

**MINING INDUSTRY, AUSTRALIA
PRELIMINARY, 1992-93**

This publication presents preliminary establishment data from the Census of Mining Operations conducted with respect to the 1992-93 financial year and some comparative statistics relating to 1991-92. Both the 1991-92 and 1992-93 Censuses included coal mining, oil and gas extraction and metal ore mining.

The 1992-93 Census also includes construction material mining and mining n.e.c.. Data for these industries are not presented in this publication. This information is available upon request.

Detailed industry statistics, covering all the above classifications, will be provided in *Mining Industry, Australia 1992-93* (8402.0), to be issued shortly. For details of ABS State Mining publications to be issued, refer to the *Catalogue of Publications and Products, Australia* (1101.0). Copies of these publications are available at ABS Offices.

SUMMARY OF FINDINGS

Turnover by industry

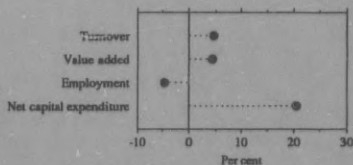
Turnover in 1992-93 was \$29,566 million compared with \$28,253 million in 1991-92, an increase of 5 per cent.

Increased turnover was recorded in the oil and gas industry, rising from \$8,093 million in 1991-92 to \$8,846 million in 1992-93 (up 9%) and the gold ore industry, increasing from \$4,043 million in 1991-92 to \$4,578 million in 1992-93 (up 13%). Turnover also increased in the copper ore industry rising by over \$100 million (17%) to \$741 million in 1992-93.

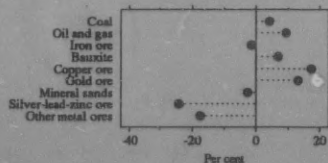
These increases were offset by decreases in turnover for the silver-lead-zinc ore industry, down \$265 million (or 24%) to \$835 million in 1992-93, and other metal ores which fell by \$171 million (18%) to \$798 million in 1992-93.

In absolute terms the industries with the largest contributions to turnover were coal \$9,241 million (31%), oil and gas \$8,846 million (30%) and gold ore \$4,578 million (15%).

**PERCENTAGE CHANGE IN SELECTED INDICATORS
BETWEEN 1991-92 AND 1992-93**



**PERCENTAGE CHANGE IN TURNOVER
BY INDUSTRY BETWEEN 1991-92 AND 1992-93**



INQUIREES:

- for more information about statistics in this publication and the availability of related unpublished statistics, contact Andrew Middleton on Adelaide (08) 237 7539 or any ABS State Office.
- for information about other ABS statistics and services, please contact Information Services on Canberra (06) 252 6627, 252 5402, 252 6007 or any ABS State Office.

Value added by industry

Value added rose by \$820 million (4%) to \$20,603 million in 1992-93.

The largest percentage increase occurred in the gold ore industry where value added increased from \$2,024 million in 1991-92 to \$2,478 million in 1992-93 (up 22%). Value added in the bauxite industry rose by \$77 million (15%) to \$592 million in 1992-93.

Decreases were recorded in the silver-lead-zinc ore industry (down \$328 million or 59%) and other metal ores (down \$229 million or 37%). Falling commodity prices and a rise in production costs were among factors responsible for decreases in value added within these industries.

The largest contributors in 1992-93 were the oil and gas industry (\$8,116 million or 41%), the coal industry (\$5,212 million or 26%) and the gold ore industry (\$2,478 million or 12%).

Net capital expenditure by industry

Net capital expenditure (i.e. acquisitions less disposals) increased by \$675 million (20%) from \$3,295 million in 1991-92 to \$3,969 million in 1992-93.

Increases in net capital expenditure were reported in the coal industry, where net expenditure rose \$343 million (68%) to \$846 million in 1992-93. Net capital expenditure also rose in the iron ore industry, up \$180 million (63%) to \$467 million in 1992-93.

Net capital expenditure fell by \$68 million (36%) in the silver-lead-zinc ore industry in 1992-93.

The oil and gas industry was the largest contributor to net capital expenditure accounting for \$1,572 million (40%) in 1992-93. The gold ore industry accounted for \$545 million (14%).

Employment by industry

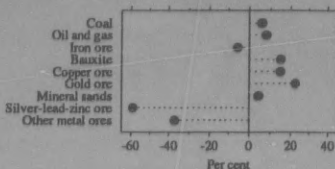
Employment at 30 June 1993 fell by 5 per cent from 61,644 persons in 1991-92 to 58,828 persons in 1992-93.

In contrast, wages and salaries rose by 2 per cent from \$3,559 million in 1991-92 to \$3,622 million in 1992-93. Increases in costs associated with overtime and termination packages to redundant staff contributed to the increase.

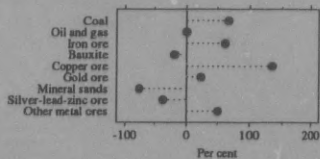
All industries except the gold ore industry recorded falls in their number of employees. Employment within the gold ore industry rose 7 per cent from 7,593 persons at 30 June 1992 to 8,096 persons at 30 June 1993. The largest decreases occurred in the iron ore industry (down 1,394 persons or 17%), the silver-lead-zinc ore industry (down 963 persons or 22%).

The coal industry was the largest contributor accounting for 45 per cent of all mining employees. The gold ore industry and the iron ore industry, with 14 per cent and 12 per cent respectively were other major employers of wage and salary earners.

PERCENTAGE CHANGE IN VALUE ADDED BY INDUSTRY BETWEEN 1991-92 AND 1992-93



PERCENTAGE CHANGE IN NET CAPITAL EXPENDITURE BY INDUSTRY BETWEEN 1991-92 AND 1992-93



PERCENTAGE CHANGE IN EMPLOYMENT BY INDUSTRY BETWEEN 1991-92 AND 1992-93

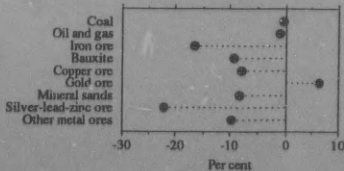


TABLE 1 - MINING OPERATIONS - ESTABLISHMENT LEVEL(a) - SUMMARY OF OPERATIONS, AUSTRALIA
 (\$ million)

Items	Coal		Oil and gas		Iron ore		Bauxite		Copper ore		Gold ore		
	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	
INCOME AND EXPENDITURE													
Turnover(c)	8,880.9	9,240.6	8,093.2	8,845.5	3,315.6	3,277.0	660.9	705.5	631.7	741.3	4,043.1	4,577.8	
Plus Closing stocks	855.9	758.5	199.7	183.4	359.0	330.3	42.6	59.8	108.4	107.3	558.4	648.9	
Less Opening stocks	824.0	770.8	158.2	217.7	307.4	362.6	45.4	61.8	92.6	102.2	562.7	627.1	
Less Purchases, transfers in, and selected expenses	3,999.1	4,016.2	621.6	695.3	1,015.9	1,022.9	143.5	111.7	224.5	260.8	2,014.4	2,121.8	
Value added	4,913.7	5,212.1	7,513.1	8,115.9	2,351.4	2,222.5	514.6	591.9	423.0	485.6	2,024.4	2,477.6	
FIXED CAPITAL EXPENDITURE													
Fixed capital expenditure less disposals	503.2	846.4	1,570.4	1,572.2	287.0	466.6	26.3	21.4	93.1	217.9	446.0	545.0	
EMPLOYMENT DETAILS													
Number of establishments at 30 June	No.	143	143	102	106	17	18	11	11	9	14	157	169
Employment at 30 June(d)	No.	27,448	27,315	5,046	4,984	8,392	6,998	2,068	1,877	2,351	2,168	7,593	8,096
Wages and salaries(e)	\$m	1,731.0	1,824.0	373.3	369.2	464.8	439.8	90.9	92.8	112.9	113.4	357.0	380.2
INCOME AND EXPENDITURE													
Items	Mineral sands		Silver-lead-zinc ore		Other metal ores(b)		Total metal ores		Total coal, oil and gas and metal ores				
	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93			
INCOME AND EXPENDITURE													
Turnover(c)	558.5	545.1	1,099.6	834.8	969.3	798.0	11,278.7	11,479.8	28,252.8	29,565.8			
Plus Closing stocks	161.3	156.5	192.3	126.7	212.4	191.4	1,634.4	1,621.4	2,690.1	2,563.3			
Less Opening stocks	166.5	147.7	200.6	197.4	196.3	205.2	1,571.6	1,703.9	2,553.8	2,692.4			
Less Purchases, transfers in, and selected expenses	287.7	276.9	533.8	534.8	365.4	393.2	4,565.3	4,722.1	9,206.0	9,433.7			
Value added	265.5	277.1	557.5	229.3	620.0	391.0	6,753.3	6,674.9	19,183.0	20,003.0			
FIXED CAPITAL EXPENDITURE													
Fixed capital expenditure less disposals	72.0	16.7	188.9	120.5	108.0	162.7	1,221.3	1,550.8	3,294.9	3,969.4			
EMPLOYMENT DETAILS													
Number of establishments at 30 June	No.	21	20	17	17	22	21	254	270	499	519		
Employment at 30 June(d)	No.	1,833	1,683	4,386	3,423	2,527	2,284	29,150	26,529	61,644	58,828		
Wages and salaries(e)	\$m	78.2	61.2	214.1	230.5	137.2	111.1	1,455.2	1,429.0	3,559.4	3,622.2		

a) See Explanatory Notes, 'Statistical units'. (b) Includes nickel ore mining. (c) Includes transfers out to other establishments of the same management unit where appropriate. (d) Includes working proprietors. (e) Excludes amounts drawn by working proprietors.

Turnover by State

Victoria recorded the largest increase in turnover, rising from \$3,631 million in 1991-92 to \$4,033 million in 1992-93 (up 11%). Tasmania recorded the largest fall in turnover dropping from \$383 million in 1991-92 to \$328 million in 1992-93 (down 14%).

Western Australia was the largest contributor to national turnover accounting for 37 per cent, or \$11,041 million in 1992-93. Queensland with a turnover of \$6,819 million (23%) and New South Wales with \$4,542 million (15%) were ranked second and third respectively.

Value added by State

Value added mirrored turnover in that Victoria recorded the largest absolute increase, rising \$336 million to \$3,811 million in 1992-93. Tasmania reported the greatest percentage decrease, falling 29 per cent to \$146 million in 1992-93.

Western Australia accounted for 37 per cent or \$7,498 million of national value added. Queensland was the second largest contributor to national value added accounting for \$3,984 million (or 20%).

Net capital expenditure by State

Queensland recorded the largest increase in net capital expenditure, increasing from \$443 million in 1991-92 to \$829 million in 1992-93 (up 87%). Net capital expenditure also increased in Western Australia, rising \$307 million to \$2,196 million in 1992-93 (up 16%).

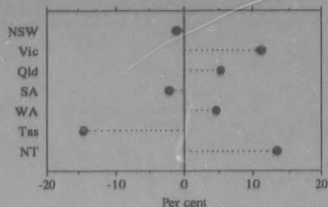
Western Australia was the largest contributor to net capital expenditure, accounting for \$2,196 million (or 55%) followed by Queensland with \$829 million (or 21%).

Employment by State

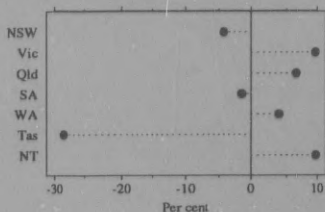
Employment at 30 June fell in most States. The greatest decreases were recorded in Western Australia, down 1,039 persons (or 5%) and in New South Wales, down 748 persons (or 4%). In percentage terms Tasmania reported the largest fall with employment decreasing by 12 per cent (206 persons).

Employment in mining was concentrated in three States. Western Australia (34%), New South Wales (30%) and Queensland (26%) account for 90 per cent of employment in mining.

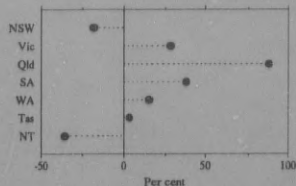
PERCENTAGE CHANGE IN TURNOVER BY STATE BETWEEN 1991-92 AND 1992-93



PERCENTAGE CHANGE IN VALUE ADDED BY STATE BETWEEN 1991-92 AND 1992-93



PERCENTAGE CHANGE IN NET CAPITAL EXPENDITURE BY STATE BETWEEN 1991-92 AND 1992-93



PERCENTAGE CHANGE IN EMPLOYMENT BY STATE BETWEEN 1991-92 AND 1992-93

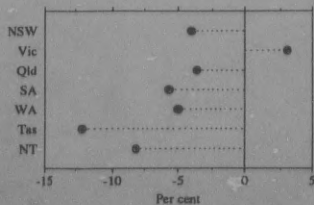


TABLE 2 - MINING OPERATIONS - ESTABLISHMENT LEVEL(a) - SUMMARY OF OPERATIONS BY STATE
 (\$ million)

Items	New South Wales(b)		Victoria		Queensland		South Australia		
	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	1991-92	1992-93	
INCOME AND EXPENDITURE									
Turnover(c)	4,581.8	4,542.1	3,630.6	4,033.4	6,477.5	6,619.0	1,095.1	1,074.5	
Plus Closing stocks	523.5	449.5	61.5	45.9	707.4	644.4	87.1	76.5	
Less Opening stocks	496.8	488.8	46.1	60.8	695.0	671.5	96.5	90.0	
Less Purchases, transfers in, and selected expenses	2,167.2	2,163.7	170.9	207.2	2,754.3	2,808.1	233.5	219.4	
Value added	2,441.3	2,339.1	3,475.1	3,811.3	3,735.5	3,963.8	852.2	841.5	
FIXED CAPITAL EXPENDITURE									
Fixed capital expenditure less disposals	430.6	349.2	253.9	325.1	442.7	829.0	93.8	128.9	
EMPLOYMENT DETAILS									
Number of establishments at 30 June	No.	99	102	11	18	123	129	16	16
Employment at 30 June(d)	No.	18,277	17,529	1,031	1,062	15,667	15,083	2,269	2,143
Wages and salaries(e)	\$m	1,141.9	1,211.5	124.5	103.7	882.7	910.9	94.6	97.5
INCOME AND EXPENDITURE									
Turnover(c)	10,558.5	11,040.6	382.6	328.9	1,526.7	1,727.9	28,252.8	29,565.8	
Plus Closing stocks	997.0	1,068.0	59.3	48.4	254.4	230.5	2,690.1	2,563.3	
Less Opening stocks	939.1	1,066.1	58.5	58.1	221.8	257.1	2,553.8	2,692.4	
Less Purchases, transfers in, and selected expenses	3,401.5	3,544.6	179.2	172.7	299.4	317.9	9,206.0	9,433.7	
Value added	7,215.0	7,498.0	204.1	145.9	1,259.9	1,383.4	19,183.0	20,003.0	
FIXED CAPITAL EXPENDITURE									
Fixed capital expenditure less disposals	1,809.0	2,196.2	31.7	32.9	153.1	100.6	3,294.9	3,969.4	
EMPLOYMENT DETAILS									
Number of establishments at 30 June	No.	202	206	11	10	37	38	499	519
Employment at 30 June(d)	No.	20,925	19,886	1,716	1,510	1,759	1,614	61,644	58,828
Wages and salaries(e)	\$m	1,131.6	1,120.7	92.6	88.8	91.5	89.1	3,559.4	3,622.2

(a) See Explanatory Notes, "Statistical units". (b) Includes the Australian Capital Territory. (c) Includes transfers out to other establishments of the same management unit where appropriate. (d) Includes working proprietors. (e) Excludes amounts drawn by working proprietors.

EXPLANATORY NOTES

Introduction

The statistics in this publication have been derived from the 1992-93 Census of Mining Operations. The Census 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.

The Census of Mining Operations is conducted as a component of the ABS integrated economic statistics system. Data from each industry sector conform to the same basic conceptual standards, allowing comparative analysis between and across different industry sectors.

Reference Period

The period covered by the Census is in general the twelve months ended 30 June. Where businesses are unable to supply information on this basis, the substitute accounting period is used for data other than that relating to employment.

Scope

The 1993 edition of the *Australian and New Zealand Standard Industrial Classification* (ANZSIC) (1292.0) has been used to classify management units (and establishments) included in the Census of Mining Operations. 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.

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.

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. Also excluded from the collection are any establishments with no employees (*i.e.* sole proprietors). These have been omitted because they are not expected to be statistically significant. Typical of these are itinerant and part-time miners, particularly in the gemstone industry and, to a lesser extent, in the copper and tin industries.

It should be noted that companies engaged in providing contract mining services are classified to 'services to mining' and are therefore not included.

The annual Census of Mining Operations covers the ANZSIC classes for coal mining, oil and gas extraction and metal ore mining. On a triennial basis, including 1992-93, data are collected for construction material mining and mining n.e.c.

Statistical Units

The basic unit for which statistics are reported in ABS integrated industry collections is the establishment. Prior to the 1989-90 Census, this unit covered, in general, all the operations carried on under the ownership of one enterprise (business) at a single physical location. A combination of factors (including better communication and transport facilities and greater automation allowing management to be spread over a number of locations) has changed the way businesses are managed and made it increasingly difficult to obtain the requisite information under the locational definition. This has required increasing degrees of estimation to maintain the statistical series.

To overcome these quite significant reporting problems, the ABS has modified its units definitions to align them more closely with industry practices.

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.

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.

Since, and including, the 1989-90 Census of Mining Operations, there has been a change in the statistical treatment of Unincorporated Joint Ventures. Previously these operations were reported by a specifically created enterprise in respect of each joint venture despite the fact that they do not exist as legal entities. In accordance with AAS19 the requirement to prepare financial statements rests with each venturer rather than the joint venture. In recognition of this, new establishments have been created for each venturer where an appropriate establishment operating in the same industry (ANZSIC) in the same State, did not already exist.

Despite the circumstances referred to above, the majority of establishments continue to cover the operations at a single physical location.

Explanation of terms used

As the data presented in this publication have been compiled from the standard financial accounts of businesses, the definition of individually reported items aligns with those adopted in standard accounting practice.

Related Publications

Mining and related statistics are contained in a number of other publications produced by the ABS, the Bureau of Resource Sciences (BRS, formerly the Bureau of Mineral Resources or BMR) or the Australian Bureau of Agricultural and Resource Economics (ABARE). Users are also referred to the annual reports of the State Mines Departments, which contain mineral statistics.

A list of the ABS, BRS and ABARE publications may be found in the ABS publication *Mining Industry, Australia, 1991-92* (8402.0).

More detailed mining statistics will be contained in the publications *Mining Industry, Australia, 1992-93* (8402.0), *Mineral Production, Australia, 1992-93* (8405.0), to be issued in the near future.

Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publication Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and the Publications Advice are available from any ABS Office.

Unpublished Statistics

The statistics presented in this publication represent only a portion of the information which is available from the Census of Mining Operations. 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.

Electronic services

A wide range of ABS data are available on electronic media. Selections of most frequently requested statistics are available, updated daily, on DISCOVERY (Key #656#). The ABS PC TELESTATS service delivers major economic indicator main features ready to download into personal computers on the day of release. The PC AUSSTATS service enables on-line access to a data base of thousands of up-to-date time series. Selected datasets are also available on diskette or CD-ROM. For more details on electronic data services available, contact Information Services in any of the ABS Offices.

Symbols and other usages

The following symbol, where shown means:

n.e.c. not elsewhere classified

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

Abbreviations

The following abbreviations are used within this publication.

ABS Australian Bureau of Statistics

ANZSIC Australian and New Zealand Standard Industrial Classification

IAN CASTLES
Australian Statistician

