings of working proprietors.

nil or rounded to zero (including null cells)



# **2.2** FINANCIAL PERFORMANCE, 2003-04 and 2004-05 continued .....

TOTAL COAL MINING, OIL AND GAS

	EXTRACTION							
	METAL ORE	MINING	OTHER I	MINING	TO MINI	NG	TOTAL M	INING
	03–04	04–05	03–04	04–05	03–04	04–05	03–04	04–05
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • •
Sales and service income(a)	50 330	61 201	3 929	3 695	6 132	6 150	60 391	71 046
Less								
Purchases of goods and materials	6 563	7 365	815	^ 808	1 260	^ 878	8 638	9 051
Rent, leasing and hiring expenses	693	697	^ 104	^ 110	281	345	1 078	1 152
Freight and cartage expenses	2 812	2 594	287	^ 353	54	58	3 153	3 005
Motor vehicle running expenses	54	91	58	^ 67	76	^ 49	188	207
Repair and maintenance expenses	1 658	1 821	207	212	356	388	2 221	2 421
Contract mining expenses	4 076	4 228	^ 67	^ 79	364	324	4 508	4 631
Other contract, subcontract								
and commision expenses	1 842	1 811	144	^ 136	202	^ 444	2 189	2 391
Other selected expenses	5 838	9 272	599	^ 626	1 298	1 384	7 736	11 282
Purchases and selected expenses	23 537	28 539	2 281	^ 2 407	3 892	3 875		34 820
•	20 007	20 000	2 201	2 101	0 002	0 010	20 / 11	01020
Plus	0.004	0.400	440	400	404	004	0.004	4.404
Opening inventories	3 384	3 428	416	408	184	264	3 984	4 101
Less								
Closing inventories	3 535	4 103	431	416	250	226	4 216	4 745
Less								
Capitalised purchases	743	663	33	**19	29	**35	805	^ 716
Cost of sales	22 644	27 201	2 234	2 380	3 797	3 877		33 459
Cost of Sales	22 044	27 201	2 234	2 300	3 191	3 011	20 073	33 439
Trading profit	27 686	34 000	1 695	1 315	2 335	2 273	31 716	37 588
Plus								
Funding from government								
Energy grants credits	515	552	40	23	82	100	637	675
For other operational costs	3	2	<del>-</del>	3	1	7	4	12
•								
Interest income	1 109	1 072	*79	*94	^ 53	^ 68	1 241	1 233
Other income	4 263	3 731	*66	*253	^ 281	*354	4 610	4 337
Total income	56 221	66 557	4 114	4 067	6 549	6 679	66 883	77 304
Less								
Wages and salaries(b)	4 826	5 130	534	541	1 598	1 781	6 958	7 452
Employer contributions	. 020	0 100		0.1	2 000	1.01	0 000	02
into superannuation	462	502	49	54	130	126	642	682
Workers' compensation	402	302	43	54	100	120	042	002
premiums/costs	145	129	17	17	58	48	220	194
Selected labour costs	5 433	5 761	600	613	1 786	1 956	7 820	8 329
Selected labour costs	5 455	3 701	600	013	1 700	1 930	1 020	0 329
Less								
Depreciation and amortisation	6 857	7 057	392	352	415	505	7 663	7 914
Insurance premiums	393	384	28	25	53	53	474	462
Natural resource royalty expenses	3 749	3 596	140	98	11	*18	3 900	3 712
Bad and doubtful debts	*6	*11	*5	6	13	10	^ 24	^ 27
Plus								
Capitalised wages and salaries	374	236	24	*6	^3	**17	401	260
Earnings before interest and tax	17 512	22 783	739	^ 600	^ 477	**278		23 661
_	1. 712	22 100	100	300	711	210	10 120	_0 JUI
Less								
Interest expenses	2 508	2 419	143	^ 173	67	103	2 718	2 694
Total expenses	41 368	46 867	3 532	3 648	6 205	6 467	51 105	56 982
Operating profit before tax	15 004	20 365	^ 597	*427	^ 410	**175	16 010	20 967

and should be used with caution

estimate has a relative standard error of 25% to 50% and

should be used with caution

considered too unreliable for general use

nil or rounded to zero (including null cells)

lncludes rent, leasing and hiring income.

<sup>^</sup> estimate has a relative standard error of 10% to less than 25% \*\* estimate has a relative standard error greater than 50% and is

<sup>(</sup>b) Excludes the drawings of working proprietors.



# **2.3** INDUSTRY VALUE ADDED, 2003-04 and 2004-05 .....

	COAL MINING		EXTRACT	OIL AND GAS EXTRACTION		IRON ORE MINING		COPPER ORE MINING		RE
	03-04	04-05	03-04	04-05	03-04	04-05	03-04	04-05	03–04	04-05
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
		• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • •	• • • • • • •	• • • • •
Sales and service income(a) Plus Funding from government	15 355	20 332	15 802	17 797	5 922	8 014	1 892	2 439	5 073	5 305
Energy grants credits For other operational costs	248 1	309	13 1	7 —	46 —	64 1	21 —	21 —	135 1	88 —
Capital work done for own use Change in inventories	437 *-15	309 324	82 -48	179 47	119 25	27 54	17 45	84 18	177 *40	149 ^ 92
Less										
Purchases of goods and materials Other intermediate input expenses	2 632 6 765	3 218 7 910	300 1 690	522 3 159	735 1 682	699 2 519	406 883	421 893	1 082 2 341	1 019 3 165
Industry value added	6 629	10 146	13 860	14 349	3 694	4 942	686	1 248	2 002	1 451

estimate has a relative standard error of 10% to less than 25% and
— nil or rounded to zero (including null cells) should be used with caution

estimate has a relative standard error of 25% to 50% and should be used with caution

<sup>(</sup>a) Includes rent, leasing and hiring income.



# 2.3 INDUSTRY VALUE ADDED, 2003-04 and 2004-05 continued .........

	MINERAL SAND MINING		SILVER-LE		OTHER(	a)	TOTAL M	
	03-04	04–05	03-04	04-05	03-04	04-05	03-04	04–05
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • • •	• • • • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • •
Sales and service income(b) Plus	941	1 053	1 987	2 293	3 358	3 968	19 174	23 072
Funding from government Energy grants credits For other operational costs	2 —	<u>1</u>	21 —	32 —	31 —	29 —	255 1	235 1
Capital work done for own use Change in inventories	27 12	38 41	23 31	66 8	235 62	47 91	597 214	411 304
Less Purchases of goods and materials Other intermediate input expenses	220 426	352 292	387 724	441 821	802 1 002	692 1 241	3 632 7 059	3 625 8 931
Industry value added	336	490	950	1 136	1 882	2 202	9 550	11 468

nil or rounded to zero (including null cells)

<sup>(</sup>b) Includes rent, leasing and hiring income.

<sup>(</sup>a) Comprises Bauxite mining, nickel ore mining and metal ore mining N.E.C.

Sales and service income(a)

Change in inventories

Industry value added

Funding from government

Energy grants credits

For other operational costs

Purchases of goods and materials Other intermediate input expenses

Capital work done for own use



Plus

Less

### INDUSTRY VALUE ADDED, 2003-04 and 2004-05 continued .......

30 039 35 963

TOTAL COAL MINING, OIL AND GAS EXTRACTION AND SERVICES METAL ORE MINING TOTAL MINING TO MINING OTHER MINING 03-04 04-05 03-04 04-05 03-04 04-05 03-04 04-05 50 330 61 201 3 929 3 695 6 132 6 150 60 391 71 046 552 40 23 100 637 675 515 82 3 3 1 12 1 117 899 57 \*\*25 31 \*\*52 1 205 ^976 ^ 151 675 \*\*14 \*\*8 -38 ^ 231 645 67 6 563 7.365 815 ^808 1 260 ^878 8 638 9 051 15 514 20 000 1 373 1 540 2 463 2 818 19 350 24 358

2 589 2 576

34 481 39 945

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

nil or rounded to zero (including null cells)

<sup>\*\*</sup> estimate has a relative standard error greater than 50% and is considered too unreliable for general use

<sup>(</sup>a) Includes rent, leasing and hiring income.



# 2.4 ACQUISITION AND DISPOSAL OF ASSETS, 2003-04 and 2004-05 .....

	COAL MINING			OIL AND GAS EXTRACTION			COPPER ORE MINING	
	03–04	04–05	03–04	04–05	03-04	04–05	03-04	04-05
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • • • • •	• • • • • •	• • • • • •	• • • • • • •	• • • • • •		• • • • •
Capital expenditure on(a) Plant, machinery and equipment Dwellings, other buildings and structures Other (including land and intangible assets) Total	1 378.9 572.8 328.5 2 280.2	1 723.4 ^ 966.9 369.8 3 060.0	817.1 1 919.2 1 179.1 3 915.3	1 079.1 2 553.0 1 579.2 5 211.4	904.7 541.8 195.5 1 641.9	487.4 1 141.0 134.4 1 762.8	428.8 93.6 19.5 541.9	162.5 219.2 17.1 398.8
Disposal of assets	794.5	190.4	135.2	757.5	47.7	50.3	6.9	26.9
Net capital expenditure	1 485.7	2 869.6	3 780.2	4 453.8	1 594.2	1 712.5	535.0	371.9

<sup>25%</sup> and should be used with caution

# 2.4 ACQUISITION AND DISPOSAL OF ASSETS, 2003-04 and 2004-05 continued .....

					SILVER-	LEAD-					
	GOLD OR	E	MINERA	۱L	ZINC OF	RE			TOTAL ME	TAL	
	MINING		SAND M		MINING	MINING		a)	ORE MINI	ORE MINING	
	•••••	•••••	•••••	••••••	•••••	••••••	•••••	••••••	•••••		
	03–04	04-05	03–04	04–05	03–04	04–05	03-04	04–05	03-04	04-05	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
Capital expenditure on(b)											
Plant, machinery and equipment	315.0	222.9	88.5	66.5	116.8	164.4	156.4	312.6	2 010.3	1 416.3	
Dwellings, other buildings											
and structures	984.1	344.3	30.0	26.7	52.0	43.3	150.5	445.4	1 852.0	2 219.8	
Other (including land											
and intangible assets)	763.9	1 397.1	63.8	60.8	21.3	37.7	172.8	69.0	1 236.8	1 716.1	
Total	2 063.0	1 964.3	182.3	154.0	190.1	245.4	479.8	827.0	5 099.1	5 352.2	
Disposal of assets	19.3	182.6	5.2	9.1	58.5	4.0	4.2	48.1	141.8	321.0	
Net capital expenditure	2 043.7	1 781.7	177.1	144.8	131.6	241.3	475.6	778.9	4 957.3	5 031.2	

<sup>(</sup>a) Comprises BAUXITE MINING, NICKEL ORE MINING AND METAL ORE MINING N.E.C. (b) Items listed include value of capital work done for own use —

<sup>^</sup> estimate has a relative standard error of 10% to less than (a) Items listed include value of capital work done for own use - reported in Table 2.3.

reported in Table 2.3.



# 2.4 ACQUISITION AND DISPOSAL OF ASSETS, 2003-04 and 2004-05 continued .....

TOTAL COAL MINING, OIL AND GAS EXTRACTION AND SERVICES TO MINING TOTAL MINING METAL ORE MINING OTHER MINING 04-05 03-04 03-04 04-05 03-04 04-05 03-04 04-05 Capital expenditure on(a) Plant, machinery and equipment 4 206.2 4 218.7 ^ 169.7 355.3 620.4 578.3 4 996.4 5 152.4 Dwellings, other buildings and structures 4 344.0 5 739.7 32.9 52.6 36.8 \*\*88.2 4 413.7 5 880.6 Other (including land and intangible assets) 2 744.3 3 665.1 240.4 84.9 528.8 919.5 3 513.6 4 669.5 1 186.0 1 585.9 Total 11 294.6 13 623.5 443.1 492.9 12 923.7 15 702.4 Disposal of assets 1 071.4 1 268.9 239.1 66.9 50.2 206.4 1 377.5 1 525.6 Net capital expenditure 10 223.2 12 354.6 376.2 442.7 946.9 1 379.5 11 546.2 14 176.8

### SELECTED PERFORMANCE MEASURES, 2003-04 and 2004-05 .....

		COAL MINING			OIL AND GAS EXTRACTION		IRON ORE MINING		IING
		03–04	04–05	03–04	04–05	03–04	04–05	03-04	04–05
• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • • •	• • • • •	• • • • • •			• • • • •
Labour Industry value added to selected labour									
costs Selected labour costs per person	times	2.9	4.4	14.6	14.5	6.5	7.7	2.5	3.7
employed(a)	\$'000	121.2	106.5	122.3	122.2	105.7	103.5	87.6	103.3
Profitability	0.4								
Profit margin(b)	%	12.9	24.5	55.6	52.3	42.8	46.5	-10.5	17.9
Debt Interest coverage	times	3.2	6.3	11.4	15.7	9.2	19.8	-0.2	4.8
Capital expenditure Investment rate (value added)	%	34.4	30.2	28.2	36.3	44.4	35.7	79.0	32.0

<sup>(</sup>a) See Explanatory Notes paragraph 24.

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

estimate has a relative standard error greater than 50% and is considered too unreliable for general use

Items listed include value of capital work done for own use – reported in Table 2.3.

<sup>(</sup>b) This ratio differs in concept from the trading profit margin presented in previous issues of this publication. For the definition, see the Glossary.



# 2.5 SELECTED PERFORMANCE MEASURES, 2003-04 and 2004-05 continued ......

		GOLD ORE MINING		SAND M	MINERAL SAND MINING		SILVER-LEAD-ZINC ORE MINING		OTHER(a)	
		03-04	04–05	03–04	04–05	03–04	04–05	03-04	04-05	
Labour Industry value added to selected labour	• • • • • •	• • • • • •		• • • • • •	• • • • •		• • • • • •	• • • • • • •	• • • •	
costs Selected labour costs per person	times	2.7	1.9	2.7	2.8	4.5	4.9	6.8	6.3	
employed(b)  Profitability	\$'000	77.5	77.2	69.6	90.7	101.3	96.5	71.9	83.8	
Profit margin(c)  Debt	%	8.8	-7.7	10.4	16.5	-6.9	23.3	44.4	40.9	
Interest coverage	times	3.2	0.1	4.6	6.1	-5.7	41.1	39.6	39.5	
Capital expenditure Investment rate (value added)	%	103.0	135.4	54.3	31.4	20.0	21.6	25.5	37.5	



# 2.5 SELECTED PERFORMANCE MEASURES, 2003-04 and 2004-05 continued ......

		TOTAL COAL MINING, OIL AND TOTAL METAL GAS EXTRACTION AND METAL ORE MINING ORE MINING				OTHER MINING		
		03–04	04–05	03-04	04–05	03–04	04–05	
• • • • • • • • • • • • • • • • • • • •	• • • • •		• • • •	• • • • • • • • • • • • •	• • • • • • •	• • • • • • •	• • • • •	
Selected labour costs per person	times \$'000	4.4 85.2	4.6 89.8		6.2 100.6	3.1 53.6	2.3 55.0	
Profitability Profit margin(b)	%	22.1	26.4	29.8	33.3	15.2	11.6	
Debt Interest coverage	times	6.5	8.2	7.0	9.4	5.2	3.5	
Capital expenditure Investment rate (value added)	%	53.4	46.7	37.6	37.9	23.9	35.1	

<sup>(</sup>a) See Explanatory Notes paragraph 24.

<sup>(</sup>b) See Explanatory Notes paragraph 24.

<sup>(</sup>a) Comprises Bauxite mining, Nicket ore Mining and Metal ore mining n.e.c. (c) This ratio differs in concept from the trading profit margin presented in previous issues of this publication. For the definition, see the Glossary.

<sup>(</sup>b) This ratio differs in concept from the trading profit margin presented in previous issues of this publication. For the definition, see the Glossary.



# 2.5 SELECTED PERFORMANCE MEASURES, 2003-04 and 2004-05 continued ......

		SERVICE TO MINI		TOTAL N	IINING
		03-04	04–05	03–04	04–05
• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • •
Labour					
Industry value added to selected labour costs Selected labour costs per person	times	1.4	1.3	4.4	4.8
employed(a)	\$'000	76.3	79.1	89.9	89.5
Profitability Profit margin(b)	%	6.7	2.8	26.5	29.5
Debt					
Interest coverage	times	7.1	2.7	6.9	8.8
Capital expenditure Investment rate (value added)	%	45.8	61.6	37.5	39.3

<sup>(</sup>a) See Explanatory Notes paragraph 24.

<sup>(</sup>b) This ratio differs in concept from the trading profit margin presented in previous issues of this publication. For the definition, see the Glossary.

## CHAPTER 3

### STATE/TERRITORY SUMMARY

INTRODUCTION

This chapter contains key data of industry performance at the state and territory level, together with data illustrating the contribution of the mining industry in each state and territory. Data for the Australian Capital Territory are included with those for New South Wales and are not available separately. For convenience, the combined estimates are designated as New South Wales data in the commentary below.

KEY DATA

Table 3.1 presents a time series for selected items for all states and the Northern Territory, from 2001–02 to 2004–05. The data relate to the industry designated as 'Selected mining', that is, ANZSIC subdivisions 11–14 (Coal mining, Oil and Gas extraction, Metal ore mining and Other mining) only. ANZSIC subdivision 15 (Services to mining) is excluded from the data in this table, because the design of the survey does not support production of data at the state and territory level for this industry. See Explanatory Notes paragraphs 33 and 34 for an outline of the methodology used in deriving these estimates.

#### CONTRIBUTION OF STATES / TERRITORIES TO TOTAL SELECTED MINING, 2004-05 Emp: 2.5% W&S: 3.2% SSI: 3.3% Emp: 27.3% IVA: 3.1% W&S: 29.1% SSI: 25.1% NT IVA: 23.9% OLD WA Emp: 36.0% SA W&S: 36.7% SSI: 44.4% IVA: 48.6% NSW + ACT Emp: 21.6% Emp: 5.4% W&S: 19.6% W&S: 51% SSI: 15.8% SSI: 4.2% IVA: 11.3% Legend: IVA: 4.5% Emp = Employment at end of June VIC. W&S = Wages and salaries TAS. SSI = Sales and service income Emp: 5.2% Emp: 1.9% IVA = Industry value added W&S: 4.8% W&S: 1.5% SSI: 6.3% SSI: 0.9% IVA: 7.9% IVA: 0.7%

The above graphic illustrates each state or territory's share of Australian economic aggregates relating to Selected mining in 2004–05.

SALES AND SERVICE INCOME

Between 2003–04 and 2004–05, sales and service income of the Selected mining industry increased in all states and territories apart from Victoria, where it fell for the third consecutive year. Western Australia recorded the largest increase, rising \$4.3b (18%) to \$28.8b. Sales and service income in Queensland rose by a higher percentage (34%) but by a slightly smaller amount (\$4.1b). Other large increases occurred in Tasmania (up 30%, or \$0.1b), South Australia (up 29%, or \$0.6b) and New South Wales (up 21%, or \$1.8b).

Over the period from 2001–02 to 2004–05, only Victoria and the Northern Territory recorded decreases in the sales and service income of Selected Mining. The largest absolute increase occurred in Western Australia (\$7.1b), and the largest percentage increase was in South Australia (58%). These increases over time have largely been concentrated in the most recent year. Typical increases in 2004–05 have been as much as double those of 2002–03 (in dollar terms), separated by a year of lesser or negative growth in 2003–04. Victoria's decrease of \$1.9b from 2001–02 to 2004–05 exceeded that of the Northern Territory (\$896m), but in percentage terms they were very similar (at about 30%).

In 2004-05, Western Australia accounted for 44% of sales and service income of the Selected mining industry, followed by Queensland at 25% and New South Wales at 16%. Victoria contributed 6%, down from 8% in 2003–04, and Queensland's share increased from 23%.

INDUSTRY VALUE ADDED

Movements in sales and service income between 2003–04 and 2004–05 have generally been accompanied by changes in IVA in the same direction. IVA for Selected MINING in Queensland increased by \$3.4b (or 60%) to \$8.9b. Victorian IVA for Selected MINING in 2004–05 was 16% (or \$0.5b) less than in 2003–04, and the Northern Territory's declined by 17% (\$0.3b).

A 13% (\$4.3b) increase nationally in Selected Mining IVA over the period from 2001–02 to 2004–05 is the product of substantial increases in Queensland (\$3.0b) and Western Australia (\$2.9b), smaller increases in New South Wales, South Australia and Tasmania, and major decreases in Victoria (\$2.0b) and the Northern Territory (\$1.2b).

In 2004–05, Western Australia's \$18.2b of industry value added represented 49% of the Australian total for Selected mining. Queensland (24%) was the next largest contributor followed by New South Wales (\$11%). The proportion of national IVA accounted for by Victoria fell from 11% to 8% between 2003–04 and 2004–05. In the four years from 2001–02 to 2004–05, Victoria's contribution to the Australian estimate of IVA for this industry has nearly halved, from 15%.

**EMPLOYMENT** 

The Selected mining industry increased employment between 2003–04 and 2004–05 in all states and territories except the Northern Territory, gaining 8% nationally. Employment increased most strongly in Queensland (2,070 persons, or 12%), followed by Western Australia (1,319 persons, or 6%). The additional 111 persons employed in Tasmania at the end of 2004–05 represented an increase of 10%. Selected mining reduced its employment by 6% in the Northern Territory.

EMPLOYMENT continued

Over the period from 2001–02 to 2004–05, the biggest increase in employment in Selected mining occurred in Queensland (4,670 persons, or 33%), followed by Western Australia (3,825 persons, or 18%) and New South Wales (1,925 persons, or 15%). Compared to June 2002 there were 150 (or 11%) fewer persons employed in Selected mining in Tasmania, and marginally fewer in Victoria, at the end of June 2005.

In 2004–05, 36% of employment in the Selected mining industry was recorded against Western Australia, followed by Queensland with 27%; New South Wales contributed 22% of the total. This pattern differs from the shares of sales and service income and IVA among the major states as outlined above, largely reflecting differing labour intensities in the types of mining predominant in each state and territory.

COMPARISON ACROSS INDUSTRY

Table 3.2 shows the contribution of industries to the production (as measured by total factor income) of each state and territory, as well as Australia, in 2004–05. For the purposes of this table, the activity of general government and the ownership of dwellings are each treated as industries.

In 2004–05, the largest share of production on this basis was contributed by Property and Business services, which generated 12.8% of total factor income. Of the nineteen industries shown, Mining ranked eighth nationally, contributing 5.4%. Its share of total factor income varied markedly among the states and territories. Mining was by far the dominant industry in the Northern Territory – where, at 20%, its share of total factor income is more than twice that of the next largest industry – and in Western Australia. In Queensland it ranked equal third.



# **3.1** KEY DATA, Selected mining(a)

	Employment at end of June	Wages and salaries(b)	Sales and service income(c)	Industry value added	Wages and salaries per person employed(d)
	no.	\$m	\$m	\$m	\$'000
	IIO.	фііі	φιιι	фііі	\$000
NEW SC	UTH WALI	ES AND AUS	STRALIAN CA	APITAL TER	RRITORY
2001–02	12 875	1 126	7 926	3 415	87.5
2002-03	13 180	1 186	8 675	4 435	90.0
2003–04 2004–05	13 837 14 800	1 139 1 113	8 512 10 274	3 508 4 229	82.3 75.2
• • • • • • • •			• • • • • • • • •	• • • • • • • • •	• • • • • • • •
		VICT	TORIA		
2001–02	3 619	252	5 940	4 977	69.7
2002–03 2003–04	4 193 3 274	290 282	4 657 4 420	3 667 3 485	69.2 86.1
2003–04	3 569	272	4 070	2 940	76.2
• • • • • • • •			• • • • • • • • •	• • • • • • • • •	• • • • • • • •
		QUEEN	NSLAND		
2001–02	13 998	1 110	12 446	5 902	79.3
2002-03	15 468	1 331	13 745	6 343 5 573	86.0
2003–04 2004–05	16 598 18 668	1 519 1 652	12 210 16 317	8 935	91.5 88.5
• • • • • • • • •					• • • • • • • •
		SOUTH A	USTRALIA		
2001–02	3 251	191	1 718	1 097	58.7
2002–03	3 067	174	1 961	1 198	56.6
2003-04	3 507	216	2 109	1 344	61.6
2004–05	3 697	287	2 713	1 683	77.8
• • • • • • • • •		WESTERN	AUSTRALIA	• • • • • • • • •	• • • • • • • •
2001–02	20 824	1 623	21 719	15 240	77.9
2002–03	22 706	1 886	24 390	17 018	83.1
2003-04	23 330	1 963	24 432	16 360	84.1
2004–05	24 649	2 082	28 782	18 175	84.5
		TASI	MANIA	•	• • • • • • • • • • • • • • • • • • • •
2001–02	1 418	96	568	67	67.9
2002–03	999	90	445	108	90.2
2003-04		65	461	202	
2004–05		83	601	260	
• • • • • • • • •	• • • • • • • •		TERRITORY		• • • • • • • •
2001–02	1 722	166		2 330	
2002–03		146			
2003-04	1 861	175	2 116 2 138	1 419	
• • • • • • • • •			RALIA	• • • • • • • • •	• • • • • • • •
2001–02	57 706	4 565	53 352	33 028	79.1
2001–02	61 034	5 103		33 028 34 657	83.6
2002-03	63 565		54 259		84.3
2004–05	68 383	5 671		37 369	82.9
• • • • • • • •			• • • • • • • • •	• • • • • • • • •	• • • • • • • •

<sup>(</sup>a) Total mining excluding ANZSIC subdivision 15 Services to MINING.

<sup>(</sup>b) Excludes the drawings of working proprietors.

<sup>(</sup>c) Includes rent, leasing and hiring income.

<sup>(</sup>d) See Explanatory Notes paragraph 24.



	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
ndustry	%	%	%	%	%	%	%	%	%
• • • • • • • • • • • • • • • • • • • •	• • • • •	• • • • •	• • • • •	• • • • •	• • • • •			• • • • •	• • • • •
Agriculture, forestry and fishing	1.8	3.3	4.2	6.2	4.5	6.9	2.9	0.1	3.3
Mining	2.0	1.3	8.2	2.4	21.4	1.8	20.2	_	5.4
Manufacturing	12.2	15.4	10.5	16.3	9.3	16.3	7.5	2.3	12.4
Electricity, gas and water supply	2.0	2.9	2.0	3.0	3.1	5.0	1.7	2.5	2.5
Construction	7.1	6.2	7.8	6.1	7.0	5.0	7.6	7.0	6.9
Wholesale trade	5.4	5.7	5.0	4.3	3.9	3.4	2.1	1.9	5.0
Retail trade	6.2	6.4	8.0	6.4	5.6	7.7	5.0	5.3	6.5
Accommodation, cafes and restaurants	2.7	1.8	3.2	2.3	1.6	2.8	2.7	2.3	2.4
Transport and storage	4.2	4.0	4.9	4.6	4.6	4.5	4.0	2.3	4.3
Communication services	3.0	3.7	2.7	2.7	2.5	2.8	2.7	2.9	3.0
Finance and insurance	10.0	8.7	5.0	5.8	3.9	5.8	2.6	3.6	7.5
Property and business services	15.2	13.7	10.2	10.2	10.9	5.9	8.5	13.4	12.8
Government administration and defence	3.4	2.3	4.0	3.2	2.2	5.4	7.3	26.4	3.6
Education	4.2	4.7	4.4	4.7	3.1	5.0	3.9	5.7	4.3
Health and community services	6.1	6.7	6.0	7.6	5.7	8.8	5.8	6.1	6.4
Cultural and recreational services	1.6	1.6	1.0	1.4	1.0	1.1	1.8	2.6	1.4
Personal and other services	1.8	1.8	2.0	2.2	1.7	1.9	2.0	2.7	1.9
Ownership of dwellings	9.2	8.1	8.2	8.6	6.4	7.3	8.8	8.7	8.3
General government(a)	1.9	1.7	2.4	2.0	1.6	2.6	2.9	4.4	2.0

nil or rounded to zero (including null cells)
 Note: Australian National Accounts: State Accounts,

(a) State details for general government gross operating 2004–05 (cat. no. 5220.0), Analysis of results (page 6).

surplus by industry are not available.

## CHAPTER 4

### COMMODITIES PRODUCED .....

#### INTRODUCTION

This Chapter presents information about mineral production in Australia based on data produced by the various state and Northern Territory government departments as part of their administrative responsibilities.

This edition presents these data in accordance with a new framework for categorising the products of the mining industry. This framework has been developed by the ABS, in consultation with industry sources and major users of the data, with a view to standardising the data collected by the various jurisdictions.

Commodity data are presented at the broadest level of this framework, for each year from 2001–02 to 2004–05, for each state and the Northern Territory. More detailed time series data are available, free of charge, on the ABS website.

To access the commodity data, go to the ABS home page <a href="http://abs.gov.au">http://abs.gov.au</a>. Select the 'Access to all ABS products & statistics' from the 'All Statistics' tab menu bar on the left hand side. On the 'Statistics' page, choose 'By Catalogue Number' under 'All Statistics'. Find 8415.0 for 2004–05; the detailed commodity Excel spreadsheets are located under the 'Details' tab.

#### PRESENTATION CHANGES

The four broad categories of the new commodities framework are fuel minerals, metallic minerals, construction materials, and industrial minerals. These resemble, in name and general content, the major categories used previously: coal, oil and gas; metallic minerals; construction materials; and other non-metallic minerals. The main changes at this level are that the industrial minerals category now includes a number of commodities that were previously not part of the corresponding category Other non-metallic minerals:

- peat (previously shown under coal, oil and gas),
- dimension stone (previously shown under construction materials)
- mineral sands, tantalum, lithium, chromite and iron oxide (previously shown under Metallic minerals).

Any comparisons with data compiled under the former classification should take these changes into account. A complete list of the items constituting each of these broad categories is provided in the Appendix.

#### COMPARABILITY

Readers should exercise caution when using mineral commodity data, as:

 definitional requirements vary, as does the range of commodities upon which royalties are payable: the different jurisdictions do not necessarily apply common definitions and standards when compiling the statistics; COMPARABILITY continued

- significant variations exist between jurisdictions in the way in which value of production is attributed, particularly for metallic minerals. ABS estimates based on applying a market price to the metallic content (recoverable metal) have been used where possible to obtain a valuation as close as possible to the concept of production.
- the level of information available for construction materials and other non-metallic minerals varies considerably. Production and value of construction materials may be understated in several states, because royalties are not always collected and/or the activity occurs on private land.

Footnotes have been provided in the spreadsheets to clarify definitions, and highlight those areas where treatment or data availability vary across jurisdictions. Any offshore production is attributed to the state or territory which controls that particular offshore area or administers it on behalf of the Australian Government. Data relating to the Joint Petroleum Development Area, in the Timor Sea, is included with that of the Northern Territory.

No data are recorded in this chapter for the Australian Capital Territory.

For further information, see Explanatory Notes paragraphs 38–41. Paragraph 41 also includes website and publication details of the sources.

SUMMARY

The recorded value of mineral production for Australia was \$66.8b for 2004–05 (subject to the qualifications described above). This is an increase of \$16.2b (or 32%) on 2003–04.

In 2004–05 Fuel minerals accounted for 55% (or \$37.1b) of the total value of Australian mineral commodities produced, followed by Metallic minerals (38%, or \$25.7b), Industrial minerals (4%, or \$2.7b) and Construction materials (2%, or \$1.4b).

STATE / TERRITORY COMPARISON

Over the period from 2001–02 to 2004–05, the largest Australian mineral commodity producer was Western Australia, which accounted for 45% of the value of production in 2004–05. Queensland was the second highest contributor (25% in 2004–05), with New South Wales (14% in 2004–05) consistently ranked third.

Western Australia recorded the highest contribution to the Metallic minerals and Fuel minerals categories: 62% (or \$16.0b) and 34% (\$12.5b) of the Australian totals respectively. Of the \$16.2b increase in the value of mineral production during 2004–05, \$6.4b was attributable to Western Australia and \$5.1b to Queensland. With an increase of \$4.1b, Queensland dominated the national increase of \$10.7b in the value of Fuel minerals. Western Australia was the major source of the \$5.3b national increase in value of Metallic minerals, having produced an additional \$3.4b in this category. Its contribution to the increase in value of Metallic minerals was more than three times the size of the next largest contributor, Queensland (up \$1.0b).

The value of mineral commodities produced increased from 2003–04 to 2004–05 in all seven jurisdictions. Western Australia recorded the largest increase, of \$6.4b (or 27%), reflecting large increases in Metallic minerals (\$3.4b) and Fuel minerals (\$3.0b). Queensland's increase was \$5.1b (or 44%), and the value for New South Wales rose by \$2.5b (or 37%).

## VALUE OF MINERAL COMMODITIES PRODUCED, States, Northern Territory and **4.1** Australia, 2001–02 to 2004–05

	Fuel	Metallic	Construction	Industrial	Total mineral
	minerals	minerals	materials	minerals	commodities
	\$m	\$m	\$m	\$m	\$m
• • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • • • •
<b>New South Wales</b>					
2001–02	6 159	1 192	389	129	7 869
2002–03	4 955	1 325	394	123	6 797
2003–04	4 790	1 469	342	100	6 700
2004–05	7 048	1 735	303	102	9 188
Victoria					
2001–02	3 748	62	339	43	4 193
2002-03	3 423	62	391	130	4 006
2003-04	3 398	57	420	57	3 933
2004–05	4 029	70	489	39	4 626
Queensland					
2001-02	8 762	4 138	324	451	13 675
2002-03	8 044	3 632	351	362	12 388
2003-04	7 062	3 895	452	331	11 740
2004–05	11 124	4 944	452	330	16 849
South Australia					
2001–02	722	834	105	60	1 722
2002-03	745	731	110	97	1 683
2003-04	673	881	117	85	1 756
2004–05	865	1 330	125	85	2 404
Western Australia					
2001-02	10 112	11 855	16	1 760	23 742
2002-03	10 764	12 286	16	2 022	25 089
2003-04	9 548	12 676	19	1 647	23 889
2004–05	12 517	16 040	20	1 711	30 288
Tasmania					
2001-02	(a)np	529	25	(a)24	577
2002-03	(a)np	485	27	(a)24	536
2003-04	(a)np	569	34	(a)27	630
2004–05	(a)np	634	43	(a)24	701
Northern Territory					
2001–02	(b) 1 622	921	23	218	2 784
2002-03	(b)1 390	831	28	221	2 470
2003-04	(b)869	877	12	205	1 962
2004–05	(b)1 475	925	16	366	2 783
Australia					
2001–02	(a)31 126	19 531	1 221	(a) 2 685	54 562
2002-03	(a) 29 321	19 352	1 317	(a)2 979	52 969
2003-04	(a) 26 340	20 425	1 396	(a) 2 450	50 611
2004–05	(a)37 059	25 678	1 447	(a) 2 657	66 841

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

<sup>(</sup>a) Coal production in Tasmania is included with the value for Industrial minerals.

<sup>(</sup>b) Includes production in the Joint Petroleum Development Area. For more information, see paragraph 35 of the Explanatory Notes.

### EXPLANATORY NOTES .....

#### INTRODUCTION

- **1** This publication, *Mining Operations, Australia, 2004–05* (cat. no. 8415.0), presents estimates of the economic and financial performance of the mining industry and the production of mining commodities. These data are obtained from ABS surveys and, in the case of the commodity data, as statistics from state and Northern Territory government departments.
- **2** Mining, as specified in Division B of the 1993 edition of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (cat. no. 1292.0), relates to the extraction of minerals occurring naturally as solids such as coal and ores, liquids such as crude petroleum, or gases such as natural gas, by such processes as underground mining, open-cut extraction methods, quarrying, operation of wells or evaporation pans, dredging or recovering from ore dumps or tailings. Activities such as briquetting, or dressing/beneficiating ores or other minerals (by crushing, milling, screening, washing, flotation, chemical beneficiation, etc.) are included, because they are generally carried out at or near mine sites as an integral part of mining operations. Natural gas absorption and purifying plants are also included. The division also includes exploration for minerals and the provision of a wide variety of services to mining and to mineral exploration, as well as mining units under development.
- **3** From 2006–07 reference year the Economic Activity Survey (EAS) results will be presented using the 2006 edition of ANZSIC, an updated version of the industry classification. At the time of release, data for some previous years will also be made available on a 2006 ANZSIC basis, as an aid to analysis.
- **4** The mining collection is conducted annually as a component of the ABS's Economic Activity Survey (EAS):
  - A sample of 724 mining businesses were asked by the ABS to provide employment details and data obtained from their financial statements, mainly via mail out questionnaires. Businesses were also asked to supply key details of their operations by state and territory, enabling the production of the state/territory estimates contained in table 3.1.
  - Key financial data for 3,368 mining businesses, which had been supplied by them to the Australian Taxation Office (ATO) on business income tax returns (BIT data), were then used to supplement the ABS's directly collected information. Section 16(4)(ga) of the *Income Tax Assessment Act 1936* provides for the ATO to pass information to the Australian Statistician for the purposes of the *Census and Statistics Act 1905*.
- **5** Commodity production data, as published in Chapter 4, are not collected as part of this annual mining collection (see Explanatory Notes paragraphs 38–41 for further detail).

STATISTICAL UNITS USED

- **6** Statistical units are those entities from which statistics are collected, or about which statistics are compiled. In ABS economic statistics, the statistical unit is generally the business. All businesses in the EAS are recorded on the ABS Business Register (ABSBR).
- **7** The ABS uses an economic statistics units model on the ABSBR to describe the characteristics of businesses, and the structural relationships between related businesses. Within large and diverse business groups, the units model is used also to define reporting units that can provide data to the ABS at suitable levels of detail.

STATISTICAL UNITS USED continued

- **8** This units model allocates businesses to one of two sub-populations:
  - Most businesses and organisations in Australia need to obtain an Australian Business Number (ABN). The vast majority of these businesses are simple in structure and are allocated to the population which is maintained by the ATO. These are termed (by the ABS) ABN units.
  - The remaining businesses are in the ABS maintained population, and are termed type of activity units, or TAUs.
- **9** Together, these two sub-populations (of ABN units and TAUs) make up the ABSBR population, from which the EAS samples are taken.
- **10** For details about the ABSBR and how ABN units and TAUs contribute to the industry statistics in this publication, see Technical Note 1.

SCOPE AND COVERAGE

- **11** The scope of the 2004–05 mining collection comprises all businesses (including non-employing businesses) on the ABSBR at time of selection, whose industry is classified to ANZSIC Division B Mining. This division comprises the following subdivisions and their component groups and classes:
  - 11 Coal mining
    - 110 Coal mining
      - 1101 Black coal mining
      - 1102 Brown coal mining
  - 12 Oil and gas extraction
    - 120 Oil and gas extraction
      - 1200 Oil and gas extraction
  - 13 Metal ore mining
    - 131 Metal ore mining
      - 1311 Iron ore mining
      - 1312 Bauxite mining
      - 1313 Copper ore mining
      - 1314 Gold ore mining
      - 1315 Mineral sand mining
      - 1316 Nickel ore mining
      - 1317 Silver-lead-zinc ore mining
      - 1319 Metal ore mining n.e.c.
  - 14 Other mining
    - 141 Construction material mining
      - 1411 Gravel and sand quarrying
      - 1419 Construction material mining n.e.c.
    - 142 Mining n.e.c.
      - 1420 Mining n.e.c.
  - 15 Services to mining
    - 151 Exploration
      - 1511 Petroleum exploration (own account)
      - 1512 Petroleum exploration services
      - 1513 Mineral exploration (own account)
      - 1514 Mineral exploration services
    - 152 Other mining services
      - 1520 Other mining services
- **12** Industry statistics in Chapters 1–3 of this publication (excluding tables 1.2 and 3.2) are presented at the subdivision level for all subdivisions. ANZSIC Subdivision 13 Metal ore mining is also presented at the ANZSIC class level.

SCOPE AND COVERAGE continued

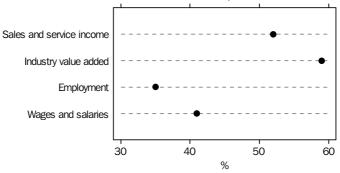
- **13** The ANZSIC-based industry statistics presented in this publication are compiled differently from activity statistics. Each ABN unit or TAU on the ABSBR has been classified (by the ATO and the ABS respectively) to a single industry irrespective of any diversity of activities undertaken. The industry class allocated is the one which relates to those activities that provide the main source of income. A mining business is one predominantly engaged in mining activities, but the data collected for it cover all activities of the business (including any non-mining activities). Conversely, there are some businesses predominantly engaged in non-mining activities which also undertake limited mining activities; these are excluded from the collection.
- **14** Businesses mainly engaged in refining or smelting minerals or ores (other than preliminary smelting of gold), or in manufacturing such products of mineral origin as coke, cement and fertilisers, are excluded, as they are engaged in activities classified to ANZSIC Division C Manufacturing.
- Businesses engaged in providing contract mining services are not always within the scope of the annual mining collection. Under ANZSIC principles, only those contract mining organisations responsible for all facets of a mining operation are classified to Mining. Businesses which contract to provide selected services are classified to the (predominant) activity they are performing, rather than to the industry they are serving. For example, businesses contracted to perform tasks such as mine site preparation (and/or construction), and removal of overburden, are classified to ANZSIC Division E Construction and are, therefore, outside the scope of the mining collection.
- 16 Some mining businesses engage, to a significant extent, in activities which are normally carried out by different industries. For example, a predominantly mining business may also undertake significant amounts of manufacturing. Similarly, a mining business may produce significant volumes of goods which are normally produced in different mining industries. Where a business makes a significant economic contribution to industries classified to different ANZSIC subdivisions, the ABS includes the business in the ABS maintained population and 'splits' the TAU's reported data between the industries involved. Significance is determined using total income.
- **17** A TAU's reported data will be split if the inclusion of data relating to the secondary activity in the statistics for the industry of the primary activity distorts (by overstating or understating) either the primary or secondary industry statistics at the ANZSIC subdivision level by:
  - 3% or more, where the industries of the primary and secondary activities are in the same ANZSIC division
  - 2% or more, where the industries of the primary and secondary activities are in different ANZSIC divisions.
- 18 Unincorporated joint ventures (UJVs) within the mining industry are arrangements which allow the sharing of expertise, resources and risk associated with the development of mineral deposits. This occurs through the participation of a number of organisations (by investment) in a mining operation. Some of these organisations may not otherwise be involved in the mining industry.
- **19** The mining collection includes mining businesses which are operators and/or participants in UJVs. Generally, each participant supplies data of its share of income, while the operator reports all expenses and employment.

SCOPE AND COVERAGE continued

REFERENCE PERIOD

- **20** The ABS attempts to maintain a current understanding of the structure of the large, complex and diverse business groups that form the ABS maintained population on the ABSBR, through direct contact with those businesses. Resultant changes in their structures on the ABSBR can affect:
  - the availability of such businesses (or units within them) for inclusion in the annual economic collections,
  - the delineation of the units, within those groups, for which data are to be reported.
- **21** The ABS attempts to obtain data for those businesses which ceased operation during the year, but it is not possible to obtain data for all of them.
- 22 The period covered by the collection is, in general, the 12 months ended 30 June. Where businesses are unable to supply information on this basis, an accounting period for which data can be provided is used for data other than that relating to employment. Such businesses make a substantial contribution to some of the estimates presented in this publication. As a result, the estimates can reflect trading conditions that prevailed in periods outside the twelve months ended June in the relevant year.
- The following graph illustrates the contribution of businesses which reported for the year ended 31 December 2004 to estimates of key aggregates for total mining in 2004–05. Their contribution is much greater in the Coal mining, Oil and gas extraction and Metal ore mining industries than in the remaining mining industry subdivisions. Within each mining industry, the contribution that these businesses make to each of these variables is generally similar in most cases.

DECEMBER YEAR-END BUSINESSES, Contribution to total mining



- 24 It should be noted that, although financial data estimates relate to the full twelve months, employment estimates relate to the last pay period ending in June of the given year. As such, estimates of wages and salaries per person employed can be affected by any fluctuations in employment during the reference period.
- **25** Financial data presented incorporate all units in scope of the mining collection that were at the production stage at any time during the year. They also include any temporarily inactive units, i.e. those units which were in the development stage or which were not in production, but which still existed and held assets and liabilities and/or incurred some non-operating expenses (e.g. depreciation, administration costs).

RELIABILITY OF ESTIMATES

INDUSTRY PERFORMANCE MEASURES

- **26** For information about this subject, see Technical Note 2.
- **27** This publication presents a wide range of data that can be used to analyse business and industry performance.
- **28** Differences in accounting policy and practices across businesses and industries can lead to some inconsistencies in the data input to the statistics. Although much of the accounting process is subject to standards, there is still a great deal of flexibility left to managers and accountants in the accounting policy and practices that they adopt. For example, the way profit is measured is affected by management policy about such issues

INDUSTRY PERFORMANCE
MEASURES continued

as depreciation rates, bad debt provisions and write off, and goodwill write off. The varying degree to which businesses consolidate their accounts may also affect any industry performance measures calculated.

- **29** A range of performance measures, usually expressed as ratios, can be produced from the data available from businesses' financial statements. Others, relating to labour inputs, can be derived by expressing financial or economic variables on a per person employed basis. The performance measures presented in this publication comprise:
  - profitability ratios, which measure the rate of profit on sales
  - debt ratios, which indicate the ability of businesses to meet the cost of debt financing
  - labour measures, which relate output, labour costs and employment
  - capital expenditure ratios, which indicate the extent of business investment in capital assets.
- **30** A further explanation of each ratio can be found in the Glossary. Please note that some of the ratios are new to this issue of the publication.
- **31** Those ratios compiled from a combination of flow (whole period) and level (beginning or end of period) items need to be treated with additional caution. Ratios which include both level and flow items in their derivation may be volatile due to the timing differences involved. In particular, this should be taken into account when considering those measures expressed as values per person employed. It may, therefore, be preferable to base any analysis on a range of data presented rather than focusing on one variable.
- **32** The above limitations are not meant to imply that analysis based on these data should be avoided, only that they should be borne in mind when interpreting the data presented in this publication.
- **33** State and territory summary estimates for selected mining (i.e. total Mining excluding ANZSIC Subdivision 15 Services to mining) are presented in table 3.1. To enable the production of these estimates, businesses included in the mail out survey were asked to report data for employment, wages and salaries, and sales of goods and services, for each state and/or territory in which they operated, if more than one. The relevant data for all other businesses, including those whose contribution was sourced from BIT data, were allocated to their state/territory of operations as recorded on the ABSBR. Further statistical modelling enabled the production of state and territory estimates for industry value added.
- **34** The design of the mining collection does not take into account the state/territory in which businesses are based or in which they operate. As a result, these state and territory estimates are particularly subject to variation from year to year because of rotation of businesses into and out of the sample.
- 35 The Joint Petroleum Development Area (JPDA) is an area in the Timor Sea, about 500 km north west of Darwin. A Treaty between Australia and East Timor, which entered into force on 2 April 2003, provides the necessary framework arrangements for companies to exploit resources in the JPDA. Data relating to activity in the JPDA is included in estimates for the Northern Territory. Further, as a reflection of the joint Australia/East Timor administration of exploration and production activity in the JPDA, 50% of income and expenditure relating to the JPDA is excluded from the estimates.
- **36** State and Northern Territory commodity production statistics are presented in Chapter 4 (see Explanatory Notes paragraphs 38–41 for details).
- **37** Data in this publication have been adjusted to allow for lags in processing new businesses to the ABSBR. The effect of these adjustments is an increase of 0.4% on the Australian estimate of sales and service income for total Mining.

STATE AND TERRITORY ESTIMATES

NEW BUSINESSES

COMMODITY PRODUCTION DATA

- **38** Chapter 4 of this publication presents details of the value of minerals produced during the year ended 30 June 2005.
- **39** These data are based on annual publications and other information supplied by the various state and Northern Territory departments responsible for the collection of these statistics. For the first time, these data are presented in accordance with a new framework for categorising the products of the mining industry. Table 4.1 shows values of production for the four broad categories within this framework: Fuel minerals, Metallic minerals, Industrial minerals, and Construction materials. The presentation of these data is designed to give an overview of the level of mining activity within each state and the Northern Territory.
- **40** In previous issues of this publication, the ABS showed the full level of commodity detail (quantity and value) released by the relevant authorities. This level of detail is now provided, on the basis of the new framework, from 2001–02 reference year onwards in a spreadsheet which accompanies the release of this publication. The spreadsheet has been footnoted to document conceptual differences relating to scope, coverage, valuation or any other aspect.
- **41** The commodity production data in each state and the Northern Territory were originally produced by the respective departments' web sites and publications:

New South Wales: NSW Department of Primary Industries,

<a href="http://www.dpi.nsw.gov.au/minerals">http://www.dpi.nsw.gov.au/minerals</a>>

Quantity and value of major mining products in New South Wales

 $\label{lem:primary Industries} Victoria: Department of Primary Industries, <& http://www.dpi.vic.gov.au> \\$ 

Minerals and Petroleum Victoria, Statistical Review

Queensland: Department of Natural Resources and Mines,

<a href="http://www.nrm.qld.gov.au">http://www.nrm.qld.gov.au</a>

Queensland Minerals and Energy Review

South Australia: Department of Primary Industries and Resources,

<a href="http://www.pir.sa.gov.au">http://www.pir.sa.gov.au</a>

Resource Production Statistics, biannual

Western Australia: Department of Industry and Resources,

<a href="http://www.doir.wa.gov.au">http://www.doir.wa.gov.au</a>

Western Australian Statistics Digest, Mineral and Petroleum Production

Tasmania: Department of Infrastructure, Energy and Resources,

<a href="http://www.dier.tas.gov.au">http://www.dier.tas.gov.au</a>

Mineral Resources Tasmania, Annual Review

Northern Territory: Department of Primary Industries, Fisheries and Mines,

<a href="http://www.minerals.nt.gov.au">http://www.minerals.nt.gov.au</a>

Annual Production Report

ACKNOWLEDGMENT

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

RELATED PUBLICATIONS

- **43** The ABS produces industry estimates for a range of selected industries (including mining) and these results are to be available in *Australian Industry*, 2004–05 (cat. no. 8155.0), expected to be released on 21 December 2006.
- 44 National estimates of income, expenditure and associated ratios will be available at the ANZSIC division level (with a greater range of data available via the ABS web site in spreadsheet form). Some data presenting greater detail are considered experimental at this stage, while the methodology used to produce them is reviewed and improved. These consist of national estimates of income, expenses, operating profit before

RELATED PUBLICATIONS continued

tax(OPBT), and wages and salaries, at the ANZSIC class level, and state/territory estimates of these items at the ANZSIC division level.

**45** The following publications and electronic releases also contain information about the mining industry:

Australian Bureau of Statistics Business Register, Counts of Businesses – Summary Tables, cat. no. 8161.0.55.001, released on 7 October 2005 – Annual release Australian Industry, 2003–04, cat. no. 8155.0, released on 9 August 2006 – Annual publication

Australian Labour Market Statistics, cat. no. 6105.0 – Quarterly publication Australian National Accounts: National Income, Expenditure and Product, cat. no. 5206.0 – Quarterly publication

Australian National Accounts: State Accounts, 2004–05, cat. no. 5220.0, released on 9 November 2005 – Annual publication

Business Indicators, Australia, cat. no. 5676.0 – Quarterly publication

Directory of Mining Statistics, cat. no. 8416.0, released on 29 October 1999

– Irregular publication

Electricity, Gas, Water and Sewerage Operations, Australia, 2004–05, cat. no. 8226.0, released on 13 October 2006 – Annual publication International Trade in Goods and Services, Australia, cat. no. 5368.0 – Monthly publication

International Trade Price Indexes, Australia, cat. no. 6457. 0

- Quarterly publication

Job Vacancies, Australia, cat. no. 6354.0 – Quarterly publication
Labour Costs, Australia, 2002–03, cat. no. 6348.0.55.001, released on 11 June 2004

– Irregular electronic publication

Mineral and Petroleum Exploration, Australia, cat. no. 8412.0 – Quarterly publication

Mining Indicators, Australia, cat. no. 8417.0 – Quarterly electronic publication Private New Capital Expenditure and Expected Expenditure, Australia, cat. no. 5625.0 – Quarterly publication

Producer Price Indexes, Australia, cat. no. 6427.0 – Quarterly publication Research and Experimental Development, Businesses, Australia, 2004–05, cat. no. 8104.0, released on 28 August 2006 – Annual publication Year Book Australia, 2006, cat. no. 1301.0, released on 20 January 2006 – Annual publication

- **46** Current publications and other products released by the ABS are listed in the *Catalogue of Publications and Products* (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <a href="http://www.abs.gov.au">http://www.abs.gov.au</a>. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.
- **47** The following organisations also publish mining and related statistics for Australia: ABARE, web site <a href="http://www.abareconomics.com">http://www.abareconomics.com</a>

Australian Commodities (forecasts and issues)

Australian Commodity Statistics

Australian Mineral Statistics

Geoscience Australia, web site <a href="http://www.ga.gov.au">http://www.ga.gov.au</a>

Australia's Identified Mineral Resources

Oil and Gas Resources of Australia

Minerals Council of Australia, web site <a href="http://www.minerals.org.au">http://www.minerals.org.au</a>

Minerals Industry Survey Report, 2004

United States Department of the Interior, US Geological Survey, web site <a href="http://www.geology.usgs.gov">http://www.geology.usgs.gov</a>

Non-ABS data

Non-ABS data continued

Mineral Commodity Summaries The Mineral Industry of Australia

ABS DATA AVAILABLE ON REQUEST

**48** As well as the statistics included in this and related publications, the ABS may have other relevant data available on request and for a charge. Inquiries should be made to the National Information and Referral Service on 1300 135 070.

ROUNDING

- **49** Where figures have been rounded, discrepancies may occur between totals and the sums of the component items. Due to data being adjusted for lags in processing new businesses to the ABS Business Register (see paragraph 37), this 'rounding rule' also applies to employment estimates.
- **50** Proportions, ratios and other calculated figures shown in this publication have been calculated using unrounded estimates and may be different from, but are more accurate than, calculations based on the rounded estimates.

#### **APPENDIX**

#### SURVEY CHANGES - COMMODITY ITEMS

#### INTRODUCTION

- **1** This Appendix lists items included in the mining commodities framework that has been introduced with this issue of the publication. It shows the content of each of the broad categories for which data are presented in Chapter 4.
- **2** The data produced are derived from data collected by the state and Northern Territory mines departments.

#### AVAILABILITY OF DATA

- **3** The Construction materials items shown in this table preceded by the word "including" illustrate the sorts of commodities that may be reported by individual jurisdictions as part of the item in which they are included. In general, they represent items for which data are not sufficiently comparable across jurisdictions (because of differences in definitions and/or scope and coverage) to enable a national total to be produced.
- **4** Production quantity and value data for all other items listed below are available, in a series starting from 2001–02 reference year, in the spreadsheets that accompany this publication: see the ABS website using the link below. These spreadsheets also contain definitions and some guidance about general principles used in compiling the data in accordance with this framework.
- **5** To access the commodity data, go to the ABS home page <a href="http://abs.gov.au">http://abs.gov.au</a>. Select the 'Access to all ABS products & statistics' from the 'All Statistics' tab menu bar on the left hand side. On the 'Statistics' page, choose 'By Catalogue Number' under 'All Statistics'. Find 8415.0 for 2004–05; the detailed commodity Excel spreadsheets are located under the 'Details' tab.

#### MINERAL COMMODITY DATA ITEMS, 2004-05

### Fuel minerals

Black coal (saleable)

Brown coal
Crude oil
Condensate
Shale oil
Natural gas
Coal seam methane
Liquefied natural gas

Liquefied petroleum gas Propane Butane

Ethane Carbon dioxide

### Metallic minerals

Antimony (metal content)

Bauxite

Cadmium (metal content)
Cobalt (metal content)
Copper (metal content)
Gold (metal content)

#### Metallic minerals cont.

Iron ore and concentrate Iron ore pellets Lead (metal content) Nickel (metal content) Palladium (metal content) Platinum (metal content) Silver (metal content) Tin (metal content) Uranium oxide Zinc (metal content)

#### Industrial minerals

Zinc/lead concentrate

Barite
Chromite
Clays
Bentonite
Attapulgite
Kaolin
Structural clays

41

#### MINERAL COMMODITY DATA ITEMS, 2004-05 continued

#### Industrial minerals cont. Industrial minerals cont. Titanium minerals Diamond Rutile Diatomite Dimension stone Vanadium Basalt Vermiculite Granite Zeolite Limestone Zircon Marble **Construction materials** Sandstone Crushed and broken rock Slate (includes flagstone) (including Crushed rock-broken, Armour, Other and/or unspecified rock Rip rap and spalls, Concrete aggregate, Feldspar Sealing aggregate, Screenings, Asphalt aggregate, Garnet (industrial grades only) and Staurolite Rail Ballast, Crusher fines, Other/unspecified Garnet aggregate, Road base, Road sub base, Staurolite Crushed rock - road sub/base, Crushed and broken stone, Aggregate, Rock, Crushed rock, Gems and ornamental stones Other rock types excluding gravel and river Gems gravel, Crushed rock - fine aggregate Opal (manufactured sand)) Sapphire Other Construction sand (including Natural sand-premixed/ready mixed Ornamental stones concrete, Concrete sand, Concrete products, Gypsum Asphalt sand, Natural sand - mortar sand, Iron oxides Bricklaying sand, Plastering sand, Packing or Magnetite filling sand, Other and/or unspecified Other iron oxides construction sand, Fine sand, Specification sand, Shellgrit, Quarry sand, Washed sand, Limestone and limesand Bitumen sand, General sand, Building sand) Limestone for: Cement Gravel Lime (including River gravel - crushed, River gravel -Agricultural use unprocessed, Ridge/other gravel, Decorative Metallurgical flux stone - Crushed rock, Decorative stone -Chemical uses River gravel (naturally rounded)) Other and/or unspecified uses Soil, loam, and garden sand Limesand (including Loam, garden sand or loam, Soil) Magnesium-rich materials Other construction materials Magnesite (including Unspecified, Unprocessed Dolomite construction material, Filling, Rubble, Fill) Serpentinite Manganese ore Mica Peat Perlite Phosphate rock Pyrophyllite Salt Silica Lump (quartz, quartzite, chert) Sand Unspecified silica Scheelite Sillimanite Spodumene Spongolite Talc Tantalum Titanium minerals Ilmenite Synthetic rutile Leucoxene

#### TECHNICAL NOTE 1

### METHODOLOGY .....

INTRODUCTION

- **1** The industry estimates in this publication are produced using a combination of ABS directly collected data and Business Income Tax (BIT) data sourced from the Australian Taxation Office (ATO).
- **2** The directly collected data have been reported by a sample of mining businesses, as recorded on the ABS Business Register (ABSBR). The ABS uses an economic statistics units model on the ABSBR to describe the characteristics of businesses, and the structural relationships between related businesses. Within large and diverse business groups, the units model is used also to define reporting units that can provide data to the ABS at suitable levels of detail.

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

ATO MAINTAINED POPULATION

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

ABS MAINTAINED POPULATION

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

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

Enterprise: An institutional unit comprising:

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

ABS MAINTAINED
POPULATION continued

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

CONTRIBUTION OF THE STATISTICAL UNITS TO THE ESTIMATES

**6** The following paragraphs outline the way in which these categories of statistical units contribute to the estimates of financial and economic variables presented in this publication. Estimates of employment are derived in a different manner; see paragraph 14 below

TAUs

- **7** All units in the ABS maintained population (i.e. TAUs) classified to MINING were eligible to be selected for direct collection. Direct collection of data from these units is necessary because:
  - many large and complex employing businesses have more than one legal entity, making it difficult to identify all legal entities for that business in the BIT data
  - BIT data do not include all of the detailed information that the ABS requires from large and complex businesses.
  - 'tax exempt' businesses that are not required to complete business income tax returns would otherwise not contribute to the statistics.

ABN units

- **8** The balance of units on the ABSBR classified to Mining were ABN units, from the ATO maintained population. Cut-offs were established which determined the way in which each ABN unit contributed to the statistics:
- First, ABN units with annualised Business Activity Statement (BAS) total sales (used in lieu of EAS total income) at or greater than the cut-offs set for individual ANZSIC categories were eligible to be selected for direct collection of data by the ABS. If selected, they were sent the same mail out questionnaire for completion that was sent to selections from the ABS maintained population.
- Second, ABN units with annualised BAS total sales below the cut-offs were excluded from direct collection. For these units, BIT data were obtained and added to the directly collected estimates to produce the statistics in this publication.

CUT-OFFS FOR ABN UNITS

- **9** Cut-offs for ABN units were originally established for the 2001–02 collection year, which was the first to incorporate BIT data from the ATO. More information about how the initial cut-offs were set is shown in Appendix 1: Survey Changes in the 2001–02 and 2002–03 issue of this publication. Turnover cut-offs have not changed from the initial year.
- **10** For 2004–05, a cut-off of:
  - \$1m applied for ANZSIC Subdivisions 11 and 12 and Classes 1311, 1313, 1315, and 1316
  - \$0.5m applied for ANZSIC Group 152 and Class 1314
  - \$0.25m applied for ANZSIC Groups 141 and 142, and Class 1319.
- **11** No cut-off applied for ANZSIC Group 151 and Class 1312.

## PRODUCING MINING INDUSTRY ESTIMATES

- **12** Therefore, the 2004–05 mining industry estimates have been derived as follows:
- A sample survey was used to estimate the contribution of
  - all businesses in the ABS maintained population
  - those businesses at or above the cut-offs in the ATO maintained population
  - 'tax exempt' businesses, that are not required to complete business income tax returns (and so would otherwise not contribute to the statistics)
- For the balance of businesses (i.e. in the ATO maintained population below the cut-offs for their ANZSIC category), their contribution was sourced from BIT data, with some more detailed breakdowns produced using proportional relationships derived from the sample survey. The derivation of employment estimates is discussed below.

Income contribution by unit type

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

#### CONTRIBUTION TO SALES AND SERVICE INCOME(a)

ABSBR	ATO BIT data	Directly collected data	Total
unit	%	%	%
ABN units TAUs	5.6 —	10.2 84.2	15.8 84.2
Total	5.6	94.4	100.0

- nil or rounded to zero (including null cells)
- (a) Includes rent, leasing and hiring income

#### EMPLOYMENT ESTIMATES

**14** One implication of the use of BIT data in these statistics is that no direct measure of employment is available for those units which contribute to the estimates through the BIT source. This is because the ATO does not collect information about employment numbers. Unlike financial variables, which have a direct relationship to the data available from the BIT files, employment data are not amenable to being modelled using the same techniques. Hence a different methodology is used in order to estimate employment for those units whose data are sourced from the BIT files. For each business, an estimate of employee numbers is derived from its value of wages and salaries (if any) using industry averages. For each unincorporated business, these employee numbers are then added to an estimate of its number of working proprietors or partners, to produce an estimate of the total employment of the business. These estimates are then aggregated to the directly collected data to produce the estimates in this publication.

#### TECHNICAL NOTE 2 DATA RELIABILITY .....

ABS SURVEY DATA

Sample error

- **1** For 2004–05 the mining collection was, in part, a sample survey designed primarily to deliver industry subdivision and selected class estimates for Australia. Industry division estimates (excluding Subdivision 15 Services to Mining) for states and territories for key data variables are also produced, but the survey was not specifically designed for these purposes.
- 2 The majority of data in Chapters 1 to 3 of this publication have been obtained from a sample of mining businesses. As such, these data are subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all mining businesses in the population. The measure of the likely difference as used by the ABS is given by the standard error, which indicates the extent to which an estimate might have varied by chance because the data were obtained from only a sample of units. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the data had been obtained from all units, and about 19 chances in 20 that the difference will be less than two standard errors.
- **3** The standard error can also be expressed as a percentage of the estimate, and this is known as the relative standard error (RSE).
- **4** Relative standard errors at the industry subdivision and selected class level for Australia for selected data items representing the full range of data contained in this publication are shown in the table below. The relative standard errors of the selected estimates for the states and territories are mainly 5% or less. Detailed relative standard errors can be made available on request.
- **5** To illustrate the above, the estimate of sales and service income for total mining in 2004–05 was \$71,046m. The RSE of this estimate is shown as 0.9%, giving a standard error of approximately \$639m. This implies that there are two chances in three that, if all units had been included in the survey, an estimate in the range of \$70,407m to \$71,685m would have been obtained. Similarly, it implies that there are 19 chances in 20 (i.e., a confidence interval of 95%) that the estimate would have been within the range of \$69,768m to \$72,324m.

#### RELATIVE STANDARD ERRORS

	Employment at end of June	Wages and salaries(a)	Sales and service income(b)	Industry value added
Industry	%	%	%	%
11 Coal mining	1.7	1.5	2.5	1.1
12 Oil and gas extraction	_	_	0.2	0.1
13 Metal ore mining				
1311 Iron ore mining	_	_	_	_
1313 Copper ore mining	_	_	_	_
1314 Gold ore mining	1.8	1.8	2.2	6.2
1315 Mineral sand mining	_	_	_	_
1317 Silver-lead-zinc ore mining 1312, 1316 and 1319 Bauxite mining,	_	_	_	_
nickel ore mining and metal ore mining n.e.c.	_	_	_	_
Total metal ore mining	0.6	0.6	0.5	0.7
11–13 Total coal mining, oil and gas extraction				
and metal ore mining	0.7	0.7	0.9	0.4
14 Other mining	4.5	4.6	7.3	5.7
15 Services to mining	6.4	4.1	4.6	7.4
11–15 Total mining	1.9	1.2	0.9	0.7

nil or rounded to zero (including null cells)

Sample error continued

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

Non-sample error

- **7** The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of inadequacies in available sources from which the population frame was compiled, imperfections in reporting by providers, errors made in collection such as in recording and coding data, and errors made in processing data. Inaccuracies of this kind are referred to collectively as non-sampling error and they may occur in any enumeration, whether a full census or a sample.
- **8** 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.
- **9** The mineral production data shown in Chapter 4 are mainly compiled from data produced by the state and Northern Territory departments responsible. For information about the comparability of these data, please see the introduction to that chapter.

NON-ABS DATA

<sup>(</sup>b) Includes rent, leasing and hiring income.

a) Excludes the drawings of working proprietors.

### GLOSSARY .....

Data presented in Chapters 1 to 3 of this publication have been compiled from the standard financial accounts of businesses; therefore, the definition of each reported item aligns closely with that adopted in standard business accounting practice. Definitions of particular terms, as used in this publication, are also included.

ABN unit

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

Acquisitions

See the various capital expenditure entries.

Bad and doubtful debts

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

Business

A business is generally considered to be a person, partnership, or corporation engaged in business or commerce; for example, a gold mining business.

In this publication, the term represents the ABN unit or type of activity unit (TAU), which are the two standard statistical units for the 2004–05 mining collection (these two units are explained under separate entries). For details, see Explanatory Notes paragraphs 6–10.

Business Activity Statement (BAS) total sales

Represented by the form item G1 *Total sales* on businesses' Business Activity Statements, supplied by them to the ATO. This item comprises all payments and other consideration (including GST) received during the nominated tax period for supplies made in the course of business.

Capital expenditure on dwellings, other buildings and structures

Capital expenditure incurred acquiring dwellings, other buildings and structures, including roads, factories, warehouses, offices, bridges, mine development, and oil and gas platforms. Represents expenditure before deduction of trade-in allowances, and includes expenses (except capitalised interest) incurred during the year in acquiring such assets.

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

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

Capital expenditure on plant, machinery and equipment

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

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Capital work done for own use

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

Capitalised purchases

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

Capitalised wages and salaries

Capitalised payments for work done by employees of a business in manufacturing, constructing, installing or repairing assets, in mineral and petroleum exploration activities, and in the in-house development of computer software, for use by the business or for rental or lease.

Chain volume measures

Annually-reweighted chain Laspeyres volume indexes referenced to the current price values in a chosen reference year (i.e. the year when the quarterly chain volume measures sum to the current price annual values). Chain Laspeyres volume measures are compiled by linking together (compounding) movements in volumes, calculated using the average prices of the previous financial year, and applying the compounded movements to the current price estimates of the reference year. Quarterly chain volume estimates are benchmarked to annual chain volume estimates, so that the quarterly estimates for a financial year sum to the corresponding annual estimate.

Generally, chain volume measures are not additive. In other words, component chain volume measures do not sum to a total in the way original current price components do. In order to minimize the impact of this property, the ABS uses the latest base year as the reference year. A change in reference year changes levels but not growth rates, although some revision to recent growth rates can be expected because of the introduction of a more recent base year (and revisions to the current price estimates underlying the chain volume measures).

For details, see *Australian National Accounts: National Income, Expenditure and Product, December Quarter 2005* (cat. no. 5206.0).

Change in inventories

The value of total closing inventories less total opening inventories.

Closing inventories

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

Contract mining expenses

Contract payments for mining services. Includes amounts paid/payable to mining contractors and associated freight charges for materials brought in by the contractor.

Cost of sales

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

Current prices

Estimates at current prices are valued at the prices of the period to which the observation relates. For example, estimates for 2004–05 are valued using 2004–05 prices. This contrasts to chain volume measures, where the prices used in valuation refer to the prices of a previous period.

Depreciation and amortisation

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

Disposal of assets

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

Earnings before interest and tax (EBIT)

Profit prior to the deduction of interest expenses and income tax.

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## Employer contributions into superannuation

Includes salary sacrifice. Also includes all employer contributions to superannuation funds (including the employer productivity contribution) and provisions for employer contributions to superannuation funds. Employee contributions are excluded.

#### Employment at end of June

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

In order to produce data by state and territory, businesses which received mail out questionnaires were also asked to report employment (as well as wages and salaries, and sales of goods and services) for each state and/or territory in which they operated. For details, see Explanatory Notes paragraphs 33–36.

For details of how employment estimates have been derived, see Technical Note 1 paragraph 14.

#### Energy grants credit

See the entry for funding from government: energy grants credit.

#### Enterprise

An institutional unit comprising:

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

#### Enterprise group

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

#### Freight and cartage expenses

Includes handling charges and payments to owner/drivers for delivery of minerals. Excludes the cost of delivery by own vehicles and employees, overseas freight and cartage on goods exported, and payments to couriers.

# Funding from government: energy grants credit

Amount reimbursed under the Australian Government's Energy Grants (Credit) Scheme. This scheme replaced the Diesel Fuel Rebate Scheme and the Diesel and Alternate Fuels Grant on 1 July 2003, and provides a grant for diesel and alternative fuels used in specified activities.

# Funding from government for other operational costs

Funding from federal, state and/or local government for operational costs (e.g. wages and salaries, rent, food) apart from Energy Grants (Credit) Scheme funding (which is separately published). Includes bounties, subsidies, export grants, apprenticeship and traineeship schemes, and community service obligation payments.

## Funding from government for specific capital items

Includes capital grants, and low interest or interest free loans made by government to businesses to encourage expenditure on specific equipment (e.g. environmental protection equipment).

#### Gross value added

The value of output at basic prices minus the value of intermediate consumption at purchasers' prices. The term is used to describe gross product by industry and by institutional sector. Basic prices valuation of output removes the distortion caused by variations in the incidence of commodity taxes and subsidies across the output of individual industries. For details, please refer to *Australian National Accounts: National Income, Expenditure and Product, December Quarter 2005* (cat. no. 5206.0).

#### 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 mining businesses to gross domestic product.

The derivation of IVA is as follows:

Sales and service income

plus Funding from federal, state and/or local government

for operational costs

plus Capital work done for own use

plus Closing inventoriesless Opening inventories

less Purchases of goods and materialsless Other intermediate input expenses

(for details, see the entry for total expenses)

equals IVA

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

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

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

## Industry value added to selected labour costs

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

#### Insurance premiums

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

#### Interest coverage

The number of times that businesses can meet their interest expenses from their earnings before interest and tax, i.e. earnings before interest and tax / interest expenses.

#### Interest expenses

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

#### Interest income

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

#### Intermediate input expenses

For details, see the entry for total expenses.

#### Intermediate inputs

Intermediate inputs consist of materials and certain services which are used up in the production process.

The calculation is:

Intermediate input expenses

(for details, see the entry for total expenses)

plus Opening inventories less Closing inventories equals Intermediate inputs Inventories – opening/closing

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

Investment rate (value added)

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

Motor vehicle running expenses

Includes expenditure on registration fees, compulsory third-party insurance premiums, fuel, and repair and maintenance expenses. Excludes expenses for off-road motor vehicles (e.g. mobile plant, quarry dump trucks) and lease payments, optional third party and comprehensive motor vehicle insurance premiums, and depreciation.

Natural resource royalty expenses

Includes payments under mineral lease arrangements, and resource rent taxes and royalties. Excludes payments for royalties from intellectual property (e.g. patents and copyrights) and expensed computer software licence fees, (both of which are included under other operating expenses), and capitalised computer software licence fees (included under capital expenditure). Gold tax payments are also excluded. See the entry for total expenses for the definition of other operating expenses.

Net capital expenditure

The value of total capital expenditure less proceeds received from the disposal of assets.

Opening inventories

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

Operating profit before tax (OPBT)

Profit before extraordinary items are brought to account and prior to the deduction of income tax and appropriations to owners (e.g. dividends paid), i.e. total income – total expenses + change in inventories.

Other contract, subcontract and commission expenses

Payments to other businesses and self-employed persons for work done or sales made on a contract or commission basis. Payments to persons paid by commission without a retainer are also included. Includes payments to owner drivers for removal of material, but not for delivery of the final mineral product. Excludes contract mining expenses, published separately.

Other income

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

Other intermediate input expenses

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

Other selected expenses

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

Production volumes

See the entry for chain volume measures.

Profit margin

The percentage of sales and service income available as operating profit before tax (OPBT), i.e. (OPBT / sales and service income)  $\times$  100.

## Purchases and selected expenses

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

### Purchases of goods and materials

Purchases of materials, components, explosives, containers, packaging materials, fuels, electricity and water, and purchases of minerals and other goods for resale. Also includes capitalised purchases. Excludes purchases of parts and fuels for motor vehicles, but includes fuels for off-road vehicles, such as mobile plant and quarry dump trucks.

#### Reference period

For each collection year, businesses are asked to report data for the financial year ended 30 June. However, if a business has a different financial year, it is asked to report (apart from employment) for the 12 month period which ends between 1 October of the previous year and 30 September of the current year. This period is then used as a substitute for the financial year ended 30 June. For example, for the 2004–05 collection, a business may have reported data for the year ended 31 December 2004.

## Rent, leasing and hiring expenses

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

### Rent, leasing and hiring income

For details, see the entry for sales and service income.

### Repair and maintenance expenses

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

#### Sales and service income

#### Comprises:

#### Sales of goods

whether or not produced by the business (including goods produced for the business on a commission basis). Includes 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, and sales of goods produced by the business from crude materials purchased. Excludes excise and duties received on behalf of the Government (e.g. the petroleum production excise duty), sales of assets, 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).

#### Income from services

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

### Rent, leasing and hiring income

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

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

Sales and service income

continued

In order to produce data by state and territory, businesses which received mail out questionnaires were also asked to report sales of goods and services (as well as employment and wages and salaries) for each state and/or territory in which they operated. For details, see Explanatory Notes paragraphs 33–36.

Selected expenses

See the entry for purchases and selected expenses.

Selected labour costs

See the entry for total expenses.

Selected labour costs per person employed

The value of selected labour costs paid by mining businesses which operated during the given year ended 30 June divided by the number of persons employed by mining businesses during the last pay period ending in June of that same year.

Selected mining (table 3.1)

Comprises all classes in ANZSIC Division B Mining except Subdivision 15 Services to mining.

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

Superannuation

See the entry for employer contributions into superannuation.

Total expenses

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

Those expenses used for calculations are categorised as follows:

#### Intermediate input expenses

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

Purchases of goods, materials and services used in production, which include:

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

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

- management fees/charges paid to related and unrelated businesses
- bank charges other than interest
- audit and other accounting expenses
- legal fees
- advertising expenses
- postal and telecommunication expenses
- office supplies and printing expenses
- travelling, accommodation and entertainment expenses
- staff training

#### Total expenses continued

- payments for royalties from intellectual property (e.g. patents and copyrights)
- payments to employment agencies for staff.

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

#### Selected labour costs

- wages and salaries (including provisions for employee entitlements)
- employer contributions into superannuation (including salary sacrifice)
- workers' compensation premiums/costs.

#### Other operating expenses

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

These expenses are included in table 2.2 as:

#### individually listed items

- bad and doubtful debts
- depreciation and amortisation
- insurance premiums (except workers' compensation and compulsory third party motor vehicle insurance premiums)
- interest expenses
- natural resource royalty expenses

#### part of other selected expenses

- computer software expenses not capitalised by businesses
- land tax and land rates
- mineral/petroleum exploration expenses not capitalised by businesses
- payroll tax and fringe benefits tax
- other expenses not capitalised by businesses.

#### Total factor income

That part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour and capital). It represents the value added by these factors in the process of production, and is equivalent to gross domestic product less taxes plus subsidies on production and imports. For details, please refer to *Australian National Accounts: State Accounts, 2004–05* (cat. no. 5220.0).

#### Total income

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

#### Total mining

Comprises all classes in ANZSIC Division B Mining (i.e. Subdivisions 11–15).

#### Trading profit

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

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

#### Type of activity unit (TAU)

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

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

#### Wages and salaries

The gross wages and salaries (including capitalised wages and salaries) of all employees of the business. The item includes severance, termination and redundancy payments, salaries and fees of directors and executives, retainers and commissions of persons who received a retainer, bonuses, and annual and other types of leave. Provision expenses for employee entitlements (e.g. provisions for annual leave and leave bonus, long service leave, sick leave, and severance, termination and redundancy payments) are also included. Payments related to salary sacrifice and payments to self-employed persons such as consultants, contractors and persons paid solely by commission without a retainer are excluded. The drawings of working proprietors and partners are also excluded.

In order to produce data by state and territory, businesses which received mail out questionnaires were also asked to report wages and salaries (as well as employment and sales of goods and services) for each state and/or territory in which they operated. For details, see Explanatory Notes paragraphs 33–36.

Wages and salaries per person employed

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

Wages and salaries to sales and service income ratio

The wages and salaries paid by mining businesses which operated during the given year ended 30 June as a proportion of the sales and service income of mining businesses which operated during the same year.

Workers' compensation premiums/costs

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

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