

Minerals Industry '99

SURVEY REPORT

SURVEY CONDUCTED BY

PRICEWATERHOUSECOOPERS 

data funds
balance
expenditure
labour costs ratios
outlook
profit
assets



**MINERALS
COUNCIL**
OF AUSTRALIA

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Material from the survey may be republished
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Contents

Background	2
Overview for 1998/99	3
Safety and Health Performance	8
Price Movements	10
Production	12
Aggregate Balance Sheet	15
Aggregate Profit and Loss Statement	16
Profitability	18
Cash Flows	20
Borrowings	21
Distribution of Assets by Activity	22
Government and Taxation	23
Rehabilitation Expenditure	25
Native Title and Aboriginal Development Expenditure	27
Employment and Labour Costs	28
Overseas Exploration Survey	30
Outlook for 1999/2000	34
Appendix 1: Coverage and Definitions	35
Appendix 2: Constant Group Financial Data	37
Appendix 3: 10 Year Historical Summary	38

Background

The aim of this annual survey is to provide timely and accurate financial data on the Australian minerals industry and to facilitate more informed debate on the industry's role and importance in the economy. The report also includes information on the safety and health performance of the industry and overseas exploration expenditure by the respondents.

This twenty-third survey relates to the year ended 30 June 1999, although a number of respondents reported data relating to earlier balance dates.

The Minerals Council of Australia is very grateful for the support of all respondents without whose assistance this report could not have been completed.

Survey Sample and Execution

The survey sample and design was developed by the Council in association with the Australian Aluminium Council, the NSW Minerals Council and the Queensland Mining Council.

PricewaterhouseCoopers prepared the tables in this survey, based on information supplied to them in confidence by the respondents. This information was occasionally supplemented by publicly available reports.

While PricewaterhouseCoopers has reviewed the responses for consistency, it has not audited them and cannot be held responsible for errors in the data supplied. The Council prepared the text commenting on the tables.

Definition of the Minerals Industry

The minerals industry is defined as including exploration for, and extraction and primary processing of, minerals in Australia. Primary processing is taken to include the processing of minerals up to the first pouring of the refined metal but fabrication beyond that stage is excluded. The oil and gas and iron and steel industries are also excluded from the survey.

The definition of the minerals industry used in this survey differs from that employed by the Australian Bureau of Statistics (ABS) and the Australian Bureau of Agricultural and Resource Economics (ABARE). While the definitions in all three sources are consistent in terms of the definition of individual commodity sectors, they differ in terms of the range of sectors included.

The ABS distinguishes 'metal product industries' from 'mining' which includes the oil and gas industry. The ABARE category 'mineral resources sector' is similar to that used in this report except that ABARE includes the iron and steel and the oil and gas industries.

Coverage

The survey aims to report on the financial position of all of Australia's minerals industry activity as defined above. This has been successful in that the survey coverage accounts for:

- All Australian bauxite, diamond and uranium production and over 90 per cent of alumina, iron ore, lead and zinc production.
- Over 80 per cent of copper, black coal, gold, ilmenite, nickel, rutile, silver and tin production and 60 per cent of aluminium production.

The respondent companies range from the largest companies to small exploration ventures. The survey has not captured some of the smaller mining, prospecting and exploration companies, some overseas controlled companies and a portion of some joint venture operations.

The proportion of activity covered in this year's survey is comparable with the 1998 Survey.

Constant group

As respondents vary slightly from year to year, figures are not precisely comparable between annual surveys and it is not practical to correct for this by 'weighting' the data. For a more precise comparison, companies that responded to the survey in 1997/98 and 1998/99 are treated as a smaller constant group.

The major accounting items for this constant group are separately reported and compared with the total group in Appendix 2. This procedure allows the removal of any bias in trends across survey years arising from changes in survey coverage. The companies included in the constant group had a total value of assets equal to 97 per cent of the total value of assets of all survey respondents.

Overview for 1998/99

Industry profitability improves from the historic low level of 1997/98, but remains well below the long-term average.

Strong growth in Australian minerals industry investment over recent years set to slow.

Continuing micro-economic reform, cost-reduction and sustainable development regulation, combined with prudent macroeconomic policy is vital if Australia is to capitalise on its minerals growth potential.

Safety and Health

Despite a fall in the main lag indicator for safety and health performance, Lost Time Injury Frequency Rate (LTIFR), fatalities continue to occur in the Australian minerals industry. With ten deaths in 1998/99, safety and health remains the Council's highest priority.

The industry's LTIFR for 1998/99 is estimated at 12 per million hours worked, down from 15 per million hours worked in 1997/98. Work is under way to initiate industry-wide reporting on lead indicators.

In accordance with the high priority given to this issue an extensive leadership strategy is being implemented by the Council to pursue the vision of "An Australian minerals industry **free** of fatalities, injuries and diseases". The strategy is based on three key drivers – leadership, recognition and reporting.

Profitability

On all indicators of profitability, the performance of the minerals industry in 1998/99 was improved on 1997/98, but remains below the long-term average for the industry. Net profit return on average shareholders' funds was 3.7 per cent in 1998/99, compared with 1.8 per cent in 1997/98. The past three years have seen the lowest results recorded since the early 1980's.

The improved 1998/99 profitability result reflects the effect of subdued but positive revenue growth and a decrease in expenses.

Net profit return on average assets employed rose, from 1.0 to 1.9 per cent, but also remains down on the long-term average for industry of 4.6 per cent.

Items of Interest	1998/99 \$ million	1997/98 \$ million	1996/97 \$ million
Operating Revenue	30,383	30,111	27,635
Total Assets at Year End	56,823	55,911	52,811
Borrowings at Year End	15,006	12,056	8,106
Interest Expense	1,249	1,528	1,054
Direct Taxes	1,547	1,258	1,200
Operating Profit Before Abnormal Items	3,666	2,220	2,537
Net Profit	1,057	567	881
Net Capital Expenditure (Investment) on Mining, Smelting and Refining Assets	6,716	8,367	6,696
– Mining fixed assets	4,535	6,127	5,090
– Smelting and refining assets	2,181	2,239	1,606
Employees at Year End	56,459	61,675	70,489
– Contractors considered a substitute for full time employees	16,556	14,427	n/a
Total Employment	73,015	76,102	n/a
Rates of Return	per cent	per cent	per cent
Operating Profit Before Abnormals Return on Average Shareholders' Funds	12.8	7.2	8.2
Net Profit Return on Average Shareholders' Funds	3.7	1.8	2.9
Net Profit Return on Average Assets Employed	1.9	1.0	1.7
Gross Debt to Equity Ratio	0.54	0.41	0.26

Forecasts	1999/2000 forecast \$ million	1998/99 actual \$ million	Forecast percentage change
Net expenditure on mining assets	1,722	4,535	-62.0
Net expenditure on smelting and refining assets	1,058	2,181	-51.4
Total net expenditure on mining, smelting and refining assets	2,780	6,716	-58.6
Employees at Year End	54,119	56,459	-4.1

Prices

In 1998/99, average US dollar world mineral prices fell by 11 per cent, following a 7 per cent fall in the previous year. However, the effect of this on the revenues of the Australian minerals industry was largely offset by the fall in the value of the Australian dollar relative to the US dollar. The average value of the Australian dollar relative to the US dollar was 8 per cent lower in 1998/99 than in the previous year. As a result, the Australian dollar commodity price index was 3 per cent lower in 1998/99 than in 1997/98.

As with the previous year, the falls generally reflected the downturn in commodity demand due to subdued economic activity in Asia, and continued strong growth in supply for a number of commodities. However, world prices for most mineral commodities are expected to rise in the coming year as stronger growth in some European and most Asian countries, combined with sustained growth in the United States, increases demand for mineral commodities significantly.

Production

Overall mine production by respondents to the Survey, as measured by the Minerals Council Mine Production Index, rose 0.1 per cent in 1998/99, following growth of 5.2 per cent in the previous year. Australian mine production has grown strongly over the past ten years, with the Mine Production Index rising by 55 per cent over this period. Production of many mineral commodities was at record levels in 1998/99.

The Smelting and Refining Production Index rose 2 per cent in 1998/99, with respondents' production results varying across the range of metals produced. Production of alumina and aluminium, as reported by respondents, both rose in 1998/99, recording 2 and 6 per cent increases respectively.

Industry Revenues

Total revenue rose 3 per cent to \$32,341 million. Smelting and refining sales revenue actually fell 4 per cent, while mining revenue rose 4 per cent. While average US dollar prices for most commodities were lower in 1998/99 than in the previous year, the effect of this on export earnings was largely offset by the 8 per cent fall in the value of the Australian dollar relative to the US dollar.

As foreshadowed in last year's report, the slowing in Asian economic growth impacted on the total volume of Australian exports in 1998/99, with reduced exports to these markets. Some exports were diverted from affected Asian markets towards markets in Europe and North America. Some were also diverted to markets in those parts of Asia less affected by the financial crisis. A modest improvement in exports is expected in 1999/2000.

Expenses

Total expenses fell by 3 per cent, following a 12 per cent rise in 1997/98. This decrease in costs reflected a number of factors, particularly the continued productivity and efficiency gains in the industry. Interest expense fell by 18 per cent, despite an increase in borrowings at year-end. This has been caused by the significant level of interest capitalisation on major projects, a reduction in interest rates, and changes in the level of inter-company borrowings.

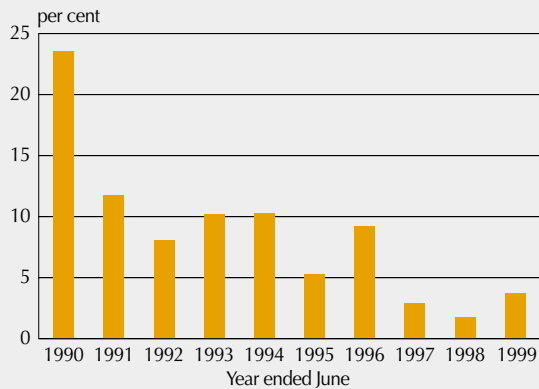
Taxation

The total amount of direct and indirect taxes incurred by respondents was \$2,060 million, up 16 per cent on 1997/98.

In 1998/99, total tax paid by companies represented 66 per cent of net profit before all taxes, compared with 76 and 67 per cent in 1997/98 and 1996/97 respectively. Income tax expense rose by 61 per cent in 1998/99, mainly as a result of the improvement in industry profitability. After increasing substantially in the past two years, the share of royalties and indirect taxes in total payments decreased slightly during 1998/99. The major reason for the decrease in the share of indirect taxes in total taxation was a higher level of profitability in the industry, which resulted in the significant increase in direct tax in the total share of taxes paid.

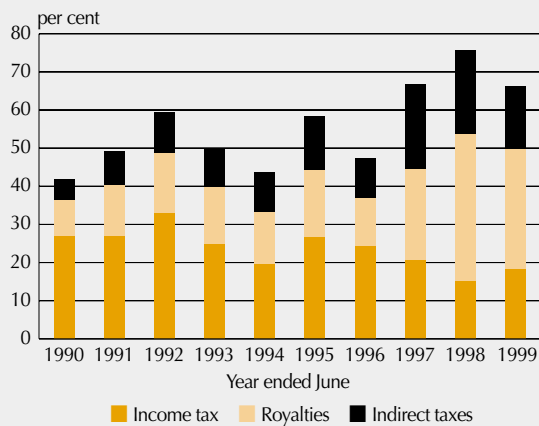
The Survey data show that indirect taxes (such as fuel tax) are a large component of total industry tax payments. Over recent years there has been an increase in the share of indirect taxes in total taxes paid by the industry. This is of concern because, compared to income taxes, taxes on business inputs are distorting and undermine the competitiveness of the industry. Moreover, the compliance costs associated with indirect taxes, per dollar of revenue raised, are high.

Net Profit – Return on shareholders' funds



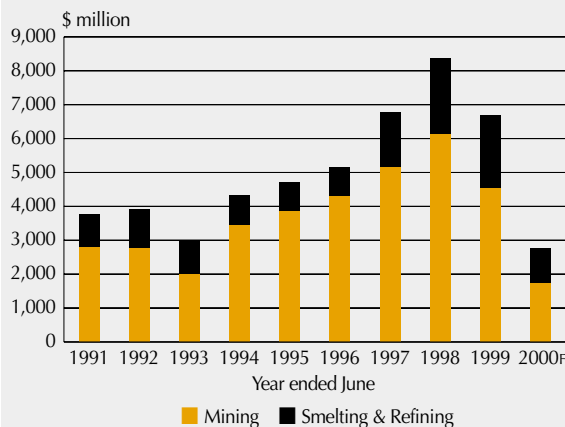
Taxes and Royalties

Share of profit before all taxes



Real spending on fixed assets

(1997/98 dollars)



Employment

In 1998/99, there was a sharp fall in the direct employment of respondents. Employee numbers fell by 8 per cent from 61,675 at the end of 1997/98 to 56,459 at the end of 1998/99. Direct employment has fallen sharply in each of the past three years after being fairly constant in the previous five-year period. Respondents forecast their direct employment levels to be 4 per cent lower next year.

Part of the decline in direct employment can be explained in terms of an increased use of contract labour, which has been a trend reported by respondents in recent years. In 1998/99, respondents engaged 16,556 contractors that were considered a substitute for full time employees, a rise of 15 per cent over 1997/98. Thus, more than one in five full-time employees engaged in minerals activities is a contractor. This does not include part-time contractors.

Taking contractors into account, total employment by respondents to the survey fell by 4 per cent, from 76,102 to 73,015.

Borrowings

Reflecting the recent level of investment activity in the minerals industry, borrowings were \$15,006 million at the end of 1998/99, 24 per cent higher than at the end of the previous year. As a result, the debt to equity ratio has risen to well above the average for the past ten years.

Exploration

In 1998/99, respondents spent \$418 million on overseas exploration activities and \$682 million in Australia. Exploration expenditure in Australia by larger survey respondents was down by 15 per cent while overseas exploration expenditure by larger survey respondents was down by 13 per cent. There is some levelling out of the recent shift in total exploration expenditure towards offshore spending.

Changing geo-political conditions and the opening up of various countries in South America, Asia and Africa to foreign investment is resulting in increasing opportunities for exploration in these countries. Larger Australian mineral companies are on average now spending over 45 per cent of their exploration budgets overseas. This underlines the critical importance of Australia's mineral investment climate remaining competitive.

Investment

Net expenditure on fixed and deferred assets fell by 20 per cent in 1998/99 to \$6,716 million. It fell by 26 per cent in the mining sector but by only around 3 per cent in the smelting and refining sector of the industry.

This decrease in investment spending reflects a levelling out following the large number of projects completed recently. Many of these projects were commissioned during 1998/99 and will, in coming years, add significantly to Australian minerals production. In the light of lower world prices for minerals due to flattened demand and new supply coming on stream, the reductions also reflect some planned projects being deferred.

Outlook for 1999/2000

Following the significant investment activity in the minerals industry since 1992/93, investment activity is, consistent with the expectations outlined in previous survey reports, expected to fall in coming years.

Net expenditure on fixed and deferred assets is expected to fall by 59 per cent in 1999/2000. Fixed asset expenditure in the mining sector is expected to fall by 62 per cent while in smelting and refining it is expected to fall by 51 per cent.

Exploration expenditure in Australia is forecast to fall by 33 per cent in 1999/2000. More recent ABS data will become available and will provide a better guide. Research and development expenditure is also expected to fall, by 16 per cent on the 1998/99 outcome.

The Policy Environment

Projects that are under construction and subject to consideration will result in an increase in Australian minerals production over the coming years. Apart from market conditions, government taxation and regulatory policy will have an important influence on decisions to proceed.

The Commonwealth Government has recognised the urgent need for **indirect tax reform** to address the problem of taxation on inputs to production (which reduces Australia's international competitiveness) and reliance on a narrow base for indirect taxation in the economy. The industry applauded the Government on successfully introducing its indirect tax reform package during the year, which will see a domestic goods and services tax introduced from 1 July 2000.

In the context of international competitiveness, the issue of **fuel tax** has been a major issue for the minerals industry for many years. The fuel excise changes, introduced as part of the Government's indirect tax reform package, include reductions to transport costs, particularly in remote and regional Australia. The industry also welcomes the removal of the 12 per cent wholesale sales tax equivalent tax impost on eligible activity under the Diesel Fuel Rebate Scheme. However, uses of fuel that are excluded from claim under the current arrangements will continue to be ineligible for rebate or credit of excise under the new arrangements.

In relation to **direct taxation**, the Council has long argued that it is the combination of all business tax rates and measures, and not just the corporate rate (or any other single tax measure), that is important in assessing project viability. The industry has therefore generally welcomed the pragmatic approach the Commonwealth Government has taken in many aspects of its response to the **Review of Business Taxation**. Even so, a number of companies are naturally concerned about the loss of so-called 'accelerated depreciation' entitlements and the removal of a statutory cap on the 'life of mine' under the allowable capital expenditure provisions of the taxation legislation. Both of these changes will impact adversely on investment in the minerals industry.

From the minerals industry's point of view, confirmation of the continuing immediate deductibility for exploration and prospecting expenditure and of key operating expenditures is particularly welcome. Any change to this treatment would have impacted severely and adversely on working capital requirements for minerals companies and the economic viability of individual mining operations.

In relation to the reforms under way, much will depend on the implementation process and in particular on genuine consultation with industry over the legislative and administrative details involved. In particular, there is a need to continue the consultative process regarding consolidation and the basis of calculation of taxable income. Such a process would provide greater certainty as to the interpretation of the new law and, therefore, a reduced compliance burden by both government and industry.

A key factor in improving Australia's attractiveness to investors is sustained improvements in productivity. Issues affecting competitiveness and the ability to improve productivity include **native title, environmental requirements** and **microeconomic reforms** including labour market policies and practices, provision of world class economic infrastructure and streamlining of approvals processes. A **macroeconomic environment** featuring stable growth, low inflation, fiscal prudence and steady monetary policy must also be maintained.

There is a growing acknowledgment within the broader community of the need to put in place effective and efficient legislative mechanisms to support **the interaction of the minerals industry and indigenous interests**. The industry recognises the need to form cooperative partnerships with indigenous peoples. All arrangements, however, need to be underpinned by effective legislation that produces workable outcomes within realistic time frames.

In addition, the minerals industry is concerned that **regulation**, including **environmental regulation** and **land access**, should not impose unnecessary cost, time and administrative burdens. The minerals industry therefore supports current processes and initiatives designed to improve the efficiency of both environmental and other regulation. This includes such initiatives as: harmonisation of regulation at all levels of government; pursuit of self regulation by the industry and cooperative agreements between industry and government in preference to imposed regulation; and cooperative development and adoption of appropriate national and international standards and guidelines.

The international and Australian response to the issue of greenhouse gas emissions, including the Commonwealth Government's consideration during 2000 of aspects of the possible implementation of a national emissions trading system, will be critical to decisions on locating energy intensive mineral processing operations in Australia and will also influence Australia's coal sector. It is important that Australia's response to greenhouse issues continue to be considered as part of a broader global solution. This requires a more complete recognition of the potential effects of a national emissions trading system on the international competitiveness of Australia's major export industries. Given the political, technical and scientific uncertainties concerning greenhouse gases and climate change, emissions trading should not be adopted unilaterally at this stage, nor pre-empted by other policy decisions.

Safety and Health Performance

The Council's top priority remains the elimination of minerals industry fatalities, injuries and diseases.

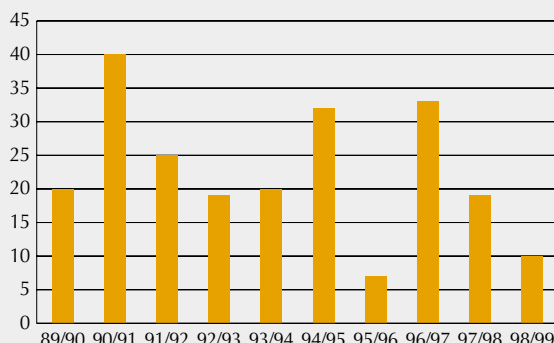
Despite a fall in the main lag indicator for safety and health performance (LTIFR), fatalities continue to occur in the Australian minerals industry. With ten deaths in 1998/99, it is too early to conclude there is a sustained downward trend in fatalities. Consequently, safety and health remains the Council's highest priority. An extensive leadership strategy is being implemented by the Council to pursue the vision of "An Australian minerals industry *free of fatalities, injuries and diseases*".

The information provided below is based on the Minerals Council's quarterly *Safety Survey Report* which is available from the Council's web site (at www.minerals.org.au) and the annual *Safety and Health Performance Report 1998-99* which will be available early in 2000.

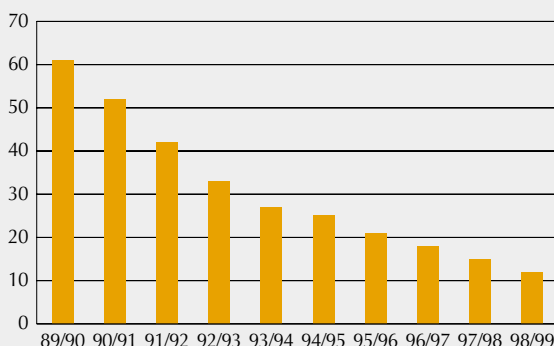
Fatalities

In 1998/99 there were 10 fatalities in the Australian minerals industry. This figure is down from 19 the previous year and 33 in 1996/97. While this outcome is still unacceptable, it may indicate the benefits of the industry-wide focus on safety. Since 1989/90 the industry has seen 225 deaths, an average of more than 22 deaths a year.

Fatalities 1989/90 to 1998/99



Total Industry Lost Time Injury Frequency Rate 1989/90 to 1998/99



Seven of the 10 fatalities for 1998/99 occurred in underground mining operations – five took place in metalliferous mines and two in coal operations. Of the remaining three fatalities, two occurred in open-cut metalliferous mines and one in an open-cut coal mine.

Rockfalls and people falling from heights were the main causes of fatalities in 1998/99. Four of the underground fatalities were caused by rockfalls, two of which were associated with the use of heavy equipment. Three deaths were the result of falls from heights, with two of these taking place underground.

Lost Time Injuries

The *Safety Survey Report* estimates the Australian minerals industry's LTIFR for 1998/99 at 12 lost time injuries per million hours worked. This figure is an improvement on 1997/98 when the industry recorded a rate of 15 per million hours worked.

Underground coal continues to have the highest LTIFR, with a rate of 41. However, this rate is considerably less than the rate of 57 that was reported in 1997/98. Open-cut coal continues to decrease, going from 15 to 14. Open-cut and underground metalliferous recorded rates of 7 and 12 respectively. Smelting and refining recorded a rise in LTIFR, with the rate increasing from 5 to 8.

Minerals Council of Australia Activities

Since making safety and health its highest priority in 1996, the Minerals Council has implemented a strategy to provide and foster leadership to drive improvements in safety and health performance. The strategy involves three main drivers – leadership, recognition and reporting – and is implemented by the Council's Safety and Health Committee which reports directly to the Council's Executive Committee.

Safety and Health Leadership

The Council's activities are based on the fundamental role that leadership plays in the creation of change and the achievement of performance improvement. Key leadership activities during 1998/99 included:

- Ongoing support for the Council's safety and health objectives and activities by industry leaders. The Council's Executive Committee continued to hold its meetings in conjunction with major Council safety and health events and to address safety and health as the first substantive agenda item at their meetings. Individual Executive Committee members shared information on fatalities and significant incidents as well as their own efforts to improve safety and health performance.

The industry's main lag indicator, the Lost Time Injury Frequency Rate, is estimated at 12 per million hours worked for 1998/99 compared with 15 per million hours worked for 1997/98.

Work is under way to initiate industry-wide reporting on lead indicators for safety and health performance.

- The second CEO Safety and Health Session, held in Canberra in March 1999, was well attended and focussed on the importance of personal leadership.
- A strategy was developed to improve the industry's performance on workplace health issues.
- A policy statement on operator / contractor safety and health management was endorsed. The statement says that operators have the responsibility to protect the safety and health of every person on site and that the relationship between an operator and contractor should include the agreement and implementation of a plan to effectively identify and manage safety and health issues.

National Safety and Health Recognition

Whilst acknowledging that the industry's safety and health performance must improve, the Council believes that it is important to recognise and promote excellence and innovation where it occurs. By doing so, the Council aims to encourage the continuation of excellent behaviour as well as to foster improvements through the identification of benchmarks. The Council has two national awards that provide this recognition:

- The 1999 MINEX Award for minerals industry safety and health excellence, held in Launceston in September 1999, was presented to Placer Dome Asia Pacific's Osborne Mines. Having also taken top honours in 1996, Osborne is the first minerals operation to have twice won the prestigious award.

Five other operations were selected by the MINEX judges for commendations in the 1999 awards. They were: Newcrest Mining's Cadia Hill Gold Mine, Thiess Contractors' Mt Owen Mine, Normandy Mining's Normandy Kaltails, North Limited's Northparkes Mines and Peabody Resources' Ravensworth / Narama Mine.

- The inaugural National Safety and Health Innovation Award was presented to a Quarry Crushing Plant Guarding and Isolation / Lockout System from CSR Construction Materials.

Case studies on previous MINEX Award winners and a booklet on the 1999 Innovation Award finalists are available from the Council's web site. The 1999 MINEX case study will be available in the near future.

National Safety and Health Reporting

The Council also fulfils a leadership role by providing reliable, timely, comprehensive and consistent data on the industry's safety and health performance. The data is published by the Council with two audiences in mind. Firstly, it is targeted to the minerals industry which uses the data for monitoring and benchmarking purposes. Secondly, it is directed to the community (and their representatives) to raise awareness and to report on progress towards the industry's safety and health objectives.

The Council provides safety and health performance data through two publications:

- An annual *Safety and Health Performance Report*.
- Quarterly *Safety Survey Reports*.

Work is also under way to initiate the reporting of lead indicators on safety and health performance. In 1999, this work has included a major survey of the minerals industry's safety culture and the development of a strategy to utilise the survey findings.

SAFETY AND HEALTH VISION

An Australian minerals industry **free** of fatalities, injuries or diseases.

SAFETY AWARENESS

The state of mind where we are constantly aware of the possibility of injury and act accordingly at all times.

SAFETY AND HEALTH BELIEFS

- All fatalities, injuries and diseases are preventable.
- No task is so important that it cannot be done safely.
- All hazards can be identified and their risks managed.
- Everyone has a personal responsibility for the safety and health of themselves and others.
- Safety and health performance can always improve.

POLICY STATEMENT ON OPERATOR/CONTRACTOR SAFETY AND HEALTH MANAGEMENT

- Operators have the responsibility to protect the safety and health of every person on site including contractors and their employees.
- The relationship between the operator and contractor will include the agreement and implementation of a plan to effectively identify and manage safety and health issues.

Price Movements

Lower world prices for minerals due to flat demand and new supply still coming on stream.

Average \$US prices decline for almost all commodities.

However, official expectations are for improvements in average \$US prices in 1999/2000.

In 1998/99, average US dollar world mineral prices fell by 11 per cent, following a 7 per cent fall in the previous year. However, the effect of this on the revenues of the Australian minerals industry was largely offset by the fall in the value of the Australian

dollar relative to the US dollar. Despite a rise in value at the end of 1998/99, the average value of the Australian dollar relative to the US dollar was 8 per cent lower in 1998/99 than in the previous year. As a result, the Australian dollar commodity price index was 3 per cent lower in 1998/99 than in 1997/98.

Average US dollar prices for all mineral commodities fell in 1998/99, with the exception of a small increase in US dollar prices of ilmenite, which rose by 3 per cent. As with the previous year, the falls generally reflected the downturn in commodity demand due to subdued economic activity in Asia, and continued strong growth in supply for a number of commodities.

However, world prices for most mineral commodities are expected to rise in 1999/2000. This is expected to be the result of stronger growth in some European and most Asian countries (including Japan), combined with sustained growth in the United States, which will act to increase demand for mineral commodities.

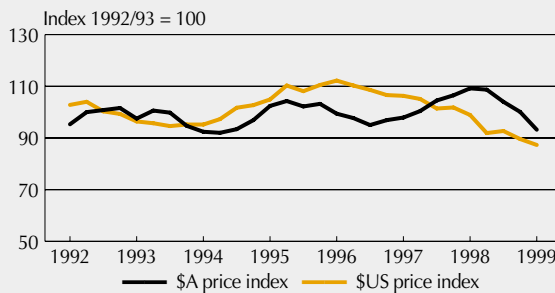
US dollar lead, copper and nickel prices fell by 8, 19 and 22 per cent respectively in 1998/99. Australian dollar copper prices fell by 12 per cent while nickel prices fell by around 16 per cent in Australian dollar terms. Lead prices were virtually unchanged in Australian dollar terms during the year.

Continued subdued demand in Asia and excess production capacity has contributed to a fall in US dollar prices for steaming coal of 15 per cent in 1998/99. This followed a 10 per cent decline in the previous year. Compared to steaming coal, coking coal demand was slightly stronger and the fall in US dollar prices, at 13 per cent, was slightly less pronounced.

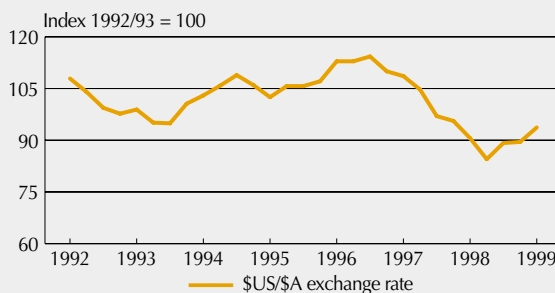
Despite stronger expected demand, coal prices are expected to fall further in 1999/2000. Long-term steaming coal contract prices with Japanese importers for the current Japanese fiscal year were reduced by over 13 per cent. Spot prices for thermal coal fell over the past year and continued weak demand will see a continuation of this trend into 1999/2000. Coking coal demand is expected to improve in 1999/2000 in response to a rebound in demand by Asian steel makers. Coal prices negotiated with Japanese buyers for JFY 1999 were reduced by around 15 to 18 per cent.

Iron ore prices remained subdued through 1998/99 with a 2 per cent decrease in the average US dollar price. World blast furnace steel production was also subdued in 1998. Demand for iron ore is expected to recover in 1999/2000.

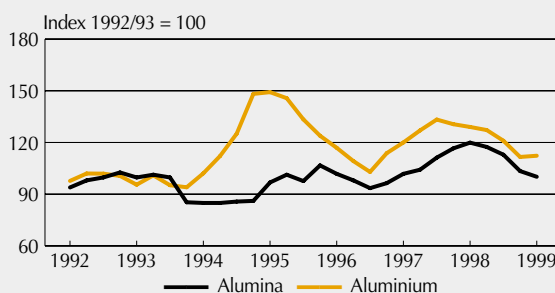
Price Indexes



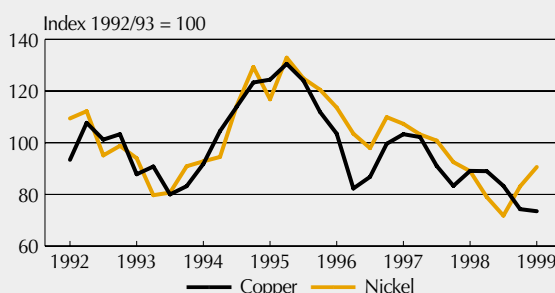
Exchange Rate



Alumina/Aluminium Prices

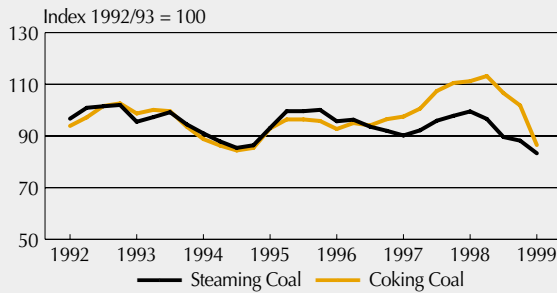


Copper/Nickel Prices

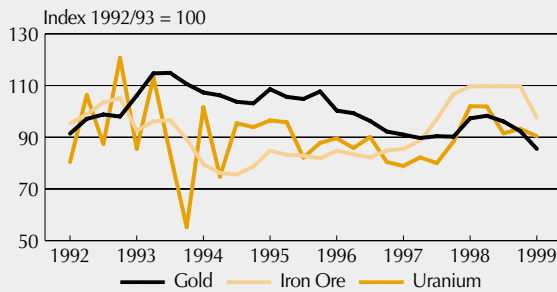


In 1998/99, continued low aluminium demand combined with excess world aluminium production resulted in significantly lower world aluminium and alumina prices, with falls of 16 and 12 per cent respectively recorded over the previous year.

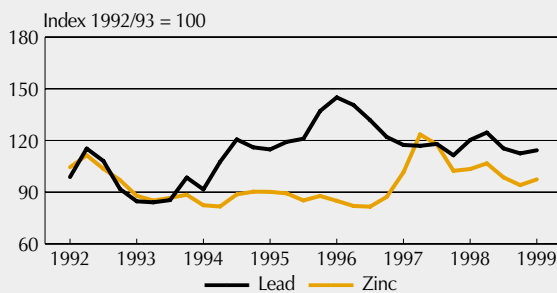
Steaming Coal/Coking Coal Prices



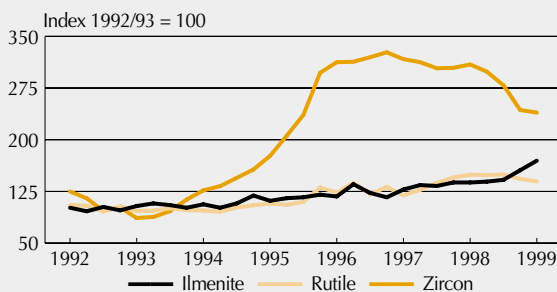
Gold/Iron Ore/Uraniun Prices



Lead/Zinc Prices



Mineral Sands Prices



US dollar gold prices fell by 7 per cent in 1998/99, following a 15 per cent fall in the previous year. In Australian dollar terms, gold prices actually rose by 1 per cent in 1998/99, after a 2 per cent fall in the previous year.

Even so, negative market sentiment drove the gold price to 20-year lows in early 1999. Australian gold producers, in general, retain a measure of protection against short-term price fluctuations due to the hedging programs that major companies have in place.

The fall in gold prices in US dollar terms reflected ongoing uncertainty about future gold sales by central banks and official sector gold lending to producers. More recently, the announcement that the European Central Banks would limit their gold sales to 400 tonnes annually for the next five years, as well as limit their activities in gold lending and derivative products, had a positive effect on market sentiment. The International Monetary Fund also announced plans to avoid selling gold on the open market. This has contributed to more positive market sentiment in the second half of 1999 that has seen the price of gold rise strongly.

Australian dollar prices for ilmenite and rutile rose by 11 and 4 per cent, respectively, in 1998/99, while zircon prices fell by 14 per cent. Over the past four years, prices have risen substantially as a result of constrained supply in other exporting countries, and continuing strong demand in the developed economies.

Improvements in average \$US prices are expected in 1999/2000 as economic growth in the major economies continues and recovers in other areas. However, the rise in \$US denominated prices may not outweigh the expected appreciation of the \$A to result in higher \$A revenue for all producers.

Note: The charts describe movements in Australian dollar prices for major minerals. Prices are presented in the form of quarterly indexes with base year 1992/93 equal to 100. The prices shown on the graphs for lead, copper, nickel and zinc are London Metal Exchange (LME) spot prices expressed in Australian dollars at average quarterly exchange rates. Alumina, aluminium, coking coal, steaming coal, iron ore, uranium and mineral sands prices are unit export values (export values divided by export tonnages). Gold prices are from the London bullion market. The Index of Mineral Commodity Prices is a weighted average of prices, using each mineral product's contribution to the total value of mineral exports over the period 1991/92 to 1993/94 to apportion weights. Raw price data are from Australian Bureau of Agricultural and Resources Economics, *Australian Mineral Statistics*, various issues.

Production

Growth in mine production steadies: the Minerals Council Mine Production Index has increased by 55 per cent over the ten years to 1998/99.

Moderate rise in smelting and refining production.

The value of exports falls by 5 per cent as a result of lower world commodity prices.

Mine Production

Overall mine production by respondents to the survey, as measured by the Minerals Council Mine Production Index, rose 0.1 per cent in 1998/99, following growth of 5.2 per cent in the previous year. Australian mine production has grown strongly over the past ten years, with the Mine Production Index rising by 55 per cent over this period. Production of many mineral commodities was at record levels in 1998/99.

Iron ore production by respondents fell by 1 per cent in 1998/99. The volume of iron ore exports fell by 5 per cent in 1998/99. Iron ore export volumes are expected to increase significantly in 1999/2000, but lower negotiated prices and a possible appreciation of the Australian dollar are expected to see the value of iron ore exports fall slightly. However, the global outlook for crude steel production is expected to improve in 1999/2000, in line with further increases in world industrial activity.

Black coal production by respondents fell by 2 per cent in 1998/99, following an 8 per cent increase in the previous year. In response to low profitability, the Australian coal industry is currently experiencing restructuring which may limit production growth over the next few years. Recently a number of mines have closed, either temporarily or permanently and a number of planned expansions have been deferred. However, growth in world coal trade is expected to increase in 1999/2000, as coal fired electricity generation grows and blast furnace steel production recovers from recent lows.

Mine production of copper rose 7 per cent in 1998/99, lead production rose 16 per cent and zinc production rose 13 per cent. The increase in copper production during the year was partly the result of production at the Ernest Henry mine, WMC's Olympic Dam mine in South Australia, Western Metals' Mount Gordon mine in north west Queensland and Newcrest's Cadia Hill mine in New South Wales, which was operational from August 1998. A major contributor to the increase in lead and zinc production was BHP's Cannington mine.

Nickel production fell 19 per cent following an 8 per cent increase in 1997/98, as a number of mines were placed on care and maintenance. This is partly due to reduced demand for stainless steel in Asia and production decisions in Russia. However, strong increases in nickel production are expected in the next few years. The successful commissioning of the Cawse, Bulong and Murrin Murrin laterite nickel mines would result in significant increases in mine production and export returns in coming years.

Even so, unexpected delays in commissioning these new Australian projects have contributed to volatility in the price outlook.

Respondents' gold production rose by 3 per cent in 1998/99, following a 6 per cent increase in 1997/98. The lower gold price through much of the year placed significant pressure on the industry and saw the closure of a number of smaller, higher cost mines. Production is expected to fall in 1999/2000 as further mine closures more than offset new production capacity.

Uranium production rose in 1998/99, after remaining steady between 1996/97 and 1997/98. WMC's Olympic Dam mine has now overtaken the ERA Ranger mine as the largest uranium mine in Australia. This boost to production is expected to see uranium production increase further in 1999/2000. This extra production, combined with expected higher world prices, should see uranium export returns rise strongly over 1999/2000.

Ilmenite and rutile production fell in 1998/99 following a strong rise in 1997/98, while zircon production was 10 per cent lower. The decrease in ilmenite production was mainly due to the relocation of Consolidated Rutile's activities to the Yarraman deposit in Queensland, where production is expected to commence in late 1999. Production is expected to fall further in 1999/2000 following the closure of BHP's Beenup mine in early 1999. Strong exploration efforts in the Murray Basin area by a number of companies may mean a significant increase in supplies of titanium minerals in the longer-term. Production from the Murray Basin area may commence within the next five years.

Smelting and Refining Production

The Smelting and Refining Production Index rose 2 per cent in 1998/99, with respondents' production results varying across the range of metals produced. Production of alumina and aluminium, as reported by respondents, both rose in 1998/99, recording 2 and 6 per cent increases respectively.

According to Government figures, aluminium production rose by 6 per cent in 1998/99. A further increase is expected in 1999/2000 following the expansion of the Tomago smelter in New South Wales in early 1999.

Refined base metals production in 1998/99 rose by 1 per cent. Respondents' production of refined copper rose by 5 per cent, following M.I.M.'s Mount Isa smelter expansion and Townsville refinery upgrade, and refined zinc production rose by 4 per cent. By contrast, production of refined nickel fell 5 per cent, while production of lead bullion fell by 9 per cent and production of refined lead by 1 per cent. WMC Resources is expected to increase production of refined nickel in the coming year,

following a temporary closure of the Kalgoorlie nickel smelter in early 1999. Australian smelter and refinery production is expected to increase strongly over the next few years with new capacity coming on line.

Alumina production is also expected to rise following the commissioning of Alcoa's Wagerup refinery in Western Australia in mid-1999. Production of refined silver rose significantly, by 163 per cent. This followed a large fall in 1997/98, of 52 per cent, and is due largely to expanded refinery production capacity.

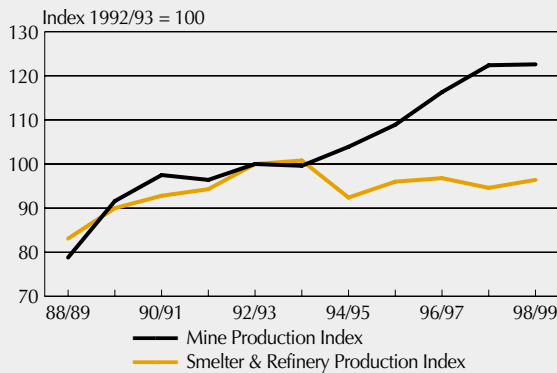
There are also a number of minerals processing facilities under construction. These include the Wagerup alumina refinery expansion, the Townsville copper refinery upgrades and the Port Kembla copper refinery reconstruction.

Exports

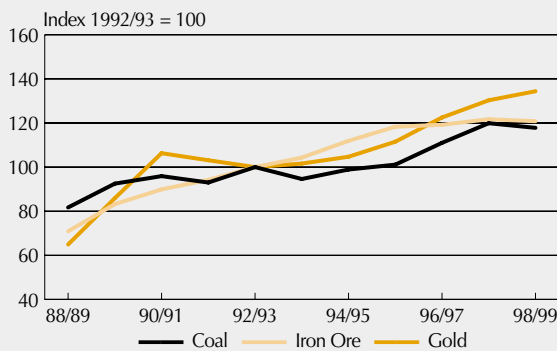
Around 90 per cent of Australian mineral production is exported directly or indirectly. According to Australian Bureau of Agricultural and Resource Economics statistics, the value of exports of minerals covered by this survey fell 5 per cent in 1998/99 to \$31.1 billion. This outcome mainly reflected the significantly lower world prices facing these commodities over the year.

As foreshadowed in last year's report, the slowing in Asian economic growth impacted on the total volume of Australian exports in 1998/99, with reduced exports to these markets. Some exports were diverted from Asian markets towards markets in Europe and North America. A modest improvement in exports is expected in 1999/2000.

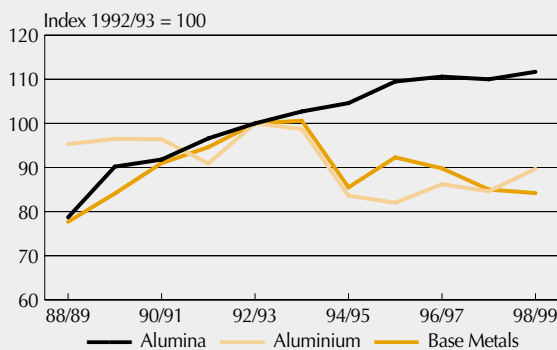
Mineral Production



Mine Production



Smelting and Refining



Note: The Minerals Council Mine Production Index and Smelting and Refining Index are based on production of survey respondents. The indexes are weighted averages with individual commodity weights based on each commodity's contribution to export earnings in the three years 1991/92 to 1993/94. The production figures reported in this survey generally differ slightly from Government estimates for the entire industry. As company coverage varies from year to year, the figures in the table may, in some cases, give a misleading impression of the movement in production volumes. In these cases, the commentary will point this out.

Production of Major Mineral Commodities by Survey Respondents^(a)

	1998/99 '000	1997/98 '000	1996/97 '000
Mine Production			
Bauxite	48,049	47,644	46,746
Black Coal (saleable) ^(b)	178,022	181,299	167,758
Copper ^(c)	545	508	476
Diamonds ('000 carats)	40,843	40,175	41,942
Gold ^(c) ('000 troy ounces)	8,277	8,025	7,543
Iron Ore	147,612	148,684	145,628
Lead ^(c)	610	526	472
Mineral Sands – Ilmenite ^(c)	1,847	2,242	1,805
– Rutile ^(c)	196	216	169
– Zircon ^(c)	305	339	431
Manganese Ore ^(c)	1,579	1,681	2,135
Nickel ^(c)	100	123	114
Silver ^(c) ('000 troy ounces)	41,704	33,297	24,683
Tin ^(c)	8	10	9
Uranium (tonnes)	6,375	5,900	5,900
Zinc ^(c)	1,110	980	976
Smelting and Refining Production			
Alumina	13,647	13,435	13,509
Aluminium	1,011	953	972
Refined Copper	269	258	277
Lead Bullion	157	172	192
Refined Lead	196	198	214
Refined Zinc	323	312	320
Refined Nickel	76	80	74
Iron Ore Pellets	2,833	1,618	1,570
Refined Silver ('000 troy ounces)	9,464	3,602	7,451
Synthetic rutile	581	492	442

Notes: (a) Thousand tonnes unless otherwise specified.

(b) Raw coal production less rejects removed at coal washeries plus unexplained stock adjustments at the mine.

(c) Metallic content of mine production.

Aggregate Balance Sheet

Reflecting recent investment activity, the total value of assets employed increases 2 per cent over 1997/98.

Borrowings rise significantly, and the debt to equity ratio rises as a result.

The overall industry balance sheet remains sound.

At the end of 1998/99, the total value of assets employed in the minerals industry by survey respondents was \$56,823 million, an increase of 2 per cent on the previous year.

The value of fixed and deferred assets rose 3 per cent to \$40,788 million. This followed an 8 per cent increase in the previous year. The levelling off in the value of fixed assets is a result of the strong investment activity in recent years slowing during 1998/99.

Shareholders' funds fell by 6 per cent. This reflects the impact of continuing consolidation in the industry through mergers and acquisitions. It is also a function of the Survey that in some instances, dividends paid by respondents will exceed the profits directly attributable to their activities in the minerals industry.

Borrowings rose by 24 per cent in 1998/99 to be \$15,006 million at the end of the year. The increase in borrowings reflects the financing requirements of a number of large projects, which involved significant debt financing, including significant overseas borrowing.

As a result of reduced shareholders' funds and increased borrowings, the debt to equity ratio rose sharply. At the end 1998/99, the gross debt to equity ratio was 0.54, substantially higher than in the previous year, and well above the average for the past ten years.

The ratio of current assets to current liabilities fell from 1.22 in 1997/98 to 1.15 in 1998/99. The revenue to fixed and deferred assets ratio fell slightly from 0.79 to 0.76. The funds turnover ratio rose slightly, from 0.76 to 0.77.

The overall industry balance sheet has remained reasonably sound despite relatively low levels of profitability in recent years. The slowing in the level of investment in fixed assets and the relatively high debt to equity ratio follow a period of high investment levels in the industry. This investment will provide a sound base for the industry to capitalise on any future upturn in world commodity prices.

	1998/99	1997/98	1996/97	1998/99	1997/98	1996/97
	\$ million			Percentage of total assets		
Shareholders' Funds	27,690	29,529	31,783	48.7	52.8	60.2
Borrowings	15,006	12,056	8,106	26.4	21.6	15.3
Total Funds Employed	42,696	41,585	39,889	75.1	74.4	75.5
Income Tax Provision	4,118	3,557	3,794	7.2	6.4	7.2
Other Provisions	4,720	4,328	3,791	8.3	7.7	7.2
Trade Creditors and Accruals	3,893	5,537	4,269	6.9	9.9	8.1
Other Liabilities	1,396	904	1,068	2.5	1.6	2.0
Equity and Liabilities	56,823	55,911	52,811	100.0	100.0	100.0
Fixed and Deferred Assets	40,788	39,675	36,664	71.8	71.0	69.4
Operating Current Assets	10,566	10,703	9,666	18.6	19.1	18.3
Other Assets	5,469	5,533	6,481	9.6	9.9	12.3
Total Assets	56,823	55,911	52,811	100.0	100.0	100.0
	Average ratios					
Revenue to Fixed Assets	0.76	0.79	0.79			
Funds Turnover Ratio	0.77	0.76	0.74			
Gross Debt to Equity Ratio	0.54	0.41	0.26			
Current Ratio	1.15	1.22	1.02			

Aggregate Profit and Loss Statement

Price falls and the lower \$A/\$US exchange rate mean sales revenue records only a modest increase.

Costs decrease in 1998/99, reversing some of the increase recorded in 1997/98.

There was a high level of abnormal losses, continuing the recent trend of asset write-downs.

Industry profits rose in 1998/99, due to the combination of a modest increase in sales revenue and lower costs.

Total revenue rose 3 per cent to \$32,341 million. Within this total, smelting and refining sales revenue fell 4 per cent, while mining revenue rose by 4 per cent. These results reflected lower world prices, subdued production volumes and the lower \$A/\$US exchange rate. World prices for most mineral commodities fell in 1998/99.

Total expenses fell by 3 per cent, following a 12 per cent rise in 1997/98. Most components of total expenses fell, with significant falls recorded for interest expenses and production and other operating costs.

The fall in interest expenses, of 18 per cent, was despite an increase in borrowings at year-end. This has been caused by the significant level of interest capitalisation on major projects, a reduction in interest rates, and changes in the level of inter-company borrowings.

Resource based taxes rose by 8 per cent. This reflects the introduction by the Western Australian Government of a gold royalty from 1 July 1998. There was also a small general increase in royalty payments due to increased volumes produced.

Depreciation and amortisation expenses rose 4 per cent. This increase is broadly consistent with the increase in the industry's fixed and deferred assets.

Labour costs fell only slightly in 1998/99, despite a large fall in direct employment. This reflected higher payments per employee mainly due to redundancy payments.

Operating profit before abnormals was \$3,666 million, 65 per cent higher than in 1997/98. This is the best result since 1995/96.

For the third consecutive year there were significant write-downs in the value of company assets, particularly in the gold and base metals sectors. Abnormal losses were \$2,040 million, compared to \$1,301 million in 1997/98. Asset write-downs accounted for most of the abnormal losses.

Operating profit before income tax rose 77 per cent to \$1,626 million. Net profit in 1997/98 was \$919 million, 34 per cent below the previous year's result.

In summary, industry costs have fallen and profitability has improved somewhat, confirming that the weakness of results in recent years has reflected short-term factors rather than an erosion of productivity or efficiency. The industry has responded to difficult circumstances by instituting major changes to the way it operates and, as a result, is better placed to meet the challenges in the years ahead.

	1998/99 \$ million	1997/98 \$ million	1996/97 \$ million
Mining Sales	21,242	20,586	19,364
Smelting and Refining Sales	9,142	9,525	8,271
Other Revenue	1,957	1,687	1,313
Total Revenue	32,341	31,798	28,948
Labour Costs	4,965	5,017	5,025
Government Rail and Port Charges	1,381	1,411	1,415
Cost of production & Operating Costs ^(a)	15,854	16,302	14,467
Depreciation and Amortisation	3,679	3,545	3,164
Interest	1,249	1,528	1,054
Resource Based Taxes	978	906	652
Net Exchange Losses	56	349	51
Indirect Taxes	513	520	583
Total Expense	28,675	29,578	26,411
Operating Profit Before Abnormals	3,666	2,220	2,537
Abnormal Gain (Loss)	(2,040)	(1,301)	(1,137)
Operating Profit	1,626	919	1,400
Income Tax Expense	569	352	548
Net Profit Before Extraordinaries	1,057	567	852
Net Extraordinary Gain (Loss)	0	0	29
Net Profit	1,057	567	881
Note: (a) Includes costs of production, contractor costs and marketing costs which are not separately identified in the Table.			

Profitability

Improvement in profitability in 1998/99, but still below the ten-year average for the industry.

Rates of return measures improve – especially for the mining sector of the industry.

Indicators of profitability for the industry improved during 1998/99, but remain well down on the industry average for the last ten years. In part, this low level of profitability reflects the number of recent projects in the industry. Many of these projects would be adding to the asset base of the industry, but not yet contributing to profit levels. On this basis, the outlook may be for improved profitability in coming years.

The net profit return on average shareholders' funds was 3.7 per cent in 1998/99, compared with 1.8 per cent in the previous year. Although an improvement, this is well below the ten-year average of this measure of profitability of 8.7 per cent.

The net profit return on average assets employment also rose, from 1.0 per cent in 1997/98 to 1.9 per cent in 1998/99, but was also down on the ten-year average of this measure of 4.6 per cent.

A broader measure of rates of return, operating profit before interest and income tax expense on average funds employed, was 6.8 per cent in 1998/99. This is up on the 6.0 per cent return recorded in 1997/98 and the 6.3 per cent return recorded in 1996/97. This is a measure of the total return from minerals industry activities to be shared between shareholders, lenders and governments.

As in most years, there was large variation in profits / losses across commodities and across respondents.

Note: The ratios quoted in the table below are a better measure of performance than absolute dollar earnings. The latter is not a reliable guide to the industry's performance unless it is related to the level of funds invested or the asset base. Figures in the funding and profitability table should be interpreted with care. Asset values have generally not been adjusted to reflect the effects of inflation. Consequently, in current dollar terms, the returns on shareholders' funds and the other profit measures tend to be overstated and the aggregate value of assets understated. For definitions, see Appendix 1.

	1998/99 \$ million	1997/98 \$ million	1996/97 \$ million
Average Shareholders' Funds	28,610	30,656	30,910
Average Funds Employed	42,141	40,737	39,269
Average Assets	56,367	54,361	52,344
Operating Profit Before Abnormal Items	3,666	2,220	2,537
Operating Profit Before Interest and Income Tax	2,876	2,447	2,454
Operating Profit Before Income Tax	1,626	919	1,400
Operating Profit After Income Tax	1,057	567	852
Net Extraordinary Gain (Loss)	0	0	29
Net Profit	1,057	567	881
Rates of Return	per cent	per cent	per cent
Operating Profit Before Abnormals Return on Average Shareholders' Funds	12.8	7.2	8.2
Operating Profit Before Interest and Income Tax Expense on Average Funds Employed	6.8	6.0	6.3
Net Profit Return on Average Shareholders' Funds	3.7	1.8	2.9
Net Profit Return on Average Assets Employed	1.9	1.0	1.7
Net Profit Return on Total Revenue	3.3	1.8	3.0

The improvement in profitability appears to be driven by the results in the mining sector. Net profit return on average assets employed in this sector of the industry was 3.0 per cent, a significant increase from the 1.0 per cent recorded in 1997/98 and the 0.9 per cent recorded in 1996/97. While revenue increased only moderately, there was a sharp fall in costs.

In the smelting and refining sector, a loss was recorded and as a result net profit return on average assets employed was -0.6 per cent. This compares with 1.0 per cent in the previous year and 3.7 per cent in 1996/97. Smelting and refining sales revenue fell by 4 per cent. Although costs also decreased, this decrease was not large enough to offset the decline in sales revenue.

As noted above, the number of recent projects in the industry has affected both of these results. Many of these projects would be adding to the asset base of the industry, but not yet contributing to profit levels.

Note: Some care should be taken in interpreting the figures reported in the table below. The aluminium / alumina sector largely reports on a calendar year basis. Thus, the survey does not reflect price rises in the latter half of 1998/99. Secondly, a number of major project expansions / upgrades have taken place, together with some technical / operational problems, which have dampened sales revenue. Finally, the split between mining and smelting and refining is somewhat artificial. For example, primary gold smelting to produce doré is included in the mining sector.

Mining	1998/99 \$ million	1997/98 \$ million	1996/97 \$ million
Sales Revenue	21,242	20,586	19,364
Net Profit	1,170	401	357
	per cent	per cent	per cent
Net Profit on Average Assets Employed	3.0	1.0	0.9
Smelting and Refining	\$ million	\$ million	\$ million
Sales Revenue	9,142	9,525	8,271
Net Profit	(113)	166	524
	per cent	per cent	per cent
Net Profit on Average Assets Employed	-0.6	1.0	3.7

Cash Flows

A high proportion of cash from operating activities continues to be reinvested in assets.

New borrowings and refinancing of existing debt well in excess of recent years' levels.

In 1998/99, the minerals industry received \$29,033 million in receipts from customers. Net cash from operating activities totalled \$5,878 million, which was largely applied to investment activities, particularly the purchase of property, plant and equipment. Overall, net cash used in investment activities was significantly higher than net cash provided by operating activities.

Reflecting increased activity during the year, proceeds from sales of controlled entities rose from \$214 million to \$909 million. Proceeds from the issue of shares in 1998/99 were \$1,115 million, 28 per cent higher than in 1997/98. The statement of cashflows shows new borrowings and refinancing of existing debt well in excess of recent years' levels.

This is consistent with the number of capital projects under construction and the increase in borrowings recorded in the balance sheet. Some of the increase in borrowings would be attributable to the lower \$A/\$US exchange rate which would have increased the recorded value of \$US debt outstanding at balance date.

Dividend payments were recorded as \$2,454 million. This equals a return of 9 per cent on shareholders' funds. Some care should be used in the interpretation of this result as it reflects the final dividend payment for 1997/98 and an interim payment for 1998/99.

	1998/99 \$ million	1997/98 \$ million
Operating Activities		
Receipts from Customers	29,033	27,805
Payments to Suppliers and Employees	(22,494)	(20,436)
Dividends Received	114	93
Interest Received	229	388
Interest and Other Costs of Finance Paid	(1,102)	(1,420)
Income Taxes Paid	(793)	(653)
Other	891	609
Net Cash Provided by Operating Activities	5,878	6,386
Investing		
Payment for Purchase of Controlled Entities	(832)	(481)
Proceeds from Sale of Controlled Entities	909	214
Payments for Property, Plant and Equipment	(6,517)	(7,535)
Proceeds from Sale of Property, Plant and Equipment	365	338
Other Payments	(2,009)	(1,137)
Other Proceeds	1,004	124
Net Cash Used in Investing Activities	(7,080)	(8,477)
Financing		
Proceeds from Issues of Shares	1,115	872
Proceeds from Borrowings	16,076	12,771
Repayments of Borrowings	(13,616)	(9,905)
Dividends Paid	(2,454)	(1,775)
Other	373	229
Net Cash Provided by Financing Activities	1,494	2,192
Cash at the Beginning of the Year ^(a)	1,184	1,196
Net Increase/Decrease in Cash Held	292	101
Movements Attributable to Exchange Rate Fluctuations on Foreign Currencies Held	(47)	(5)
Cash at the End of the Year	1,429	1,292

Note: (a) The change in the mix of respondents means cash at the beginning of 1998/99 differs from the 1997/98 end of year figure.

Borrowings

At the end of 1998/99, borrowings were \$15,006 million, 24 per cent higher than at the end of the previous year. As a result of the increase in borrowings and a reduction in shareholders' funds, the gross debt to equity ratio rose from 0.41 in 1997/98 to 0.54 in 1998/99.

Reflecting the significant refreshing of "old" capital and new capital investment in recent years, the debt to equity ratio is now well above the average for the past ten years (see Appendix 3).

Associated with the increase in borrowing, there was a shift into long-term (more than 5 years to maturity) debt, which increased from 18 to 42 per cent of total debt. The proportion of borrowing repayable between 4 and 5 years fell significantly, from 38 per cent of total debt to 19 per cent at the end of 1998/99.

Over the past three years, there has been a trend towards an increase in Australian dollar denominated debt. However, this trend was reversed in 1998/99, with a pronounced increase in foreign, especially long-term \$US, denominated debt. This is a result of long-term project financing within the industry.

Foreign dominated debt, particularly that which is \$US denominated, provides the advantage of a natural hedge arising from the fact that most of the industry's revenue is denominated in foreign currency. While the optimal mix of debt will vary with industry circumstances, incentives to shift in or out of foreign denominated debt can also be explained by the relative rates of interest available in overseas financial markets compared with domestic interest rates.

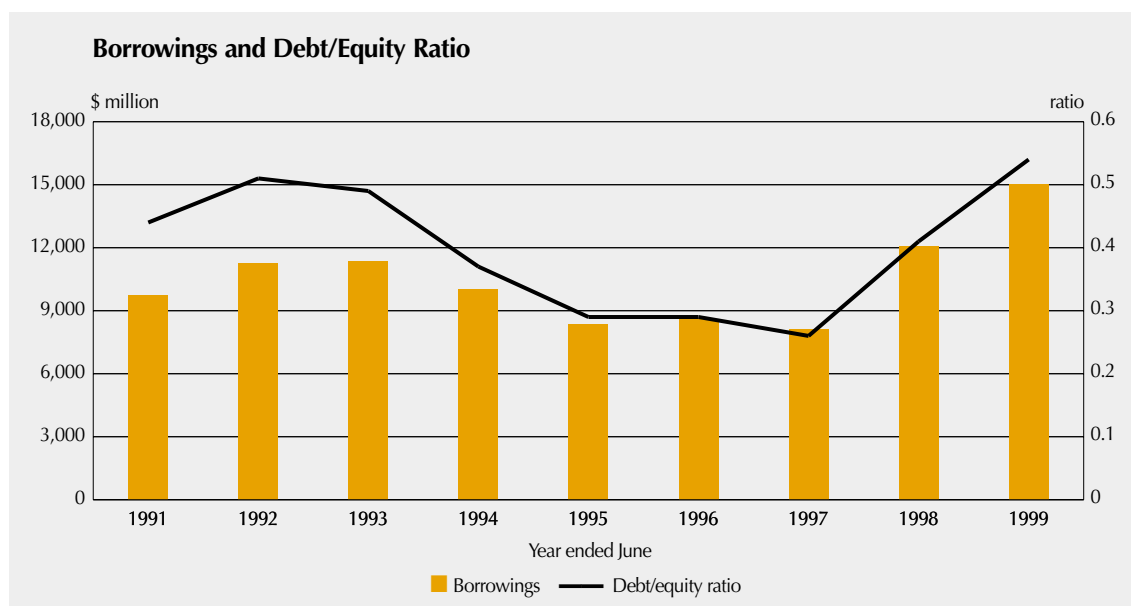
Reflecting the recent high level of investment activity in the minerals industry, borrowings rise.

A pronounced shift towards longer-term debt.

Increase in foreign denominated debt, reversing the trend of recent years.

Amounts Owing at Balance Date Repayable Within:	June 1999 \$ million	June 1998 \$ million	June 1997 \$ million	June 1999 percentage of total	June 1998 percentage of total	June 1997 percentage of total
1 Year	2,245	1,827	1,930	15.0	15.2	23.8
2 – 3 Years	3,623	2,667	2,136	24.1	22.1	26.3
4 – 5 Years	2,793	4,547	1,877	18.6	37.7	23.2
After 5 Years	6,345	2,179	1,630	42.3	18.1	20.1
Term Not Specified	0	836	533	0.0	6.9	6.6
Total Borrowings (a)	15,006	12,056	8,106	100.0	100.0	100.0
In Foreign Currency	9,554	6,619	4,840	63.7	54.9	59.7
In Australian Currency	5,452	5,437	3,266	36.3	45.1	40.3

Note: (a) For a small number of respondents, the figures for borrowings do not include inter-company debt.



Distribution of Assets by Activity

Increase in fixed and deferred assets in both sectors.

Smelting and refining sector share of total assets increases.

This reflects the industry's response to the improved environment for downstream activity brought about by economic, especially microeconomic, reform.

At the end of 1998/99, assets employed in the minerals industry totalled \$56,823 million, an increase of 2 per cent on the previous year. The total of fixed and deferred assets was \$40,788 million, an increase of 3 per cent. The value of other assets fell by 1 per cent.

Total assets employed in the exploration and mining sector were almost steady, rising by less than 1 per cent. There was a 1 per cent increase in the value of fixed and deferred assets and a 3 per cent fall in other assets.

In the smelting and refining sector, total assets employed rose by 5 per cent, with an increase of 6 per cent in the value of fixed and deferred assets and a 2 per cent rise in other assets.

The share of exploration and mining assets in total assets employed fell to 67 per cent in 1998/99 from 68 per cent in 1997/98. This ratio had been stable at 75:25 over the previous 5 years.

The change in this ratio illustrates how the industry has responded to the improved environment for downstream activity brought about by economic, especially microeconomic, reform.

	June 1999 \$ million	June 1998 \$ million	June 1997 \$ million
Exploration and Mining			
Fixed and Deferred Assets	27,333	26,949	26,072
Other ^(a)	10,745	11,028	11,482
Total	38,078	37,977	37,554
Smelting and Refining			
Fixed and Deferred Assets	13,456	12,726	10,592
Other ^(a)	5,290	5,208	4,665
Total	18,746	17,934	15,257
Total Assets			
Fixed and Deferred Assets	40,788	39,675	36,664
Other ^(a)	16,035	16,236	16,147
Total	56,823	55,911	52,811

Note: (a) 'Other' assets include inventories, receivables, future income tax benefit assets, and inter-company balances.

Government and Taxation

Total taxes paid by the industry rise 16 per cent. Most of the rise is in income tax expense, which is up 61 per cent – due to improved profitability.

The Council has welcomed the Commonwealth Government's indirect tax reform measures.

The industry has also generally welcomed the pragmatic approach the Commonwealth Government has taken in many aspects of its response to the Review of Business Taxation.

The total amount of direct and indirect tax liabilities incurred by respondents in 1998/99 was \$2,060 million, 16 per cent higher than in the previous year. In 1998/99, total tax paid by companies represented 66 per cent of net profit before all taxes, compared with 76 and 67 per cent in 1997/98 and 1996/97 respectively.

Income tax expense rose by 61 per cent, mainly as a result of the improvement in industry profitability.

In 1998/99, income tax accounted for 35 per cent of pre-income tax net profit, down from 38 per cent in the previous year. In any given year this figure will differ from the company tax rate due to differences in definition between accounting profit and taxable income.

Royalty payments to government in 1998/99 were \$978 million, 8 per cent higher than in the previous year. This increase is much lower than the increase in 1997/98, which reflected increased payments by the Queensland coal industry.

Prior to 1997/98, as well as explicit royalties, the Queensland Government levied 'de facto royalties' in the form of extra charges for State Government provided rail freight services. The increase in royalty payments in 1997/98 mainly represented the outcome of individual company negotiations to shift the 'de facto royalty' payments into higher transparent royalty payments. This represents an important change because more of the real contribution of the industry to state revenue is now transparent. In addition, the Western Australian Government introduced a gold royalty, which applied from 1 July 1998. There was also a small increase in the volume of mine production that contributed to the rise in royalty payments. Government port and rail charges fell 2 per cent to \$1,381 million.

The total of indirect taxes paid by the industry fell by 2 per cent in 1998/99 to \$513 million. This was due to slight falls in payroll tax and fringe benefits tax, reflecting the lower level of industry employment. Fuel excise and other payments increased by 4 per cent. In 1998/99, income tax accounted for 28 per cent of total taxes paid by companies, resource based taxes accounted for 47 per cent and indirect taxes accounted for 25 per cent.

After increasing substantially in the past two years, the share of royalties and indirect taxes in total payments decreased during 1998/99. The major reason for the decrease was a higher level of profitability in the industry, which resulted in a significant increase in total income tax. Nevertheless, the survey data show that indirect taxes are a large component of total industry tax payments.

Over recent years there has been an increase in the share of indirect taxes in total taxes paid by the industry. This is of concern because taxes on business inputs are highly distorting and directly undermine the competitiveness of the industry. Moreover, the compliance costs associated with indirect taxes, per dollar of revenue raised, are very high.

This underscores the importance of the Commonwealth Government's indirect tax reform initiatives announced during 1999. These reforms aim to address the problem of reliance on a narrow base for indirect taxation in the economy and to remove taxation on business inputs. In fact, after geological prospectivity and degree of political risk, the tax mix in the fiscal regime is a primary consideration in attracting investment in any country's minerals industry.

With an increasingly competitive global minerals market, capital and skilled people are mobile inputs. Continuing Australia's current tax arrangements, in particular taxes on business inputs, would have risked deflecting potential investors who may be considering placing large projects in Australia.

For these reasons, the Council applauded the Commonwealth Government on successfully introducing its indirect tax reform package during the year. The industry has also generally welcomed the pragmatic approach the Commonwealth Government has taken in many aspects of its response to the Review of Business Taxation.

Even so, many are naturally concerned about the loss of so-called 'accelerated depreciation' entitlements and the removal of a statutory cap on the 'life of mine' under the allowable capital expenditure provisions of the taxation legislation.

Clearly, removing 'accelerated depreciation' adversely impacts on resource intensive industries. This is due to both their capital-intensive nature and also because projects tend to be financed to a significant extent through non-recourse debt. The cash flow benefits of 'accelerated depreciation' significantly reduce the risk of funding such projects and consequently improve funding availability. These points were recognised in the Review's final report.

Furthermore, the Review's information paper, *An International Perspective: Examining how other countries approach business taxation*, demonstrates that virtually all countries examined allowed some degree of acceleration, particularly in respect of mining. Importantly, this includes the countries with which Australia competes to supply into price-taker minerals markets.

The Council will be closely monitoring the impact of removal of 'accelerated depreciation' and the statutory cap on mine lives to ensure this does not adversely impact the international competitiveness and standing of Australia as one of the world's leading minerals nations.

Copies of the Council's submissions on tax reform and its responses to Government policy decisions are available at www.minerals.org.au.

Note: The income tax figures in this table differ from income tax actually paid during the year because of differences in the timing of the recognition of income tax expense in the accounts of respondents and the actual payment of income tax to the Government. Actual tax payments made in 1998/99 are also partly reflected in profits of the 1997/98 financial year.

	1998/99	1997/98	1996/97	1998/99	1997/98	1996/97
	\$ million			per cent of total company taxes		
Taxes Levied On Companies						
Mineral Royalties, Licence Fees, etc	978	906	652	47.5	51.0	36.6
Income Tax Expense	569	352	548	27.6	19.8	30.7
Total Direct Taxes	1,547	1,258	1,200	75.1	70.8	67.3
Land Taxes and Rates	49	49	53	2.4	2.8	2.9
Payroll Tax	239	249	232	11.6	14.0	13.0
Fringe Benefits Tax	105	107	108	5.1	6.0	6.1
Fuel Excise and Other Taxes	120	115	190	5.8	6.5	10.7
Total Indirect Taxes^(a)	513	520	583	24.9	29.2	32.7
Total Tax Expense by Companies	2,060	1,778	1,783	100.0	100.0	100.0
Taxes Levied On Others						
Income Tax Paid by Employees	1,324	1,317	1,322			
Withholding Tax Paid by Lenders and Shareholders	2	1	1			
Total Taxes	3,386	3,096	3,106			
Government Rail and Port Charges	1,381	1,411	1,415			
Total Government Revenue	4,767	4,507	4,521			

Notes: (a) Excludes an unknown but small amount of sales tax and embedded sales tax.

Rehabilitation Expenditure

44 companies were signatories to the Australian Minerals Industry Code for Environmental Management as at November 1999, applying the Code at over 300 sites.

The annual expense for rehabilitation in 1998/99 was \$275 million.

The figures presented in this survey cover only part of the industry's total environmental expenditure.

In 1998/99, the industry provided \$275 million for expenditure on rehabilitation, 12 per cent higher than in the previous year. The accumulated balance of the provision for rehabilitation expenditure rose 24 per cent to \$1,208 million at the end of 1998/99. The strong rise in the balance over the past few years is consistent with an increased focus on environmental rehabilitation by the minerals industry. The balance is provided for the purpose of rehabilitation and can be expected to be drawn down in future years.

Furthermore, expenditure on rehabilitation is projected to increase next year. In addition, the figures presented in this survey cover only part of the industry's total environmental expenditure (see note at the end of this section).

The environmental performance of the Australian minerals industry is central to its continued viability. The importance of high standards of environmental management and performance to the future of the industry is demonstrated through the *Australian Minerals Industry Code for Environmental Management* (the Code), which provides a framework for continual improvement in environmental management and communication.

The Code is designed to facilitate each signatory's continual improvement of environmental performance in each phase of mineral development, from initial exploration to closure and final rehabilitation, and to communicate that performance to the industry's stakeholders and the community.

By signing the Code, signatories commit to excellence in environmental management through nine principles:

- Sustainable development.
- Environmentally Responsible Culture.
- Community Partnership.
- Risk Management.
- Integrated Environmental Management.
- Performance Targets.
- Continual Improvement.
- Rehabilitation and Decommissioning.
- Reporting.

There are two key obligations of a signatory to the Code:

- Within 2 years of becoming a signatory, companies will produce annual public environmental reports.
- A signatory's implementation of the Code will be evaluated by accredited internal or external auditors.

The Code also requires a signatory's employees and site contractors to comply with company practices and procedures.

Forty-four companies have now become signatories to the *Australian Minerals Industry Code for Environmental Management*, applying the Code at over 300 sites across the world.

Under the Code, signatory companies are releasing annual public environmental reports. At least 28 company environmental reports have been released with the number rising to 33 by the end of 1999. These figures will continue to rise, as more companies become signatories to the Code.

The Minerals Council of Australia's 24th Annual Environmental Workshop, held in Townsville in October 1999, devoted three sessions to the Code, reinforcing the importance of environmental performance to the industry. The workshop attracted over 400 delegates. Approximately forty per cent of those attending the workshop were from mining companies and sites around Australia. A further 24 delegates were from overseas, providing testament to Australia's international leadership in the field of environmental management and reporting.

When the Code was launched in 1996, a review within three years was foreshadowed. During the second half of 1999, the Code has been undergoing a review in consultation with key stakeholders around the country. The first draft of the revised Code was released for comment in early October 1999. It is anticipated that the final draft of the revised Code will be endorsed by the minerals industry in mid-December 1999.

In addition, the Code now has its own website (at www.enviro-code.minerals.org.au).

The Australian minerals industry also undertakes considerable research and training in areas related specifically to improving environmental performance. Research and training is undertaken directly by companies and through sponsorship and support of research and training institutions such as the Australian Centre for Mining Environmental Research, the Australian Minerals Foundation, the Australian Minerals Energy and Environment Foundation, and the Australian Minerals Industry Research Association.

Note: The figures presented in this survey cover only part of the industry's total environmental expenditure. In addition to minesite rehabilitation, substantial environmental expenditures are incurred in research, pollution monitoring and control, clean up and in capital expenditures designed to minimise the environmental impact of mining and minerals processing plant and equipment.

Rehabilitation Expenditure	1999/2000 Forecast \$ million	1998/99 \$ million	1997/98 \$ million	1996/97 \$ million
Annual Provision ^(a)	267	275	245	178
Accumulated Balance of Provision	n/a	1,208	975	928

Notes: (a) Annual provision for rehabilitation represents the amount charged to the profit and loss statement during the period, which increases the total rehabilitation provision. Actual payments made will be made directly from the total rehabilitation provision, and will not necessary equal the amount charged to the profit and loss statement.

Native Title and Aboriginal Development Expenditure

In 1998/99, the industry spent \$28.8 million on Native Title and Aboriginal development expenditure.

It is anticipated that total expenditure will increase in coming years.

Native title expenditure excludes any costs arising from the significant delays that have been experienced in the minerals industry in gaining access to land for exploration.

The minerals industry in Australia is concerned at the increasing level of expenditure resulting from legislative and common law developments with native title and related indigenous issues.

This year's Survey collected information on minerals industry expenditure on native title and related indigenous issues. Respondents supplied information on internal expenditure relating to land access and Aboriginal development and external expenditure relating to the same categories.

Internal expenditure on land access relates to the statutory requirements of the *Native Title Act 1993*. In particular, the requirements and procedures arising from its 'future act provisions' and the need for mineral companies to be respondents to claims for native title on land where they have interests in mineral exploration and development. For 1998/99, internal expenditure for respondents to the survey was \$7.6 million.

External expenditure on land access and Aboriginal development for 1998/99 was \$21.2 million. This expenditure relates to payments made to indigenous people and third parties acting for indigenous interests. The level of expenditure is concerned with the external costs of complying with procedures arising from the 'future act provisions' of the *Native Title Act 1993* and reflects expenditure rising from native title agreements with native titleholders on land access.

It is anticipated that the total expenditure of \$28.8 million in 1998/99 will increase as the current backlog of mineral tenement applications is processed and agreements and determinations result in compensation payments. The 1998/99 expenditure was mainly concerned with procedural requirements.

Native title expenditure in 1998/99 excludes any costs arising from the significant delays that have been experienced in the minerals industry in gaining access to land for exploration. These delays are not recorded as native title expenditure but have resulted in a switching of exploration investment from Australian's greenfields exploration to either brownfields exploration or overseas exploration. The trend towards overseas exploration has been evident since the early 1990's.

Native Title and Aboriginal Development Expenditure	1998/99 \$ million
Internal	
Expenditure Relating to Land Access ^(a)	2.3
Expenditure Relating to Aboriginal Development ^(b)	5.3
Total Internal Expenditure	7.6
External	
Expenditure Relating to Land Access ^(a)	15.2
Expenditure Relating to Aboriginal Development ^(b)	6.0
Total External Expenditure	21.2
Total Native Title and Aboriginal Development Expenditure	28.8

Note: (a) Land access expenditure includes items such as compliance with the *Native Title Act 1993* and indigenous heritage legislation, legal, representational, negotiation and anthropological studies and compensation (cash or in kind) paid to Aboriginals.

(b) Aboriginal development expenditure includes items such as special education, training, employment, small business, community development programmes for Aboriginals and Aboriginal communities.

Employment and Labour Costs

A further decrease in direct employment.

Around 22 per cent (or more than 1 in 5) of full-time equivalent positions in the industry are now contracted out.

Labour costs per employee increase – mainly due to redundancy payments.

The number of people directly employed in respondent companies fell by 8 per cent in 1998/99, following a 13 per cent fall in the previous year. This fall is partly due to the effects of company restructures and downsizing and partly due to a change from direct to contract employment status at a number of respondent operations.

While employment levels between 1992/93 and 1996/97 were relatively stable, the longer-term industry trend since 1989/90 has been towards lower direct employment. The effect of increased activity and new production on employment levels has been more than offset by a continuing trend towards increased use of contractors and improved labour productivity through changes in work practices, training and improved technology.

Employment in mining operations was the major contributor to this fall, with mining employment falling by 11 per cent. Following a 5 per cent reduction in employment in exploration in 1997/98, employment in exploration fell by a further 1 per cent in 1998/99. Employment in the smelting and refining sector fell by 4 per cent.

Reflecting this sharp fall in direct employment, total labour costs also fell. However, labour costs fell by only 1 per cent, with a 13 per cent increase in gross wages and salaries per employee. This increase is largely explained by redundancy payments associated with industry restructuring.

In 1998/99, gross wages and salaries accounted for 85 per cent of total labour costs while non-wage costs accounted for 15 per cent.

Important non-wage costs include fringe benefits tax (FBT) and payroll tax. In 1998/99, FBT payments per employee were \$1,778, 10 per cent higher than in the previous year. Payroll tax per employee was \$4,040, 7 per cent higher than in the previous year. In the minerals industry, payroll tax constitutes a significant tax on employment and as such can discourage employment growth.

Contracted employees

Over the past few years, there has been a strong trend towards contracting rather than direct employment of labour.

In 1998/99, there were 16,556 full-time equivalent contractors engaged by respondents, an increase of 15 per cent over the 14,427 full-time equivalent contractors engaged by respondents in 1997/98. This result does not include part-time contractors (undertaking short-term maintenance work or drilling operations, for example). Thus, approximately 22 per cent of full-time employment provided by respondents in 1998/99 were contracted-out.

Taking contractors into account, total employment by respondents to the survey fell by 4 per cent, from 76,102 to 73,015.

Note: The figures for wages and salaries include production bonuses, overtime, penalty rates, long-service leave, sick pay and leave loading. People employed by contractors are not included in the table. The employment numbers presented in the table relate to end of period employment. Labour costs per employee are calculated on average employment for the year rather than end of year employment. A number of estimates are made to provide separate exploration and mining figures, which are only meant to be indicative.

	1998/99 number	1997/98 number	1996/97 number	1998/99 percentage change
Direct Employment				
Exploration	2,380	2,416	2,556	- 1.5
Mining	38,603	43,174	52,034	-10.6
Exploration and Mining	40,983	45,590	54,590	-10.1
Smelting and Refining	15,476	16,085	15,899	- 3.8
Total Direct Employment	56,459	61,675	70,489	- 8.5

	1998/99 number	1997/98 number	1998/99 percentage change
Contractor Personnel Consultant a Substitute for Full-Time Employees			
Contract Mining	11,252	9,977	12.8
Other Contracting	5,304	4,450	19.2
Total Contract Employment	16,556	14,427	14.8

	1998/99 \$ million	1997/98 \$ million	1996/97 \$ million	1998/99 per cent of total
Aggregate Labour Costs				
Gross Wages and Salaries	4,218	4,189	4,213	85.0
Payroll Tax	239	249	232	4.8
Workers' Compensation	90	123	106	1.8
Fringe Benefits Tax	105	107	108	2.1
Superannuation, training and other	313	348	366	6.3
Total Labour Costs	4,965	5,017	5,025	100.0
Recipients of Labour Costs:				
Employees Net Wages and Benefits	3,207	3,220	3,257	64.6
Government Tax Revenue	1,758	1,797	1,768	35.4

	1998/99 dollars	1997/98 dollars	1996/97 dollars	1997/98 percentage change
Labour Costs per Employee^(a)				
Gross Wages and Salaries	71,417	63,391	59,165	12.7
Other Benefits	5,306	5,266	5,146	0.8
Payroll Tax	4,040	3,768	3,265	7.2
Fringe Benefits Tax	1,778	1,619	1,515	9.8
Total Expenditure per Employee	82,541	74,044	69,091	11.5
Note: (a) Based on average employment during the year and other than workers' compensation.				

Overseas Exploration Expenditure

Overseas exploration expenditure accounted for 38 per cent of total exploration expenditure by respondents. For larger companies, this is now 46 per cent of activity.

The share of gold in total overseas exploration expenditure fell from 53 per cent in 1997/98 to 41 per cent in 1998/99.

Asia and North and South America are the principal regions for overseas exploration.

Growth in the level of overseas exploration expenditure nearly two and a half times that of domestic expenditure by major companies.

The Survey also collects information on exploration expenditure in Australia and overseas. The latter information is sought by commodity and by overseas region. To enable a comparison and establish trends over a longer period of time, those respondents that have provided overseas exploration expenditure figures over the past decade are separately reported as a 'constant group' below.

The table below detailing average annual growth rates for a 'constant group' of respondents to the Council's annual survey over a ten year period shows growth in overseas exploration expenditure by larger minerals companies was nearly two and a half times the growth in Australian exploration expenditure.

Analysis of all respondents

In 1998/99, respondents spent \$418 million on overseas exploration activities, or 38 per cent of total exploration expenditure, and \$682 million in Australia, or 62 per cent of total exploration expenditure. Official data, which has a wider coverage of the industry than this Survey, show that Australian minerals industry exploration expenditure fell by 21 per cent between 1997/98 and 1998/99.

The share of gold in total overseas exploration expenditure fell from 53 per cent in 1997/98 to 41 per cent in 1998/99. The sharp decline in gold prices has contributed to the fall in expenditure on gold exploration and a shift towards base metals exploration. Base metals exploration rose from 29 per cent to 37 per cent.

The major areas for overseas exploration in 1998/99 were:

- Asia, which rose sharply to account for 27 per cent, following a shift in exploration focus by one large respondent in particular to Asia from North America.
- North America, which accounted for 22 per cent (down from 30 per cent in 1997/98).
- South America 20 per cent (down from 23 per cent in 1997/98).

There was also an increase in the importance of Africa while exploration in Eastern Europe and Western Europe declined sharply.

Overseas Mineral Exploration expenditure – all respondents

By Commodity	1998/99 \$ million	1997/98 \$ million	By overseas region	1998/99 Per cent	1997/98 Per cent
Gold and platinum	177.8	239.4	Papua New Guinea/Pacific	3.1	1.6
Base metals	154.0	131.1	Asia	27.5	16.8
Mineral sands	3.1	10.5	South America	20.2	22.7
Diamonds	33.8	26.5	North America	22.0	30.4
Coal	1.0	5.6	Eastern Europe (inc. CIS)/	0.5	8.3
Other	48.2	37.2	Western Europe		
Total	417.9	450.2	Africa	18.4	13.4
			Other and general	8.3	6.8
Gold (%)	40.6	53.3	Total overseas (\$ million)	417.9	450.2
Non-Gold (%)	59.4	46.7	Australia (\$ million)	682.1	806.2

Note: The Australian Bureau of Statistics (ABS) also conducts surveys of exploration expenditure by the minerals industry. Its quarterly surveys provide a wider coverage of Australian exploration expenditure than shown here.

While respondents to the Council's 1999 survey accounted for around 81 per cent of total minerals exploration expenditure in Australia in 1998/99 (as reported to ABS in *Actual and Expected Private Mineral Exploration, Australia*, Cat. No. 8412.0), they represented the bulk of the exploration spending by Australian companies overseas. The Council's survey is recognised as a more accurate time series of overseas expenditure than the ABS survey.

Decisions to explore in Australia or overseas are based on a comparison of a range of factors. These include prospectivity, the fiscal and regulatory regimes, sovereign risk and the cost of access to land.

There has been a reduction in greenfields exploration in Australia with greater concentration on more costly production lease exploration and development.

In 1998/99, 94 per cent of overseas exploration expenditure by respondents was off production leases. In Australia, the figure has been around the 50 per cent level over the past few years.

There is a growing acknowledgment within the broader community of the need to put in place effective and efficient legislative mechanisms to deal with the interaction of the minerals industry and indigenous interests. The Council is maintaining a longer-term perspective on the issue and recognises that industry and indigenous people will need to form cooperative partnerships. All arrangements, however, need to be underpinned by effective legislation that produces workable outcomes within realistic time frames.

Constant Group Responses

Constant group respondents' exploration expenditure in Australia fell from \$469 million in 1997/98 to \$397 million in 1998/99. Overseas exploration expenditure by the constant group fell from \$384 million to \$333 million, but now accounts for 46 per cent of constant group exploration expenditure, up from 45 per cent in 1997/98.

When the Council established the survey of overseas exploration over ten years ago, relatively few companies (about twenty) were exploring overseas. These tended to be the larger mining companies. Over the intervening period, more Australian based operations have embarked on overseas exploration programs.

Analysis of the broad allocation of exploration expenditure shows that the increase in overseas exploration expenditures has been particularly marked in the first half of the 1990's, with the proportion of total expenditure by the larger companies devoted to overseas exploration rising significantly.

In 1998/99, *for the constant group*:

- Asia accounted for 28 per cent of overseas spending, North America 27 per cent and South America 25 per cent. The shift towards Asia is consistent with the experience for the total group.
- Gold and platinum exploration accounted for 31 per cent of the total overseas spending by respondents. This is a significant decrease on 1997/98, and well below the peak 79 per cent share recorded in 1988/89. This is also well below the share of gold in total group overseas exploration expenditure. The constant group spends a relatively smaller share of overseas exploration expenditure on gold and platinum and a relatively larger share on base metals than does the total group.

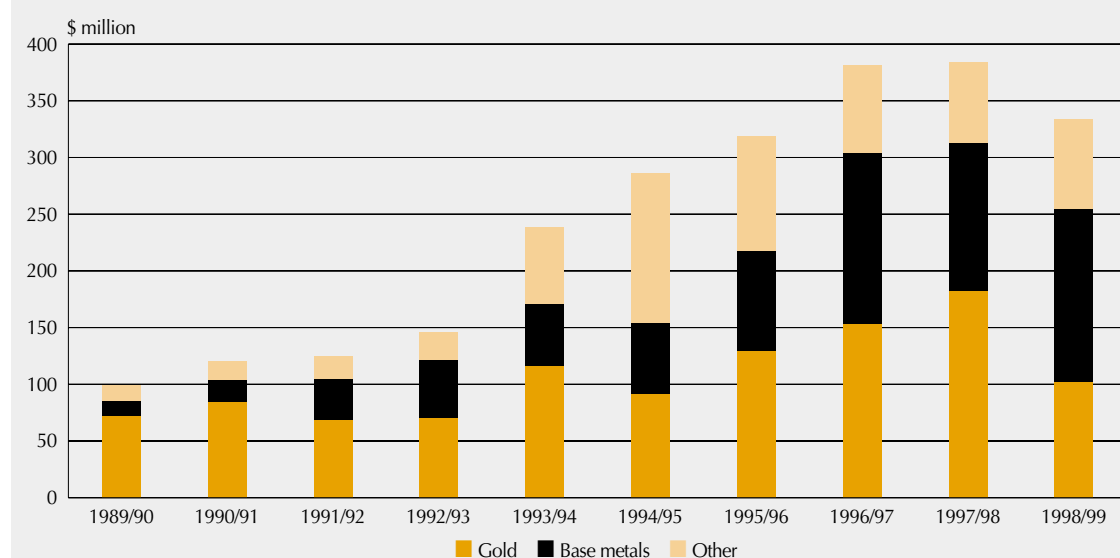
Broad Allocation of Mineral Exploration Expenditure – Constant Group

Year	1998/99	1997/98	1996/97	1995/96	1994/95	1993/94	10 Year Average Annual Growth (%)
	\$ million						
Australia	396.7	468.4	506.2	468.7	460.8	403.4	5.3
Overseas	333.1	384.1	381.5	319.1	285.8	238.3	12.9
Total exploration	729.8	852.5	887.7	787.8	746.6	641.7	8.0
Overseas percentage	45.6	45.1	43.0	40.5	38.3	37.1	

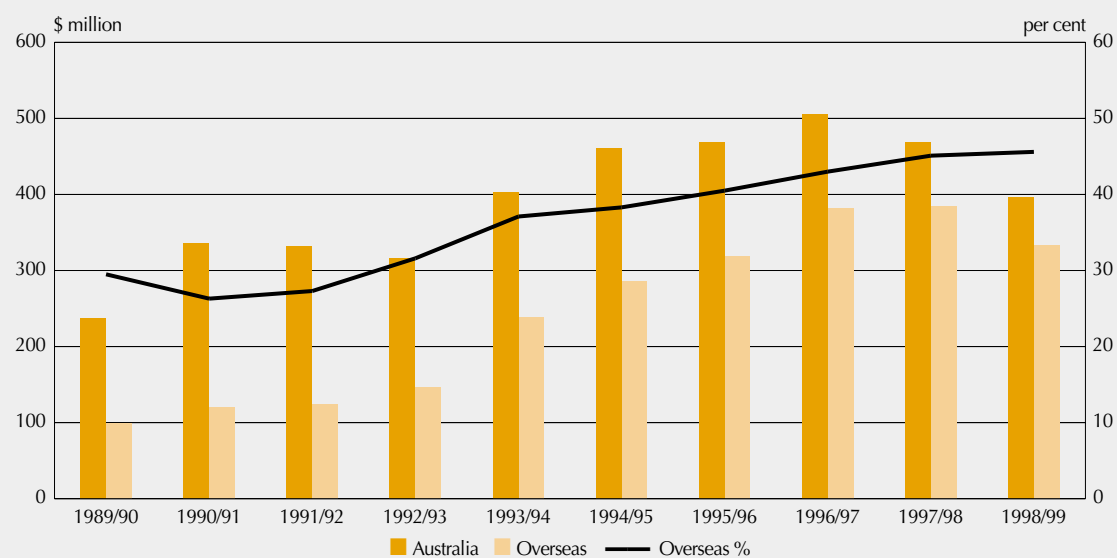
Overseas Exploration Expenditure by Commodity Sought – Constant Group

Year	1998/99	1997/98	1996/97	1995/96	1994/95	1993/94	1992/93	1991/92
	percentage							
Gold & platinum	30.6	47.3	40.0	40.5	31.8	48.7	47.9	55.2
Base metals	45.8	34.1	39.7	27.6	22.0	22.6	35.1	29.0
Mineral sands	0.0	2.7	1.0	2.0	1.6	1.7	3.5	2.1
Diamonds	10.1	6.9	5.2	15.6	27.7	15.2	7.2	7.2
Coal	0.0	1.5	3.1	1.7	2.4	1.9	2.3	1.4
Other & general	13.5	7.5	11.0	12.6	14.5	9.9	4.0	5.1
Total (\$m)	333.1	384.1	381.5	319.1	285.8	238.3	146.1	124.3

Overseas Exploration Expenditure by Major Commodity – Constant Group



Broad Allocation of Exploration Expenditure – Constant Group



Minerals Exploration Expenditure by Overseas Region – Constant Group

	1998/99	1997/98	1996/97	1995/96	1994/95	1993/94	1992/93	1991/92	1990/91
	percentage								
Papua New Guinea	0.3	0.2	2.4	3.7	2.8	4.4	11.1	15.6	14.5
Asia	28.0	15.3	21.8	23.4	21.9	18.4	16.9	18.2	15.0
Pacific	0.2	0.1	0.3	1.7	0.3	0.3	1.0	1.3	1.8
North America	27.2	35.1	30.3	29.4	33.8	33.6	25.9	30.8	30.7
South America	24.5	25.7	27.6	22.3	16.8	17.5	14.1	10.1	9.8
Eastern Europe (inc.CIS)	0.6	7.2	3.7	3.6	5.0	3.4	3.5	2.8	0.3
Western Europe	0.0	2.6	0.2	2.8	1.8	2.7	4.1	2.4	8.9
Africa	11.5	9.1	6.2	7.5	15.3	13.3	11.3	8.0	6.8
Other and general	7.7	4.7	7.5	5.6	2.3	6.4	12.1	10.8	12.2
Total (\$m)	333.1	384.1	381.5	319.1	285.8	238.3	146.1	124.3	119.8

Note: Until 1993/94 the data was obtained from the exploration arms of member companies. For 1994/95 onwards, the data was obtained from company head offices as part of the Council's *Minerals Industry Survey*.

Outlook for 1999/2000

A number of major new projects were commissioned in 1998/99. However, the number of projects to be commissioned beyond the first half of 1999/2000 is much lower.

The minerals industry is undergoing substantial restructuring in order to remain competitive in difficult market circumstances.

Maintaining a positive investment climate remains critical to further investment in the minerals industry.

Net expenditure on fixed and deferred assets is expected to fall by 59 per cent in 1999/2000, following a 20 per cent decrease in 1998/99. Fixed asset expenditure in the mining sector is expected to fall by 62 per cent while fixed asset expenditure in smelting and refining is expected to fall by 51 per cent.

Direct employment by respondents is also expected to fall, by 4 per cent to 54,119. The number of people directly employed by survey respondents has not risen in the past few years, as would have been the case historically, given increased sector activity and investment. This reflects ongoing industry restructuring, with a resultant increased productivity of employees, and the growing trend towards the use of contracting.

A significant number of new projects were commissioned in 1998/99. These included WMC Resource's Olympic Dam expansion, BHP's hot briquetted iron plant at Port Hedland and three new laterite nickel operations in Western Australia (Bulong, Cawse and Murrin Murrin). The completion of Rio Tinto's Yandicoogina iron ore mine in the Pilbara region represents an expansion of Australia's iron ore export capacity. There was also the Wagerup alumina refinery expansion, the Townsville copper refinery upgrades and the Port Kembla copper refinery reconstruction.

These new projects, combined with the substantial increases in both exploration and investment expenditure by the industry since 1992/93, should underpin future expansions in industry production and export levels.

There are also a number of projects at advanced stages of development. However, with over half of these advanced projects expected to be completed shortly, the number planned for commissioning beyond the first half of 1999/2000 is relatively small.

Major projects expected to be commissioned in 1999/2000 include Pasma's Century mine in north west Queensland (which is the world's largest zinc mine), an expansion of the Hill 50 gold mine, the recommissioning of the Yimuyn Manjerr (formerly Mount Todd) gold mine, WMC's Queensland Fertiliser Project and M.I.M.'s Enterprise copper mine and George Fisher silver-lead-zinc mine and the Korea Zinc smelter.

The factors contributing to the slow down in the commissioning of new projects beyond the first half of 1999/2000 include:

- Existing large global supply capacity relative to consumption of some minerals.
- The fact that many companies, having recently invested substantial amounts in developing their best new resources, are seeking to consolidate.
- Difficulties in securing project financing in a climate of economic uncertainty and subdued market outlook.

While market forces will play a major role, the attractiveness of the overall investment climate in Australia compared to overseas, remains a critical factor.

The outlook for 1999/2000 for the important areas of exploration and research and development remain a concern:

- Respondents forecast their exploration expenditure in Australia will fall 33 per cent in 1999/2000.
- The level of research and development forecast expenditure level, of \$159 million, is 16 per cent lower than the 1998/99 outcome. Such forecasts tend to be conservative however. For example, the R&D outcome for 1998/99, at \$190 million, is well above that forecast in last year's survey report (that is, of \$144 million).

	1999/2000 forecast \$ million	1998/99 actual \$ million	Forecast percentage change
Net Capital Expenditure (Investment) on:			
Mining Assets	1,722	4,535	-62.0
Smelting and Refining Assets	1,058	2,181	-51.4
Total Fixed Assets	2,780	6,716	-58.6
Exploration Expenditure in Australia	456	682	-33.1
Research and Development	159	190	-16.2
Number of Employees	54,119	56,459	- 4.1

Appendix 1: Coverage and Definitions

Survey Responses

Respondents to the survey include companies engaged only in exploration as well as companies that engage in a wider range of minerals activities.

While statistically desirable to have all respondents reporting their financial data for the same period, this was not always possible. To minimise the work of respondents, data for a financial year-end within six months before 30 June 1999 (that is, 31 December 1998) were accepted. Those whose year-end fell outside those parameters were asked to provide June fiscal year information. Some respondents, engaged principally in exploration activities, supplied data relating to financial years ending between November and January. This was accepted when it was confirmed that it was representative of data which would have applied had it been prepared for a financial year ended 30 June.

Definitions

In broad terms the ‘minerals industry’ has been defined as ‘exploration for and extraction and primary processing of minerals in Australia’.

Adoption of this definition results in the inclusion of refining and smelting but excludes any minerals activities carried out by respondents overseas. It should also be noted that the conversion of iron ore and coal to iron and steel is not included in the survey, nor is the conversion of coal to coke.

Safety and Health Terms

The Lost Time Injury Frequency Rate (LTIFR) is defined as the number of lost time injuries per million hours worked. A Lost Time Injury (LTI) is defined as an injury that results in a minimum of one full shift’s absence.

Financial Terms

Shareholders’ Funds is the net total of values attributed to items of share capital, retained earnings, accumulated losses, interests of minorities in the capital and reserves of subsidiaries, reserves, goodwill or premium arising on consolidation and amounts set aside for dividends still unpaid at balance date. It also includes contributions by participants to a joint venture if the source of those funds cannot be accurately determined.

Borrowings is the amount of principal outstanding on loans, notes, debentures, mortgages, hire purchase and bank overdrafts.

Funds Employed is the sum of shareholders’ funds and borrowings.

Fixed and Deferred Assets. This category includes capitalised exploration and mine development expenditure in addition to assets such as plant, equipment, vehicles, buildings, normally classified as fixed assets.

Current/Non-Current Assets and Liabilities.

The term ‘current’ signifies amounts normally expected to be received or paid within the ensuing period of twelve months.

Sales. Sales revenue derived by respondents from their minerals activities located within Australia, excluding sea freight and other costs of delivery outside Australia.

Accounting policies

The adoption of different accounting policies affected the homogeneous nature of the survey data. Respondents’ information has generally not been modified to achieve uniform accounting data.

The two most common methods of accounting for exploration expenditure are to write-off expenditure as incurred or to allocate costs to areas of interest.

Rounding

The monetary amounts in this survey have been rounded to the nearest million dollars. Any discrepancies between totals and the sum of components are due to rounding.

Ratios

Debt to equity ratio	=	$\frac{\text{borrowings}}{\text{shareholders' funds}}$
Current ratio	=	$\frac{\text{current assets}}{\text{current liabilities}}$
Pre-interest profit on average funds employed	=	$\frac{\text{operating profit before interest and tax}}{\text{average of total funds at the beginning and the end of the period}}$
Net profit return on average assets employed	=	$\frac{\text{net profit}}{\text{average of total assets employed at beginning and end of the period}}$
Net profit return on average shareholders' funds	=	$\frac{\text{net profit}}{\text{average of shareholders' funds at the beginning and the end of the period}}$
Net profit return on total revenue	=	$\frac{\text{net profit}}{\text{total revenue}}$
Operating profit before abnormals return on average shareholders funds'	=	$\frac{\text{operating profit before abnormals}}{\text{average of shareholders' funds at the beginning and the end of the period}}$
Operating profit before interest and income tax expense on average funds employed	=	$\frac{\text{operating profit before interest and income tax expense}}{\text{average of total funds employed at the beginning and the end of the period}}$

Appendix 2: Constant Group Financial Data

The aim of the Survey is to include activities of all companies operating in Australia qualifying under the given definition of minerals. This has been possible up to a point and the coverage has consistently accounted for a large proportion of total Australian minerals production. While there is generally a similar number of respondents for each Survey, the mix of respondents may change slightly from year to year.

Accordingly, the figures are not precisely comparable from one Survey to the next. To facilitate more precise comparisons between years, the returns from the respondents that have participated in 1997/98 and 1998/99 are separately reported as a constant group.

In 1998/99, the constant group consisted of companies with total asset values equal to around 97 per cent of the total group's assets.

Data on the major aggregates for the constant group in 1998/99 are compared with the data for the total group in the table below. To assess the impact of changes in the respondent group, percentage changes on the previous year are compared for the constant group and for the total group. For most items the constant group and total group figures are similar. The percentage change figures are also similar.

Selected items for comparison	Constant Group 1998/99	Total Group 1998/99	Constant Group 1997/98	Total Group 1997/98	Constant Group % change	Total Group % change
	\$ million	\$ million	\$ million	\$ million		
Shareholders' Funds	27,066	27,690	28,447	29,529	- 4.9	- 6.2
Total Assets	54,839	56,823	54,340	55,911	0.9	1.6
Borrowings	14,140	15,006	11,901	12,056	18.8	24.5
Net Expenditure on Mining, Smelting and Refining Fixed and Deferred Assets	6,442	6,716	8,180	8,367	-21.3	-19.7
Sales Revenue	29,317	30,383	29,174	30,111	0.5	0.9
Total Expense	27,615	28,674	28,716	29,578	- 3.8	- 3.1
Labour Costs:						
Gross Wages and Salaries	4,069	4,218	4,092	4,189	- 0.6	0.7
Other Labour Costs	488	508	563	579	-13.4	-12.3
Payroll Tax	229	239	243	249	- 5.6	- 4.3
Interest Expense	1,187	1,249	1,518	1,528	-21.8	-18.3
Direct Taxes						
Income Tax	550	569	343	352	60.3	61.7
Mineral Royalties, etc	967	978	882	906	9.6	7.9
Operating Profits Before Income and Resource Based Taxes	2,624	2,604	1,782	1,825	47.3	42.7
Net Profit	1,107	1,057	557	567	98.9	86.4

Appendix 3: 10 Year Historical Summary

Item of Interest (\$m)	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	10 year average
Total Revenue	26,007	26,400	24,990	26,056	25,545	26,237	27,999	28,948	31,798	32,341	27,632
Total Assets at Year End	38,449	41,158	43,753	44,862	48,558	49,486	51,876	52,811	55,911	56,823	48,369
Borrowing's at Year End	8,613	9,722	11,252	11,363	10,482	8,342	8,610	8,106	12,056	15,006	10,355
Net Capital Expenditure on Mining, Smelting and Refining Assets	4,220	3,363	3,574	2,745	4,039	4,463	4,994	6,694	8,367	6,716	4,918
Interest Expense	966	1,142	940	917	811	859	921	1,054	1,528	1,249	1,039
Total Labour Costs	4,001	4,436	4,493	4,423	4,485	4,656	4,743	5,025	5,017	4,965	4,624
Profit Before Income, Resource and Indirect Taxes	7,449	5,020	4,415	4,601	4,630	3,546	5,136	2,636	2,345	3,117	4,290
Direct Taxes	2,711	1,984	2,152	1,823	1,546	1,574	1,898	1,200	1,258	1,547	1,769
Resource Based Taxes	703	671	699	678	635	632	649	652	906	978	720
Indirect Taxes	411	454	474	467	490	499	542	583	520	513	495
Abnormal Gain (Loss)	n/a	133	(375)	(27)	205	(891)	(114)	(1,137)	(1,301)	(2,040)	(616)
Net Profit	4,311	2,549	1,789	2,311	2,582	1,481	2,714	881	567	1,057	2,024
Total Employment	80,956	80,385	77,038	72,139	70,243	72,085	71,901	70,489	61,675	56,459	71,337
Labour Costs per Employee	49,421	55,965	57,092	59,298	63,004	63,853	64,303	69,091	74,044	82,541	63,861
Rehabilitation Annual Expense	n/a	129	118	125	158	183	195	179	245	275	179
Rehabilitation Accumulated Balance of Provision	n/a	355	333	379	439	660	782	929	975	1,208	673
Overseas Exploration (Constant Group)	99.3	119.8	124.3	146.1	238.3	285.8	319.1	381.5	384.1	333.1	243
Australian Exploration (Constant Group)	237.2	335.4	331.8	316	403.4	460.8	468.7	506.2	468.5	396.7	392
Overseas Exploration (All Respondents)	n/a	n/a	n/a	n/a	n/a	319.2	352.9	415.3	450.2	417.9	n/a
Australian Exploration (All Respondents)	n/a	n/a	n/a	n/a	n/a	603.8	641.9	718.5	699.2	682.1	n/a
Net Profit Return on Average Assets Employed (%)	11.9	6.4	4.2	5.2	5.5	3.0	5.4	1.7	1.0	1.9	4.6
Net Profit Return on Average Shareholders' Funds (%)	23.4	11.8	8.1	10.2	10.3	5.3	9.2	2.9	1.8	3.7	8.7
Gross Debt to Equity Ratio	0.43	0.44	0.51	0.49	0.37	0.29	0.29	0.26	0.41	0.54	0.40

