

MINING INDUSTRY, AUSTRALIA PRELIMINARY, 1993-94

This publication presents preliminary establishment data from the Census of Mining Operations conducted with respect to the 1993-94 financial year, and some comparative statistics relating to 1992-93. Both the 1992-93 and 1993-94 Censuses included coal mining, oil and gas extraction and metal ore mining.

Detailed industry statistics will be provided in *Australian Mining Industry, 1993-94* (8414.0), to be issued shortly. For details of other related ABS publications to be issued, refer to the *Catalogue of Publications and Products, Australia* (1101.0). Copies of these publications are available at ABS Offices.

Turnover in the mining industry fell by 0.4 per cent in 1993-94, while value added fell by 1.2 per cent. Employment was down 1.4 per cent but wages and salaries increased by 3.9 per cent. Net fixed capital expenditure fell by 1.0 per cent. Tasmania and New South Wales showed the greatest increases in turnover and value added.

Turnover by industry

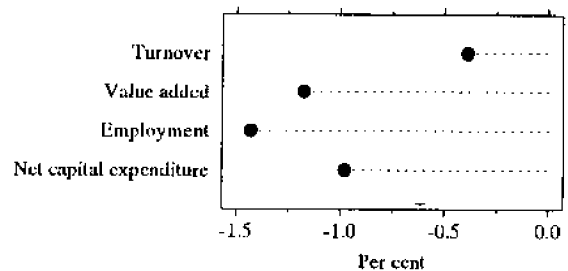
Turnover in 1993-94 was \$28,868 million compared with \$28,981 million in 1992-93.

Increases in turnover were recorded in a number of industries. In the gold ore mining industry, turnover increased from \$4,049 million in 1992-93 to \$4,394 million in 1993-94 (up 9%). The coal mining industry reported an increase of \$648 million (7%), rising to \$9,907 million in 1993-94. However part of the increase is attributable to the inclusion of turnover of the brown coal mining industry in Victoria, previously classified as part of the electricity supply industry and therefore outside of the scope of the Mining Census (*see* Explanatory Notes for further details). Turnover also increased in the copper ore mining industry rising by \$100 million (11%) to \$993 million in 1993-94.

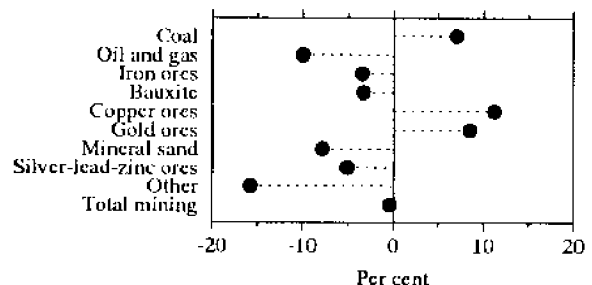
These increases were offset by decreases in turnover for the oil and gas extraction industry. Lower commodity prices were a factor in turnover falling from \$8,456 million in 1992-93 to \$7,610 million in 1993-94 (down 10%). Other metal ore mining also recorded a decrease in turnover, falling \$130 million (16%) to \$694 million in 1993-94.

In absolute terms the industries with the largest contributions to turnover were coal mining \$9,907 million (34%), oil and gas extraction \$7,610 million (26%) and gold ore mining \$4,394 million (15%).

PERCENTAGE CHANGE IN SELECTED INDICATORS
BETWEEN 1992-93 AND 1993-94



PERCENTAGE CHANGE IN TURNOVER
BY INDUSTRY BETWEEN 1992-93 AND 1993-94



- INQUIRIES:**
- 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) 207 0326 or any ABS State Office.

Value added by industry

Value added decreased by \$230 million (1.2%) to \$19,279 million in 1993-94.

The largest percentage increase occurred in the silver-lead-zinc ore mining industry where value added increased from \$361 million in 1992-93 to \$437 million in 1993-94 (up 21%). Value added in the coal mining industry increased \$648 million (10%) to \$9,907 million while value added in the gold ore mining industry rose by \$159 million (8%) to \$2,253 million in 1993-94.

Decreases were recorded in the oil and gas extraction industry, down \$757 million (10%) to \$6,963 million in 1993-94, and the bauxite mining industry, down \$66 million (12%) to \$466 million.

The largest contributors to value added in 1993-94 were the oil and gas extraction industry (\$6,963 million or 36%), the coal mining industry (\$5,790 million or 30%) and the gold ore mining industry (\$2,253 million or 12%).

Net capital expenditure by industry

Net capital expenditure (*i.e.* acquisitions less disposals) decreased by \$38 million (1%) from \$3,868 million in 1992-93 to \$3,830 million in 1993-94.

Increases in net capital expenditure were reported in the gold ore mining industry, where net expenditure rose \$221 million (46 per cent) to \$699 million in 1993-94. Net capital expenditure also rose in the iron ore industry, up \$99 million (24%) to \$507 million in 1993-94.

Net capital expenditure fell by \$249 million (15%) in the oil and gas extraction industry in 1993-94.

The oil and gas industry accounted for the largest proportion of net capital expenditure, with \$1,372 million (36%) in 1993-94. The coal mining industry and gold ore mining industry accounted for \$853 million (22%) and \$699 million (18%) respectively.

Employment by industry

Employment at 30 June fell by 1.4 per cent from 58,047 persons at 30 June 1993 to 57,215 persons at 30 June 1994.

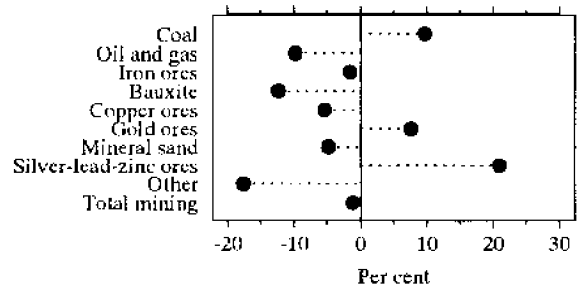
Wages and salaries rose by 4 per cent from \$3,530 million in 1992-93 to \$3,667 million in 1993-94.

The majority of industries recorded falls in the number of employees. The iron ore mining industry recorded the largest absolute and relative fall of 666 persons (10%) to 6,335 persons at 30 June 1994. Changes in work practices within the industry were a major factor. The number of employees in the coal mining industry also declined in the statistics although the overall fall was masked by the inclusion of employees in the brown coal mining industry in Victoria.

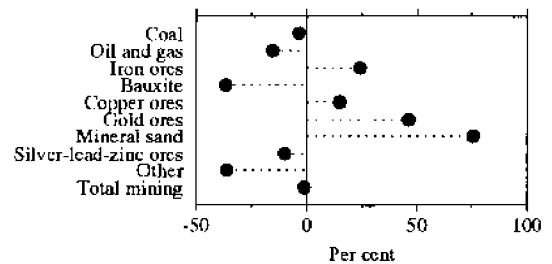
The gold ore mining industry recorded an increase of 501 persons (7%) to 8,087 persons at the end of June 1994.

The coal mining industry had 46 per cent of all mining employees. The gold ore mining industry and the iron ore mining industry, with 14 per cent and 11 per cent respectively were other major employers of wage and salary earners.

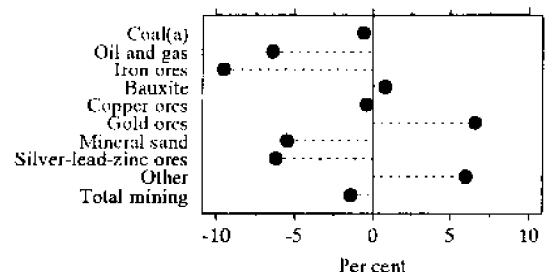
PERCENTAGE CHANGE IN VALUE ADDED BY INDUSTRY BETWEEN 1992-93 AND 1993-94



PERCENTAGE CHANGE IN NET CAPITAL EXPENDITURE BY INDUSTRY BETWEEN 1992-93 AND 1993-94



PERCENTAGE CHANGE IN EMPLOYMENT BY INDUSTRY BETWEEN 1992-93 AND 1993-94



(a) Includes brown coal mining in 1993-94.

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

Items	Coal mining(b)		Oil and gas extraction		Iron ore mining		Bauxite mining		Copper ore mining		Gold ore mining		
	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	
INCOME AND EXPENDITURE													
Turnover(d)	9,259.1	9,906.9	8,456.1	7,609.8	3,262.6	3,148.6	778.1	752.1	893.3	993.3	4,048.9	4,393.8	
<i>Plus</i>													
Closing stocks	758.0	629.0	220.3	187.6	333.3	334.2	44.8	57.5	151.8	166.1	577.6	636.1	
<i>Less</i>													
Opening stocks	775.1	773.2	221.5	206.4	363.2	324.9	42.8	41.6	103.5	155.4	550.8	600.5	
<i>Less</i>													
Purchases, transfers in, and selected expenses	3,968.8	3,973.0	735.0	627.9	998.0	959.8	248.0	301.6	291.6	388.8	1,981.9	2,176.5	
Value added	5,273.2	5,789.7	7,720.0	6,963.1	2,234.7	2,198.0	532.2	466.4	650.0	615.3	2,093.8	2,252.8	
FIXED CAPITAL EXPENDITURE													
Fixed capital expenditure less disposals	884.4	853.2	1,621.8	1,372.4	408.0	506.9	65.0	41.1	87.9	101.2	477.5	698.8	
EMPLOYMENT DETAILS													
Number of establishments at 30 June	No.	148	159	101	105	18	18	11	9	13	18	152	186
Employment at 30 June(e)	No.	26,687	26,534	4,987	4,667	7,001	6,335	1,917	1,932	2,512	2,502	7,586	8,087
Wages and salaries(f)	\$m	1,774.1	1,938.8	377.3	365.5	439.8	398.4	86.7	80.8	132.5	147.9	346.9	362.5

Items	Mineral sand mining		Silver-lead-zinc ore mining		Other metal ore mining(c)		Total metal ore mining		Total coal mining, oil and gas extraction and metal ore mining			
	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94		
INCOME AND EXPENDITURE												
Turnover(d)		502.5	462.7	955.7	906.8	824.5	694.3	11,265.7	11,351.5	28,980.9	28,868.3	
<i>Plus</i>												
Closing stocks		127.9	134.0	157.8	186.0	187.8	255.4	1,580.9	1,769.3	2,559.2	2,585.9	
<i>Less</i>												
Opening stocks		136.9	117.5	207.3	145.4	205.2	197.9	1,609.7	1,583.2	2,606.3	2,562.8	
<i>Less</i>												
Purchases, transfers in, and selected expenses		291.0	286.6	545.2	510.6	365.0	387.7	4,720.7	5,011.6	9,424.5	9,612.5	
Value added		202.4	192.6	361.0	436.8	442.1	364.2	6,516.1	6,526.0	19,509.3	19,278.9	
FIXED CAPITAL EXPENDITURE												
Fixed capital expenditure less disposals		23.2	40.7	92.1	82.9	208.3	132.9	1,362.0	1,604.5	3,868.1	3,830.1	
EMPLOYMENT DETAILS												
Number of establishments at 30 June	No.		19	21	17	18	14	19	244	289	493	553
Employment at 30 June(e)	No.		1,862	1,759	3,480	3,263	2,015	2,135	26,373	26,014	58,047	57,215
Wages and salaries(f)	\$m		71.3	73.9	193.8	180.3	107.7	118.5	1,378.7	1,362.3	3,530.1	3,666.7

(a) See Explanatory Notes, 'Statistical units'. (b) Includes brown coal mining in Victoria in 1993-94. In 1992-93 and in previous years this activity was included with electricity generation, ANZSIC class 3610. (c) Includes nickel ore mining. (d) Includes transfers out to other establishments of the same management unit where appropriate. (e) Includes working proprietors. (f) Excludes amounts drawn by working proprietors.

Turnover by State

New South Wales recorded the largest absolute increase in turnover, rising from \$4,663 million in 1992-93 to \$4,839 million in 1992-93 (up 4%). The Northern Territory recorded the largest fall in turnover dropping from \$1,494 million in 1992-93 to \$1,196 million in 1993-94 (down 20%). This was primarily attributable to a decrease in the value of oil and gas production. Decreased oil and gas production also affected the turnover value for Victoria (although the decrease was partially offset by the inclusion of the brown coal mining activity).

Western Australia was the largest contributor to national turnover accounting for 37 per cent, or \$10,550 million in 1993-94. Queensland, with a turnover of \$6,819 million (24%) and New South Wales with \$4,839 million (17%) were ranked second and third respectively.

Value added by State

Value added mirrored turnover in that New South Wales recorded the largest absolute increase, rising \$221 million (9%) to \$2,710 million in 1993-94. The Northern Territory reported the greatest percentage decrease, falling 24 per cent to \$884 million in 1993-94.

Western Australia accounted for 36 per cent or \$6,852 million of national value added. Queensland was the next largest contributor to national value added, accounting for \$4,055 million (or 21%).

Net capital expenditure by State

Increases in net capital expenditure were recorded in a number of States. Expenditure in the Northern Territory increased by \$215 million to \$293 million in 1993-94. This was primarily due to the pre-production development of new oil and gas fields. Expenditure rose by \$213 million (to \$612 million in 1993-94) in New South Wales and by \$201 million (to \$446 million in 1993-94) in Victoria.

These increases were offset by a fall in net capital expenditure in Western Australia where expenditure decreased by \$477 million to \$1,732 million in 1993-94.

Western Australia was the largest contributor to net capital expenditure, accounting for \$1,732 million (or 45%) followed by Queensland with \$627 million (or 16%).

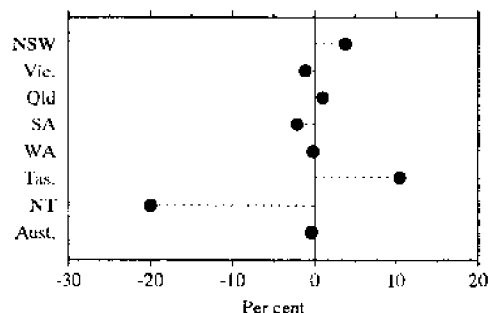
Employment by State

Employment at 30 June fell in most States. The greatest decreases were recorded in New South Wales, down 762 persons (or 5%) to 16,071 persons and in Western Australia, down 743 persons (or 4%) to 18,800 persons. In percentage terms Tasmania reported the largest fall with employment at 30 June decreasing by 9 per cent (140 persons) to 1,386 persons at 30 June 1994.

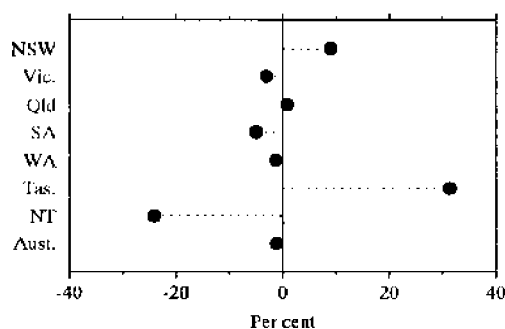
Employment in Victoria rose, due to the inclusion of persons employed in the brown coal mining industry. Employment rose from 1,082 persons at 30 June 1993 to 2,044 persons at 30 June 1994.

Employment in mining was concentrated in three States with Western Australia accounting for 33 per cent of all mining employees. New South Wales 28 per cent and Queensland 27 per cent.

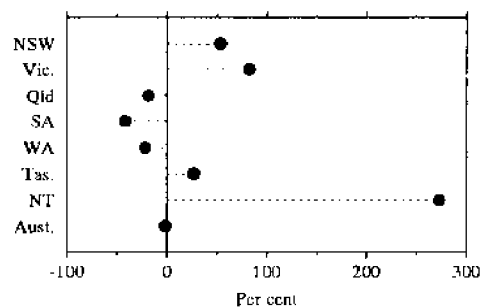
PERCENTAGE CHANGE IN TURNOVER BY STATE BETWEEN 1992-93 AND 1993-94



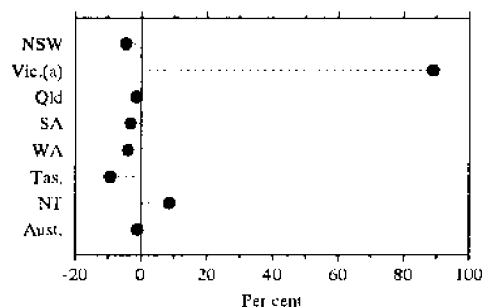
PERCENTAGE CHANGE IN VALUE ADDED BY STATE BETWEEN 1992-93 AND 1993-94



PERCENTAGE CHANGE IN NET CAPITAL EXPENDITURE BY STATE BETWEEN 1992-93 AND 1993-94



PERCENTAGE CHANGE IN EMPLOYMENT BY STATE BETWEEN 1992-93 AND 1993-94



(a) Includes brown coal mining in 1993-94.

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

Items	New South Wales(b)		Victoria		Queensland		South Australia		
	1992-93	1993-94	1992-93	1993-94(c)	1992-93	1993-94	1992-93	1993-94	
INCOME AND EXPENDITURE									
Turnover(d)	4,662.5	4,839.2	4,073.6	4,028.6	6,751.2	6,818.9	1,093.4	1,070.6	
<i>Plus</i> Closing stocks	456.8	379.2	45.9	43.0	699.7	687.4	93.1	71.8	
<i>Less</i> Opening stocks	510.7	439.6	62.7	49.7	645.0	727.5	93.2	83.9	
<i>Less</i> Purchases, transfers in, and selected expenses	2,120.2	2,069.2	196.4	281.3	2,783.7	2,723.8	204.9	213.6	
Value added	2,488.4	2,709.5	3,860.4	3,740.5	4,022.2	4,055.0	888.4	844.8	
FIXED CAPITAL EXPENDITURE									
Fixed capital expenditure less disposals	399.3	612.4	244.3	445.5	767.0	627.4	140.7	82.8	
EMPLOYMENT DETAILS									
Number of establishments at 30 June	No.	102	115	16	29	126	132	16	18
Employment at 30 June(e)	No.	16,833	16,071	1,082	2,044	15,432	15,225	2,237	2,171
Wages and salaries(f)	\$m	1,122.0	1,162.5	103.7	176.8	920.0	952.2	104.5	109.0
Western Australia Tasmania Northern Territory Australia									
Items	Western Australia		Tasmania		Northern Territory		Australia		
	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	1992-93	1993-94	
INCOME AND EXPENDITURE									
Turnover(d)	10,575.9	10,550.4	330.4	365.0	1,493.9	1,195.6	28,980.9	28,868.3	
<i>Plus</i> Closing stocks	984.1	1,101.4	48.9	64.7	230.7	238.4	2,559.2	2,585.9	
<i>Less</i> Opening stocks	980.4	986.3	58.3	51.1	256.0	224.5	2,606.3	2,562.8	
<i>Less</i> Purchases, transfers in, and selected expenses	3,641.2	3,813.9	173.8	185.4	304.2	325.2	9,424.5	9,612.5	
Value added	6,938.5	6,851.5	147.1	193.2	1,164.3	884.3	19,509.3	19,278.9	
FIXED CAPITAL EXPENDITURE									
Fixed capital expenditure less disposals	2,209.1	1,731.9	29.0	36.9	78.7	293.2	3,868.1	3,830.1	
EMPLOYMENT DETAILS									
Number of establishments at 30 June	No.	189	213	9	10	35	36	493	553
Employment at 30 June(e)	No.	19,543	18,800	1,526	1,386	1,394	1,516	58,047	57,215
Wages and salaries(f)	\$m	1,111.9	1,096.5	89.1	85.1	78.9	84.5	3,530.1	3,666.7

(a) See Explanatory Notes, 'Statistical units'. (b) Includes the Australian Capital Territory. (c) Includes brown coal mining in Victoria in 1993-94. In 1992-93 and in previous years this activity was included with electricity generation, ANZSIC class 3610. (d) Includes transfers out to other establishments of the same management unit where appropriate. (e) Includes working proprietors. (f) Excludes amounts drawn by working proprietors.

EXPLANATORY NOTES

Introduction

The statistics in this publication have been derived from the Census of Mining Operations. The Census provides 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.

Prior to 1993-94, the brown coal mining operations of the State Electricity Commission of Victoria (SECV) have been classified to the Electricity supply industry (and therefore excluded from this Census) because separate data were not available.

for the mining operations. With the restructuring of the SECV, separate data on the brown coal mining industry have now become available and the management unit undertaking brown coal mining is now classified to industry 1102, and included in the Census.

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.. The next such collection is scheduled for 1995-96.

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 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, 1992-93* (8402.0).

More detailed mining statistics will be contained in the publication *Australian Mining Industry, 1993-94* (8414.0) to be issued in the near future.

Data on mineral related series also appear in *Manufacturing Production, Australia* (8301.0) which is issued monthly.

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 guide-lines 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 data services

A large range of ABS data is available via on-line services, diskette, magnetic tape, tape cartridge and CD ROM. For more details on electronic data services 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.

ABARE Australian Bureau of Agricultural and Resource Economics

ABS Australian Bureau of Statistics

ANZSIC Australian and New Zealand Standard Industrial Classification

BRS Bureau of Resource Sciences

RICHARD MADDEN
Acting Australian Statistician

