

Minerals Industry '98

SURVEY REPORT

SURVEY CONDUCTED BY

PRICEWATERHOUSECOOPERS 

data funds
balance
expenditure
labour costs ratios
outlook
profit assets



MINERALS
COUNCIL
OF AUSTRALIA

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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 minerals industry and overseas exploration expenditure by the respondents.

This twenty-second survey relates to the year ended 30 June 1998, although a number of respondents reported data relating to earlier balance dates.

The Minerals Council of Australia is 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 and the Australian Coal Association. 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, uranium & alumina production, over 90 percent of iron ore, nickel, ilmenite, rutile, lead, zinc and tin production;
- some 80 percent of silver, copper, black coal and gold production and 60 percent 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 1997 survey, with the exception of aluminium which is less well covered.

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 1996/97 and 1997/98 are treated as a smaller constant group.

The major accounting items for this constant group are separately reported and compared to 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 percent of the total value of assets of all survey respondents.

Adjusted figures from the previous report

Some respondents when completing this year's questionnaire made adjustments to figures for prior years' production, employment, exploration and revenue. These figures have been revised accordingly. Thus in some cases, figures for 1995/96 and 1996/97 appearing in this report differ from the figures in the previous report.

Survey Overview

Industry profitability at historically low levels.

Strong growth in Australian investment over recent years set to slow as current projects are completed and projects in planning are deferred.

For Australia to capitalise on its minerals growth potential, maintaining an internationally competitive investment and taxation framework is critical in the face of continued long-term price pressures.

Safety and Health

In 1997/98, sadly, there were 19 fatalities in the minerals industry. The number of deaths in the industry over the past decade has varied markedly with no evidence of a sustained improvement. This record is unacceptable. The elimination of fatalities is the strongest focus of the Council's safety and health effort.

The industry's preliminary lost time injury frequency rate for 1997/98 is estimated at 20 per million hours worked.

The Minerals Council has accorded safety and health as its number one priority. The Council has established a Safety and Health Committee to carry through on its commitment to safety and health. The Committee is responsible for developing and implementing an action plan to address the industry's priority safety and health issues and to support the Council's leadership role in this area.

Profitability

On all indicators of profitability, the minerals industry performed poorly in 1997/98. Net profit return on average shareholders' funds was 1.8 percent in 1997/98, compared with 2.9 percent in 1996/97. The past two years have seen the two lowest results recorded since the early 1980's.

The 1997/98 profitability result reflects the effect of reasonable revenue growth (as a result of the lower exchange rate and increased mine and metal production) being offset by a sharp increase in expenses. This rise in expenses is partly due to short-term factors such as the high level of commissioning of new plant and redundancy payments.

The substantial fall in profits was also compounded by the large abnormal loss in the 1997/98 Survey. This was principally the result of large, non-current asset write-downs by some respondents (particularly in the gold and coal sectors).

Operating profit before abnormals as a return on average shareholders' funds was 7.2 percent in 1997/98, compared with 8.2 percent in the previous year.

Items of Interest	1997/98 \$ million	1996/97 \$ million	1995/96 \$ million
Operating Revenue	30,111	27,635	26,664
Total Assets at Year End	55,911	52,811	51,876
Borrowings at Year End	12,056	8,106	8,610
Interest Expense	1,528	1,054	921
Direct Taxes	1,258	1,200	1,898
Operating Profit Before Abnormal Items	2,220	2,537	4,060
Net Profit	567	881	2,714
Net Capital Expenditure (Investment) on Mining, Smelting and Refining Assets			
– mining fixed assets	8,367	6,696	4,994
– smelting and refining assets	6,127	5,090	4,159
	2,239	1,606	835
Employees at Year End	61,675	70,489	71,901
– Contractors considered a substitute for full time employees	14,427	n/a	n/a
Rates of Return	percent	percent	percent
Operating Profit Before Abnormals Return on Average Shareholders' Funds	7.2	8.2	13.8
Net Profit Return on Average Shareholders' Funds	1.8	2.9	9.2
Net Profit Return on Average Assets Employed	1.0	1.7	5.4
Gross Debt to Equity Ratio	0.41	0.26	0.29

Forecasts	1998/99 forecast \$ million	1997/98 actual \$ million	Forecast percentage change
Net expenditure on mining assets	3,988	6,127	-34.9
Net expenditure on smelting and refining assets	1,126	2,239	-49.7
Total net expenditure on mining, smelting and refining assets	5,114	8,367	-38.9
Employees at Year End	57,150	61,675	-7.3

Prices

In 1997/98, US dollar world mineral prices fell by 7 per cent on average, following a 4 per cent fall in the previous year. However, the effect of this on Australian dollar prices was more than 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 13 per cent lower in 1997/98 than in the previous year. As a result, the Australian dollar commodity price index was 8 per cent higher in 1997/98.

US dollar prices for all mineral commodities fell in 1997/98, with the exception of a small increase in US dollar prices of alumina, aluminium, iron ore and zinc. These falls generally reflected the downturn in commodity demand due to reduced economic activity in Asia, and continued strong growth in supply for a number of commodities.

World supplies of most minerals are expected to continue to grow faster than demand, leading to a build up of stocks. As a result, world prices are expected to remain relatively low over the next year.

Production

Overall mine production by respondents to the Survey, as measured by the Minerals Council Mine Production Index, rose 5.2 per cent in 1997/98, following 6.8 per cent growth in the previous year. Australian mine production has grown strongly over the past ten years, with the Mine Production Index rising by 72 per cent over this period. Production of most mineral commodities was at record levels in 1997/98.

The Smelting and Refining Production Index fell 2 per cent in 1997/98, with respondents' production of all metals falling. Production of alumina and aluminium, as reported by respondents, both fell slightly in 1997/98. However, in the case of aluminium, the fall in respondents' production was due to lower survey coverage of this industry than in the 1996/97 survey. Australian aluminium production in fact increased.

Industry revenues

Total revenue rose 10 per cent to \$31,798 million. Smelting and refining sales revenue rose 15 per cent, while mining revenue rose 6 per cent.

While average US dollar prices for most commodities were lower in 1997/98 than in the previous year, the effect of this on export earnings was more than offset by the 13 per cent fall in the value of the Australian dollar relative to the US dollar.

The slowing in Asian economic growth did not have a noticeable impact on the total volume of Australian exports in 1997/98, although there were reduced exports to these markets. Export volumes remained firm for most of the year with some exports being diverted from Asian markets towards markets in Europe and North America. However, the impact of the downturn in Asia is progressively spreading to these markets and is likely to impact more strongly on demand for Australian exports next year.

Expenses

Total expenses rose by 12 per cent, following a 10 per cent rise in 1996/97. This increase in costs reflected a number of factors.

Mine production was significantly higher in 1997/98. At the same time, there were a number of mines, particularly in the gold and coal sectors, which were not operating at full capacity. The latter meant that unit production costs would have been significantly higher for these mines. Another factor was the increase in redundancy payments and costs associated with industry restructuring.

Reflecting increased investment and borrowings, interest payments rose by 45 per cent. Interest payments on foreign denominated debt would also have risen due to the lower exchange rate.

While industry costs have risen and profitability has fallen further, this reflected short-term factors rather than erosion of productivity or efficiency. The increase in mine production last year came mostly from established mines with generally smaller labour forces. This indicates continuing efficiency gains in the industry.

Taxation

The total amount of direct and indirect taxes incurred by respondents was \$1,778 million, slightly below that for the previous year. In 1997/98, total tax paid by companies represented 76 percent of net profit before all taxes, compared with 67 and 47 percent in 1996/97 and 1995/96 respectively.

Income tax expense fell by 36 percent in 1997/98, mainly as a result of the deterioration in industry profitability. In 1997/98, there was an apparent substantial increase in royalty payments. Royalty payments in 1997/98 were \$906 million, 39 percent higher than in the previous year. The increase in royalty payments mainly represents the outcome of negotiations to reduce rail freight charges in Queensland in exchange for more transparent, higher royalty payments.

In the past two years, the share of royalties and indirect taxes in total payments has increased substantially. The major reason for the increase in recent years is the low profitability of the industry combined with the fact that royalty payments and indirect taxes, unlike income taxes, do not fall in line with profits.

Indirect taxes are a large and growing component of total industry taxes, the importance of which is understated because the figures reported in the survey do not include embedded sales tax paid by the industry. Compared to income taxes, taxes on business inputs are highly distortionary and directly undermine the competitiveness of the industry. Moreover, the compliance costs associated with indirect taxes, per dollar of revenue raised, tend to be very high.

Employment

In 1997/98, there was a sharp fall in the direct employment of respondents. Employee numbers fell by 13 percent from 70,489 at the end of 1996/97 to 61,675 at the end of 1997/98.

Direct employment has fallen sharply in each of the past two years after being fairly constant in the previous five-year period. Respondents forecast their direct employment levels to be 7 percent lower next year.

Part of the decline in direct employment can be explained in terms of increased use of contract labour. There is a growing trend towards the use of contractors. In 1997/98, respondents engaged 14,427 contractors which were considered a substitute for full time employees. Thus approximately one in five full-time employees engaged in minerals activities is a contractor. This does not include part-time contractors.

Borrowings

At the end of 1997/98 borrowings were \$12,056 million, 49 percent higher than at the end of the previous year. The borrowings have been used to finance a strong increase in investment spending. Moreover, the debt to equity ratio has risen only to the average for the past ten years.

Exploration

In 1997/98, respondents spent \$450 million on overseas exploration activities and \$699 million in Australia. Exploration expenditure in Australia was down by 3 percent while overseas expenditure by Australian companies was up by 8 percent. This indicates a continuing shift in total exploration expenditure towards offshore spending.

At the time the survey was conducted, August 1998, aggregate exploration expenditure in Australia was forecast to fall by 25 percent in 1998/99. More recent ABS data will become available and will provide a better guide.

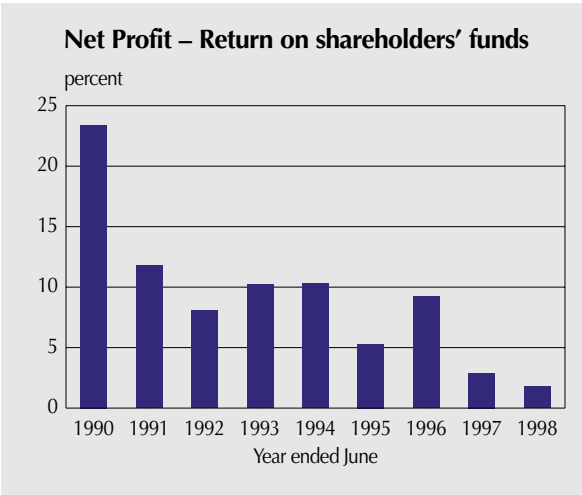
Changing geo-political conditions and the opening up of various countries in South America, Asia and Africa to foreign investment is resulting in increasing exploration offshore. The Survey reveals that the larger Australian mineral companies are on average now spending 30 to 40 percent of their exploration budgets outside Australia. This underlines the critical importance of Australia's mineral investment climate remaining competitive.

Investment

Net expenditure on fixed and deferred assets rose by 25 percent in 1997/98 to \$8,367 million. In real terms, this is among the strongest levels of investment recorded since the commencement of the survey. Net expenditure on fixed and deferred assets rose by 20 percent in the mining sector and around 40 percent in the smelting and refining sector of the industry.

This strong increase in investment spending reflects a large number of projects completed or approaching completion. Many of these projects will be commissioned during 1998/99 and will eventually add significantly to Australian minerals production.

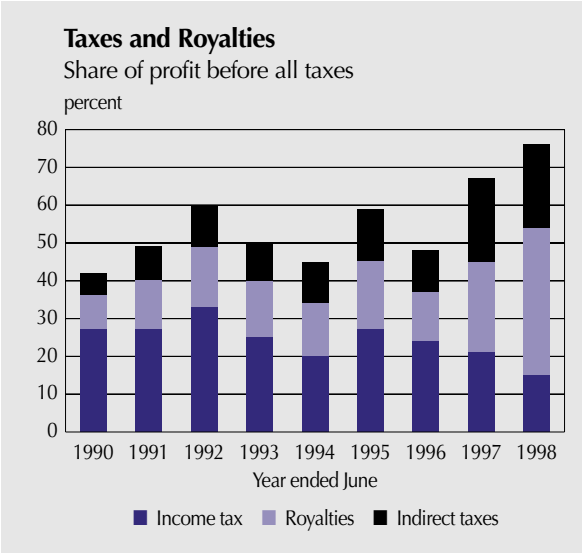
It is important to realise that this level of investment does not reflect current conditions on world markets or the short to medium term outlook. The motivation for investment is based on long term perceptions about market conditions and prices at the time of commitment to a project.



Net expenditure on fixed and deferred assets is expected to fall by 39 percent in 1998/99. Fixed asset expenditure in the mining sector is expected to fall by 35 percent while fixed asset expenditure in smelting and refining is expected to fall by 50 percent.

These reductions reflect the fact that current projects are being completed. 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. This is particularly evident in the coal sector, with a number of proposed expansions and new mines being deferred or even scrapped.

In 1997/98, weak demand and falling world prices resulted in the closure of a number of mines, either on a temporary or a permanent basis. Further mine closures are expected in 1998/99.

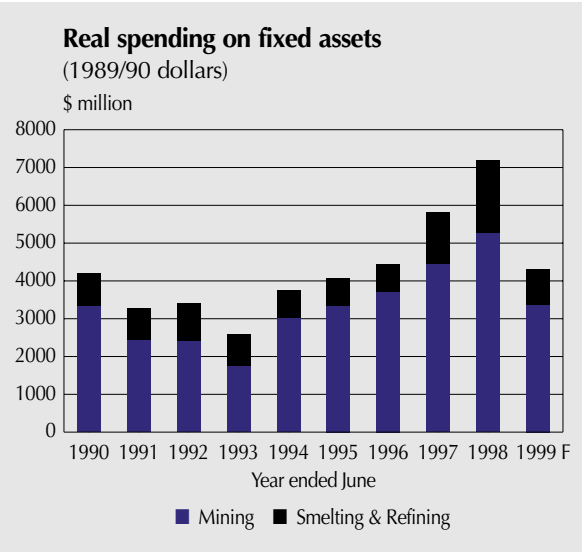


Framework for growth

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

The Coalition 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 Council welcomes this substantial reform initiative.

Clearly, 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 used in assessing project viability. The overall tax position in Australia relative to Australia's competitors affects competitiveness and project viability.



In this context, the issue of fuel tax has been a major issue for the minerals industry. The industry relies upon the Government's commitment to the maintenance of the Diesel Fuel Rebate Scheme for certain off-road usage of diesel. But in effect it still pays an equivalent Wholesale Sales Tax of about 11.8 per cent under the Scheme. Our major international competitors are not so burdened. The Coalition's tax reform package holds out the hope of addressing this issue.

Another major issue is the taxation of capital which is very mobile and sensitive to changes in effective tax rates. The minerals industry is characterised by high levels of capital investment and long lead times before the generation of sales income and production-dependent cash flows. It is one of Australia's most capital intensive industries and represents approximately \$10 billion or over 20 per cent of business capital expenditure in Australia.

In the context of the Ralph Review of Business Taxation, it is important to recognise that any trade-off between the corporate tax rate and other business tax arrangements (including changing the prevailing depreciation arrangements or the immediate deductibility of exploration expenditure) would affect the investment economics of the minerals sector.

Exploration is clearly necessary to ensure continuing production in the minerals industry. The immediate deductibility of exploration expenditure acknowledges that such expenditure is an ongoing and necessary expense of a minerals company. The immediate deductibility has been supported consistently by independent reviews. These include those by the Asprey Committee and the former Industry Commission – which found it to be the least distorting tax treatment in terms of the efficient allocation of resources in the economy. The tax treatment also recognises the success rate in discovery is extremely low, reflecting the typically high technical and financial risks involved. Typically there will not be a successful mine resulting from most exploration expenditures.

A key factor in improving Australia's attractiveness to investors is sustained improvements in productivity. Issues affecting competitiveness and the ability to improve productivity are native title, environmental requirements and micro-economic issues including reform of industrial relations and work practices, provision of infrastructure, streamlining approvals processes and broader fiscal and monetary policy settings.

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 resource 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 co-operative partnerships. All arrangements, however, need to be underpinned by effective legislation that produces workable outcomes within realistic time frames.

In addition, the international and Australian domestic response to the issue of climate change, will also be critical to decisions on locating energy intensive mineral processing operations in Australia and will also influence Australia's coal sector.

Safety and Health Performance

The elimination of fatalities remains the top priority for the Minerals Council.

The industry's LTIFR for 1997/98 is estimated at about 20 per million hours worked.

Tragically 19 fatalities were recorded in the Australian minerals industry in 1997/98. The number of deaths in the industry over the past decade has varied markedly with no evidence of a sustained annual improvement in fatalities. Any fatality is unacceptable and the industry must continue every effort to achieve the Council's vision of "An Australian minerals industry **free** of fatalities, injuries or diseases".

This section summarises the Minerals Council's quarterly *Safety Survey Report* copies of which are available from the Council.

Fatalities

Nearly two-thirds of the 1997/98 fatalities occurred in underground mining operations, but, contrary to common perceptions, these were overwhelmingly reported in the underground metalliferous sector (11 fatalities). There was one fatality in an underground coal mine in 1997/98.

Of the remaining seven fatalities, four were reported in open-cut metalliferous mines.

In terms of the causes of fatalities, eight fatalities were associated with the use or maintenance of heavy equipment – three on the surface and five underground. Underground rockfalls remain a major cause of death in the underground sector of the Australian minerals industry with this factor alone accounting for four fatalities.

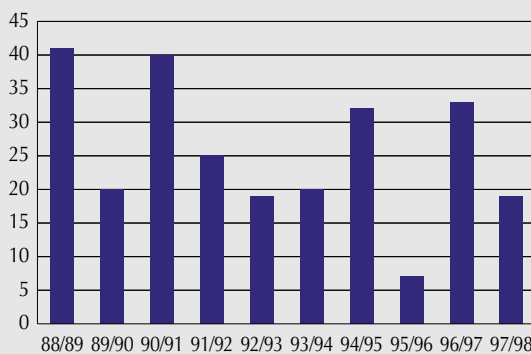
Lost Time Injuries

The *Safety Survey Report* estimates the Australian minerals industry's preliminary LTIFR for 1997/98 at about 20 lost time injuries per million hours worked.

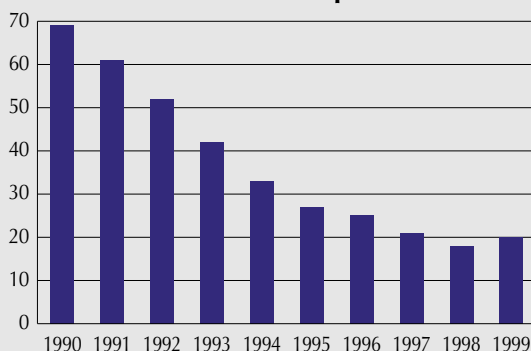
The Survey Report's figures are indicative only and more firm trends can only be drawn once official LTIFR figures for 1997/98 are available from the relevant State authorities. For example, in 1996/97, the preliminary LTIFR of 20 was revised downwards to 18. The Council will publish the official statistics in its *Safety and Health Performance Report of the Australian Minerals Industry 1997/98* which is due to be released in the first quarter of 1999.

Once again, the estimated LTIFR in 1997/98 for the underground coal sector is significantly higher than that of other sectors. In this sector, the LTIFR is estimated at 58 whereas all other sectors have a LTIFR of below 20, with smelting/refining showing the best outcome at around seven.

Fatalities 1988/89 to 1997/98



Total Industry Lost Time Injury Frequency Rate 1988/89 to 1997/98 (p)



Minerals Council of Australia's Activities

The Minerals Council has agreed safety and health is its top priority for action. In partnership with its State and Territory counterparts, the Council is taking a lead on industry safety and health issues. The Minerals Council has undertaken the following key initiatives in pursuit of that objective:

- adopted a Council Safety and Health Statement which sets out the Council's safety and health vision, its safety awareness definition and its safety and health beliefs (see box below). Similar statements have been or are being considered for adoption by a number of the Minerals Council's State/Territory counterparts;
- established a Safety and Health Committee reporting directly to the Council's Executive Committee to implement its safety and health work program;
- recognises best practice safety and health in the minerals industry through its prestigious MINEX Safety and Health Excellence Awards; and
- publishes data about the industry's safety performance each quarter and safety and health performance annually.

Industry Safety and Health Leadership

The Minerals Council's Safety and Health Work Program recognises safety and health leadership as a top priority and must be driven through all levels of the industry. The Council's Executive Committee demonstrates its strong commitment to safety and health by:

- discussing safety as its first substantive item at each of its quarterly meetings. Specifically, the CEO of any member company at which a fatality has occurred since the last meeting is invited to outline the circumstances surrounding that fatality. In the case of non-members, the President of the relevant State/Territory Minerals Council/Chamber is asked to do so;
- having at each meeting a member of the Executive Committee present an outline of the personal efforts made to improve safety and health in his company; and
- scheduling, each year, an Executive Committee meeting in conjunction with the MINEX Safety and Health Excellence Awards Presentation Dinner.

Underpinning this priority for safety and health leadership is the recognition of the need for a positive safety and health culture throughout the industry. The cultural change theme runs through the Council's work program including:

- CEO Safety and Health Session in March 1998 which had a focus on leadership and effecting cultural change. A further expanded session is planned for March 1999. The 1999 session will run for a full day and invitees will include all industry leaders;
- the development and provision of a safety and health cultural instrument and survey – the Council has engaged SAFEmap as consultants to undertake this important project;
- the promotion of the need for industry cultural change which will be guided by the outcomes of the above cultural survey; and
- recognition of best-practice including cultural aspects through the MINEX Safety and Health Excellence Awards.

National Safety and Health Performance Reporting

The Minerals Council has taken the following steps to provide reliable, timely, comprehensive and consistent national data on safety and health performance by:

- publishing, annually, its *Safety and Health Performance Report of the Australian Minerals Industry* and publishing every quarter a report about safety within 60-75 days of the end of the reporting period.

The Council also believes that a range of performance indicators is required to better monitor and gauge the safety and health of the Australian minerals industry. The Council is currently undertaking work on the following performance indicators:

- **safety and health behaviour/culture:** SAFEmap is to survey and report on the industry's safety and health culture. First results are expected in March 1999;
- **safety and health systems:** an instrument based on the MINEX Awards Assessment Criteria has been finalised; and
- **safety and health outcomes:** continuous improvement of the Council's annual and quarterly safety and health reporting.

National Safety and Health Recognition

While the industry's safety and health performance needs to improve, there are minerals sites in Australia which are achieving safety and health excellence. The Council recognises these sites through the National Minerals Industry Excellence Award for Safety and Health – the MINEX Awards. In 1998, Worsley Alumina Refinery was awarded the MINEX Award. WMC Exploration Australia Region and BHP's Crinum Mine were also recognised with a high commendation and a commendation, respectively.

The Council will conduct the National Safety Innovation Awards in 1999. The aim of these Awards is to recognise the creative and innovative solutions to everyday safety and health problems on minerals sites.

Safety and Health Statement

The Minerals Council of Australia and its member companies have the following safety and health vision and beliefs.

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. (Adapted from Dr Neil George, circa 1939)

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.

Price Movements

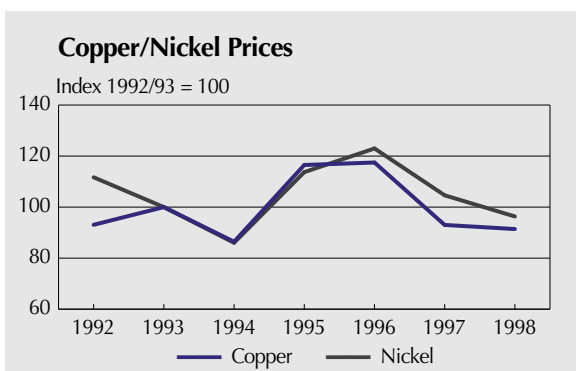
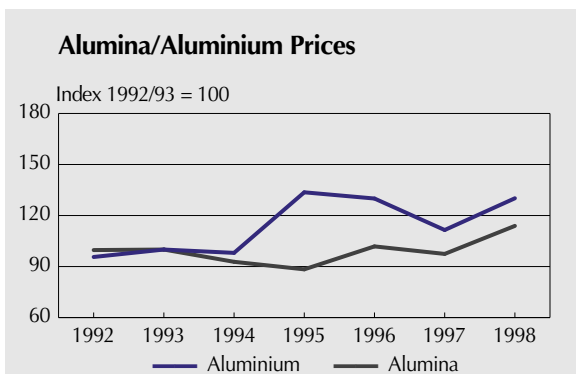
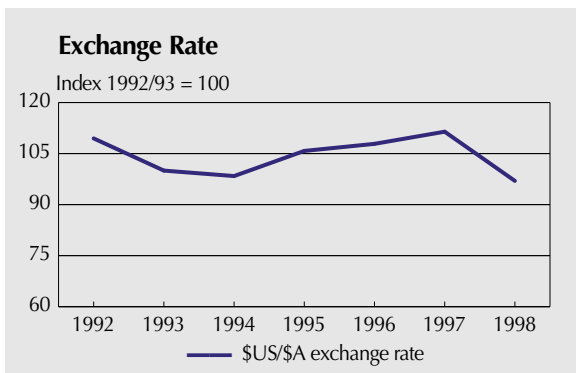
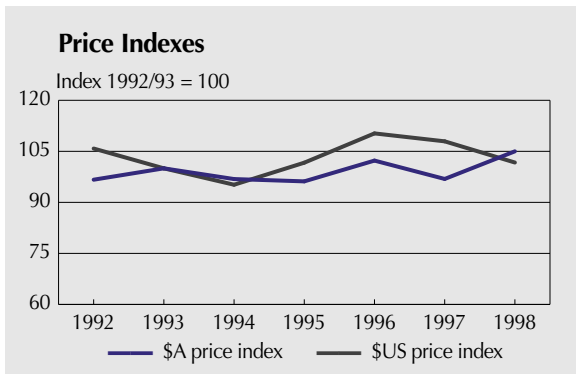
Lower world prices for minerals due to flattening demand and new supply still coming on stream.

Average \$US prices decline.

Weaker Australian dollar offsets the affects of lower prices.

In 1997/98, average US dollar world mineral prices fell by 7 per cent, following a 4 percent fall in the previous year. However, the effect of this on the revenues of the Australian minerals industry was more than 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 13 percent lower in 1997/98 than in the previous year. As a result, the Australian dollar commodity price index, was 8 percent higher in 1997/98 than in 1996/97.



Average US dollar prices for all mineral commodities fell in 1997/98, with the exception of a small increase in US dollar prices of alumina, aluminium and iron ore, each around 2 percent higher, and a 10 percent increase in the US dollar price of zinc. These falls generally reflected the downturn in commodity demand due to reduced economic activity in Asia, and continued strong growth in supply for a number of commodities.

World supplies of most minerals are expected to continue to grow faster than demand, leading to a build up of stocks. As a result, world prices are expected to remain relatively low over the next year.

US dollar lead, copper and nickel prices fell by 21, 14 and 20 percent respectively in 1997/98. However, as a result of the sharp fall in the exchange rate, Australian dollar copper prices only fell slightly while lead and nickel prices fell by around 10 percent in Australian dollar terms.

Reduced demand in Asia has contributed to a fall in US dollar prices for steaming coal of 10 percent in 1997/98. This followed a 3 percent decline in the previous year. Compared to steaming coal, coking coal demand was somewhat stronger and the fall in US dollar prices, at 2 percent, was correspondingly less pronounced.

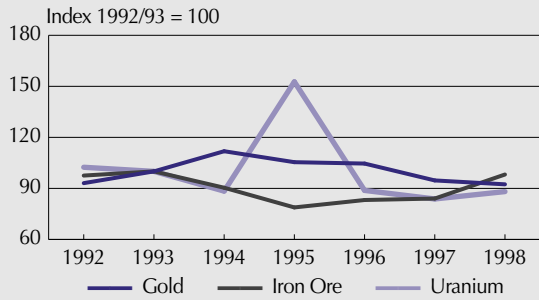
Coal prices are expected to fall further in 1998/99. Long-term steaming coal contract prices with Japanese importers for the 1998 Japanese fiscal year (JFY – April 1988 to March 1999) were reduced by over 8 percent. Spot prices for thermal coal fell significantly over the past year and continued weak demand will see a continuation of this trend into 1998/99.

Coking coal demand is expected to weaken in 1998/99 in response to reduced demand by Asian steel makers. Coal prices negotiated with Japanese buyers for JFY 1998 were reduced by around 5 percent.

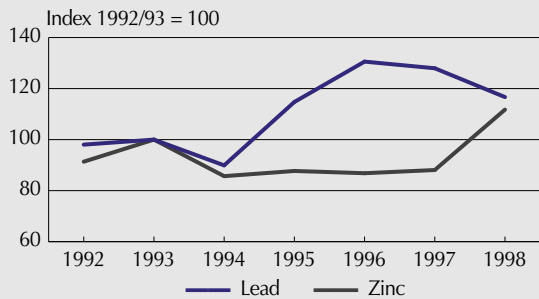
Iron ore prices remained relatively stable through 1997/98 with a 2 per cent increase in the average US dollar price. World blast furnace steel production was fairly strong in 1997, particularly in Japan, China and Europe. However, demand for iron ore is expected to weaken in 1998/99 as a result of slower world economic growth. Benchmark contract prices negotiated with Japanese steel makers for JFY 1998 rose by around 3 percent, but volumes were reduced.

In 1997/98, weaker aluminium demand in Asia was largely offset by relatively strong demand in North America and Europe. As a result, world aluminium and alumina prices were slightly higher in 1997/98 than in the previous year.

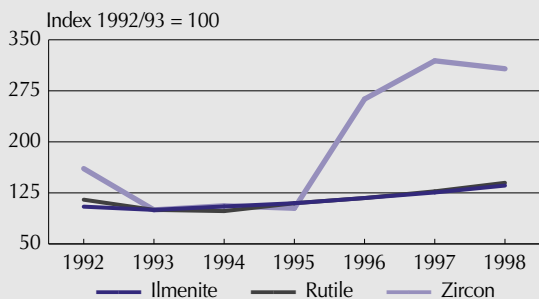
Gold/Iron Ore/Uranium Prices



Lead/Zinc Prices



Mineral Sands Prices



US dollar gold prices fell by 15 percent in 1997/98, following a 6 percent fall in the previous year. In Australian dollar terms, gold prices fell by 2 percent in 1997/98 and by 9 percent in the previous year. The fall in gold prices reflected reduced demand in Asia, uncertainty about future gold sales by central banks and official sector gold lending to producers. 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.

Australian dollar prices for ilmenite and rutile rose by 8 and 10 percent, respectively, in 1997/98, while zircon prices fell by 4 percent. 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.

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 Metals 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 Minerals Statistics*, various issues.

Production

Growth in mine production continues: the index of mine production has increased 72 percent over the ten years to 1997/98.

Moderate fall in smelting and refining production.

Strong increase in export volumes.

Mine Production

Overall mine production by respondents to the Survey, as measured by the Minerals Council Mine Production Index, rose 5.2 percent in 1997/98, following 6.8 percent growth in the previous year. Australian mine production has grown strongly over the past ten years, with the Mine Production Index rising by 72 percent over this period. Production of most mineral commodities was at record levels in 1997/98.

Iron ore production by respondents rose by 2 percent in 1997/98. In the first quarter of 1998, iron ore exports to Asian markets, particularly China and Japan, fell sharply, resulting in some build up in stocks. This was partly offset by diversion of tonnages to markets outside of Asia. The global outlook for crude steel production is, in the short term, weakened by the Japanese recession. In the longer term, Australian iron ore production and exports are expected to continue to grow strongly.

Black coal production by respondents rose by 8 percent in 1997/98, following a 10 percent increase in the previous year. Strong supply growth compounded by weaker demand due to the deterioration of economic conditions in Asia has seen spot prices for thermal coal weakening over the past year. As a result of weaker market conditions, contract prices with Japanese buyers have been reduced. 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.

Mine production of copper rose 7 percent in 1997/98, lead production rose 12 percent and zinc production rose 3 percent. A major contributor to the increase in copper production was the Ernest Henry Mine, which began operating in October 1997. Increased output from the Cannington mine contributed to strong growth in lead production.

Australian base metal production is set to expand strongly in the next few years as the Ernest Henry, Cannington and Pillara mines reach full production capacity. The Century Zinc mine is also currently under construction. To some extent this increase will be offset by the recent closures of the Cobar CSA, Woodlawn and Thalanga mines.

Nickel production rose 8 percent following a 10 percent increase in 1996/97. This was due to increased output from WMC Resources' mines and the commencement of the Silver Swan mine. Deteriorating demand conditions in 1998 have seen the temporary closure of a number of mines.

Further increases in nickel production are expected in the next few years. The Cawse, Bulong and Murrin Murrin mines are all expected to be commissioned in late 1998 and a number of other projects are under consideration.

Respondents' gold production rose by 6 percent in 1997/98, following a 10 percent increase in 1996/97. This was due to a number of new mines and increased production from existing mines. Offsetting this, to some extent, was the closure of a number of smaller, higher cost mines in response to lower gold prices.

After a sharp increase in 1996/97 in response to strong world demand, uranium production fell slightly in 1997/98. However, this was due to technical difficulties at the Ranger Mine's processing plant in the second half of the year, which resulted in a sharp fall in production. The Ranger Mine is expected to reach full capacity in 1998/99. Production from Olympic Dam is also expected to rise substantially following the completion in early 1999 of an expansion program.

In addition to this expansion, a number of new projects are being considered, which together would substantially increase Australian output after the year 2000. World market conditions, as well as the investment climate in Australia, will determine whether these projects proceed.

Ilmenite and rutile production rose strongly in 1997/98, while zircon production was steady. This increase was mainly due to the Beenup mine, which began operation last year. Synthetic rutile production also rose in 1997/98. Australian mineral sands exporters have benefited from supply constraints in other major exporting countries and firm demand for pigments and other titanium based products in developed economies. Increased production from the Beenup mine, planned capacity expansions at other mines and new projects could significantly boost rutile, ilmenite and synthetic rutile production in the next few years.

Smelting and Refining Production

The Smelting and Refining Production Index fell 2 percent in 1997/98, with respondents' production of all metals falling. Production of alumina and aluminium, as reported by respondents both fell slightly in 1997/98. However, in the case of aluminium, the fall in production was due to lower survey coverage of the industry than in last year's survey.

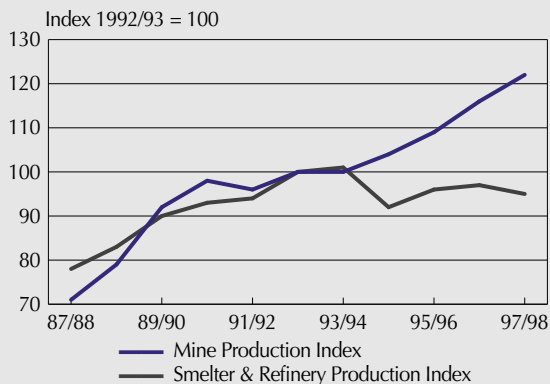
According to Government figures, aluminium production rose strongly in 1997/98, to be 14 percent above that for 1996/97. The Boyne Island expansion and increased capacity utilisation at the Portland smelter contributed to this increase.

Refined base metals production in 1997/98 fell by 3 percent. Respondents' production of refined copper fell by 7 percent, refined zinc by 3 percent and refined lead fell 7 percent. However, Australian smelter and refinery production is expected to increase strongly over the next few years.

Alumina production will rise when the Wagerup expansion is completed in 1999, while the expansion of the Worsley refinery is well under way. Aluminium production will increase due to the Boyne Island expansion and the expected completion of an expansion to the Tomago smelter.

There are also a number of base metals refining projects under construction. These are the Korea Zinc smelter, expansions of the Mt Isa copper smelter and Townsville copper refinery, the Olympic Dam expansion and the reconstruction of the Port Kembla refinery.

Mineral Production

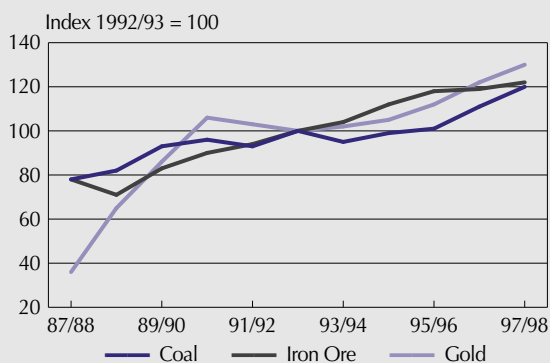


Exports

Around 90 percent of Australian mineral production is exported directly or indirectly. According to Australian Bureau of Agricultural and Resource Economics (ABARE) statistics, the value of exports of minerals covered by this survey rose 16 percent in 1997/98 to \$29.7 billion.

While average US dollar prices for most commodities were lower in 1997/98 than in the previous year, the effect of this on export earnings was more than offset by the 13 percent fall in the value of the Australian dollar relative to the US dollar.

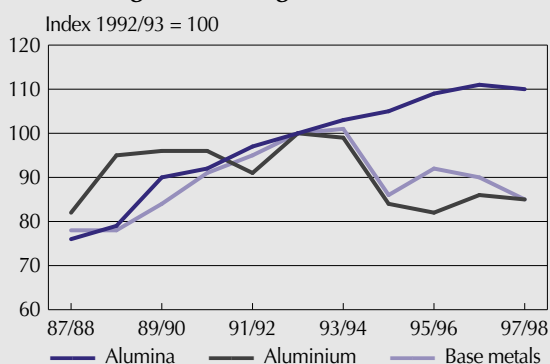
Mine Production



The slowing in Asian economic growth did not have a noticeable impact on the total volume of Australian exports in 1997/98, although there were reduced exports to these markets.

Some exports have been diverted from Asian markets towards markets in Europe and North America. According to ABARE figures, the proportion of Australia's minerals exports to Europe increased from 8 percent in value terms in 1996/97 to 13 percent in 1997/98, while the proportion of exports to North America increased from 2 percent to 6 percent. Such switching often involves a penalty as a result of lower prices and higher transport costs.

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)

	1997/98 '000	1996/97 '000	1995/96 '000
Mine Production			
Bauxite	47,644	46,746	45,513
Black Coal (saleable) ^(b)	181,299	167,758	152,839
Copper ^(c)	508	476	418
Diamonds ('000 carats)	40,175	41,942	39,634
Gold ^(c) ('000 troy ounces)	8,025	7,543	6,867
Iron Ore	148,684	145,628	144,500
Lead ^(c)	526	472	449
Mineral Sands – Ilmenite ^(c)	2,242	1,805	1,796
– Rutile ^(c)	216	169	195
– Zircon ^(c)	339	431	471
Manganese Ore ^(c)	1,681	2,135	2,374
Nickel ^(c)	123	114	104
Silver ^(c) ('000 troy ounces)	33,297	24,683	24,964
Tin ^(c)	10	9	9
Uranium (tonnes)	5,900	5,900	5,153
Zinc ^(c)	980	976	956
Smelting and Refining Production			
Alumina	13,435	13,509	13,372
Aluminium	953	972	924
Refined Copper	258	277	271
Lead Bullion	172	192	182
Refined Lead	198	214	235
Refined Zinc	312	320	330
Refined Nickel	80	74	74
Iron Ore Pellets	1,618	1,570	3,081
Refined Silver ('000 troy ounces)	3,602	7,451	7,339
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

Strong growth in fixed and deferred assets.

Borrowings rise but debt to equity ratio remains at ten-year average level.

Overall industry balance sheet remains sound.

At the end of 1997/98, the total value of assets employed in the minerals industry by survey respondents was \$55,911 million, an increase of 6 percent on the previous year.

The value of fixed and deferred assets rose 8 percent to \$39,675 million. This followed an 11 percent increase in the previous year. The growth in the value of fixed assets is a result of strong investment activity in recent years. This has more than offset the large value of asset write-downs in the industry during 1997/98.

Shareholders' funds fell by 7 percent. Important factors contributing to this decline were individual profitability results and dividends provided by a number of large respondents which exceeded profits.

Borrowings rose by 49 percent in 1997/98 to be \$12,056 million at the end of 1997/98. The increase in borrowing reflects the high level of expenditure on new fixed assets, most of which was debt financed.

As a result of reduced shareholders' funds and increased borrowings, the debt to equity ratio rose sharply. At the end 1997/98, the gross debt to equity ratio was 0.41, substantially higher than in the previous year, but equal to the average for the past ten years.

The ratio of current assets to current liabilities rose from 1.02 in 1996/97 to 1.22 in 1997/98. The revenue to fixed and deferred assets ratio remained constant at 0.79. The funds turnover ratio rose slightly to 0.76.

The overall industry balance sheet has remained sound despite relatively low levels of profitability in recent years. The record level of investment in fixed assets and the continued relatively low debt to equity ratio provides a sound base for the industry to capitalise on any future upturn in world commodity prices.

	1997/98	1996/97	1995/96	1997/98	1996/97	1995/96
		\$ million		Percentage of total assets		
Shareholders' Funds	29,529	31,783	30,037	52.8	60.2	57.9
Borrowings	12,056	8,106	8,610	21.6	15.3	16.6
Total Funds Employed	41,585	39,889	38,647	74.4	75.5	74.5
Income Tax Provision	3,557	3,794	4,082	6.4	7.2	7.8
Other Provisions	4,328	3,791	3,410	7.7	7.2	6.6
Trade Creditors and Accruals	5,537	4,269	3,921	9.9	8.1	7.6
Other Liabilities	904	1,068	1,816	1.6	2.0	3.5
Equity and Liabilities	55,911	52,811	51,876	100.0	100.0	100.0
Fixed and Deferred Assets	39,675	36,664	32,909	71.0	69.4	63.4
Operating Current Assets	10,703	9,666	10,290	19.1	18.3	19.8
Other Assets	5,533	6,481	8,677	9.9	12.3	16.8
Total Assets	55,911	52,811	51,876	100.0	100.0	100.0
		average ratios				
Revenue to Fixed Assets	0.79	0.79	0.82			
Funds Turnover Ratio	0.76	0.74	0.74			
Gross Debt to Equity Ratio	0.41	0.26	0.29			
Current Ratio	1.22	1.02	1.11			

Aggregate Profit and Loss Statement

Despite price falls, higher production and the lower dollar resulted in increased sales revenue.

This was offset by an increase in costs reflecting production growth and short-term factors.

There was again a high level of abnormal write-downs.

Despite growth in sales revenue, industry profits fell further in 1997/98 as a result of higher costs and asset write-downs. Total revenue rose 10 percent to \$31,798 million. Smelting and refining sales revenue rose 15 percent, while mining revenue rose 6 percent. The increase in sales revenue reflected increased export volumes and the lower \$A/\$US exchange rate. World prices for most mineral commodities fell in 1997/98.

While there were a number of new mines commissioned in 1997/98, the increase in mine production came mostly from existing mines with generally smaller labour forces. This indicates continuing efficiency gains in the industry.

Total expenses rose by 12 percent, following a 10 percent rise in 1996/97. Around half of the overall increase was due to a 13 percent increase in cost of production and other operating costs. This increase in other costs reflected a number of factors, notably commissioning costs. In addition, mine production was significantly higher in 1997/98. At the same time, there were a number of mines, particularly in the gold and coal sectors, which were not operating at full capacity. The latter meant that unit production costs would have been significantly higher for these mines.

Another factor was the increase in redundancy payments. Some respondents included redundancy payments in other operating costs. The sharp fall in the exchange rate would also have contributed to increased costs of imported goods.

Royalty payments rose 39 percent. This was mostly due to a move away from 'royalties' paid as part of freight charges in Queensland to a more transparent royalty charge. There was also some increase in royalty payments due to increased volumes produced.

Depreciation and amortisation expenses rose 12 percent. This increase is broadly consistent with the increase in the industry's stock of fixed and deferred assets.

Reflecting increased debt, interest payments rose by 45 percent. Interest payments on foreign denominated debt would also have risen due to the lower exchange rate.

Labour costs fell only slightly in 1997/98 despite a large fall in direct employment. This reflected higher payments per employee mainly due to redundancy payments.

Operating profit before abnormals was \$2,220 million, 13 percent lower than in 1996/97. This is the worst result since 1986/87. For the second consecutive year there were significant write downs in the value of company assets, associated with continuing low commodity prices. This was across most sectors, but particularly for gold and coal. Abnormal losses were \$1,301 million compared to \$1,137 million in 1996/97. Asset write downs accounted for just over \$1 billion of the abnormal losses.

Operating profit before income tax fell 34 percent to \$919 million. Net profit in 1997/98 was \$567 million, 33 percent below the previous year's result and this again is the lowest result since 1986/87.

In summary, while industry costs have risen and profitability has fallen further, this reflected short term factors rather than erosion of productivity or efficiency. The industry has responded to difficult circumstances by instituting major changes to the way it operates in order to be better placed to meet the challenges in the years ahead.

	1997/98 \$ million	1996/97 \$ million	1995/96 \$ million
Mining Sales	20,586	19,364	19,325
Smelting and Refining Sales	9,525	8,271	7,339
Other Revenue	1,687	1,313	1,335
Total Revenue	31,798	28,948	27,999
Labour Costs	5,017	5,025	4,743
Government Rail and Port Charges	1,411	1,415	1,356
Cost of production & Operating Costs ^(a)	16,302	14,467	12,691
Depreciation and Amortisation	3,545	3,164	2,943
Interest	1,528	1,054	921
Resource Based Taxes	906	652	649
Net Exchange Losses	349	51	94
Indirect Taxes	520	583	542
Total Expense	29,578	26,411	23,939
Operating profit before abnormals	2,220	2,537	4,060
Abnormal Gain (Loss)	-1,301	-1,137	-114
Operating Profit	919	1,400	3,946
Income Tax Expense	352	548	1,249
Net Profit Before Extraordinaries	567	852	2,697
Net Extraordinary Gain (Loss)	0	29	17
Net Profit	567	881	2,714

Note: (a) ie costs of production, contractor costs and marketing costs which are not separately identified in the Table.

Profitability

Marked decline in profitability to well below the ten year average.

Falls in net profit return on average shareholders' funds in both the exploration and mining and the smelting and refining sectors.

All indicators of profitability fell in 1997/98 and the results were the poorest since the early 1980's. Operating profit before abnormals return on average shareholders' funds fell to 7.2 percent. That compared with 8.2 percent in the previous year and 13.8 percent in 1995/96.

The net profit return on average shareholders' funds was only 1.8 percent in 1997/98, compared with 2.9 percent in the previous year. This is a marked decline and is well below the ten-year average of this measure of profitability of 10.1 percent.

A broader measure of rate of return, operating profit before interest and income tax expense on average funds employed, was 6 percent in 1997/98. This was slightly down on the 6.3 percent return recorded in the previous year, but well down on 1995/96 when the return was 12.8 percent.

This is a measure of the total return from minerals industry activities to be shared between shareholders, lenders and the Commonwealth Government.

As in most years, there was large variation in profits/losses across minerals and across companies.

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.

	1997/98 \$ million	1996/97 \$ million	1995/96 \$ million
Average Shareholders' Funds	30,656	30,910	29,491
Average Funds Employed	40,737	39,269	37,967
Average Assets	54,361	52,344	50,681
Operating Profit Before Abnormal Items	2,220	2,537	4,060
Operating Profit Before Interest and Income Tax	2,447	2,454	4,867
Operating Profit Before Income Tax	919	1,400	3,946
Operating Profit After Income Tax	567	852	2,697
Net Extraordinary Gain (Loss)	0	29	17
Net Profit	567	881	2,714
Rates of Return	percent	percent	percent
Operating Profit Before Abnormals Return on Average Shareholders' Funds	7.2	8.2	13.8
Operating Profit Before Interest and Income Tax Expense on Average Funds Employed	6.0	6.3	12.8
Net Profit Return on Average Shareholders' Funds	1.8	2.9	9.2
Net Profit Return on Average Assets Employed	1.0	1.7	5.4
Net Profit Return on Total Revenue	1.8	3.0	9.7

Profitability was low in both sectors of the industry. In the mining and exploration sector, net profit return on average assets employed was 1 percent, only slightly above the previous year's result but well down on 1995/96. While revenue increased moderately, higher costs and large asset write-downs offset this.

In the smelting and refining sector, net profit return on average assets employed was also only 1 percent. This compares with 3.7 percent in the previous year and 6.9 percent in 1995/96. Smelting and refining sales revenue rose by 15 percent, largely due to higher Australian dollar prices for alumina and aluminium. This increase was more than offset by increased costs largely associated with the commissioning of new plant.

Exploration and Mining	1997/98 \$ million	1996/97 \$ million	1995/96 \$ million
Sales Revenue	20,586	19,364	19,325
Net Profit	401	357	1,820
	percent	percent	percent
Net Profit on Average Assets Employed	1.0	0.9	4.8
Smelting and Refining	\$ million	\$ million	\$ million
Sales Revenue	9,525	8,271	7,339
Net Profit	166	524	894
	percent	percent	percent
Net Profit on Average Assets Employed	1.0	3.7	6.9

Cash Flows

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

Net expenditure on fixed assets increases.

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

In 1997/98, the industry received \$27.8 billion of receipts from customers. Net cash from operating activities totalled \$6,386 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.

Proceeds from the issue of shares in 1997/98 were \$872 million, 16 percent lower than in 1996/97.

The difference between 'payments for property, plant and equipment' and 'proceeds from sale of property, plant and equipment' is \$7.2 billion while the figure for net expenditure in mining, smelting and refining shown in the survey overview was \$8.4 billion.

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 \$1,775 million. This equals a return of 6 percent on shareholders' funds. Some care should be used in the interpretation of this result as it reflects the final dividend payment for 1996/97 and an interim payment for 1997/98.

	1997/98 \$ million	1996/97 \$ million
Operating Activities		
Receipts from customers	27,805	27,443
Payments to suppliers and employees	-20,436	-21,109
Dividends received	93	57
Interest received	388	461
Interest and other costs of finance paid	-1,420	-1,021
Income taxes paid	-653	-812
Other	609	401
Net cash provided by operating activities	6,386	5,420
Investing		
Payment for purchase of controlled entities	-481	-421
Proceeds from sale of controlled entities	214	1,089
Payments for property, plant and equipment	-7,535	-6,741
Proceeds from sale of property, plant and equipment	338	348
Other payments	-1,137	-1,293
Other proceeds	124	575
Net cash used in investing activities	-8,477	-6,443
Financing		
Proceeds from issues of shares	872	1,041
Proceeds from borrowings	12,771	6,062
Repayments of borrowings	-9,905	-5,374
Dividends paid	-1,775	-1,714
Other	229	454
Net cash provided by financing activities	2,192	469
Cash at the beginning of the year	1,196 ^(a)	2,226
Net increase/decrease in cash held	101	-554
Movements attributable to exchange rate fluctuations on foreign currencies held	-5	2
Cash at the end of the year	1,292	1,674 ^(a)

Note: (a) The change in the mix of respondents means cash at the beginning of 1997/98 differs from the 1996/97 end of year figure.

Borrowings

Borrowings rise sharply as industry investment increases.

Shift towards longer term debt.

Increase in Australian denominated debt.

At the end of 1997/98 borrowings were \$12,056 million, 49 percent 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 0.26 in 1996/97 to 0.41 in 1997/98.

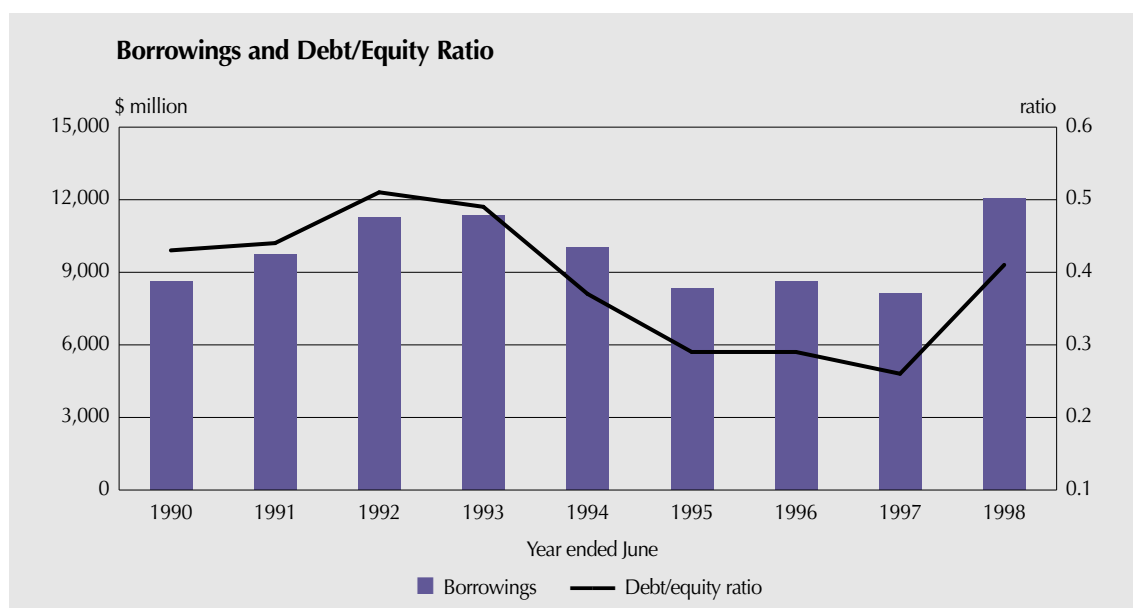
This increase in debt has been used to finance a strong increase in investment spending. The debt to equity ratio has risen but only to the average for the past ten years and remains significantly below the levels of the first half of that period (see Appendix 3).

Associated with the increase in borrowing, there was a lengthening in the term structure of debt. The proportion of borrowing repayable after 4 years increased from 43 percent at the end of June 1997 to 56 percent at the end of 1997/98.

Over the past three years, there has been a trend towards an increase in Australian dollar denominated debt. Foreign dominated debt, particularly \$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. Over the past few years, the differential between Australian and overseas interest rates has narrowed, increasing the attractiveness of Australian dollar denominated debt.

Amounts Owing at Balance Date Repayable Within:	June 1998	June 1997	June 1996	June 1998	June 1997	June 1996
	\$ million			percentage of total		
1 Year	1,827	1,930	1,447	15.2	23.8	16.8
2 – 3 Years	2,667	2,136	2,563	22.1	26.3	29.8
4 – 5 Years	4,547	1,877	1,383	37.7	23.2	16.1
After 5 Years	2,179	1,630	2,156	18.1	20.1	25.0
Term Not Specified	836	533	1,061	6.9	6.6	12.3
Total Borrowings ^(a)	12,056	8,106	8,610	100.0	100.0	100.0
In foreign currency	6,619	4,840	5,422	54.9	59.7	63.0
In Australian currency	5,437	3,266	3,188	45.1	40.3	37.0

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.

At the end of 1997/98, assets employed in the minerals industry totalled \$55,911 million, an increase of 6 percent on the previous year. The total of fixed and deferred assets was \$39,675 million, an increase of 8 percent. The value of other assets was virtually unchanged.

Total assets employed in the exploration and mining sector rose by 1 percent. There was a 3 percent increase in the value of fixed and deferred assets and a 4 percent fall in other assets. The value of assets employed in the mining and exploration sector of the industry was particularly affected by asset write-downs.

In the smelting and refining sector, total assets employed rose strongly by 18 percent with an increase of 20 percent in the value of fixed and deferred assets and a 12 percent rise in other assets. The Boyne Island, Worsley and MIM expansions, along with BHP's HBI plant, account for a significant proportion of the increase in the value of smelting and refining assets.

The share of exploration and mining assets in total assets employed fell to 68 percent in 1997/98 from 71 percent in 1996/97. This ratio had been stable at 75/25 over the previous five years. This illustrates how industry has responded to the improved environment for downstream activity brought about by economic reform.

	June 1998 \$ million	June 1997 \$ million	June 1996 \$ million
Exploration and Mining			
Fixed and deferred assets	26,949	26,072	23,768
Other	11,028	11,482	15,134
Total	37,977	37,554	38,902
Smelting and Refining			
Fixed and deferred assets	12,726	10,592	9,141
Other	5,208	4,665	3,833
Total	17,934	15,257	12,974
Total Assets			
Fixed and deferred assets	39,675	36,664	32,909
Other	16,236	16,147	18,967
Total	55,911	52,811	51,876

Government and Taxation

Income tax expense
down 36 percent
– due to poor
profitability.

Substantial increase
in government royalty
payments partly due
to changes in rail
freight arrangements.

The total amount of direct and indirect tax liabilities incurred by respondents was \$1,778 million, slightly below that for the previous year. In 1997/98, total tax paid by companies represented 76 percent of net profit before all taxes, compared with 67 and 47 percent in 1996/97 and 1995/96 respectively.

Income tax expense fell by 36 percent in 1997/98, mainly as a result of the deterioration in industry profitability (which was in turn influenced by large abnormal losses). In 1997/98, income tax accounted for 38 percent of pre-income tax net profit, the same figure recorded in the previous year. In any given year this figure will differ from the corporate tax rate because of differences in definition between accounting profit and taxable income.

Royalty payments in 1997/98 were \$906 million, 39 percent higher than in the previous year. Most of these increased payments were by the Queensland coal industry. There was also an increase in the volume of mine production which contributed to the rise in royalty payments.

In the past, as well as explicit royalties, Queensland has levied 'de facto royalties' in the form of extra charges for state government provided rail freight services. The increase in royalty payments mainly represents the outcome of individual company negotiations to shift the 'de facto' royalty payments into higher transparent royalty payments. Regardless of the immediate financial impact on the industry, this represents an important change because more of the real contribution of the industry to state revenue is now transparent.

Even so, government port and rail charges nationally, which remained virtually unaltered at \$1,411 million, still contain an element of 'de facto' royalty payments. Given the reduction in 'de facto' royalty payments in Queensland, this means charges for government services in fact increased. While this partly reflects increased production, it underlines the importance of continuing micro-economic reform for infrastructure services aimed at achieving world's best practice.

The total of indirect taxes paid by the industry fell by 11 percent in 1997/98 to \$520 million. This was due to one company reporting an abnormally large number for 'other taxes' in 1996/97. Fuel excise payments increased by 11 percent.

In 1997/98, income tax accounted for 20 percent of total taxes paid by companies, resource based taxes accounted for 51 percent and indirect taxes accounted for 29 percent.

In the past two years, the share of royalties and indirect taxes in total payments has increased substantially. The major reasons for the increase in recent years are the low profitability of the industry combined with the substantial rise in royalty payments and the fact that royalty payments and indirect taxes, unlike income taxes, do not fall with profits.

The survey data show that indirect taxes are a large component of total industry tax payments, the importance of which are understated because the figures do not include sales tax paid by the industry. Over the past six 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 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 urgent need for tax reform 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 prospects and the 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. Australia's current tax arrangements, in particular taxes on business inputs, risk deflecting potential investors who may be considering placing large projects in Australia. If the tax system is not reformed the optimal development of mineral resource assets is placed at risk.

For these reasons, the Council welcomed the Federal Government's 1998 tax reform package. This package aims to remove taxes on business inputs, replace a range of inefficient indirect taxes with a broad-based consumption tax and partly address the Federal/State fiscal imbalance problem.

	1997/98	1996/97	1995/96	1997/98	1996/97	1995/96
		\$ million		percent of	total company taxes	
Taxes Levied On Companies						
Mineral Royalties, Licence Fees, etc	906	652	649	51.0	36.6	26.9
Income Tax Expense	352	548	1,249	19.8	30.7	51.7
Total Direct Taxes	1,258	1,200	1,898	70.8	67.3	78.6
Land Taxes and Rates	49	53	49	2.8	2.9	2.0
Payroll Tax	249	232	217	14.0	13.0	9.0
Fringe Benefits Tax	107	108	105	6.0	6.1	4.3
Fuel Excise ^(a) & Other Taxes	115	190	171	6.5	10.7	6.1
Total Indirect Taxes ^(b)	520	583	542	29.2	32.7	21.4
Total Tax Expense by Companies	1,778	1,783	2,440	100.0	100.0	100.0
Taxes Levied On Others						
Income Tax Paid by Employees	1,317	1,322	1,193			
Withholding Tax Paid by Lenders and Shareholders	1	1	3			
Total Taxes	3,096	3,106	3,636			
Government Rail and Port Charges	1,411	1,415	1,356			
Total Government Revenue	4,507	4,521	4,992			
Notes: (a) Fuel excise, net of rebate was \$71 million in 1996/97 and \$79 million in 1997/98. (b) Excludes embedded sales tax.						

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 1997/98 also partly reflected profits of the 1996/97 financial year.

Rehabilitation Expenditure

41 companies have become signatories to the Australian Minerals Industry Code for Environmental Management at November 1998, applying the code at over 250 sites.

Annual provision for rehabilitation in 1997/98 was \$245 million.

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

In 1997/98, the industry spent \$245 million on rehabilitation, 38 percent higher than in the previous year. The accumulated balance of the provision for rehabilitation expenditure was \$975 million at the end of 1997/98. 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.

While expenditure on rehabilitation is projected to fall next year, it should be noted that in past surveys, forecast expenditure on this item has often underestimated actual expenditure. In addition, the figures presented in this Survey cover only part of the industry's total environmental expenditure (see note below).

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, which provides a framework for continual improvement in environmental management and communication.

The Australian minerals industry led the world in conceiving and launching the Code as a way to demonstrate its commitment to excellence in managing the environmental aspects of its operation.

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.

By signing the Code, signatories commit to seven obligations:

- Implement Environmental Management Systems
- Continual improvement in environmental performance
- Provide information to stakeholders
- Practise risk management
- Require contractors to comply with company environmental policies

- Publicly report annual environmental performance
- Evaluate Code conformance every three years by qualified, externally-accredited auditors.

Forty-one companies have now become signatories to the Code for Environmental Management, applying the Code at over 250 sites across the world.

Under the Code, signatory companies will produce annual public environment reports. At this stage there are expected to be at least 41 reports by the end of 2000. This figure will progressively rise as more companies become signatories to the Code.

The importance of environmental performance to the industry was exemplified by the Minerals Council of Australia's Annual Environmental Workshop which focussed wholly on the Code. The workshop attracted over 450 delegates. Forty-two percent of those attending the workshop were from mining companies and sites around Australia. A further 32 delegates were from overseas, representing 11 countries, and providing testament to Australia's leadership in the field of environmental management and reporting.

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 Mine 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	1998/99 Forecast	1997/98	1996/97	1995/96
	\$ million	\$ million	\$ million	\$ million
Annual Provision	204	245	178	195
Accumulated Balance of Provision	N/A	975	928	782

Employment and Labour Costs

Decrease in direct employment.

But 1 in 5 full time equivalent positions are now contracted out.

Gross wages and salaries and payroll tax per employee increase – partly due to redundancy payments.

The number of people directly employed in the respondent companies fell by 13 percent in 1997/98, following a 2 percent fall in the previous year. This fall is due to a change from direct to contract employment status at a number of respondent operations and the effects of company restructures and downsizing.

While employment levels between 1994/95 and 1995/96 were relatively stable, the longer-term industry trend since 1991 appears to be towards lower direct employment. The effect of increased activity and new production on employment levels has been largely 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 fell by 17 percent. Following a 17 percent reduction in employment in exploration in 1996/97, employment in exploration fell by a further 2 percent in 1997/98. This partly reflects greater use of contract services.

Employment in the smelting and refining sector rose by 1 percent.

Despite the sharp fall in direct employment, total labour costs fell only slightly. The 7 percent increase in gross wages and salaries per employee is partly explained by redundancy payments associated with industry restructuring.

In 1997/98, gross wages and salaries accounted for 84 percent of total labour costs while non-wage costs accounted for 16 percent.

Important non-wage costs include fringe benefits tax and payroll tax. In 1997/98 FBT payments per employee were \$1,619, 7 percent higher than in the previous year. Payroll tax per employee was \$3,768, 11 percent higher than in the previous year. Payroll tax constitutes a significant tax on employment and as such discourages employment growth.

Contracted employees

In this year's survey, respondents were asked for information concerning their use of contract labour. Over the past few years, there has been a strong trend towards contracting rather than direct employment of labour.

In 1997/98, there were 14,427 full-time equivalent contractors engaged by respondents. This does not include part-time contractors (undertaking short term maintenance work or drilling operations, for example). Thus approximately 20 percent of full-time employment provided by respondents in 1997/98 was contracted-out.

Contractor personnel considered a substitute for full time employees, June 1998

Contract mining	9,977
Other contractors	4,450
Total	14,427

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.

	1997/98 number	1996/97 number	1995/96 number	1997/98 percentage change
Direct Employment				
Exploration	2,416	2,556	2,966	-1.6
Mining	43,174	52,034	52,239	-17.2
Exploration and Mining	45,590	54,590	55,205	-16.5
Smelting and Refining	16,085	15,899	16,696	1.2
Total Direct Employment	61,675	70,489	71,901	-12.5

	1997/98 \$ million	1996/97 \$ million	1995/96 \$ million	1997/98 percent of total
Aggregate Labour Costs				
Gross Wages and Salaries	4,189	4,213	3,943	83.5
Payroll Tax	249	232	217	5.0
Workers' Compensation	123	106	114	2.5
Fringe Benefits Tax	107	108	105	2.1
Superannuation, training and other	348	366	363	6.9
Total Labour Costs	5,017	5,025	4,742	100.0
Recipients of Labour Costs:				
Employees Net Wages and Benefits	3,220	3,257	3,113	
Government Tax Revenue	1,797	1,768	1,629	

	1997/98 dollars	1996/97 dollars	1995/96 dollars	1997/98 percentage change
Labour Costs per Employee^(a)				
Gross Wages and Salaries	63,391	59,165	54,775	7.1
Other Benefits	5,266	5,146	5,045	2.3
Payroll Tax	3,768	3,265	3,018	11.5
Fringe Benefits Tax	1,619	1,515	1,465	7.1
Total Expenditure per Employee	74,044	69,091	64,303	7.0
Note: (a) Based on average employment during the year and other than workers' compensation.				

Overseas Exploration Survey

Overseas exploration spending accounted for 39 percent of total exploration spending.

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

Growth in the level of overseas exploration expenditure is about twice that of domestic expenditure by major companies.

The annual survey 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 showing 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 activity by larger minerals companies was twice the growth in Australian exploration.

Analysis of all respondents

In 1997/98, respondents spent \$450 million on overseas exploration activities and \$699 million in Australia. Exploration expenditure in Australia was down by 3 percent while overseas expenditure by Australian companies was up by 8 percent. This indicated a continuing shift in total exploration expenditure towards offshore spending.

The share of gold in total overseas exploration spending rose from 45 percent in 1996/97 to 53 percent in 1997/98. This was largely at the expense of base metals exploration, which fell from

37 percent to 29 percent. Over the previous five years there had been rapid growth in exploration for base metals. The decline in prices for most metals over the past two years may have contributed to a shift away from base metals exploration.

Overseas diamond exploration spending rose slightly in 1997/98 to account for 6 percent of overseas exploration spending. However, this is still significantly below the 14 percent share of diamonds recorded in 1995/96.

The major areas for overseas exploration in 1997/98 were North America, which accounted for 30 percent, South America 23 percent and Asia 17 percent. The share of North America in total overseas spending rose sharply, from 20 percent in 1996/97. There was also an increase in the importance of Eastern Europe and Africa.

In Papua New Guinea and Asia, economic and political uncertainty contributed to reduced exploration activity. The decline in South America may be due to the fall in base metals prices, since a high proportion of exploration activity in South America is directed towards base metals.

Overseas Mineral Exploration expenditure – all respondents

By Commodity	1997/98 Percent	1996/97 Percent	By overseas region	1997/98 Percent	1996/97 Percent
Gold and platinum	53.4	44.5	Papua New Guinea	0.7	3.9
Base metals	29.1	36.6	Asia	16.8	21.0
Mineral sands	2.3	0.9	Pacific	0.9	0.8
Diamonds	5.9	4.7	South America	22.7	25.7
Coal	1.2	3.0	North America	30.4	28.6
Other	8.1	10.3	Eastern Europe	6.1	3.4
Total	100.0	100.0	Western Europe	2.2	0.2
			Africa	13.4	7.8
Gold	53.3	44.5	Other and general	6.8	8.6
Non-Gold	46.7	55.5	Total overseas (\$ million)	450.2	415.3
			Australia (\$ million)	699.2	718.5

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

While respondents to the Council's 1998 survey accounted for only 66 percent of total minerals exploration expenditure in Australia in 1997/98 (as reported to ABS, 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. From 1997, the ABS revised its overseas exploration figures which are now in line with the Council's.

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. The Native Title Act 1993 and the High Court's Wik decision in December 1996 introduced significant uncertainty to the approvals process in Australia. The Federal Government's amended Native Title legislation in 1998 provides the basis for a reduction in uncertainty.

In the meantime there has been a reduction in greenfields exploration in Australia with greater concentration on more costly production lease exploration and development.

In 1997/98, 96 percent of overseas exploration expenditure by respondents was off production leases. In Australia, the figure has been around the 50 percent 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 resource 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 co-operative 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 spending in Australia fell from \$506 million in 1996/97 to \$469 million in 1997/98. Overseas exploration by the constant group fell slightly after adjustment for inflation but now accounts for 45 percent of constant group exploration expenditure.

When the Council established the survey of overseas exploration over ten years ago, relatively few companies (about 20) were exploring overseas. Over the intervening period, more Australian based operations have embarked on overseas exploration programs.

In 1997/98, a number of these 20 or so 'constant group' companies reported significant reductions in their Australian or (in one case) overseas exploration expenditures. Offsetting this was an increase in overseas and/or Australian exploration by companies which are not in the 'constant group'.

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 1997/98, *for the constant group*:

- South America accounted for 26 percent of overseas spending, Asia 15 percent and North America 35 percent. The shift away from Asia towards North America is consistent with that for the total group.
- Gold and platinum exploration accounted for 47 percent of the total overseas spending by respondents. While this was a substantial increase on 1996/97, it was well below the 79 percent share recorded in 1988/89.

Broad Allocation of Mineral Exploration Expenditure – Constant Group

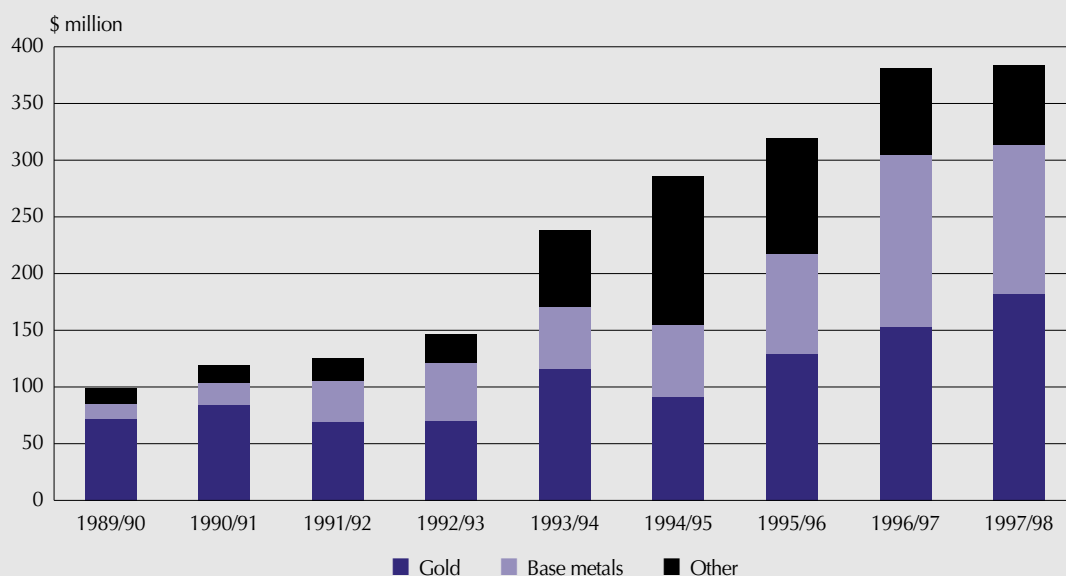
Year	1997/98	1996/97	1995/96	1994/95	1993/94	1992/93	10 Year Average Annual Growth (%)
	\$ million						
Australia	468.5	506.2	468.7	460.8	403.4	316.0	10.0
Overseas	384.1	381.5	319.1	285.8	238.3	146.1	18.2
Total exploration	852.6	887.7	787.8	746.6	641.7	462.1	13.0
Overseas percentage	45.1	43.0	40.5	38.3	37.1	31.6	

Note: (a) 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 annual Minerals Industry Survey.

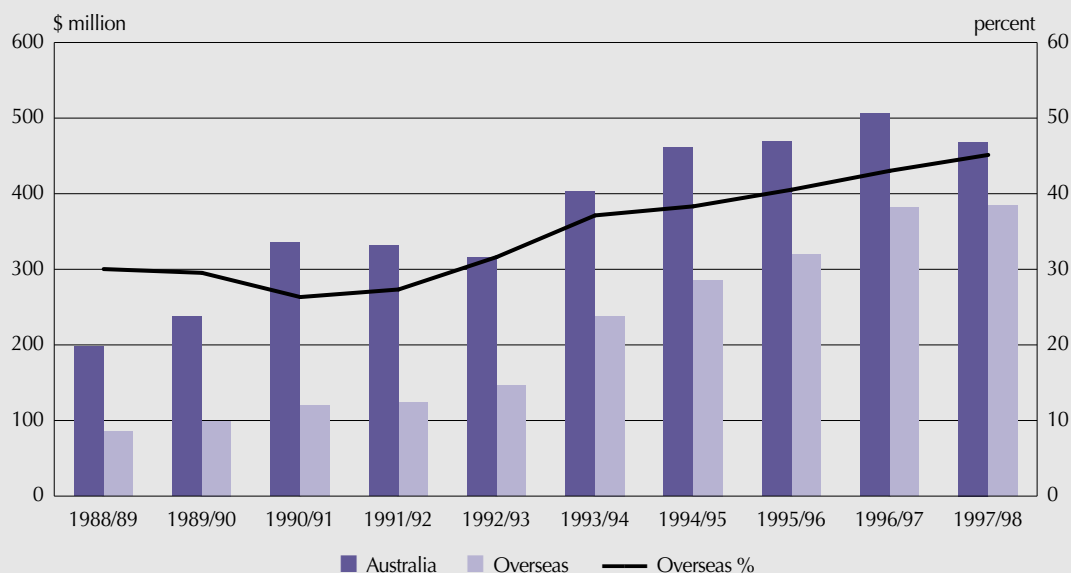
Overseas Exploration Expenditure by Commodity Sought – Constant Group

Year	1997/98	1996/97	1995/96	1994/95	1993/94	1992/93	1991/92	1990/91	1989/90
	percentage								
Gold & platinum	47.3	40.0	40.5	31.8	48.7	47.9	55.2	70.5	72.7
Base metals	34.1	39.7	27.6	22.0	22.6	35.1	29.0	16.0	12.9
Mineral sands	2.7	1.0	2.0	1.6	1.7	3.5	2.1	3.2	2.4
Diamonds	6.9	5.2	15.6	27.7	15.2	7.2	7.2	2.9	5.7
Coal	1.5	3.1	1.7	2.4	1.9	2.3	1.4	1.6	2.8
Other & general	7.5	11.0	12.6	14.5	9.9	4.0	5.1	5.8	3.5
Total (\$m)	384.1	381.5	319.1	285.8	238.3	146.1	124.3	119.8	99.3

Overseas Exploration Expenditure by Major Commodity – Constant Group



Broad Allocation of Exploration Expenditure – Constant Group



Minerals Exploration Expenditure by Overseas Region – Constant Group

	1997/98	1996/97	1995/96	1994/95	1993/94	1992/93	1991/92	1990/91	1989/90
	percentage								
Papua New Guinea	0.2	2.4	3.7	2.8	4.4	11.1	15.6	14.5	11.2
Asia	15.3	21.8	23.4	21.9	18.4	16.9	18.2	15.0	18.8
Pacific	0.1	0.3	1.7	0.3	0.3	1.0	1.3	1.8	1.9
North America	35.1	30.3	29.4	33.8	33.6	25.9	30.8	30.7	31.8
South America	25.7	27.6	22.3	16.8	17.5	14.1	10.1	9.8	10.9
CIS and E Europe	7.2	3.7	3.6	5.0	3.4	3.5	2.8	0.3	0
Western Europe	2.6	0.2	2.8	1.8	2.7	4.1	2.4	8.9	1.8
Africa	9.1	6.2	7.5	15.3	13.3	11.3	8.0	6.8	11.0
Other and general	4.7	7.5	5.6	2.3	6.4	12.1	10.8	12.2	12.6
Total (\$m)	384.1	381.5	319.1	285.8	238.3	146.1	124.3	119.8	99.3

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 annual Minerals Industry Survey.

Outlook

A number of major new projects are to be commissioned in 1998/99 reflecting faith in the future, however, a number of projects under consideration have been deferred.

Industry is undertaking substantial restructuring in order to remain competitive.

But 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 39 percent in 1998/99, following a 25 percent increase in 1997/98. Fixed asset expenditure in the mining sector is expected to fall by 35 percent while fixed asset expenditure in smelting and refining is expected to fall by 50 percent.

Employment by respondents is also expected to fall, by 7 percent to 57,150. The number of people directly employed by survey respondents has not risen in the past few years as would be expected given increased sector activity and investments. This reflects restructuring, with a resultant increased productivity of employees, and the growing trend towards the use of contracting.

Several new projects were commissioned in 1997/98. These included the Cannington mine, the Beenup mineral sands project and a number of new coal mines and extensions to existing coal mines.

Despite generally lower world prices, there are a number of major projects currently under construction and scheduled for completion within the next two years. These projects account for the high level of expenditure on fixed assets in the past two years.

Major projects expected to be commissioned in 1998/99 include:

- the Olympic Dam expansion (uranium/base metals) and Pillara, Cadia Hill, Enterprise and Gunpowder base metal mines
- Bulong, Cawse and Murrin Murrin nickel mines
- the Wagerup alumina refinery and Tomago aluminium smelter expansions
- the Mt Isa copper smelter and Townsville copper refinery expansions, the Port Kembla copper refinery reconstruction and the Korea Zinc smelter
- the BHP HBI project, and the Oreboddy 18 and Yandicoogina iron ore projects.

Most of these projects will proceed as planned. While some of the production will be required to replace production from depleting deposits, these projects will collectively result in a substantial increment to Australian mineral production and export earnings.

In addition to these projects, there are a substantial number of projects either committed or under study. The recent softening in world economic activity and mineral commodity markets has caused considerable uncertainty concerning if and when some of these proposed projects will be committed. Some may be deferred. Others may take longer to scale up to full capacity production because of weak commodity demand. While market forces will play a major role, the attractiveness of the overall investment climate in Australia compared to overseas, remains a critical factor.

With respect to the outlook for 1998/99 for the important areas of exploration and research and development:

- Respondents forecast their exploration expenditure in Australia will fall 25 per cent in 1997/98;
- As in the past two annual Survey reports, the research and development forecast expenditure level is of concern. Such forecasts tend to be conservative however the R&D outcome for 1997/98 is below that forecast in last year's survey report (ie of \$245 million).

The tax treatment of these two fundamental activities needs to be designed to maintain the continuing health of the industry.

	1998/99 forecast \$ million	1997/98 actual \$ million	Forecast percentage change
Net Capital Expenditure (investment) on:			
Mining Assets	3,988	6,127	-34.9
Smelting and Refining Assets	1,126	2,239	-49.7
Total Fixed Assets	5,114	8,367	-38.9
Exploration Expenditure in Australia	527	699	-24.6
Research and Development	144	198	-27.3
Number of Employees	57,150	61,675	-7.3

Appendix 1: Coverage and Definitions

Survey Responses

Respondents to the survey include companies engaged only in exploration as well as companies which 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 30th June 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 30th 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 (LITRF) 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.

Effective After Tax Returns. Profit before interest and extraordinaries less income tax expense and tax on interest calculated at the standard company tax rate, as a percentage of the average of funds or assets employed at the beginning and end of period.

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

Asset turnover ratio	=	$\frac{\text{total sales revenue}}{\text{average of fixed and deferred assets at the beginning and the end of the period}}$
Funds turnover ratio	=	$\frac{\text{total revenue}}{\text{average of total funds at the beginning and the end of the period}}$
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	=	$\frac{\text{net profit}}{\text{total revenue}}$

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 1996/97 and 1997/98 are separately reported as a constant group.

In 1997/98, the constant group consisted of companies with total asset values equal to around 97 percent of the total group's assets.

Data on the major aggregates for the constant group in 1997/98 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 1997/98	Total Group 1997/98	Constant Group 1996/97	Total Group 1996/97	Constant Group % change	Total Group % change
	\$ million	\$ million	\$ million	\$ million		
Shareholders' Funds	28,447	29,529	30,042	31,783	-5.3	-7.1
Total Assets	54,340	55,911	50,330	52,811	8.0	5.9
Borrowings	11,901	12,056	7,991	8,106	48.9	48.7
Net Expenditure on Mining, Smelting and Refining Fixed and Deferred Assets	8,180	8,367	6,393	6,696	28.0	25.0
Sales Revenue	29,174	30,111	26,160	27,635	11.5	9.0
Total Expense	28,716	29,578	24,962	26,411	15.0	12.0
Labour Costs:						
Gross Wages and Salaries	4,092	4,189	4,015	4,212	1.9	-0.6
Other Labour Costs	563	579	549	580	2.6	-0.1
Payroll Tax	243	249	230	241	5.4	3.7
Interest Expense	1,518	1,528	955	1,054	58.9	44.9
Direct Taxes						
Income Tax	343	352	518	548	-33.7	-35.8
Mineral Royalties, etc	882	906	618	652	42.9	39.0
Operating Profits Before Income and Resource Based Taxes	1,782	1,825	2,057	2,052	-13.4	-11.1
Net Profit:	557	567	951	881	-41.5	-35.6

Appendix 3: 10 Year Historical Summary

Item of Interest (\$m)	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	10 year average
Total Revenue	21,527	26,007	26,400	24,990	26,056	25,545	26,237	27,999	28,948	31,798	26,551
Total Assets at Year End	34,182	38,449	41,158	43,753	44,862	48,558	49,486	51,876	52,811	55,911	46,105
Borrowing's at Year End	10,329	8,613	9,722	11,252	11,363	10,482	8,342	8,610	8,106	12,056	9,888
Net Capital Expenditure on Mining, Smelting and Refining Assets	3,079	4,220	3,363	3,574	2,745	4,039	4,463	4,994	6,694	8,367	4,554
Interest Expense	952	966	1142	940	917	811	859	921	1,054	1,528	1,009
Total Labour Costs	3,544	4,001	4,436	4,493	4,423	4,485	4,656	4,743	5,025	5,017	4,482
Profit Before income, resource and indirect taxes	5,182	7,449	5,020	4,415	4,601	4,630	3,546	5,136	2,636	2,345	4,496
Direct Taxes	1,960	2,711	1,984	2,152	1,823	1,546	1,574	1,898	1,200	1,258	1,811
Resource Based Taxes	561	703	671	699	678	635	632	649	652	906	679
Indirect Taxes	337	411	454	474	467	490	499	542	583	520	478
Abnormal Gain (Loss)	n/a	n/a	133	-375	-27	205	-891	-114	-1,137	-1,301	-351
Net Profit	2,885	4,311	2,549	1,789	2,311	2,582	1,481	2,714	881	567	2,207
Total Employment	77,502	80,956	80,385	77,038	72,139	70,243	72,085	71,901	70,489	61,675	73,441
Labour Costs per Employee	46,287	49,421	55,965	57,092	59,298	63,004	63,853	64,303	69,091	74,044	60,236
Rehabilitation Annual Provision	n/a	n/a	129	118	125	158	183	195	179	245	133
Rehabilitation Accumulated Balance of Provision	n/a	n/a	355	333	379	439	660	782	929	975	485
Overseas Exploration (constant group)	85.2	99.3	119.8	124.3	146.1	238.3	285.8	319.1	381.5	384.1	218
Australian Exploration (constant group)	198.4	237.2	335.4	331.8	316	403.4	460.8	468.7	506.2	468.5	373
Overseas Exploration (all respondents)	n/a	n/a	n/a	n/a	n/a	n/a	319.2	352.9	415.3	450.2	n/a
Australian Exploration (all respondents)	n/a	n/a	n/a	n/a	n/a	n/a	603.8	641.9	718.5	699.2	n/a
Net profit return on average assets employed (%)	8.9	11.9	6.4	4.2	5.2	5.5	3.0	5.4	1.7	1.0	5.3
Net profit return on average shareholders' funds (%)	18.3	23.4	11.8	8.1	10.2	10.3	5.3	9.2	2.9	1.8	10.1
Gross debt to equity ratio	0.6	0.43	0.44	0.51	0.49	0.37	0.29	0.29	0.26	0.41	0.4

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Mining Industry House

216 Northbourne Avenue

Canberra ACT 2601

Telephone (02) 6279 3600

Facsimile (02) 6279 3699

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PricewaterhouseCoopers Chartered Accountants

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