



1997-98

New
Issue

8415.0

MINING OPERATIONS AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) FRI 29 OCT 1999

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- For further information about these and related statistics, contact Jeff Bulger on Adelaide 08 8237 7621, or Client Services in any ABS office as shown on the back cover of this publication.

NOTES

ABOUT THIS PUBLICATION

This publication presents information relating to the mining industry. All data has been derived from the Australian Bureau of Statistics (ABS) 1997–98 Mining Collection, which is a combination of census and sample survey collections. Some comparative statistics relating to earlier years are also provided. Preliminary results were released in *Mining, Electricity and Gas Operations, Australia, Preliminary, 1997–98* (Cat. no. 8401.0) in February 1999.

This issue includes estimates for industry value added (IVA) which measures the value added by an industry to the intermediate inputs used by the industry. Under new international standards, this measure will replace industry gross product (IGP) in this publication as the measure of an industry's contribution to gross domestic product, commencing with the estimates for 1997–98.

Estimates are presented in table 1.1 on the basis of both the previous and new standards. See paragraph 28 of the Explanatory Notes and the Glossary for details of the composition of the relevant variables and for explanations of the differences between the new and previous standards as they apply to estimates in this publication.

The ABS mining collection aims to meet the demands of users who require annual financial statistics which can be related to other industry sectors in Australia on a consistent basis.



DEFINITION OF MINING

Mining broadly 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 dressing or beneficiating ores or other minerals by crushing, milling, screening, washing, flotation or other processes (including chemical beneficiation) or briquetting, 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. Further explanation on the scope and definition of mining is given in the Explanatory Notes, paragraphs 4–10.



REVISIONS

Some of the 1996–97 data has been revised to take account of changes to data which was previously published in the 1996–97 issue of *Australian Mining Industry* (Cat. no. 8414.0) which is now released in alternate years to this publication (Cat. no. 8415.0). This publication provides data from the Mining Collection only whereas publication 8414.0 provides additional data from other ABS collections and external sources.

T.J. Skinner
Acting Australian Statistician

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CHAPTER 1

FINANCIAL OPERATIONS

INTRODUCTION

Statistics in this chapter are presented at both the management unit and establishment levels. Statistics collected at the management unit level can contain data about activities normally associated with industries other than mining, because of the inclusion of establishments that are part of that management unit but that are not predominantly engaged in the mining industry (see paragraphs 11–16 of the Explanatory Notes for further detail).

The commentary refers to summary tables 1.1–1.3, while more detailed tables appear at the end of this chapter. Tables 1.4–1.7 relate to management units while tables 1.8–1.13 relate to establishment data. The Glossary provides definitions for the terms used.

MANAGEMENT UNIT SUMMARY

The following summary relates to Australian and New Zealand Standard Industrial Classification (ANZSIC) Subdivisions 11–13 (incorporating coal mining, oil and gas extraction and metal ore mining) but excludes Subdivisions 14 and 15 (other mining and services to mining). Details for Subdivisions 14 and 15 are included in table 1.1.

The Australian mining industry has been subject to many of the forces that have affected the resources sector worldwide during 1997–98. The economic downturn in Asia coupled with continued growth in production has resulted in oversupply in many markets. This has had a negative effect on prices although the weaker Australian dollar has helped to insulate Australian producers to a certain extent.

Turnover

Total turnover increased by 8% to \$37.9b in 1997–98. Although prices declined for most commodities, increased production and changes to work practices allowed turnover to increase. This was most evident in the coal mining industry where turnover increased by \$1.1b (10%) to \$12.0b. Despite depressed prices for gold and copper, the metal ore mining industry reported an increase of \$1.3b (8%) to \$16.3b.

Industry value added

National industry value added (IVA) in 1997–98 was \$21.0b. The oil and gas extraction industry and metal ore mining industry both accounted for \$7.7b. For comparison, industry gross product (IGP) for 1997–98 was \$20.2b, an increase of \$986m (5.1%).

Trading profit

Total trading profit increased by \$1.1b (6%) to \$19.6b in 1997–98. This increase was primarily due to an increase of \$2.8b (8%) in the value of sales of goods and services. In contrast, the cost of sales rose by \$1.7b (10%). Trading profit rose by \$446m (9%) to \$5.2b in the coal mining industry mainly due to an increase in production levels, although contract mining expenses increased by \$210m (42%), a sign of continued industry restructuring. In the metal ore mining industry trading profit rose by \$563m (9%) to \$6.8b due to an increase in the value of sales of goods and services across all commodities. Several new mines coming on stream in the iron ore mining and copper ore mining industries also contributed to the increase.

Earnings before interest and tax

Earnings before interest and tax (EBIT) decreased by \$1.3b (14%) to \$8.0b in 1997–98. The primary reason for the decrease was a fall of \$1.5b in revenue gained from other income. The oil and gas extraction industry reported a decrease in EBIT of \$750m (15%) to \$4.1b. This was mainly due to other income falling by \$589m because of a payment to the industry in 1996–97 to recover Petroleum Resource Rent Tax. Within the coal mining industry foreign exchange losses related to the weaker Australian dollar contributing to the fall in other income, which saw EBIT fall by \$255m (18%) to \$1.2b. In the metal ore mining industry, write-downs and abnormals were contributors to the decline in EBIT of \$273m (9%) to \$2.7b. Increased depreciation expenses were reported across all sectors.

Operating profit before tax

Operating profit before tax (OPBT) mirrored movements in EBIT and decreased by \$1.4b (19%) to \$6.2b in 1997–98. In addition to decreases in other income, an increase in interest expenses of \$164m (10%) contributed to the fall in OPBT. This resulted in OPBT decreasing for the coal mining industry by \$273m (24%) to \$868m, for the oil and gas extraction industry by \$740m (17%) to \$3.7b, and for the metal ore mining industry by \$428m (21%) to \$1.6b.

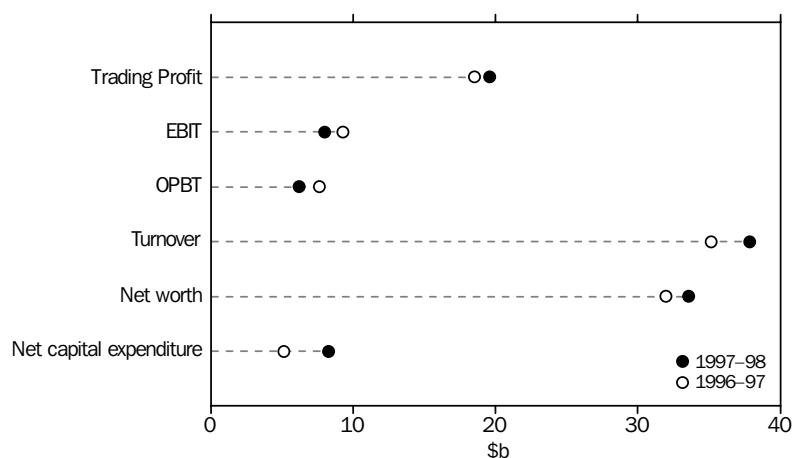
Net worth

Net worth increased by \$1.6b (5%) rising to \$33.6b in 1997–98. While the oil and gas industry reported a \$2.6b (23%) increase to \$13.8b, the coal mining and metal ore mining industries reported decreases of \$505m (7%) and \$466m (3%) respectively.

Net capital expenditure

Total net capital expenditure increased by \$3.1b (61%) to \$8.3b in 1997–98. The metal ore mining industry accounted for most of the increase with net capital expenditure rising by \$2.6b (100%) to \$5.3b. Expenditure on plant, machinery and equipment for new mines, mine expansion and upgrades of plant were the major reasons for the increase. Net capital expenditure increased by \$511m (38%) to \$1.8b in the oil and gas extraction industry, however, these gains were offset by a small decrease in the coal mining industry.

SELECTED INDICATORS



1.1 MANAGEMENT UNIT LEVEL(a), Summary of Operations(b)

	COAL MINING....		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Turnover	10 861.3	11 977.6	9 243.1	9 595.6	15 047.4	16 297.9	35 151.8	37 871.1
Industry value added (new)(c)	n.a.	5 605.9	n.a.	7 709.8	n.a.	7 676.5	n.a.	20 992.2
Industry gross product (old)(c)	4 934.4	5 417.7	7 686.9	7 644.1	6 638.7	7 184.0	19 260.0	20 245.8
Trading profit	4 787.6	5 233.4	7 515.5	7 574.0	6 212.3	6 775.5	18 515.4	19 582.9
Earnings before interest and tax	1 446.5	1 191.8	4 893.5	4 143.6	2 926.5	2 653.9	9 266.5	7 989.3
Operating profit before tax	1 141.3	868.3	4 459.9	3 720.1	2 018.3	1 590.4	7 619.5	6 178.8
Total assets	16 537.6	17 856.0	24 803.8	29 835.2	32 067.9	37 633.8	73 409.3	85 325.0
Total liabilities	9 286.3	11 109.8	13 611.8	16 047.0	18 559.0	24 591.0	41 457.1	51 747.8
Net worth	7 251.3	6 746.2	11 192.0	13 788.2	13 508.9	13 042.8	31 952.2	33 577.2
Total acquisitions of fixed tangible assets	1 369.5	1 372.5	1 511.2	1 955.1	2 934.3	5 642.5	5 815.0	8 970.1
Net capital expenditure of fixed tangible assets	1 164.6	1 127.8	1 337.7	1 848.6	2 649.8	5 297.0	5 152.1	8 273.4
	OTHER MINING(d).....		SERVICES TO MINING(d).....		TOTAL MINING.....			
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98		
Items	\$m	\$m	\$m	\$m	\$m	\$m		
Turnover	2 111.4	2 419.0	3 176.5	3 532.6	40 439.8	43 822.7		
Industry value added (new)(c)	n.a.	986.1	n.a.	1 096.8	n.a.	23 075.1		
Industry gross product (old)(c)	907.0	1 056.2	1 141.0	*867.3	21 308.0	22 169.3		
Trading profit	871.0	1 021.9	814.3	*577.1	20 200.5	21 181.9		
Earnings before interest and tax	333.2	403.0	*-227.3	*-518.7	9 372.5	7 873.6		
Operating profit before tax	267.2	338.7	-323.6	*-613.5	7 563.1	5 904.0		
Total assets	3 325.0	3 204.7	8 557.8	5 798.5	85 292.2	94 328.3		
Total liabilities	1 744.6	1 722.8	5 990.4	4 916.8	49 192.1	58 387.4		
Net worth	1 580.4	1 481.9	**2 567.4	*881.7	36 100.1	35 940.9		
Total acquisitions of fixed tangible assets	186.4	227.7	*1 494.5	537.5	7 496.0	9 735.2		
Net capital expenditure of fixed tangible assets	154.8	205.0	*1 434.6	418.9	6 741.5	8 897.2		

(a) See paragraphs 11-16 of the Explanatory Notes.

(b) Details are in tables 1.4-1.7.

(c) See paragraph 28 of the Explanatory Notes for explanation of differences between industry value added and industry gross product. Further definitional material is contained in the glossary.

(d) See paragraphs 10 and 29-32 of the Explanatory Notes.

ESTABLISHMENT SUMMARY

Statistics for detailed industry groupings and for each State and Territory are available at the establishment level for ANZSIC subdivisions 11, 12 and 13 only. The following analysis relates to both summary table 1.2 and tables 1.8 and 1.9 later in this chapter. The data for establishments vary from those of management units in that they reflect a more homogenous picture of the industry (see paragraphs 11–16 of the Explanatory Notes).

1.2 ESTABLISHMENT LEVEL(a), Summary of Operations—Industry class(b)

INDUSTRY CLASS		Turnover	Opening inven- tories	Closing inven- tories	Purchases and selected expenses	Value added	Net capital expend- iture
ANZSIC code	Description	\$m	\$m	\$m	\$m	\$m	\$m
Coal mining							
110	Coal mining	12 323	1 015	1 010	5 635	6 683	1 173
Oil and gas extraction							
1200	Oil and gas extraction	9 465	270	251	730	8 716	1 766
Metal ore mining							
1311	Iron ore mining	4 275	383	417	1 480	2 829	425
1312	Bauxite mining	984	95	75	326	638	151
1313	Copper ore mining	1 391	293	252	617	733	550
1314	Gold ore mining	5 152	592	537	3 035	2 062	683
1315	Mineral sand mining	876	207	259	428	499	213
1317	Silver-lead-zinc ore mining	1 507	161	179	581	943	682
	Other(c)	1 372	338	339	708	665	1 160
131	Total	15 556	2 069	2 057	7 174	8 370	3 864
Total 1997–98		37 344	3 353	3 318	13 540	23 770	6 803
Total 1996–97		34 234	2 786	3 354	12 380	22 422	4 592

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Details are in tables 1.8–1.9.

(c) ANZSIC Classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

Turnover

Turnover in 1997–98 at establishment level was \$37.3b, an increase of \$3.1b (9%) compared with 1996–97. This resulted from turnover increases for all industries during the reference period.

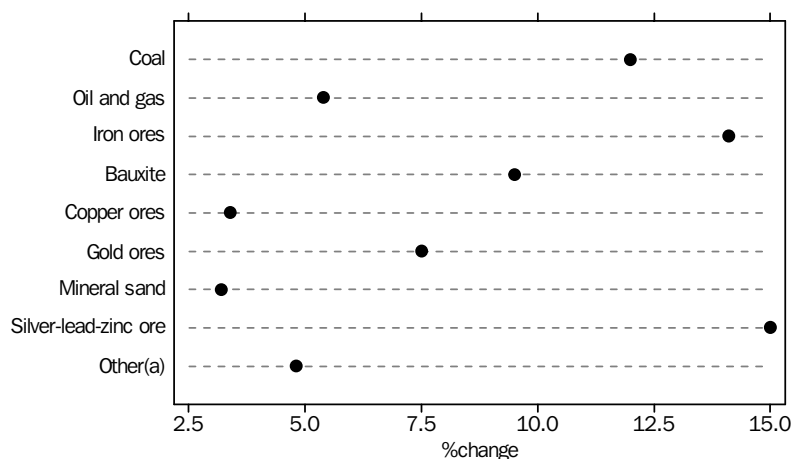
Turnover in the coal mining industry increased by \$1.3b (12%) to \$12.3b in 1997–98. This was primarily due to a number of mines becoming fully operational during the year as well as increases in production at other mines which offset the effects of lower prices. The iron ore mining industry reported a \$529m (14%) increase in turnover to \$4.3b, while the silver-lead-zinc ore mining industry reported a \$197m (15%) increase to \$1.5b.

The weakness in the Australian dollar helped to sustain the Australian gold price during 1997–98. This resulted in turnover increasing by \$358m (7%) to \$5.2b in the gold ore mining industry as production reached record levels. Operations focused on low cost mines with several high cost mines closing.

Turnover *continued*

The coal mining industry continued to be the largest contributor to total turnover accounting for 33%, slightly higher than the 32% recorded in 1996–97. The oil and gas extraction industry accounted for 25%. The other main contributors were the gold and iron ore mining industries which accounted for 14% and 11% respectively of total turnover in 1997–98.

CHANGE IN TURNOVER—1996–97 to 1997–98



(a) ANZSIC Classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

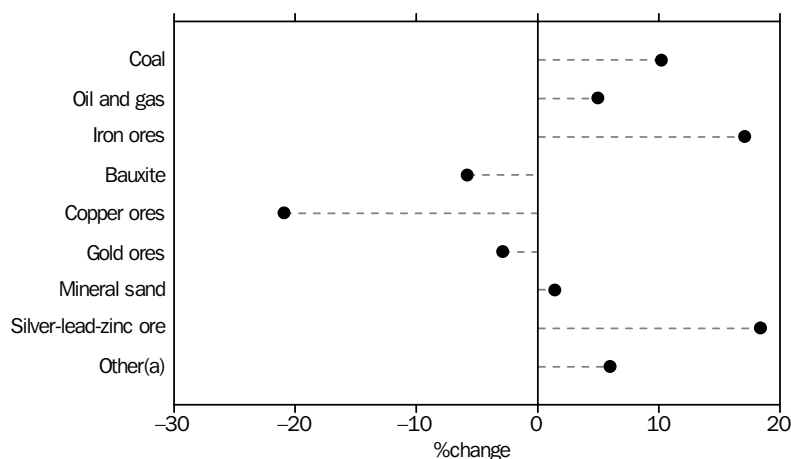
Value added

Value added increased by \$1.3b (6%) to \$23.8b in 1997–98. Increased contract mining expenses, which rose by \$601m (26%), were a feature and a reflection of the continuing trend of outsourcing mining operations. This was particularly noticeable in the coal mining, iron ore mining and gold ore mining industries.

Although value added increased in the coal mining industry by \$620m (10%) to \$6.7b, the iron ore mining industry by \$414m (17%) to \$2.8b and the silver-lead-zinc ore mining industry by \$147m (18%) to \$943m, there were a number of industries where value added decreased. Value added in the copper ore mining industry decreased by \$193m (21%) to \$733m primarily due to a decrease in the value of inventories and increased freight costs. Gold and bauxite experienced small decreases in value added.

The oil and gas extraction industry remains the largest contributor to total value added, accounting for 37% of the total in 1997–98, the same as in 1996–97. Coal was the second largest contributor accounting for 28%.

CHANGE IN VALUE ADDED—1996–97 to 1997–98



(a) ANZSIC Classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

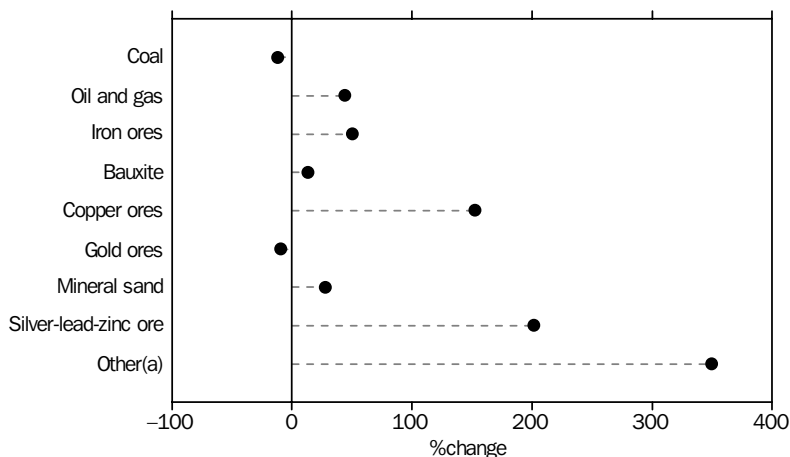
Net capital expenditure

Net capital expenditure (total expenditure less disposals) increased by \$2.2b (48%) to \$6.8b in 1997–98 with increases of \$1.2b in dwellings, buildings and other structures and \$1.0b in plant, machinery and equipment being recorded.

The construction of new mines and the expansion of existing mines helped to increase the level of net capital expenditure in several industries. This was the case in the copper ore mining industry where net capital expenditure rose by \$332m (152%) to \$550m. Other metal ore mining, which includes nickel, also reported an increase, rising from \$258m in 1996–97 to \$1.2b in 1997–98 due to development work on new mines. Net capital expenditure in the silver-lead-zinc ore mining industry rose by \$456m (202%) to \$682m.

The effects of lower prices and a need to rein in costs saw net capital expenditure in the coal and gold mining industries decrease. The closure, or placing on care and maintenance, of high cost mines contributed to the decrease. Net capital expenditure in the coal mining industry fell by \$157m (12%) to \$1.2b while gold ore mining decreased by \$70m (9%) to \$683m.

CHANGE IN NET CAPITAL EXPENDITURE—1996–97 to 1997–98



(a) ANZSIC Classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

STATE AND TERRITORY SUMMARY

Table 1.3 summarises the data for each State and Territory for 1997–98. Detailed figures can be found in tables 1.10 and 1.11. The following analysis relates to ANZSIC Subdivisions 11–13 only.

1.3 ESTABLISHMENT LEVEL(a), Summary of Operations—State and Territory(b)

	Turnover	Opening inventories	Closing inventories	Purchases and selected expenses	Value added	Net capital expenditure
<i>State and Territory</i>	\$m	\$m	\$m	\$m	\$m	\$m
New South Wales	5 975	505	501	2 913	3 058	568
Victoria	3 362	77	75	291	3 069	364
Queensland	8 820	1 003	1 014	3 837	4 993	1 587
South Australia	1 160	103	92	276	872	450
Western Australia	16 107	1 359	1 321	5 381	10 688	3 690
Tasmania	424	60	47	247	164	49
Northern Territory	1 496	247	270	595	924	95
Australia	37 344	3 353	3 318	13 540	23 770	6 803

(a) See paragraphs 11–16 of the Explanatory Notes.

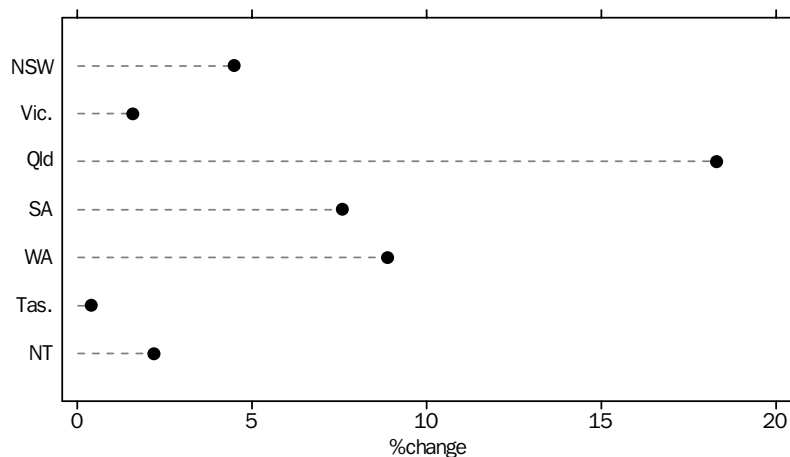
(b) Details are in tables 1.10–1.11.

Turnover

Queensland recorded the largest absolute increase with turnover rising \$1.4b (18%) to \$8.8b. The majority of the increase occurred in the coal mining industry as a result of increased production and favourable exchange rates. Western Australia also recorded a substantial increase in turnover, rising \$1.3b (9%) to \$16.1b in 1997–98. Increased revenue from the sales of goods and services, in particular the iron ore and gold ore mining industries, was largely responsible for the increase.

Western Australia continues to be the largest contributor to national turnover accounting for 43%. Queensland with 24% is ranked second. New South Wales is third with \$6.0b (16%) as a result of its extensive coal mining industry.

CHANGE IN TURNOVER—1996–97 to 1997–98

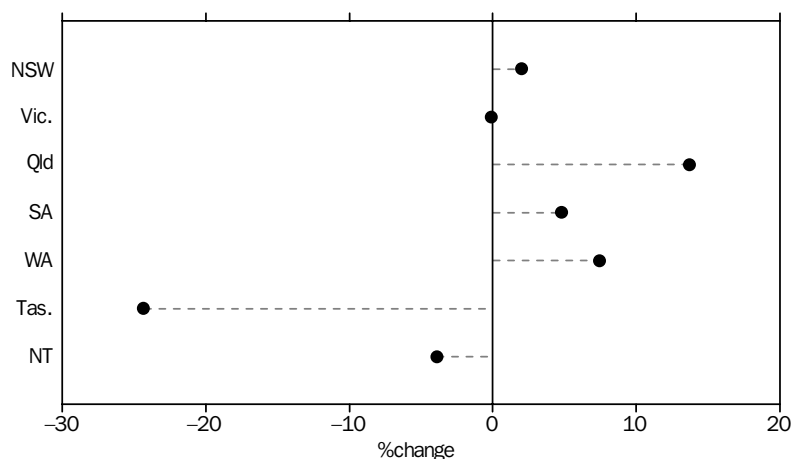


Value added

Western Australia recorded the largest increase in value added rising \$737m (7%) to \$10.7b. Value added in Tasmania decreased by \$53m (24%), falling to \$164m, mainly due to an increase in contract mining expenses.

Western Australia is still the largest contributor to national value added accounting for \$10.7b (45%). Queensland with \$5.0b (21%) is ranked second while Victoria, with a capital intensive oil and gas extraction industry, is third with \$3.1b (13%).

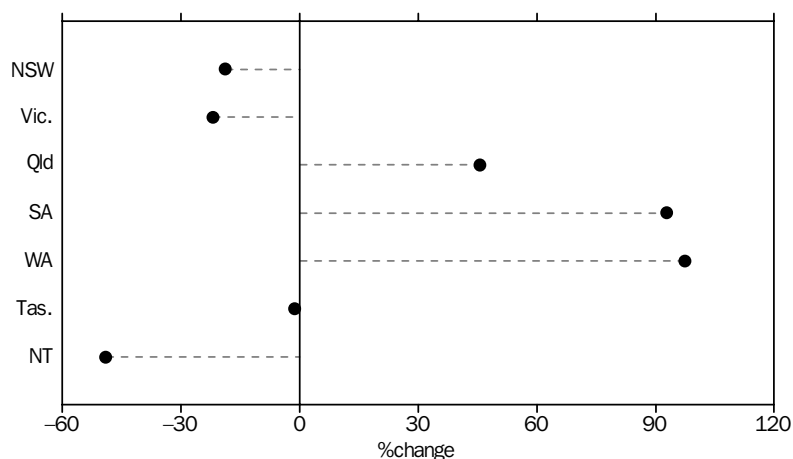
CHANGE IN VALUE ADDED—1996–97 to 1997–98



Net capital expenditure

Western Australia accounted for over half of the national net capital expenditure with \$3.7b (54%). This was an increase of \$1.8b (97%) compared with 1996–97. Increases occurred primarily in that State's iron ore and other metal ore mining industries.

CHANGE IN NET CAPITAL EXPENDITURE—1996–97 to 1997–98

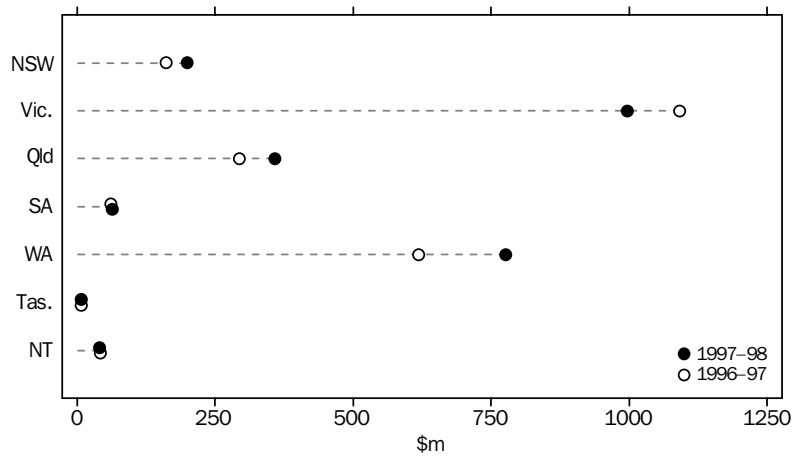


ROYALTIES

Royalties data appear in tables 1.12 and 1.13 at the end of this chapter. Royalty payments are a reflection of production and/or sales for which data are collected at the establishment level.

The oil and gas extraction industry paid out the most in mineral royalties with \$1.5b in 1997–98. Victoria and Western Australia, both with significant oil and gas extraction industries, were the major contributors on a State basis with \$997m and \$776m respectively.

ROYALTIES PAID—1996–97 to 1997–98



1.4 MANAGEMENT UNIT LEVEL(a), Income and Expenditure—Industry subdivision

	COAL MINING....		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Sales of goods and services(b)	10 687.1	11 763.8	9 193.7	9 549.1	14 548.4	15 870.2	34 429.2	37 183.1
Less								
Purchases of goods and materials	2 000.3	1 907.8	467.1	671.9	3 030.9	3 347.2	5 498.3	5 926.9
Rent, leasing and hiring expenses	112.2	143.2	87.1	81.6	175.9	159.5	375.2	384.3
Freight and cartage expenses	1 903.8	2 069.0	126.2	154.3	429.5	346.0	2 459.5	2 569.3
Motor vehicle expenses	14.6	13.5	9.4	9.7	51.7	51.1	75.7	74.3
Repair and maintenance expenses	664.5	685.4	98.8	76.7	1 112.1	1 118.6	1 875.4	1 880.7
Contract mining expenses	496.9	707.2	36.9	2.7	1 785.1	2 168.8	2 318.9	2 878.7
Payment for other contract, subcontract and commission work	323.1	300.3	313.7	320.3	876.3	889.1	1 513.1	1 509.7
Other selected expenses	629.5	715.2	583.3	667.5	1 296.9	1 242.4	2 509.7	2 625.1
Purchases and selected expenses	6 144.9	6 541.6	1 722.5	1 984.7	8 758.4	9 322.7	16 625.8	17 849.0
Plus								
Opening inventories	827.7	1 046.3	270.2	292.8	1 945.3	2 204.8	3 043.2	3 543.9
Less								
Closing inventories	1 039.2	1 011.8	283.7	274.2	2 204.4	2 295.3	3 527.3	3 581.3
Cost of sales	5 933.4	6 576.1	1 709.0	2 003.3	8 499.3	9 232.2	16 141.7	17 811.6
Plus								
Capitalised purchases	33.9	45.7	30.8	28.2	163.2	137.5	227.9	211.4
Trading profit	4 787.6	5 233.4	7 515.5	7 574.0	6 212.3	6 775.5	18 515.4	19 582.9
Plus								
Government subsidies								
Operational funding	0.8	0.8	—	—	1.2	5.9	2.0	6.7
Diesel fuel rebate	128.9	158.3	7.9	10.1	291.5	257.1	428.3	425.5
Interest income	84.4	66.6	88.8	98.8	442.6	412.7	615.8	578.1
Other income	175.6	-173.4	925.1	335.8	230.3	-313.9	1 331.0	-151.5
Less								
Wages and salaries	2 109.0	2 223.0	499.5	554.1	1 815.3	1 780.0	4 423.8	4 557.1
Superannuation	171.8	163.6	19.2	18.3	89.7	87.8	280.7	269.7
Workers' compensation	71.9	73.1	3.1	3.4	47.7	48.8	122.7	125.3
Selected labour costs	2 352.7	2 459.7	521.8	575.8	1 952.7	1 916.6	4 827.2	4 952.1
Less								
Depreciation	971.6	1 137.8	1 587.9	1 750.7	1 873.9	2 063.4	4 433.4	4 951.9
Insurance premiums	57.8	46.4	40.8	41.4	55.7	69.8	154.3	157.6
Royalties expenses	358.1	458.3	1 504.1	1 514.2	406.1	450.4	2 268.3	2 422.9
Bad debts	1.2	0.6	—	1.2	6.2	10.4	7.4	12.2
Plus								
Capitalised wages	10.6	8.9	10.8	8.2	43.2	27.2	64.6	44.3
Earnings before interest and tax	1 446.5	1 191.8	4 893.5	4 143.6	2 926.5	2 653.9	9 266.5	7 989.3
Less								
Interest expenses	305.2	323.5	433.6	423.5	908.2	1 063.5	1 647.0	1 810.5
Operating profit before tax	1 141.3	868.3	4 459.9	3 720.1	2 018.3	1 590.4	7 619.5	6 178.8

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes rent, leasing and hiring income.

1.5 MANAGEMENT UNIT LEVEL(a), Industry Value Added—Industry subdivision

	COAL MINING.....		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Sales of goods and services(b)	10 687.1	11 763.8	9 193.7	9 549.1	14 548.4	15 870.2	34 429.2	37 183.1
Government subsidies								
Operational funding	0.8	0.8	—	—	1.2	5.9	2.0	6.7
Diesel fuel rebate	128.9	158.3	7.9	10.1	291.5	257.1	428.3	425.5
Capital work done for own use	44.5	54.7	41.5	36.4	206.3	164.7	292.3	255.8
Turnover	10 861.3	11 977.6	9 243.1	9 595.6	15 047.4	16 297.9	35 151.8	37 871.1
Plus								
Closing inventories	1 039.2	1 011.8	283.7	274.2	2 204.4	2 295.3	3 527.3	3 581.3
Less								
Opening inventories	827.7	1 046.3	270.2	292.8	1 945.3	2 204.8	3 043.2	3 543.9
Less								
Capitalised purchases	33.9	45.7	30.8	28.2	163.2	137.5	227.9	211.4
Less								
Intermediate input expenses	n.a.	6 291.5	n.a.	1 838.9	n.a.	8 574.4	n.a.	16 704.9
Industry value added	n.a	5 605.9	n.a	7 709.8	n.a	7 676.5	n.a	20 992.2

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes rent, leasing and hiring income.

1.6 MANAGEMENT UNIT LEVEL(a), Assets and Liabilities—Industry subdivision

	COAL MINING.....		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Assets								
Current assets								
Closing inventories	1 039.2	1 011.8	283.7	274.2	2 204.4	2 295.3	3 527.3	3 581.3
Other current assets	2 556.6	3 068.4	2 471.1	3 408.3	8 312.0	10 015.1	13 339.7	16 491.8
Non-current assets	12 941.8	13 775.8	22 049.0	26 152.7	21 551.5	25 323.4	56 542.3	65 251.9
<i>Total value of assets</i>	<i>16 537.6</i>	<i>17 856.0</i>	<i>24 803.8</i>	<i>29 835.2</i>	<i>32 067.9</i>	<i>37 633.8</i>	<i>73 409.3</i>	<i>85 325.0</i>
Liabilities								
Current liabilities	3 547.2	4 342.5	5 159.5	4 685.9	5 459.4	7 944.3	14 166.1	16 972.7
Non-current liabilities	5 739.1	6 767.3	8 452.3	11 361.1	13 099.6	16 646.7	27 291.0	34 775.1
<i>Total value of liabilities</i>	<i>9 286.3</i>	<i>11 109.8</i>	<i>13 611.8</i>	<i>16 047.0</i>	<i>18 559.0</i>	<i>24 591.0</i>	<i>41 457.1</i>	<i>51 747.8</i>
Net worth	7 251.3	6 746.2	11 192.0	13 788.2	13 508.9	13 042.8	31 952.2	33 577.2

(a) See paragraphs 11–16 of the Explanatory Notes.

1.7 MANAGEMENT UNIT LEVEL(a), Fixed Capital Expenditure(b)—Industry subdivision

	COAL MINING....		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Capital expenditure on								
Land	33.7	49.3	3.0	0.5	49.2	84.3	85.9	134.1
Dwellings, buildings and other structures	311.2	374.2	799.8	1 487.9	1 138.9	1 824.2	2 249.9	3 686.3
Plant, machinery and equipment	1 024.6	949.0	708.4	466.7	1 746.2	3 734.0	3 479.2	5 149.7
<i>Total acquisitions</i>	<i>1 369.5</i>	<i>1 372.5</i>	<i>1 511.2</i>	<i>1 955.1</i>	<i>2 934.3</i>	<i>5 642.5</i>	<i>5 815.0</i>	<i>8 970.1</i>
Disposal of assets	204.9	244.7	173.5	106.5	284.5	345.5	662.9	696.7
Net capital expenditure	1 164.6	1 127.8	1 337.7	1 848.6	2 649.8	5 297.0	5 152.1	8 273.4

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Items listed include value of capital work done for own use.

1.8 ESTABLISHMENT LEVEL(a), Income and Expenditure—Industry class

	COAL MINING.....		OIL AND GAS EXTRACTION.....		IRON ORE MINING.....		BAUXITE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Sales of goods								
Produced by this business(b)	10 458.2	11 733.4	8 818.4	9 299.0	3 414.5	3 961.2	883.4	947.8
Not produced by this business(b)	192.2	179.5	7.7	6.9	125.8	130.5	—	—
Service income(c)	168.6	213.6	112.4	116.0	148.5	138.5	0.2	1.9
Government subsidies								
Operational funding	0.8	0.8	—	—	0.7	0.2	0.1	0.1
Diesel fuel rebate	132.0	142.3	6.7	10.1	52.2	39.7	11.6	16.6
Capital work done for own use	50.2	53.4	34.2	32.5	4.7	4.9	2.7	17.2
Turnover	11 002.0	12 323.0	8 979.4	9 464.5	3 746.4	4 275.0	898.0	983.6
Plus								
Closing inventories	1 022.0	1 009.8	262.8	251.3	383.6	416.9	94.7	74.8
Less								
Opening inventories	834.8	1 014.5	243.6	269.6	329.6	382.7	76.7	94.7
Less								
Purchases								
Materials, components, containers etc.(d)(e)	932.0	979.6	100.7	129.6	198.2	267.5	62.8	97.1
Electricity and fuels	584.4	604.5	39.9	41.7	213.9	178.3	70.2	107.2
Goods for resale(d)	176.2	185.2	5.0	2.9	58.2	68.8	—	—
Rent, leasing and hiring expenses	108.7	143.3	44.8	38.6	20.8	23.3	13.2	5.7
Freight and cartage expenses	1 871.3	2 064.7	118.9	149.6	22.4	16.6	12.3	13.5
Motor vehicle expenses	14.2	12.9	7.1	7.5	11.2	15.4	2.4	1.6
Repair and maintenance expenses	690.5	722.1	84.8	74.6	463.4	421.0	38.9	48.7
Contract mining expenses	442.0	638.2	12.2	8.6	304.0	383.5	6.5	8.9
Payment for other contract, subcontract and commission work	306.6	284.8	286.6	276.8	93.1	105.5	32.6	43.2
<i>Purchases and selected expenses</i>	<i>5 125.9</i>	<i>5 635.3</i>	<i>700.0</i>	<i>729.9</i>	<i>1 385.2</i>	<i>1 479.9</i>	<i>238.9</i>	<i>325.9</i>
Value added	6 063.3	6 683.0	8 298.6	8 716.3	2 415.2	2 829.3	677.1	637.8

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.8 ESTABLISHMENT LEVEL(a), Income and Expenditure—Industry class *continued*

	COPPER ORE MINING.....		GOLD ORE MINING.....		MINERAL SAND MINING.....		SILVER-LEAD-ZINC ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Sales of goods								
Produced by this business(b)	1 279.1	1 334.6	4 560.7	4 928.8	830.4	864.7	1 245.0	1 443.2
Not produced by this business(b)	13.8	—	4.3	6.3	5.1	3.7	—	—
Service income(c)	0.8	3.0	13.7	15.4	0.8	1.7	1.8	1.7
Government subsidies								
Operational funding	0.2	0.2	—	3.4	—	—	0.4	0.1
Diesel fuel rebate	21.9	27.5	155.9	134.0	5.0	4.6	10.6	22.8
Capital work done for own use	29.5	25.8	59.8	64.1	7.7	1.1	52.1	38.9
Turnover	1 345.3	1 391.1	4 794.4	5 152.0	849.0	875.8	1 309.9	1 506.7
Plus								
Closing inventories	297.7	251.6	590.0	537.4	207.1	258.6	157.9	178.8
Less								
Opening inventories	167.8	292.7	557.2	592.3	160.0	207.1	135.9	161.2
Less								
Purchases								
Materials, components, containers etc.(d)(e)	141.7	155.4	493.6	574.8	120.2	119.3	177.9	201.8
Electricity and fuels	75.6	92.1	479.8	451.1	91.4	101.5	76.8	95.8
Goods for resale(d)	—	—	3.7	0.2	5.0	3.7	—	—
Rent, leasing and hiring expenses	12.2	11.0	63.8	59.8	17.7	8.1	5.2	9.5
Freight and cartage expenses	25.9	42.9	101.5	81.6	32.2	36.2	75.3	76.9
Motor vehicle expenses	3.5	3.3	24.5	24.6	2.5	2.0	3.6	4.5
Repair and maintenance expenses	93.8	102.8	251.4	256.0	64.5	58.5	68.9	75.0
Contract mining expenses	109.0	121.0	1 064.7	1 344.8	41.8	68.1	45.8	64.1
Payment for other contract, subcontract and commission work	86.8	88.1	219.8	242.0	28.7	30.9	82.1	53.5
<i>Purchases and selected expenses</i>	<i>548.5</i>	<i>616.6</i>	<i>2 702.8</i>	<i>3 034.9</i>	<i>404.0</i>	<i>428.3</i>	<i>535.6</i>	<i>581.1</i>
Value added	926.7	733.4	2 124.4	2 062.2	492.1	499.0	796.3	943.2

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.8 ESTABLISHMENT LEVEL(a), Income and Expenditure—Industry class *continued*

Items	OTHER METAL ORE MINING(b)...		TOTAL METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
	\$m	\$m	\$m	\$m	\$m	\$m
Sales of goods						
Produced by this business(c)	1 242.0	1 312.5	13 455.1	14 792.8	32 731.7	35 825.2
Not produced by this business(c)	20.6	29.7	169.6	170.2	369.5	356.6
Service income(d)	19.0	11.9	184.8	174.1	465.8	503.7
Government subsidies						
Operational funding	—	0.1	1.4	4.1	2.2	4.9
Diesel fuel rebate	26.3	13.8	283.5	259.0	422.2	411.4
Capital work done for own use	1.6	3.9	158.1	155.9	242.5	241.8
Turnover	1 309.5	1 371.9	14 252.5	15 556.1	34 233.9	37 343.6
Plus						
Closing inventories	338.2	339.0	2 069.2	2 057.1	3 354.0	3 318.2
Less						
Opening inventories	280.8	338.0	1 708.0	2 068.7	2 786.4	3 352.8
Less						
Purchases						
Materials, components, containers etc.(e)(f)	98.1	114.3	1 292.5	1 530.2	2 325.2	2 639.4
Electricity and fuels	134.5	106.6	1 142.2	1 132.6	1 766.5	1 778.8
Goods for resale(e)	22.3	29.4	89.2	102.1	270.4	290.2
Rent, leasing and hiring expenses	16.1	15.4	149.0	132.8	302.5	314.7
Freight and cartage expenses	50.7	41.8	320.3	309.5	2 310.5	2 523.8
Motor vehicle expenses	2.8	3.3	50.5	54.7	71.8	75.1
Repair and maintenance expenses	94.2	94.5	1 075.1	1 056.5	1 850.4	1 853.2
Contract mining expenses	245.6	234.9	1 817.4	2 225.3	2 271.6	2 872.1
Payment for other contract, subcontract and commission work	74.7	67.4	617.8	630.6	1 211.0	1 192.2
<i>Purchases and selected expenses</i>	<i>739.0</i>	<i>707.6</i>	<i>6 554.0</i>	<i>7 174.3</i>	<i>12 379.9</i>	<i>13 539.5</i>
Value added	627.9	665.3	8 059.7	8 370.2	22 421.6	23 769.5

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) ANZSIC classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

(c) Includes transfers out to other establishments of the same management unit where appropriate.

(d) Includes rent, leasing and hiring income.

(e) Includes transfers in from other establishments of the same management unit where appropriate.

(f) Includes minerals for further processing.

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1.9 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—Industry class *continued*

Items	OTHER METAL ORE MINING(c).....		TOTAL METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97 \$m	1997-98 \$m	1996-97 \$m	1997-98 \$m	1996-97 \$m	1997-98 \$m
Capital expenditure on						
Land	—	—	74.0	66.3	99.8	115.9
Dwellings, buildings and other structures	185.3	685.4	896.6	1 554.1	2 199.7	3 411.1
Plant, machinery and equipment	187.8	486.1	1 274.9	2 533.4	2 834.4	3 863.6
<i>Total</i>	373.1	1 171.5	2 245.5	4 153.8	5 133.9	7 390.6
Disposals of assets	115.2	11.7	207.7	289.9	541.5	587.9
Net capital expenditure	257.9	1 159.8	2 037.8	3 863.9	4 592.4	6 802.7
Capital expenditure less disposals						
Land, buildings and other structures	167.1	685.4	929.3	1 591.3	2 157.8	3 468.1
Plant machinery and equipment	90.8	474.4	1 108.2	2 272.6	2 434.2	3 334.6

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.8.

(c) ANZSIC classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

1.10 ESTABLISHMENT LEVEL(a), Income and Expenditure—State and Territory

Items	COAL MINING.....		METAL ORE MINING.....		TOTAL COAL MINING AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
	\$m	\$m	\$m	\$m	\$m	\$m
NEW SOUTH WALES						
Sales of goods						
Produced by this business(b)	4 603.6	4 914.3	735.7	716.8	5 339.3	5 631.1
Not produced by this business(b)	129.0	113.9	13.8	0.4	142.8	114.3
Service income(c)	83.1	101.5	41.6	3.7	124.7	105.2
Government subsidies						
Operational funding	0.2	0.1	0.7	—	0.9	0.1
Diesel fuel rebate	50.6	58.0	4.4	3.4	55.0	61.4
Capital work done for own use	25.5	39.4	32.4	23.7	57.9	63.1
Turnover	4 892.0	5 227.2	828.6	748.0	5 720.6	5 975.2
Plus						
Closing inventories	412.2	399.4	102.4	101.2	514.6	500.6
Less						
Opening inventories	397.6	404.4	82.8	100.4	480.4	504.8
Less						
Purchases						
Materials, components, containers etc.(d)(e)	445.6	507.0	96.7	81.2	542.3	588.2
Electricity and fuels	328.0	331.9	46.4	34.7	374.4	366.6
Goods for resale(d)	124.1	107.8	—	0.4	124.1	108.2
Rent, leasing and hiring expenses	73.3	100.6	5.4	1.5	78.7	102.1
Freight and cartage expenses	664.3	748.9	26.7	23.7	691.0	772.6
Motor vehicle expenses	6.5	6.0	3.1	2.7	9.6	8.7
Repair and maintenance expenses	435.9	477.2	65.8	61.7	501.7	538.9
Contract mining expenses	211.4	237.4	81.7	61.1	293.1	298.5
Payment for other contract, subcontract and commission work	94.0	81.6	48.0	47.2	142.0	128.8
<i>Purchases and selected expenses</i>	<i>2 383.1</i>	<i>2 598.4</i>	<i>373.8</i>	<i>314.2</i>	<i>2 756.9</i>	<i>2 912.6</i>
Value added	2 523.5	2 623.8	474.4	434.6	2 997.9	3 058.4

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.10 ESTABLISHMENT LEVEL(a), Income and Expenditure—State and Territory *continued*

		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING....	
		1996-97	1997-98
Items	\$m	\$m	\$m
.....			
VICTORIA			
Sales of goods			
Produced by this business(b)	3 268.3	3 314.4	
Not produced by this business(b)	—	0.1	
Service income(c)	2.8	4.5	
Government subsidies			
Operational funding	—	—	
Diesel fuel rebate	1.9	5.4	
Capital work done for own use	34.6	37.3	
Turnover	3 307.6	3 361.7	
Plus			
Closing inventories	60.9	74.7	
Less			
Opening inventories	52.1	76.5	
Less			
Purchases			
Materials, components, containers etc.(d)(e)	86.1	103.5	
Electricity and fuels	12.9	18.6	
Goods for resale(d)	—	0.1	
Rent, leasing and hiring expenses	2.7	3.7	
Freight and cartage expenses	8.6	13.8	
Motor vehicle expenses	1.8	2.1	
Repair and maintenance expenses	46.6	61.0	
Contract mining expenses	34.3	27.6	
Payment for other contract, subcontract and commission work	50.4	60.2	
<i>Purchases and selected expenses</i>	<i>243.4</i>	<i>290.6</i>	
Value added	3 073.0	3 069.3	
.....			

(a) See paragraphs 11-16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.10 ESTABLISHMENT LEVEL(a), Income and Expenditure—State and Territory *continued*

	COAL MINING....		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
<i>Items</i>	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
QUEENSLAND								
Sales of goods								
Produced by this business(b)	5 049.6	6 042.0	281.7	372.7	1 772.5	2 024.2	7 103.8	8 438.9
Not produced by this business(b)	62.8	65.5	—	—	4.2	0.3	67.0	65.8
Service income(c)	80.4	104.6	7.4	5.2	5.9	6.1	93.7	115.9
Government subsidies								
Operational funding	0.6	0.7	—	—	0.7	0.3	1.3	1.0
Diesel fuel rebate	66.3	70.1	—	—	41.4	62.6	107.7	132.7
Capital work done for own use	18.7	3.5	0.9	3.4	63.5	58.3	83.1	65.2
Turnover	5 278.4	6 286.4	290.0	381.3	1 888.2	2 151.8	7 456.6	8 819.5
<i>Plus</i>								
Closing inventories	580.7	581.5	30.2	37.4	394.7	394.9	1 005.6	1 013.8
<i>Less</i>								
Opening inventories	413.0	581.1	21.2	29.3	274.1	392.4	708.3	1 002.8
<i>Less</i>								
Purchases								
Materials, components, containers etc.(d)(e)	444.4	432.3	5.1	8.2	214.7	258.2	664.2	698.7
Electricity and fuels	221.4	235.4	0.6	0.6	128.4	176.2	350.4	412.2
Goods for resale(d)	51.9	77.4	—	—	4.3	0.2	56.2	77.6
Rent, leasing and hiring expenses	30.5	33.7	1.2	1.1	19.3	21.3	51.0	56.1
Freight and cartage expenses	1 171.7	1 279.4	86.6	119.4	46.2	64.1	1 304.5	1 462.9
Motor vehicle expenses	4.7	5.0	0.5	0.7	7.6	5.7	12.8	11.4
Repair and maintenance expenses	197.2	179.9	0.7	1.4	76.4	72.4	274.3	253.7
Contract mining expenses	210.2	385.3	10.4	7.1	114.0	166.1	334.6	558.5
Payment for other contract, subcontract and commission work	177.6	164.2	1.8	10.7	135.3	131.2	314.7	306.1
<i>Purchases and selected expenses</i>	<i>2 509.6</i>	<i>2 792.6</i>	<i>106.9</i>	<i>149.2</i>	<i>746.2</i>	<i>895.4</i>	<i>3 362.7</i>	<i>3 837.2</i>
Value added	2 936.5	3 494.2	192.1	240.2	1 262.6	1 258.9	4 391.2	4 993.3

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.10 ESTABLISHMENT LEVEL(a), Income and Expenditure—State and Territory *continued*

	TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING...	
	1996–97	1997–98
<i>Items</i>	\$m	\$m
.....		
SOUTH AUSTRALIA		
Sales of goods		
Produced by this business(b)	1 069.4	1 147.9
Not produced by this business(b)	0.3	—
Service income(c)	0.8	0.8
Government subsidies		
Operational funding	—	—
Diesel fuel rebate	6.3	6.8
Capital work done for own use	1.6	4.7
Turnover	1 078.4	1 160.2
<i>Plus</i>		
Closing inventories	99.7	91.5
<i>Less</i>		
Opening inventories	93.1	103.1
<i>Less</i>		
Purchases		
Materials, components, containers etc.(d)(e)	60.8	66.2
Electricity and fuels	41.3	38.5
Goods for resale(d)	0.1	—
Rent, leasing and hiring expenses	6.2	7.6
Freight and cartage expenses	25.5	23.8
Motor vehicle expenses	5.3	5.9
Repair and maintenance expenses	70.0	77.2
Contract mining expenses	17.7	24.7
Payment for other contract, subcontract and commission work	26.2	32.3
<i>Purchases and selected expenses</i>	<i>253.1</i>	<i>276.2</i>
Value added	831.9	872.4
.....		

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.10 ESTABLISHMENT LEVEL(a), Income and Expenditure—State and Territory *continued*

	COAL MINING AND OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
<i>Items</i>	\$m	\$m	\$m	\$m	\$m	\$m
WESTERN AUSTRALIA						
Sales of goods						
Produced by this business(b)	5 074.7	5 407.3	9 069.7	10 061.2	14 144.4	15 468.5
Not produced by this business(b)	7.4	6.9	131.1	139.8	138.5	146.7
Service income(c)	106.6	113.2	128.9	155.1	235.5	268.3
Government subsidies						
Operational funding	—	—	—	3.7	—	3.7
Diesel fuel rebate	17.1	15.6	213.3	169.4	230.4	185.0
Capital work done for own use	4.0	2.2	31.5	32.5	35.5	34.7
Turnover	5 209.8	5 545.2	9 574.5	10 561.7	14 784.3	16 106.9
<i>Plus</i>						
Closing inventories	120.3	107.0	1 245.1	1 213.8	1 365.4	1 320.8
<i>Less</i>						
Opening inventories	104.4	127.6	1 068.6	1 231.4	1 173.0	1 359.0
<i>Less</i>						
Purchases						
Materials, components, containers etc.(d)(e)	37.7	46.8	763.4	912.3	801.1	959.1
Electricity and fuels	42.1	40.1	821.9	778.3	864.0	818.4
Goods for resale(d)	5.0	2.9	62.6	72.2	67.6	75.1
Rent, leasing and hiring expenses	41.0	38.5	118.0	100.3	159.0	138.8
Freight and cartage expenses	15.7	13.8	185.0	154.0	200.7	167.8
Motor vehicle expenses	2.9	3.1	33.6	38.9	36.5	42.0
Repair and maintenance expenses	54.2	47.5	823.4	787.5	877.6	835.0
Contract mining expenses	0.5	1.6	1 440.3	1 749.9	1 440.8	1 751.5
Payment for other contract, subcontract and commission work	229.1	195.5	349.8	397.7	578.9	593.2
<i>Purchases and selected expenses</i>	<i>428.2</i>	<i>389.8</i>	<i>4 598.0</i>	<i>4 991.1</i>	<i>5 026.2</i>	<i>5 380.9</i>
Value added	4 797.5	5 134.8	5 153.0	5 553.0	9 950.5	10 687.8

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.10 ESTABLISHMENT LEVEL(a), Income & Expenditure—State and Territory *continued*

TOTAL COAL MINING AND METAL ORE MINING.....		
	1996-97	1997-98
Items	\$m	\$m
.....		
TASMANIA		
Sales of goods		
Produced by this business(b)	417.9	421.5
Not produced by this business(b)	—	—
Service income(c)	0.2	0.2
Government subsidies		
Operational funding	—	—
Diesel fuel rebate	3.1	2.1
Capital work done for own use	0.8	—
Turnover	422.0	423.8
Plus		
Closing inventories	60.3	47.2
Less		
Opening inventories	55.3	60.3
Less		
Purchases		
Materials, components, containers etc.(d)(e)	56.5	71.2
Electricity and fuels	35.1	32.2
Goods for resale(d)	—	—
Rent, leasing and hiring expenses	1.0	1.5
Freight and cartage expenses	20.5	20.8
Motor vehicle expenses	1.3	1.1
Repair and maintenance expenses	55.8	46.4
Contract mining expenses	28.6	61.1
Payment for other contract, subcontract and commission work	12.1	12.9
<i>Purchases and selected expenses</i>	<i>210.9</i>	<i>247.2</i>
Value added	216.1	163.5
.....		

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.10 ESTABLISHMENT LEVEL(a), Income & Expenditure—State and Territory *continued*

TOTAL OIL AND GAS EXTRACTION AND METAL ORE MINING...		
	1996-97	1997-98
Items	\$m	\$m
.....		
NORTHERN TERRITORY		
Sales of goods		
Produced by this business(b)	1 388.7	1 403.1
Not produced by this business(b)	20.8	29.7
Service income(c)	7.9	8.5
Rent, leasing and hiring income		
Government subsidies		
Operational funding	0.1	0.1
Diesel fuel rebate	18.0	18.1
Capital work done for own use	29.0	36.8
Turnover	1 464.5	1 496.3
Plus		
Closing inventories	247.5	269.6
Less		
Opening inventories	224.5	246.6
Less		
Purchases		
Materials, components, containers etc.(d)(e)	114.2	152.6
Electricity and fuels	88.3	92.4
Goods for resale(d)	22.3	29.4
Rent, leasing and hiring expenses	4.0	4.9
Freight and cartage expenses	59.4	61.9
Motor vehicle expenses	4.4	4.1
Repair and maintenance expenses	24.1	40.9
Contract mining expenses	122.4	150.3
Payment for other contract, subcontract and commission work	86.6	58.9
<i>Purchases and selected expenses</i>	<i>525.7</i>	<i>595.4</i>
Value added	961.8	923.9
.....		

(a) See paragraphs 11-16 of the Explanatory Notes.

(b) Includes transfers out to other establishments of the same management unit where appropriate.

(c) Includes rent, leasing and hiring income.

(d) Includes transfers in from other establishments of the same management unit where appropriate.

(e) Includes minerals for further processing.

1.11 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—State and Territory

	COAL MINING.....		METAL ORE MINING.....		TOTAL COAL MINING AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Items	\$m	\$m	\$m	\$m	\$m	\$m
NEW SOUTH WALES						
Capital expenditure on						
Land	5.6	35.8	0.8	0.1	6.4	35.9
Dwellings, buildings and other structures	130.5	83.9	42.6	50.8	173.1	134.7
Plant, machinery and equipment	553.6	381.1	56.2	55.2	609.8	436.3
<i>Total</i>	689.7	500.8	99.6	106.1	789.3	606.9
Disposals of assets	86.3	34.6	3.6	3.9	89.9	38.5
Net capital expenditure	603.4	466.2	96.0	102.2	699.4	568.4
Capital expenditure less disposals						
Land, buildings and other structures	117.9	114.1	41.2	50.5	159.1	164.6
Plant machinery and equipment	485.5	352.1	54.7	51.7	540.2	403.8

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.10.

1.11 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—State and Territory *continued*

	TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING....	
	1996–97	1997–98
<i>Items</i>	\$m	\$m
.....		
VICTORIA		
Capital expenditure on		
Land	2.5	4.3
Dwellings, buildings and other structures	191.9	224.7
Plant, machinery and equipment	274.0	150.8
<i>Total</i>	468.4	379.8
Disposals of assets	3.0	16.0
Net capital expenditure	465.4	363.8
Capital expenditure less disposals		
Land, buildings and other structures	194.5	218.4
Plant machinery and equipment	271.0	145.4
.....		

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.10.

1.11 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—State and Territory *continued*

	COAL MINING....		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
<i>Items</i>	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
QUEENSLAND								
Capital expenditure on								
Land	15.5	8.6	—	—	7.5	0.3	23.0	8.9
Dwellings, buildings and other structures	294.4	260.0	55.9	93.7	189.7	315.0	540.0	668.7
Plant, machinery and equipment	439.4	469.4	62.3	66.3	128.5	539.8	630.2	1 075.5
<i>Total</i>	<i>749.3</i>	<i>738.0</i>	<i>118.2</i>	<i>160.0</i>	<i>325.7</i>	<i>855.1</i>	<i>1 193.2</i>	<i>1 753.1</i>
Disposals of assets	95.2	155.5	0.6	0.7	7.5	10.2	103.3	166.4
Net capital expenditure	654.1	582.5	117.6	159.3	318.2	844.9	1 089.9	1 586.7
Capital expenditure less disposals								
Land, buildings and other structures	259.4	255.3	55.9	93.7	195.9	315.1	511.2	664.1
Plant machinery and equipment	394.7	327.2	61.7	65.7	122.3	529.8	578.7	922.7

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.10.

1.11 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—State and Territory *continued*

	TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING...	
	1996–97	1997–98
<i>Items</i>	\$m	\$m
.....		
SOUTH AUSTRALIA		
Capital expenditure on		
Land	—	0.2
Dwellings, buildings and other structures	147.2	229.4
Plant, machinery and equipment	89.4	228.7
<i>Total</i>	236.6	458.1
Disposals of assets	3.4	8.6
Net capital expenditure	233.2	449.5
Capital expenditure less disposals		
Land, buildings and other structures	145.6	229.3
Plant machinery and equipment	87.5	220.2
.....		

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.10.

1.11 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—State and Territory *continued*

<i>Items</i>	COAL MINING AND OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
	\$m	\$m	\$m	\$m	\$m	\$m
WESTERN AUSTRALIA						
Capital expenditure on						
Land	2.9	1.0	62.4	65.1	65.3	66.1
Dwellings, buildings and other structures	500.8	981.1	565.6	1 072.6	1 066.4	2 053.7
Plant, machinery and equipment	185.6	222.6	885.2	1 516.7	1 070.8	1 739.3
<i>Total</i>	689.3	1 204.7	1 513.2	2 654.4	2 202.5	3 859.1
Disposals of assets	144.1	75.5	189.2	93.3	333.3	168.8
Net capital expenditure	545.2	1 129.2	1 324.0	2 561.1	1 869.2	3 690.3
Capital expenditure less disposals						
Land, buildings and other structures	473.3	981.9	591.6	1 116.6	1 064.9	2 098.5
Plant machinery and equipment	71.7	147.3	732.3	1 444.5	804.0	1 591.8

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.10.

1.11 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—State and Territory *continued*

	TOTAL COAL MINING AND METAL ORE MINING.....	
	1996-97	1997-98
<i>Items</i>	\$m	\$m
.....		
TASMANIA		
Capital expenditure on		
Land	1.5	0.2
Dwellings, buildings and other structures	28.4	46.7
Plant, machinery and equipment	23.7	167.7
<i>Total</i>	53.6	214.6
Disposals of assets	4.3	165.9
Net capital expenditure	49.3	48.7
Capital expenditure less disposals		
Land, buildings and other structures	29.4	39.3
Plant machinery and equipment	19.9	9.4
.....		

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.10.

1.11 ESTABLISHMENT LEVEL(a), Fixed Capital Expenditure(b)—State and Territory *continued*

	TOTAL OIL AND GAS EXTRACTION AND METAL ORE MINING...	
	1996-97	1997-98
<i>Items</i>	\$m	\$m
.....		
NORTHERN TERRITORY		
Capital expenditure on		
Land	1.1	0.6
Dwellings, buildings and other structures	52.8	53.1
Plant, machinery and equipment	136.6	65.1
<i>Total</i>	190.5	118.8
Disposals of assets	4.3	23.6
Net capital expenditure	186.2	95.2
Capital expenditure less disposals		
Land, buildings and other structures	53.3	53.7
Plant machinery and equipment	132.9	41.3
.....		

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes capital work done for own use—reported in table 1.10.

1.12 ESTABLISHMENT LEVEL(a), Mineral Royalties Paid—Industry class

	PAID TO GOVERNMENTS....		PAID TO OTHERS(b).....		TOTAL.....	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
<i>Industry class</i>	\$m	\$m	\$m	\$m	\$m	\$m
Coal mining	366.4	455.2	13.2	23.1	379.6	478.3
Oil and gas extraction	1 442.5	1 455.7	53.0	48.1	1 495.5	1 503.8
Metal ore mining						
Iron ore	175.6	214.2	30.7	39.6	206.3	253.8
Bauxite	46.3	49.3	—	—	46.3	49.3
Copper ore	30.6	27.0	3.4	3.5	34.0	30.5
Gold ore	13.6	14.7	20.1	16.4	33.7	31.1
Mineral sand	27.6	27.3	4.7	6.7	32.3	34.0
Silver-lead-zinc ore	21.5	32.2	—	0.2	21.5	32.4
Other metal ore	17.5	18.8	11.5	12.3	29.0	31.1
<i>Total</i>	332.7	383.5	70.4	78.7	403.1	462.2
Total	2 141.6	2 294.4	136.6	149.9	2 278.2	2 444.3

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes mineral royalties paid to others and other royalties.

1.13 ESTABLISHMENT LEVEL(a), Mineral Royalties Paid—State and Territory

Industry class	PAID TO GOVERNMENTS....		PAID TO OTHERS(b).....		TOTAL.....	
	1996–97	1997–98	1996–97	1997–98	1996–97	1997–98
	\$m	\$m	\$m	\$m	\$m	\$m
NEW SOUTH WALES						
Coal mining	140.3	172.7	4.5	7.6	144.8	180.3
Metal ore mining	15.8	17.9	0.8	1.1	16.6	19.0
Total	156.1	190.6	5.3	8.7	161.4	199.3
VICTORIA						
Total coal mining, oil and gas extraction and metal ore mining	1 055.2	964.7	36.4	31.8	1 091.6	996.5
QUEENSLAND						
Coal mining	195.7	252.6	8.5	15.4	204.2	268.0
Oil and gas extraction	21.5	20.4	6.8	5.1	28.3	25.5
Metal ore mining	56.9	59.7	4.5	5.2	61.4	64.9
Total	274.1	332.7	19.8	25.7	293.9	358.4
SOUTH AUSTRALIA						
Total coal mining, oil and gas extraction and metal ore mining	53.1	55.8	8.4	9.0	61.5	64.8
WESTERN AUSTRALIA						
Coal mining and oil and gas extraction	339.3	441.2	0.2	0.5	339.5	441.7
Metal ore mining	228.2	275.9	51.5	58.5	279.7	334.4
Total	567.5	717.1	51.7	59.0	619.2	776.1
TASMANIA						
Total coal mining and metal ore mining	8.0	8.1	0.7	0.2	8.7	8.3
NORTHERN TERRITORY						
Total oil and gas extraction and metal ore mining	27.7	25.4	14.3	15.6	42.0	41.0

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes mineral royalties paid to others and other royalties.

CHAPTER 2

EMPLOYMENT

MANAGEMENT UNIT EMPLOYMENT

Total employment recorded at management unit level will often be greater than that recorded at the establishment unit level since management units may cover activities other than the operation of the mine site.

Total employment decreased by 5,589 persons (9%) to 54,814 persons in 1997–98 for Subdivisions 11–13 of the Australian and New Zealand Standard Industrial Classification (ANZSIC).

Metal ore mining, with 26,376 persons was the largest employer, however, this was down 9% on the previous year. While the coal mining industry also recorded a decline in employment of 14%, the oil and gas extraction industry recorded an increase of 803 persons (16%). Table 2.7 provides employment data by industry class.

2.1 MANAGEMENT UNIT LEVEL(a), Employment at 30 June—Industry Subdivision

		Management units	Employment(b)	Wages and salaries(c)
ANZSIC subdivision		no.	no.	\$m
.....				
11	Coal mining	119	22 510	2 223
12	Oil and gas extraction	45	5 928	554
13	Metal ore mining	199	26 376	1 780
	<i>Total coal mining, oil and gas extraction and metal ore mining</i>	363	54 814	4 557
14	Other mining	564	7 470	337
15	Services to mining	951	16 004	963
	Total mining 1997–98	1 878	78 288	5 857
	Total mining 1996–97	1 573	85 603	5 726
.....				

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes amounts drawn by working proprietors.

ESTABLISHMENT EMPLOYMENT

Data gathered in the 1997–98 Mining Collection for establishment employment are presented in tables 2.8 and 2.9. The following analysis relates to ANZSIC Subdivisions 11–13 only.

ESTABLISHMENT EMPLOYMENT *continued*

At the establishment level, employment decreased for all industries except oil and gas extraction and silver-lead-zinc ore mining. Total employment decreased by 5,293 persons (9%) to 50,875 persons. The coal mining industry reported the largest decrease employing 3,636 (14%) fewer persons than in the previous year. This reduction was brought about by several mines either being closed or placed on care and maintenance. Changes to mining practices, including the use of contractors, to create efficiencies was a contributing factor in the employment decreases in both the iron ore mining and gold ore mining industries, although in the latter, several high cost mines were also closed.

Total wages and salaries increased by just over 1% to \$4.1b despite the falls in employment. Mine closures and the payment of redundancy packages were a factor, especially in the coal mining industry. Coal mining with 22,522 employees and \$2.2b in wages and salaries accounted for the major portion of the mining workforce.

2.2 ESTABLISHMENT LEVEL(a), Employment at 30 June—Industry Class

		EMPLOYMENT(b).....				Wages and salaries(c)
INDUSTRY CLASS		Establish- ments	Males	Females	Persons	
ANZSIC code	Description	no.	no.	no.	no.	\$m
.....						
	Coal mining					
110	Coal mining	173	21 791	731	22 522	2 197
	Oil and gas extraction					
1200	Oil and gas extraction	96	3 582	665	4 247	365
	Metal ore mining					
1311	Iron ore mining	22	4 464	609	5 073	430
1312	Bauxite mining	10	1 520	142	1 662	96
1313	Copper ore mining	21	2 154	184	2 338	136
1314	Gold ore mining	151	6 439	1 242	7 681	438
1315	Mineral sand mining	15	1 842	305	2 147	122
1317	Silver-lead-zinc ore mining	17	3 029	247	3 276	217
	Other(d)	21	1 594	335	1 929	133
131	<i>Total metal ore mining</i>	257	21 042	3 064	24 106	1 573
	Total coal mining, oil and gas extraction and metal ore mining 1997–98	526	46 415	4 460	50 875	4 134
	Total coal mining, oil and gas extraction and metal ore mining 1996–97	503	51 551	4 617	56 168	4 077
.....						

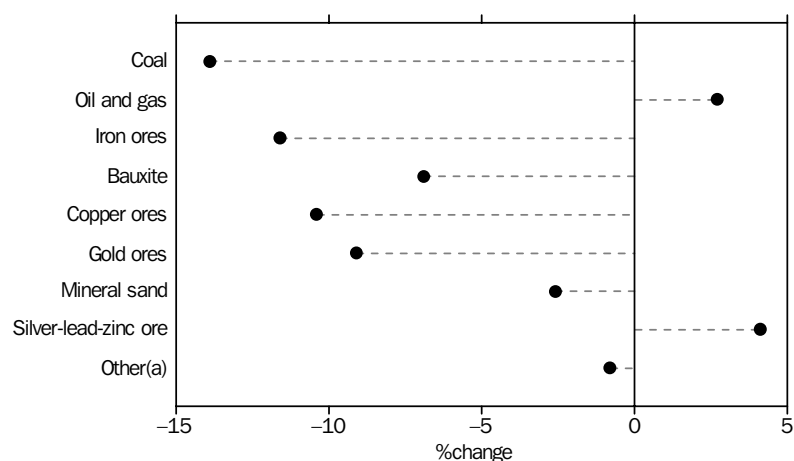
(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes amounts drawn by working proprietors.

(d) ANZSIC Classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

CHANGE IN EMPLOYMENT—June 1997 to June 1998



(a) ANZSIC Classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

Employment fell in all States except Victoria and South Australia. Western Australia, with its extensive metal ore mining industry, accounted for the most employees with 17,405 persons, although this was a decrease of 4% from 1996–97. New South Wales and Queensland reported the largest decreases losing 2,394 persons (15%) and 1,825 persons (12%) respectively, primarily in their coal mining sector.

2.3 ESTABLISHMENT LEVEL(a), Employment at 30 June—State and Territory

EMPLOYMENT(b).....

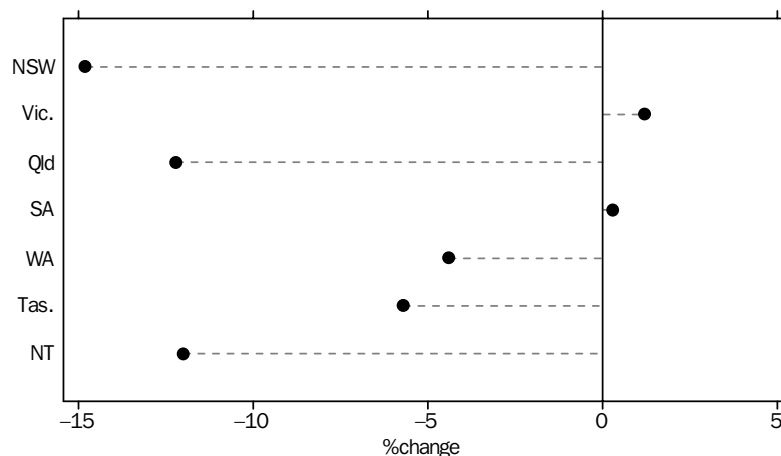
	<i>Establish- ments</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Wages and salaries(c)</i>
<i>State and Territory</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>no.</i>	<i>\$m</i>
New South Wales	122	13 386	343	13 729	1 279
Victoria	25	1 903	92	1 995	129
Queensland	141	12 222	926	13 148	1 171
South Australia	16	1 646	213	1 859	98
Western Australia	184	14 837	2 568	17 405	1 258
Tasmania	11	886	94	980	67
Northern Territory	27	1 535	224	1 759	133
Australia	526	46 415	4 460	50 875	4 134
Total 1997	503	51 551	4 617	56 168	4 077

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes amounts drawn by working proprietors.

CHANGE IN EMPLOYMENT—June 1997 to June 1998



USE OF CONTRACTORS

The impact of contract mining was discussed in the 1996–97 edition of *Australian Mining Industry* (Cat. no. 8414.0). The use of contractors to undertake a single task or a range of tasks such as stripping of overburden, crushing of ore or setting up mine site infrastructure has steadily increased particularly in the gold, coal and iron ore mining industries. Many of these contractors are classified to industry categories such as construction and transport that are out of scope of the mining collection (see paragraphs 8–9 of the Explanatory Notes).

It was mentioned earlier that the level of contract mining expenses has increased by \$601m (26%). In 1996–97 contract mining expenses accounted for 14% of total operating expenses. In 1997–98 this has risen to 16% accounting for \$2.9b. The gold ore mining, coal mining and iron ore mining industries are the largest users of contract labour.

2.4 ESTABLISHMENT LEVEL(a), Contract Mining Expenses—Industry class

	1996–97	1997–98
Industry	\$m	\$m
Coal mining	442	638
Oil and gas extraction	12	9
Iron ore mining	304	384
Bauxite mining	7	9
Copper ore mining	109	121
Gold ore mining	1 065	1 345
Mineral sand mining	42	68
Silver-lead-zinc ore mining	46	64
Other metal ore mining(b)	246	235
Total metal ore mining	1 817	2 225
Total coal mining, oil and gas extraction and metal ore mining	2 272	2 872
Total operating expenses(c)	16 457	17 674

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) ANZSIC Classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

(c) Includes purchases and selected expenses and wages and salaries.

ESTABLISHMENTS BY EMPLOYMENT SIZE

Ranking establishments by employment size, as shown in table 2.5, revealed that approximately 27% of mining operations had employment in excess of 100 persons. There were a small number of extremely large operations (i.e. more than 1,000 employees), and their contribution to employment and turnover was significant. Most mining was conducted on a large scale although some industries such as gold ore mining had a substantial number of small establishments.

An analysis of establishments by State and Territory, as shown in table 2.6, illustrates the relative levels of mining activity in each State and Territory and the composition of that activity. In terms of the number of establishments, the major mining States were Western Australia, Queensland and New South Wales.

Unincorporated joint venture (UJV) participants aside, the majority of establishments in New South Wales had an employment size of 100 or more employees. This reflects the coal mining activity that dominates the State. This contrasts with the profile for Western Australia where the majority of establishments employed fewer than 100 persons, reflecting the importance of the gold mining industry. Western Australia also had 44 establishments with more than 100 employees. These establishments covered the activities of iron ore mining and the larger gold mines.

2.5 ESTABLISHMENT LEVEL(a), Employment at 30 June—Employment size(b)

	<i>Establishments</i>	<i>Employment</i>	<i>Wages and salaries</i>	<i>Turnover</i>	<i>Value added</i>	<i>Net capital expenditure</i>
<i>Employment size</i>	no.	no.	\$m	\$m	\$m	\$m
Less than 10	126	342	80	1 983	1 241	215
10–19	25	365	24	193	111	1
20–49	34	1 153	85	714	144	339
50–99	30	2 130	156	947	62	379
100–499	113	26 283	2 064	11 438	4 791	1 654
500–999	13	8 590	613	4 877	2 920	671
1 000 or more	6	10 557	991	4 256	2 010	427
UJV participants	179	1 455	121	12 936	12 490	3 116
Total	526	50 875	4 134	37 344	23 770	6 803

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Excludes ANZSIC Subdivisions 14 and 15, Other mining and Services to mining.

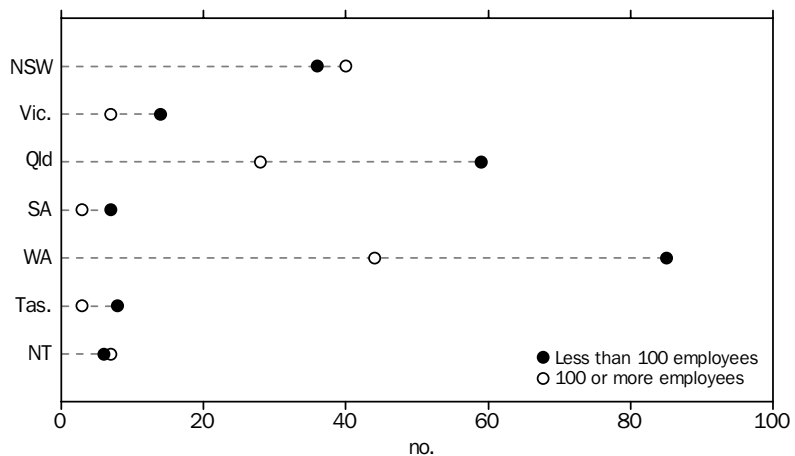
2.6 ESTABLISHMENT LEVEL(a), Employment Size at 30 June(b)

Employment size	NSW	Vic.	Qld	SA	WA	Tas.	NT	Aust.
Less than 10	14	10	43	6	48	3	2	126
10–19	6	3	3	1	10	1	1	25
20–49	11	1	8	—	11	1	2	34
50–99	6	—	8	—	12	3	1	30
100–499	37	6	21	1	38	3	7	113
500 or more	3	1	7	2	6	—	—	19
UJV participants	45	4	51	6	59	—	14	179
Total	122	25	141	16	184	11	27	526

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Excludes ANZSIC Subdivisions 14 and 15, Other mining and Services to mining.

ESTABLISHMENT LEVEL(a), Employment Size(b)



(a) Excludes establishments that are participants only in UJVs.

(b) Excludes ANZSIC Subdivisions 14 and 15, Other mining and Services to mining.

2.7 MANAGEMENT UNIT LEVEL(a), Employment and Labour Ratios at 30 June

	COAL MINING...		OIL AND GAS EXTRACTION.....		METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
Items	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Management units (no.)	117	119	45	45	184	199	346	363
Employment(b) (no.)	26 301	22 510	5 125	5 928	28 977	26 376	60 403	54 814
Persons employed per management unit (no.)	224.8	189.2	113.9	131.7	157.5	132.5	174.6	151.0
Labour ratios								
Profit to employment (\$'000/employee)	43.4	38.6	870.2	627.5	69.7	60.3	126.1	112.7
Industry value added								
To employment (\$'000/employee)	n.a.	249.0	n.a.	1 300.6	n.a.	291.0	n.a.	383.0
To selected labour costs (times)	n.a.	2.3	n.a.	13.4	n.a.	4.0	n.a.	4.2
Selected labour costs								
To employment (\$'000/employee)	89.5	109.3	101.8	97.1	67.4	72.7	79.9	90.3

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes working proprietors.

2.8 ESTABLISHMENT LEVEL(a), Employment at 30 June—Industry class

	COAL MINING....		OIL AND GAS EXTRACTION.....		IRON ORE MINING.....		BAUXITE MINING.....	
<i>Items</i>	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Establishments (no.)	175	173	86	96	21	22	10	10
Employment(b)								
Males (no.)	25 298	21 791	3 586	3 582	5 089	4 464	1 713	1 520
Females (no.)	860	731	548	665	651	609	73	142
Persons (no.)	26 158	22 522	4 134	4 247	5 740	5 073	1 786	1 662
Persons employed per establishment(b) (no.)	149.5	130.2	48.1	44.2	273.3	230.6	178.6	166.2
Employees working below ground (no.)	8 497	7 281	—	—	—	—	—	—
Wages and salaries(c) (\$m)	2 106.2	2 196.5	361.3	364.7	410.7	430.4	114.6	96.2
	COPPER ORE MINING.....		GOLD ORE MINING.....		MINERAL SAND MINING.....		SILVER-LEAD-ZINC ORE MINING.....	
<i>Items</i>	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Establishments (no.)	20	21	143	151	14	15	15	17
Employment(b)								
Males (no.)	2 352	2 154	7 070	6 439	1 881	1 842	2 914	3 029
Females (no.)	256	184	1 377	1 242	323	305	232	247
Persons (no.)	2 608	2 338	8 447	7 681	2 204	2 147	3 146	3 276
Persons employed per establishment(b) (no.)	130.4	111.3	59.1	50.9	157.4	143.1	209.7	192.7
Employees working below ground (no.)	1 175	1 071	1 113	1 091	—	—	1 602	1 694
Wages and salaries(c) (\$m)	148.1	136.0	459.7	438.3	107.6	122.0	212.3	217.0

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes amounts drawn by working proprietors.

2.8 ESTABLISHMENT LEVEL(a), Employment at 30 June—Industry class *continued*

	OTHER METAL ORE MINING(b)....		TOTAL METAL ORE MINING.....		TOTAL COAL MINING, OIL AND GAS EXTRACTION AND METAL ORE MINING.....	
<i>Items</i>	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
Establishments (no.)	19	21	242	257	503	526
Employment(c)						
Males (no.)	1 648	1 594	22 667	21 042	51 551	46 415
Females (no.)	297	335	3 209	3 064	4 617	4 460
Persons (no.)	1 945	1 929	25 876	24 106	56 168	50 875
Persons employed per establishment(c) (no.)	102.4	91.9	106.9	93.8	111.7	96.7
Employees working below ground (no.)	244	248	4 134	4 104	12 631	11 385
Wages and salaries(d) (\$m)	156.9	133.3	1 609.9	1 573.2	4 077.4	4 134.4

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) ANZSIC classes 1316 (Nickel ore mining) and 1319 (Metal ore mining n.e.c.).

(c) Includes working proprietors.

(d) Excludes amounts drawn by working proprietors.

2.9 ESTABLISHMENT LEVEL(a), Employment at 30 June—State and Territory

<i>Industry class</i>	<i>Establish- ments</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Persons per establish- ment(b)</i>	<i>Employees working below ground</i>	<i>Wages and salaries(c)</i>
	no.	no.	no.	no.	no.	no.	\$m
NEW SOUTH WALES							
Coal mining							
1996–97	101	13 655	335	13 990	138.5	6 600	1 112.4
1997–98	98	11 889	230	12 119	123.7	5 590	1 174.7
Metal ore mining							
1996–97	22	1 967	166	2 133	97.0	839	146.7
1997–98	24	1 497	113	1 610	67.1	635	104.5
Total coal mining and metal ore mining							
1996–97	123	15 622	501	16 123	131.1	7 439	1 259.1
1997–98	122	13 386	343	13 729	112.5	6 225	1 279.2
VICTORIA							
Total coal mining, oil and gas extraction and metal ore mining							
1996–97	25	1 878	93	1 971	78.8	88	122.2
1997–98	26	1 903	92	1 995	76.7	133	128.8
QUEENSLAND							
Coal mining							
1996–97	61	9 519	446	9 965	163.4	1 870	850.9
1997–98	60	7 809	431	8 240	137.3	1 532	866.5
Oil and gas extraction							
1996–97	25	240	30	270	10.8	—	15.0
1997–98	33	210	25	235	7.1	—	20.1
Metal ore mining							
1996–97	41	4 320	418	4 738	115.6	1 530	265.3
1997–98	48	4 203	470	4 673	97.4	1 407	283.9
Total coal mining, oil and gas extraction and metal ore mining							
1996–97	127	14 079	894	14 973	117.9	3 400	1 131.2
1997–98	141	12 222	926	13 148	93.2	2 939	1 170.5

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes amounts drawn by working proprietors.

2.9 ESTABLISHMENT LEVEL(a), Employment at 30 June—State and Territory *continued*

<i>Industry class</i>	<i>Establish- ments</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>	<i>Persons per establish- ment(b)</i>	<i>Employees working below ground</i>	<i>Wages and salaries(c)</i>
	no.	no.	no.	no.	no.	no.	\$m
SOUTH AUSTRALIA							
Total coal mining, oil and gas extraction and metal ore mining							
1996–97	16	1 622	232	1 854	115.9	133	105.9
1997–98	16	1 646	213	1 859	116.2	360	98.0
WESTERN AUSTRALIA							
Coal mining and oil and gas extraction							
1996–97	39	2 312	319	2 631	382.0	—	279.5
1997–98	42	2 410	459	2 869	250.3	—	294.5
Metal ore mining							
1996–97	136	13 373	2 205	15 578	114.5	980	967.5
1997–98	142	12 427	2 109	14 536	102.4	1 092	963.8
Total coal mining, oil and gas extraction and metal ore mining							
1996–97	175	15 685	2 524	18 209	104.1	980	1 247.0
1997–98	184	14 837	2 568	17 405	94.6	1 092	1 258.3
TASMANIA							
Total coal mining and metal ore mining							
1996–97	10	955	84	1 039	103.9	415	85.0
1997–98	11	886	94	980	89.1	376	67.0
NORTHERN TERRITORY							
Total oil and gas extraction and metal ore mining							
1996–97	27	1 710	289	1 999	74.0	176	127.1
1997–98	27	1 535	224	1 759	65.1	260	132.6

(a) See paragraphs 11–16 of the Explanatory Notes.

(b) Includes working proprietors.

(c) Excludes amounts drawn by working proprietors.

CHAPTER 3

MINERAL PRODUCTION

SUMMARY

The 1997–98 statistics in this section are derived solely from information supplied to the Australian Bureau of Statistics (ABS) through the Mining Collection.

3.1 VALUE OF MINERALS PRODUCED

	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>Aust.</i>
<i>Type</i>	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Coal, oil and gas	4 200	n.p.	5 283	n.p.	5 379	n.p.	n.p.	19 220
Metallic minerals	742	n.p.	2 110	n.p.	10 169	n.p.	n.p.	14 895
Total 1997–98	4 942	3 408	7 393	1 124	15 548	356	1 345	34 116
1996–97	4 742	3 265	6 375	1 059	14 395	387	1 306	31 529

The total value of minerals produced in the metallic minerals, coal, and oil and gas industries was \$34.1b in 1997–98, an increase of \$2.6b (8%) compared with 1996–97.

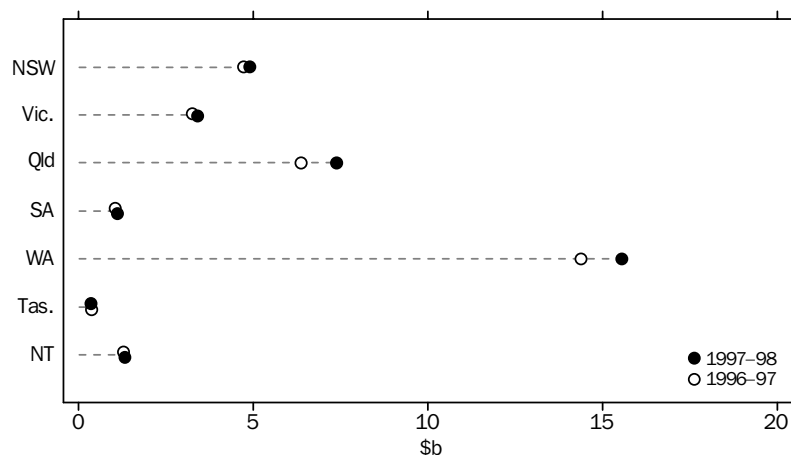
The value of metallic minerals produced increased by \$1.3b (9%) to \$14.9b. This was primarily due to increases in the value of gold production, up \$339m (7%) to \$4.9b, and the value of iron ore produced, up \$425m (12%) to \$4.0b.

The value of coal produced increased by \$828m (9%) to \$9.9b mainly due to increases in the value of bituminous coal. Increases in the value of crude oil and natural gas produced were the major reasons for the value of oil and gas production rising by \$480m (5%) to \$9.3b.

The metallic minerals group was the major contributor to the total value of production with 44%, followed by the coal industry with 29% and the oil and gas industry with 27%.

Western Australia accounted for the largest share of minerals produced with \$15.5b, or 46% of total production. Queensland was next with \$7.4b or 22%.

VALUE OF MINERALS PRODUCED



3.2 MINERALS PRODUCED, Quantity

Commodity code	Mineral	1996-97	1997-98
Metallic minerals			
500	Bauxite ('000 t)	46 874	50 418
502	Copper concentrate(a) ('000 t)	1 769	1 665
509	Gold bullion (dore) (kg)	296 398	330 095
(b)	Iron ore ('000 t)	162 480	169 568
535	Lead concentrate ('000 t)	782	943
Mineral sands			
521	Beneficiated ilmenite ('000 t)	520	585
522	Ilmenite concentrate ('000 t)	1 818	1 950
523	Leucoxene concentrate ('000 t)	32	37
525	Rutile concentrate ('000 t)	189	243
529	Zircon concentrate ('000 t)	485	383
543	Zinc concentrate ('000 t)	1 742	1 654
547	Zinc-lead concentrate(c) ('000 t)	328	375
	Other metallic minerals	n.a.	n.a.
Coal			
Saleable coal—other than lignite			
580	Bituminous coal ('000 t)	184 951	203 355
581	Semi-anthracite coal ('000 t)	2 933	3 033
582	Sub-bituminous coal ('000 t)	18 285	18 793
	Lignite ('000 t)	58 886	68 638
Oil and gas			
590	Crude oil(d) (ML)	29 556	32 310
591	Natural gas(e) (GL)	n.a.	n.a.
594	Propane (ML)	2 142	2 421
595	Butane (ML)	1 584	1 883

(a) Includes copper precipitate.

(b) Commodity codes 507, 513, 515, 519 and 520 (iron ore pellets).

(c) Includes lead-zinc concentrate.

(d) Includes condensate.

(e) Includes ethane and liquefied natural gas.

3.3 MINERALS PRODUCED, Value

		1996-97	1997-98
Commodity code	Mineral	\$'000	\$'000
Metallic minerals			
500	Bauxite	881 819	943 293
502	Copper concentrate(a)	1 330 723	1 384 382
509	Gold bullion (dore)	4 577 452	4 916 643
(b)	Iron ore	3 569 736	3 994 291
535	Lead concentrate	346 578	425 178
	Mineral sands		
521	Beneficiated ilmenite	257 345	289 192
522	Ilmenite concentrate	170 502	189 241
523	Leucoxene concentrate	17 451	10 741
525	Rutile concentrate	143 547	185 895
529	Zircon concentrate	256 133	217 726
543	Zinc concentrate	615 876	751 113
547	Zinc-lead concentrate(c)	162 686	219 211
	Other metallic minerals	1 287 164	1 368 321
Total metallic minerals		13 617 012	14 895 228
Coal			
	Saleable coal—other than lignite		
580	Bituminous coal	7 901 478	8 774 293
581	Semi-anthracite coal	125 488	138 712
582	Sub-bituminous coal	620 088	618 595
	<i>Total</i>		
	Lignite	442 335	385 913
Total coal		9 089 389	9 917 513
Oil and gas			
590	Crude oil(d)	5 202 016	5 378 221
591	Natural gas(e)	3 051 218	3 257 273
594	Propane	322 198	370 608
595	Butane	247 185	296 811
Total oil and gas		8 822 616	9 302 913
Total metallic minerals, coal, oil and gas		31 529 017	34 115 654

(a) Includes copper precipitate.

(b) Commodity codes 507, 513, 515, 519 and 520 (iron ore pellets).

(c) Includes lead-zinc concentrate.

(d) Includes condensate.

(e) Includes ethane and liquefied natural gas.

EXPLANATORY NOTES

INTRODUCTION

1 The range of financial statistics appearing in this publication have been derived from the 1997–98 Mining Collection. The collection aims to meet demands of users who require annual financial statistics which can be related to other industry sectors in Australia on a consistent basis.

2 The Mining Collection is conducted as a component of the Australian Bureau of Statistics (ABS) integrated economic statistics system. Data collected at the industry level within this framework conform to the same basic conceptual standards, allowing comparative analysis between different industries and industry sectors.

3 The data for 1996–97 are now final and replace those previously issued in *Australian Mining Industry 1996–97* (Cat. no. 8414.0) released in November 1998, reissued in June 1999.

SCOPE

4 The 1993 version of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (Cat. no. 1292.0) has been used to classify management units and establishments included in the Mining Collection. The mining classifications as listed in Division B are as follows:

- 110 Coal mining
 - 1101 Black coal mining
 - 1102 Brown coal mining
- 120 Oil and gas extraction
 - 1200 Oil and gas extraction
- 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.
- 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.
- 151 Exploration
 - 1511 Petroleum exploration (own account)
 - 1512 Petroleum exploration services
 - 1513 Mineral exploration (own account)
 - 1514 Mineral exploration services
- 152 Other mining
 - 1520 Other mining services

SCOPE *continued*

5 Mining broadly 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 dressing or beneficiating ores or other minerals by crushing, milling, screening, washing, flotation or other processes (including chemical beneficiation) or briquetting, 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.

6 Establishments mainly engaged in refining or smelting of minerals or ores (other than preliminary smelting of gold), or in the manufacturing of such products of mineral origin as coke, cement and fertilisers are excluded.

7 Mining activity is sometimes undertaken within an establishment mainly engaged in other activities (e.g. a manufacturing establishment). Statistics relating to the mining activity in this situation are not treated as part of the mining industry, and are therefore not included in this publication, unless the transfers out of minerals exceed a specific value (\$7.2m in 1996–97 and \$7.3m in 1997–98). While this does not have a great impact on the data produced for the coal, oil and gas, and metallic minerals industries due to the predominance of large operations within those industries, it does affect to a greater extent the non-metallic and construction materials industries.

8 It should be noted that companies engaged in providing contract mining services are not always collected within the scope of the annual collection. Under the principles set down within ANZSIC, contract mining organisations will only be included if they are responsible for all facets of the mining operation at a particular site.

9 In situations where companies provide contract mining services to the mining industry, these companies are classified to the activity they are performing rather than to the industry they are serving. Hence companies that are ‘contracted’ to perform tasks such as mine site preparation (and/or construction), and removal of overburden, are classified to the Construction industry and are outside the scope of the annual Mining Collection.

10 The annual Mining Collection now covers all ANZSIC classes in Division B. Subdivision 15 (Services to mining) was collected for the first time in 1995–96 using a sample survey and will continue to be collected this way on an annual basis. All of Class 1420 (Mining n.e.c.) was collected in 1996–97 and 1997–98. However, for both years Classes 1411 (Gravel and sand quarrying) and Class 1419 (Construction material mining n.e.c.) were collected using a sample survey.

STATISTICAL UNITS

11 The basic units for which statistics are reported in ABS integrated industry collections are the management unit and the establishment.

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

STATISTICAL UNITS *continued*

13 The establishment is the smallest accounting unit of a business, within a State or Territory, controlling its productive activities and maintaining a specified range of detailed data including data enabling calculation of value added. In general an establishment covers all operations at a physical location, but may consist of a group of locations provided they are within the same State or Territory and classified to a single industry. The majority of establishments operate at one location only.

14 This publication presents industry statistics which are compiled differently from activity statistics. Each management unit or establishment is classified to a single industry irrespective of any diversity of activities undertaken. The industry allocated is the one which provides the main source of income. This means, for example, that a management unit which derives most of its income from mining activities would have all operations included in the aggregates and ratios for the mining industry group, even if significant secondary activities (e.g. manufacturing, construction) were undertaken.

15 The differences in definition of management unit and establishment often result in different values being obtained for certain data items. For example, employment at the establishment level only includes those employees that are involved in that industry, whilst employment at the management unit level includes all employees of that business unit. This often includes employees who would be included in a different industry at the establishment level (e.g. sales staff, head office staff and staff involved in manufacturing activity using mining products).

16 Separately located administrative offices and ancillary units such as storage premises, laboratories and producers' sales branches continue to have their activities included with mining activities, unless these ancillaries constitute a separate accounting unit, in which case they are defined as a separate establishment.

17 The ABS Mining Collection approaches both operators and participants in unincorporated joint ventures (UJVs). The statistical treatment of UJVs from 1989–90 has included the creation of separate establishments for individual participants in a UJV. In recognition of Australian Accounting Standard 19, new establishments are created for each venturer where an appropriate establishment operating in the same industry (ANZSIC) in the same State or Territory did not already exist. This has resulted in inflation of establishment counts in a number of industries. For this reason, establishment counts should not be taken to represent the operations at a single physical location. Generally the participants supply data on their share of income and assets, while the operator reports all expenses and employment.

18 UJVs operating within the mining industry 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 which may not otherwise be involved in the mining industry.

REFERENCE PERIOD

19 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.

20 Financial data presented incorporates all units in scope of the Mining Collection that were in production stage at any time during the year. It also includes any temporarily inactive units ('temporary nils'), i.e. those units which were in 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). Prior to 1997–98 these temporarily inactive units were excluded from the Mining Collection. Their inclusion, however, has minimal effect on the estimates of the financial and employment data.

21 Employment data in this publication represents employment for all units operating as at 30 June.

22 The number of units reported (both management units and establishments) represents only those units that were in operation as at 30 June.

MINERAL PRODUCTION DATA

23 Details are presented about the quantity and value of minerals produced during the year ended 30 June 1998.

24 From 1996–97, data published for mineral production are derived solely from information supplied directly to the ABS through the Mining Collection. Published data for years prior to 1996–97 were derived from information supplied by the various State mines departments or directly to the ABS, supplemented in some cases by data from other sources. The scope of the ABS collection is confined to establishments which are classified to ANZSIC Division B, Mining, and excludes establishments which may be producing minerals as a secondary activity (refer to paragraph 7 of these Explanatory Notes).

PRINCIPLES FOR MEASURING QUANTITY AND VALUE OF MINERALS

25 The quantities of individual minerals produced are recorded, in general, in the form in which the minerals are dispatched from the mine or from associated treatment works in the locality of the mine. For metallic minerals, the output is recorded as ore if no treatment is undertaken at or near the mine, and as concentrate if ore dressing operations are carried out in associated works in the locality of the mine.

26 Quantity statistics in this publication are quantities produced during the year. The data cover, in addition to quantities produced for sale, quantities for transfer to other establishments of the management unit and quantities for consumption by the mine itself. In the case of some minerals (e.g. those which do not have a marketable value until they are sold or dispatched from a mine) the quantities reported are dispatches or sales from the mine, rather than production, and the corresponding value of production refers to value of minerals dispatched or sold.

27 The production of individual minerals is valued at the mine or at associated treatment works in the locality of the mine. The valuation is derived, in general, by valuing the quantity produced during the year at the unit selling value, less any transport costs from the mine or associated treatment works to the point of sale.

COMPARABILITY WITH PREVIOUS STATISTICS

28 Commencing with estimates for 1997–98, under new international standards, contribution to gross domestic product (GDP) by mining industries will be measured by the variable 'industry value added' (IVA). Estimates for IVA measure the value added by an industry to the intermediate inputs used by that industry. Under the previous standards, the corresponding contribution to GDP was measured by the variable 'industry gross product' (IGP) at the management unit level. It should be noted that IVA is not the same variable as 'value added' which is published at the establishment level. The composition of value added has not changed under the new standards. An explanation of the relationship between IVA estimates and IGP estimates can be found in the Glossary.

RELIABILITY OF ESTIMATES

29 Data presented in this publication for Services to mining (ANZSIC Subdivision 15) and Construction Material Mining (ANZSIC Classes 1411 and 1419) are based on information collected from a sample of businesses and are, therefore, 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 businesses in the population. One measure of the likely difference is given by the standard error (SE), 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 SE 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 SEs.

30 The SE can also be expressed as a percentage of the estimate, and is known as the relative standard error (RSE). Estimates highlighted with an asterisk (*) indicate they are subject to sampling variability between 25% and 50%. Those estimates highlighted with ** are subject to sampling variability greater than 50%. Detailed estimates of RSEs can be made available upon request.

31 The size of the RSE may be a misleading indicator of the reliability of some of the estimates for Trading Profit, Operating profit before tax (OPBT), Earnings before interest and tax (EBIT) and IVA. This situation may occur where an estimate may legitimately include positive and negative values reflecting the financial positions of different businesses. In these cases the aggregate estimate can be small relative to the contribution of individual businesses resulting in an SE which is large relative to the estimate.

32 The imprecision due to sampling variability, which is measured by the SE, 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 from providers, errors made in collection such as recording and coding data, and errors made in processing data. Inaccuracies of this kind are referred to collectively as non-sampling error and they may occur in any enumeration, whether it be a census or a sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, editing processes, and efficient operating procedures.

GENERAL ACKNOWLEDGMENT

33 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is 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

34 The following is a list of ABS publications containing mining and related statistics:

- Actual and Expected Private Mineral Exploration, Australia*
(Cat. no. 8412.0)—quarterly
- Australian Mining Industry* (Cat. no. 8414.0)—biennial, alternating with Cat. no. 8415.0
- Business Operations and Industry Performance, Australia*
(Cat. no. 8140.0)—annual
- Directory of Mining Statistics* (Cat. no. 8416.0)—first issue October 1999
- Electricity, Gas, Water and Sewerage Industries, Australia*
(Cat. no. 8208.0)—biennial, alternating with Cat. no. 8226.0
- Environment Protection Expenditure, Australia* (Cat. no. 4603.0)—annual
- Export Price Index, Australia* (Cat. no. 6405.0)—quarterly
- Import Price Index, Australia* (Cat. no. 6414.0)—quarterly
- International Merchandise Trade, Australia* (Cat. no. 5422.0)—quarterly
- Job Vacancies and Overtime, Australia* (Cat. no. 6354.0)—quarterly
- Labour Force, Australia* (Cat. no. 6203.0)—monthly
- Manufacturing Industry, Australia* (Cat. no. 8221.0)—annual
- Manufacturing Production, Australia* (Cat. no. 8301.0) includes details of the production quantity of 27 important manufactured commodities (including electricity and gas)—issued approximately four weeks after the month to which it relates
- Mining, Electricity and Gas Operations, Australia, Preliminary*
(Cat. no. 8401.0)—annual
- Mining Technology Statistics, Australia* (Cat. no. 8413.0)—annual
- Research and Experimental Development Business Enterprises, (Inter-Year Survey), Australia* (Cat. no. 8114.0)—irregular
- Year Book Australia* (Cat. no. 1301.0)—annual

35 Current publications produced by the ABS are listed in the *Catalogue of Publications and Products* (Cat. no. 1101.0). The ABS also issues, on Tuesdays and Fridays, a *Release Advice* (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and the Release Advice are available from any ABS office.

Other data

36 The following publications containing other mining and related statistics for Australia are published by organisations other than the ABS.

- Australian Commodities: Forecasts and Issues* (ABARE)
- Australian Commodity Statistics* (ABARE)
- Australian Mineral Statistics* (ABARE)
- Australia's Identified Mineral Resources* (AGSO)
- Mineral Commodity Summaries, United States Department of the Interior*, Bureau of Mines
- Oil and Gas Resources of Australia* (AGSO)

UNPUBLISHED STATISTICS

37 While the statistics presented in this publication provide a comprehensive picture of the mining industry, additional information is available from the Mining Collection and other ABS data sources. Unpublished information is generally made available on request, subject to it satisfying quality and confidentiality guidelines associated with the release of such data. The charges for these services vary according to the time required to extract, tabulate and evaluate the data.

38 Inquiries should be made to the officer named on the front cover of this publication.

ABBREVIATIONS AND SYMBOLS

39 The following abbreviations and symbols have been used in this publication:

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
AGSO	Australian Geological Survey Organisation
ANZSIC	Australian and New Zealand Standard Industrial Classification
EBIT	Earnings before interest and tax
\$b	billion dollars—1,000 million
GDP	Gross domestic product
GL	Gigalitres (10 ⁹)
IGP	Industry gross product
IVA	Industry value added
kg	kilograms
ML	Megalitres
n.a.	not available
n.e.c.	not elsewhere classified
n.p.	not available for separate publication (but included in totals where applicable)
OPBT	Operating profit before tax
RSE	relative standard error
SE	standard error
t	tonnes
UJV	Unincorporated joint venture
*	data subject to sampling variability between 25% and 50%
**	data subject to sampling variability greater than 50%
—	nil or rounded to zero

40 Where figures have been rounded, discrepancies may occur between the sum of component items and the total.

GLOSSARY

As the data presented in this publication have been compiled from the standard financial accounts of businesses, the definition of each reported item aligns closely with that adopted in standard business accounting practice. In those instances where more than one standard or definition is available, the following paragraphs indicate which one has been chosen.

Bad debts	Represents the amount of bad debts written-off, net of bad debts previously written-off but recovered.
Capital expenditure	Includes all capitalised costs and progress payments made to contractors for capital work on land, dwellings, buildings and structures, and plant, machinery and equipment (both new and second-hand).
Capitalised purchases	Goods drawn from stock for use as fixed tangible assets in capital work done for own use.
Capitalised wages	Capitalised work done by own employees in manufacturing, constructing or installing assets.
Capital work done for own use	Capitalised work done by the employees or proprietors of a business for use by the business or for rental or lease to other businesses. The main types of work are manufacturing, constructing, installing or repairing assets and development of computer software. Also included is the value of own account mineral/petroleum exploration. These activities are valued at the costs of the materials and the wages and salaries involved. Conceptually, this item should also include own account production of literary, entertainment or artistic originals. However, these activities are relatively unimportant for the mining industry and have not been measured.
Contract mining	Contract payment for mining services.
Cost of sales	The sum of purchases, selected expenses and opening stocks minus closing stocks.
Current assets	Refers to the value of closing trading stock (i.e. at the end of the financial year) plus the value of other current assets such as cash, short-term deposits, prepayments and short-term loans to employees.
Current liabilities	The book value of current liabilities at the end of the financial year. This includes provisions for employee entitlements, taxation, leave, claims, trade creditors and other accounts payable and bank overdrafts.
Depreciation	Includes depreciation allowed on buildings and other fixed tangible assets.

Disposal of assets	Includes the proceeds from the sale of land, dwellings, buildings, plant, machinery and equipment.
Dore	A gold dore is a bar which is predominantly gold, produced after the first stage in the purification process carried out by the mine. It contains approximately 90% gold with the balance being metals such as silver and copper.
Earnings before interest and tax (EBIT)	A measure of profit prior to the deduction of interest expense and income tax.
Employment	Includes working proprietors, working partners, permanent, part-time, temporary and casual employees, employees on paid leave and managerial and executive employees working for a business during the last pay period ending in June.
Establishments at 30 June	Refers to the number of establishments in operation at 30 June.
Freight and cartage expenses	Excludes the cost of delivery by own vehicles and employees, and also excludes overseas freight.
Government subsidies: diesel fuel rebate	Reimbursement under the Diesel Fuel Rebate Scheme.
Government subsidies: operational funding	Includes bounties, subsidies and export grants but excludes diesel fuel rebate.
Industry gross product (IGP)	<p>For periods prior to 1997–98, estimates of IGP represented the measure of the contribution by mining industries to gross domestic product (GDP). The formula for IGP is as follows:</p> <p>IGP = Sales of goods and services</p> <p><i>Plus</i> Rent, leasing and hiring income</p> <p>Government subsidies</p> <p>Capital work done for own use</p> <p>Closing stocks</p> <p><i>Less</i> Opening stocks</p> <p>Purchases and selected expenses.</p> <p>However, commencing with estimates for 1997–98, following the introduction of new international standards for measuring economic variables, IGP has been replaced by the variable 'industry value added' (IVA) for the purpose of measuring industry contribution to GDP.</p> <p>The relationship between IVA estimates and IGP estimates is:</p> <p>IVA</p> <p><i>Less</i> Mineral/petroleum exploration expenditure written off by businesses</p> <p><i>Less</i> Computer software expenses not capitalised by the business</p> <p><i>Less</i> Selected indirect taxes (for mining industries, the main types are fringe benefits tax, payroll tax, land rates and land taxes)</p> <p><i>Equals</i> IGP</p>

Industry value added (IVA) IVA represents the value added by an industry to the intermediate inputs used by the industry. Commencing with estimates for 1997–98, IVA has replaced IGP as the measure of the contribution by mining industries at management unit level to gross domestic product. At establishment level a different value added measure is compiled, known simply as 'value added'.

See the entry for Industry gross product for an explanation of the differences between IVA and IGP and the entry for value added for explanation of its composition.

The derivation of IVA is as follows:

Turnover

Plus Closing inventories

Less Opening inventories

Less Capitalised purchases

Less Intermediate input expenses

Equals IVA

However, it should be noted that IVA is not a measure of operating profits before tax. Wages, salaries 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.

Industry value added to employment The average amount, expressed in thousands of dollars, of industry value added for each employee, working proprietor and working partner, i.e. industry value added/employment.

Industry value added to selected labour costs The average amount of the value of each dollar of value added generated by each dollar input of labour, i.e. industry value added/selected labour costs.

Insurance premiums Includes premiums for fire, general, accident, public liability, optional third-party and comprehensive motor vehicle insurance, professional indemnity insurance and common law liability.

Interest expenses Includes interest paid on loans from banks, finance companies, insurance companies and related companies.

Interest income Includes interest received from bank accounts, loans and finance leases and earnings on discounted bills. Excludes charges between companies of the same management unit.

Intermediate inputs Intermediate inputs consist of materials and certain services which are used up in the production process. Definitions of relevant component items are also included in this glossary. The calculation is:

Intermediate input expenses

Plus Opening inventories

Less Closing inventories

Equals Intermediate inputs

Intermediate input expenses	<p>Includes two categories of operating expenses:</p> <ul style="list-style-type: none"> ▪ purchases of goods, materials and services used in production; and ▪ expenses related to the sale of goods and administrative expenses. <p>Purchase of goods, materials and services used in production includes:</p> <ul style="list-style-type: none"> ▪ purchases of materials, components, explosives, containers and packaging materials, electricity, fuels and water; ▪ purchases of minerals or other goods for resale without processing or assembly; ▪ motor vehicle expenses, freight and cartage expenses, repair and maintenance expenses; ▪ rent, leasing and hiring expenses (except for finance leases); ▪ payment for contract, subcontract and commission expenses. <p>This category of operating expenses is included in value added produced at mining establishment level.</p> <p>Expenses related to the sale of goods and administrative expenses includes: advertising expenses, audit and accounting expenses, bank fees and charges (except interest), cleaning expenses, environmental protection expenses, intellectual property royalty expenses, legal fees, management fees, paper, printing and stationery expenses, postal and telecommunication expenses, staff training expenses and travelling, accommodation and entertainment expenses.</p>
Inventories—Opening/closing	The value of all inventories (known as 'stocks' in earlier publications) or finished goods, work-in-progress, raw materials, fuels, containers etc. at the beginning and end of the financial year, respectively (previously called 'opening and closing stocks').
Management units at 30 June	Refers to the number of management units in operation at 30 June.
Motor vehicle expenses	Includes expenditure on registration fees, compulsory third-party insurance, fuel and repairs.
Net capital expenditure	The difference between total acquisitions and disposals of fixed tangible assets.
Net worth	Total assets minus total liabilities, and is equal to the interest of shareholders or other owners in the assets of the business.
Non-current assets	The book value of non-current assets at the end of the financial year. This includes plant and machinery needed for normal operations, capitalised interest, property and goodwill.
Non-current liabilities	The book value of non-current liabilities at the end of the financial year. This includes employee entitlements, bank loans, debentures and unsecured notes.
Operating profit before tax (OPBT)	A measure of profit before extraordinary items are brought to account and prior to the deduction of income tax and appropriations to owners (e.g. dividends paid).
Other income	Includes royalty income, dividends, net profit (or loss) on the sale of fixed tangible assets and net profit (or loss) on foreign exchange. It excludes extraordinary profits or losses such as those associated with the sale of a segment of the business or goodwill revaluations.

Other selected expenses	Includes expenditure on management fees/charges paid to related and unrelated businesses, office supplies and printing costs, telephone and postage charges, travelling and entertainment expenses, accounting and legal services, advertising costs, payroll tax, fringe benefits tax, land tax, rates and computer software expenses.
Payment for contract, subcontract and commission expenses	Includes 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 also are included. Excludes contract mining.
Profit to employment	The average amount of operating profit before tax contributed by each employee, working proprietor and working partner, i.e. operating profit before tax/employment.
Purchases and selected expenses	At the establishment level, includes purchases of goods and materials, rent, leasing and hiring expenses, freight and cartage expenses, motor vehicle expenses, repair and maintenance expenses, and payment for contract, subcontract and commission work. At the management unit level other selected expenses also are included.
Purchases of goods and materials	<p>Include purchases of materials, components, containers, packaging materials, fuels, electricity and water, and purchases of other goods for resale. Also includes capitalised purchases.</p> <p>Note that at the establishment level, purchases of goods and materials includes the value of any transfers in of fuels, materials and/or other goods for resale.</p>
Rent, leasing and hiring expenses	Includes expenses for land, buildings and other structures; motor vehicles; and plant, machinery and other equipment.
Rent, leasing and hiring income	Includes proceeds from the rent, lease or hiring of land, buildings, machinery, vehicles and equipment.
Repair and maintenance expenses	Excludes wages and salaries paid to own employees and the repair and maintenance costs of motor vehicles.
Royalties expenses	Includes any payments made for the use of rights, information or material owned by another company or person.
Sales of goods and services	<p>Includes revenue from the sale of minerals and other goods and service income (e.g. repair and service income, contract, subcontract and commission income, delivery charges). Sales are valued net of sales tax, excise and other duties collected on behalf of governments (e.g. the coal export levy and the petroleum production excise duty).</p> <p>Rent, leasing and hiring income is also included in sales of goods and services.</p> <p>Estimates of sales of goods and services for establishments also include the value of transfers of minerals and other goods to other establishments of the same business. These transfers are valued at commercial value (i.e. the value which would have applied had the establishments concerned not been under common ownership).</p>

Selected labour costs	The sum of wages and salaries, superannuation and workers' compensation. Wages and salaries include gross wages and salaries and amounts paid as severance, termination and redundancy payments to permanent, temporary, casual and part-time employees. Superannuation includes all employer contributions to superannuation schemes and any benefits paid by employers operating unfunded schemes. Workers' compensation includes premiums and any other costs incurred by the employer, not reimbursed by an insurance company. Other labour costs (e.g. payroll tax, fringe benefits tax, accommodation, meal and travelling allowances) are excluded.
Selected labour costs to employment	The average amount, expressed in thousands of dollars, of selected labour costs incurred by business (including wages, salaries, superannuation, workers' compensation premiums) for each employee, working proprietor and working partner, i.e. selected labour costs/employment.
Superannuation	Includes all employer contributions to superannuation schemes and any benefits paid by employers operating unfunded schemes.
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 of goods and services.
Turnover	Includes all proceeds from operating revenue (i.e. sales, service income, rent, leasing and hiring income, and government subsidies) plus the value of capital work done for own use, or for rental or lease. There are some conceptual differences between turnover as provided in this publication and turnover as defined by the new international standards. These differences are explained as part of the definition of the component item 'capital work done for own use'. Full compliance with the new standards would make very little difference to estimates of turnover. Excluded are interest income, income from natural resource royalties, funding by Federal, State or Local Governments for specific capital items, dividends and receipts from sale of fixed tangible assets.
Value added	This item is compiled for establishment level. It includes turnover plus the increase (or less the decrease) in the value of stocks, less purchases and selected expenses.
Wages and salaries	Refers to payments made to all permanent, part-time and temporary employees on the payroll during the financial year. Such payments include severance, termination and redundancy payments, overtime earnings, penalty payments and shift allowances, all paid leave, leave loadings and bonuses.
Workers' compensation	Includes premiums and any other costs incurred by the employer not reimbursed by an insurance company.

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POST Client Services, ABS, PO Box 10, Belconnen ACT 2616

EMAIL client.services@abs.gov.au



2841500007971
ISSN 1441-1067

RRP \$21.00