

# Mine

When the going gets tough...

Review of global trends in the mining industry—2009







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# Executive summary and financial highlights

*Welcome to PricewaterhouseCoopers' sixth annual review of global trends in the mining industry—Mine. These reviews provide a comprehensive analysis of the financial performance and position of the global mining industry as represented by the largest 40 mining companies by market capitalisation.*

Last year we posed the question whether this is 'as good as it gets?' 2008 started where 2007 had left off, and threatened to answer the question with a resounding 'No'. Continuation of strong demand and record prices, epitomised by record-breaking iron ore prices negotiated by BHP Billiton, Rio Tinto and Vale provided the foundation of another spectacular year for the industry;

- Revenues increased 23% year-on-year;
- Net assets increased 10%;
- Cash flows from operation increased by 25% and exceeded \$100 billion for the first time; and
- Record EBITDA<sup>1</sup> of \$141 billion

<sup>1</sup> Excluding the impact of impairment charges

Despite the strong financial results, 2008 was definitely a year of two parts with the good times quickly turning bad as the global economic crisis took hold in the last quarter and commodity prices went into freefall. The speed of the drop took many by surprise, and exposed a number of issues;

- Operating costs continued to rise at a greater rate than revenue (27%), further eroding margins;
- 50% of the Top 40 recorded impairment charges in the year that total \$31 billion (80% of this charge relates to two companies who completed deals close to the top of the market)
- The impact of the above on net profit was a decrease of 14% - the first decrease since the start of our analysis; and
- Short-term debt repayments became tough to refinance

So where does this leave the industry? The short-term outlook for the future looks bleak, and without management intervention margins will be quickly eroded. Market capitalisation of the Top 40 mining companies decreased by 62% compared to the S&P 500 which declined by 38% over the same period, as shareholders lost confidence and share prices plunged. However, the

overall level of market capitalisation is above that recorded in 2005 (which at the time was seen to be a 'spectacular year'). The full effect of the downturn is not evident in the 2008 financial information, however first quarter releases of a number of companies report significantly reduced profits and in some cases operating losses.

There is no doubt that the industry is facing tougher times, and steering a path through this downturn will require tough decisions from the leaders of the Top 40. In *A view from the top* we explore the challenges facing the leading CEOs. Our discussions highlighted that the conditions have created two kinds of companies; the 'haves' and the 'have nots', and actions will depend on which type of company the CEO is leading.

Indeed one of the keys to managing in the current environment is having a motivated and experienced team to support you. Shareholders impacted by the significant fall in share prices and with the prospect of reduced dividends in the period ahead will be quick to criticise any perceived excessive reward. How to reward and retain the best in the industry in this environment will be high on the agenda of most public company remuneration committees.

Flexibility will also be important. The boom encouraged the industry to invest heavily in capital projects and grow the top line. In these more cautious times, the ability to turn the cost tap on and off quickly may be the difference between success and failure.

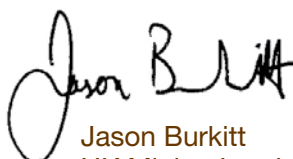
Finally during times of uncertainty the ability to be transparent and have open dialogue with stakeholders will be crucial. Real time, clear guidance outlining the company's strategy will endear trust, and potentially bring confidence back to the market.

Most indicators point toward a tough period for the industry as the short-term issues dominate the agenda. Success in the long-term will depend on how the mining industry reacts when the going gets tough...

We trust you will find this year's publication informative, and encourage you to send us your feedback.



Tim Goldsmith  
Global Mining Leader  
Mine Project Co-Leader  
PricewaterhouseCoopers



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## Executive summary and financial highlights

Key financials	2008 \$ billion	2007 \$ billion	% Change
Revenue	349	284	23
Operating expenses	208	164	27
Adjusted EBITDA*	141	120	18
Net profit	57	66	(14)
Net operating cash inflows	104	83	25
Capital expenditure	66	48	38
Net debt	115	106	8
Distributions to shareholders	29	37	(22)

\* EBITDA adjusted to exclude impairment charges.

Key ratios	2008 %	2007 %
Adjusted EBITDA margin	40	42
Net profit margin	16	23
Effective tax rate	27	29
Return on capital employed	13	16
Return on equity	18	21
Gearing ratio	33	32



01

# Industry in perspective





# 01 Industry in perspective

## Market Cap Crash

2008 has seen the market capitalisation of the Top 40 decrease by 62% from 2007. This is primarily attributed to the fall in commodity prices and the impact of the global economic crisis on shareholder confidence, which saw the industry experience sharp falls in market value in the last quarter of the year. This represents a spectacular and rapid decline for the industry – but one which is mirrored in many sectors.

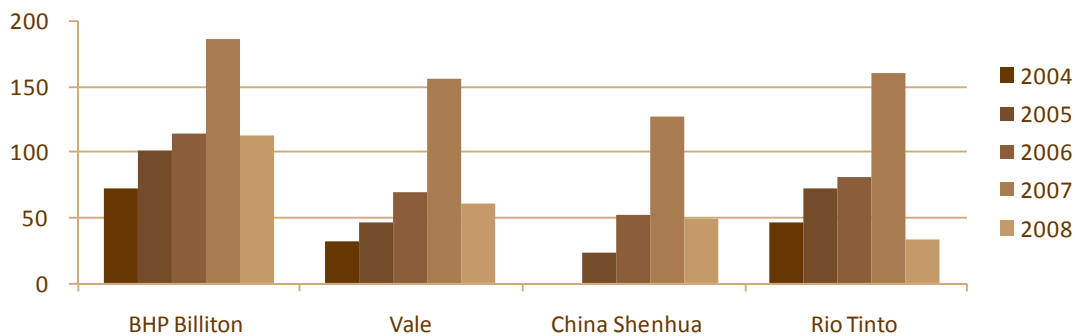
In 2007 the cut-off for inclusion within the Top 40 was a market capitalisation of greater than \$9.0 billion – in 2008 this has dropped to \$2.3 billion.

## Major Movement

While 2007 saw steep increases in the share prices of the diversified majors, they have not been immune from the fall in 2008, with their market capitalisation falling below 2006 levels. Rio Tinto has fallen from second to fourth place following a challenging year for the group, allowing Vale and China Shenhua to both move up one place each.

Overall there was significant movement in the Top 40 following the volatility experienced over the year, with 15 changes in total. The companies that were replaced were largely in the bottom quartile in 2007 and experienced market capitalisation declines in excess of the Top 40 average.

## Top 4 market capitalisation (\$ billion) - 31 December

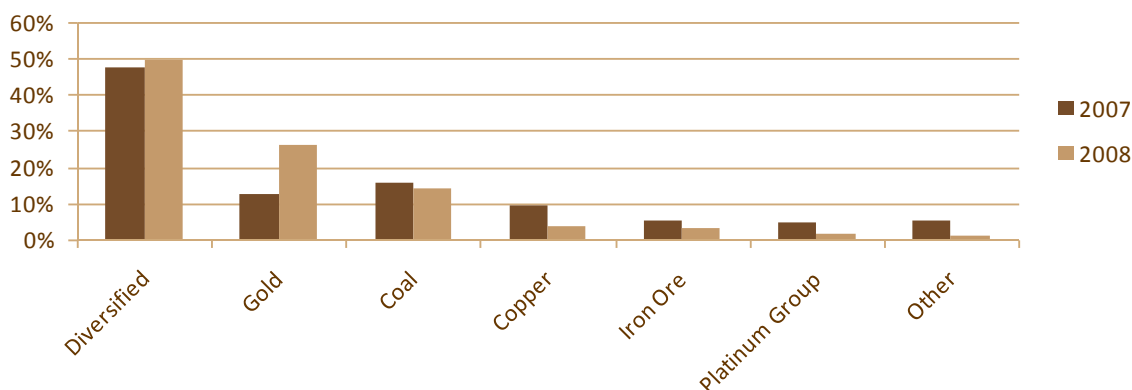


## All that glitters...

Gold companies have been the least impacted with their market capitalisation decreasing by 20% based on the perception that the commodity is a safe haven in a time of economic turmoil, and a protector of wealth. 14 gold companies are included in the Top 40

in 2008, up from ten in 2007 and gold companies now comprise 26% of the total market capitalisation, more than double the 2007 level, having taken the place of base metals, platinum and coal companies.

## Percentage of market capitalisation by commodity



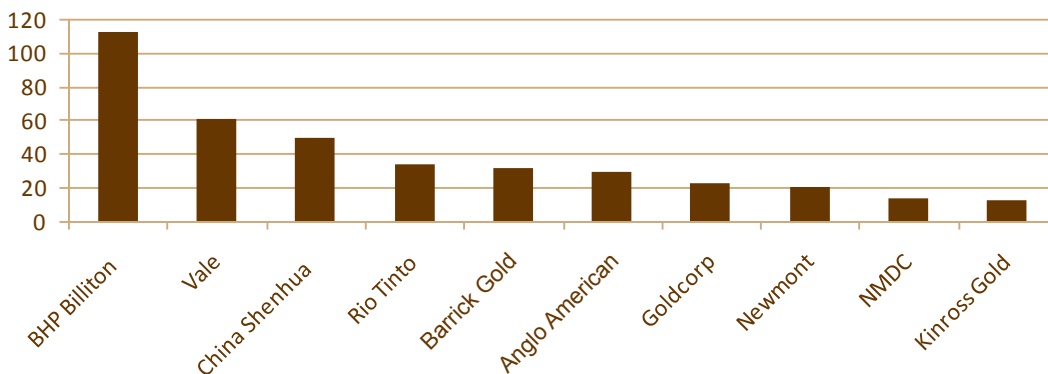
# 01 Industry in perspective

Over the last five years gold companies have not benefited to the same extent as others in the industry from the meteoric rises in commodity prices, but suffered with the rest of the industry as they experienced sharp increases in costs of materials and labour. However, 2007 and 2008 have seen robust gold prices and gold companies have again found favour. The most significant movements are;

- Barrick Gold has moved from ninth place, replacing Anglo American as the fifth largest – despite its market capitalisation decreasing;

- Four gold companies are now in the Top 10, with Goldcorp and Newmont up from fifteenth and seventeenth respectively; and
- Kinross Gold's market capitalisation has remained steady over 2008, moving them from 25<sup>th</sup> to tenth place, making gold the most represented commodity in the Top 10.

**Top ten market capitalisation** (\$ billion) - 31 December 2008



## The debt distraction

Of those companies with the high ratios of net debt to market capitalisation, the largest decrease in share price was experienced by Rio Tinto, who experienced a decrease of 79% and Teck, whose market capitalisation decreased by 85%. Both companies raised debt to complete deals close to the top of the market.

After experiencing impressive growth over the previous four years, 2008 has seen Xstrata's market capitalisation fall by 87% to \$9 billion – less than its market capitalisation in 2004. Xstrata's debt increased by 38% in 2008 and the company has felt the impact of declining base metals prices in the rising cost environment. In January 2009 the company announced a 2:1 rights issue at a significant discount to its share price. The \$6 billion raised was used to repay debt. Following the equity raising Xstrata's gearing ratio is approximately 30%, slightly below the industry average.

In contrast, Vale has moved up one place to second on the listing, despite its speculated acquisition of Xstrata not going ahead and its own market capitalisation decreasing by 59%. Vale has a gearing ratio of 29% but has a cash balance in excess of \$10

billion and only \$8 billion net debt. By the end of the first quarter of 2009 its share price had increased more than 30% above the 2008 closing price.

## Decision time

The rapid fall in market capitalisation and increased debt levels for some of the Top 40 has created two distinct groups; the 'haves' and the 'have nots'. In the current climate there is no more valuable an asset than cash, and for cash rich companies, opportunities exist as asset values fall. Options for this group of companies continue to include acquisition or organic growth. The timing of action could be a lead indicator as to the industry's assessment of value and when asset prices have declined sufficiently to best utilise their cash resources and potentially 'bag a bargain'. China has already taken its first steps, with a number of moves in play for assets, particularly in Australia, demonstrating their confidence in the long-term outlook for the industry. Having said this, many companies are holding on to their 'crown jewels' and quality assets for sale are few and far between.

For those companies with a heavy debt burden the opportunities are harder to grasp as management



# 01 Industry in perspective

time and effort is directed toward short-term financing rather than the longer-term agenda. The action taken by these companies is more defensive in nature, epitomised by Rio Tinto's proposed strategic alliance with Chinalco, and contrasts with the more aggressive action of the boom years.

## Who saw it coming?

The industry's investing cash flows illustrate that companies spent the majority of their free cash developing and acquiring assets.

Companies in 2009 are intently focussed on reducing capital and operating expenditure and managing production levels to ensure they operate at the lowest possible cost. The cash flow analysis shows that the industry did not commence these programs until late in 2008 or early 2009 and, like many others, did not see the rapid decline in both price and demand coming.

## And the reaction?

While the industry may not have seen the decline coming, the response has been rapid and decisive. In Q1 2009, 14 of the Top 40 announced mine closures, production cuts or moves to place mines on care and maintenance. In addition \$13 billion of capital expenditure has been deferred or cancelled. Combined, this has led to more than 40,000 planned redundancies across the industry.

The coming year will be crucial to determine whether the actions taken are sufficient to combat the current conditions facing the industry. Time will tell whether

the announced reductions are enough – or whether there has been an overreaction.

Of particular importance going forward is which companies will best respond and adjust their operating and corporate strategies to take advantage of opportunities over the short, medium and long-term.

## Total Shareholder Return (TSR) – holding your nerve

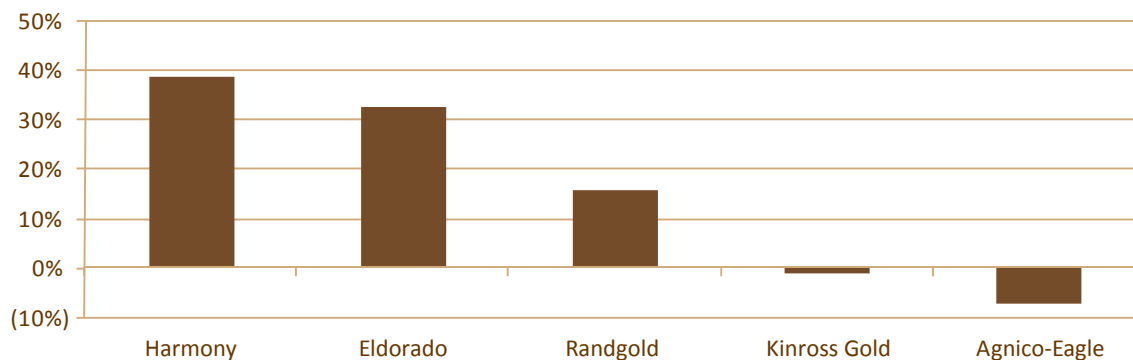
Investors in mining companies have ridden the boom over the past five years, experiencing high levels of returns, both through capital growth, dividends and share buyback programmes.

Last year we observed that 14 of the Top 40 achieved a one year TSR of greater than 100% and only five companies had negative TSR. Four companies reported a TSR of greater than 400%.

This year the contrast could not be starker. Only three companies had positive TSR and the four lowest were a 75% or greater decline. The top five TSR's are all gold companies, as are nine of the top ten including Barrick Gold, Newmont and Newcrest.

TSR is often used as a performance measure for executive remuneration and the results will affect individuals in the industry. Accordingly remuneration committees will be challenged to ensure that reward structures are designed to retain the industry's best people despite the challenging market. This is further explored in *A view from around* and our discussion on rewarding in the downturn.

## Top five TSR performance





02

A view from the top





## 02 A view from the top

*In this section, PwC presents a summary of views expressed by leading CEOs through interviews and discussions conducted during the past year.*

What a difference 12 months can make - from boom times to global economic bust. Compared to this time last year, the mining industry faces a more uncertain future, but one thing is certain: the CEOs agenda looks markedly different today than a year ago. Confidence in ambitious expansion strategies and deals supported by the insatiable appetite of China to feed double digit growth is gone. Cash, a once plentiful resource, now must be carefully rationed and the options it once created have vanished. These are testing times indeed for those at the top.

While some saw the decline in commodity prices coming, all were surprised by both the suddenness and depth of the correction. While the global economy may have hit 'pause', most CEOs still point to the longer term fundamentals and the case for stronger commodity prices remaining intact. Many also point to the industry's rapid reaction to the crisis, with capital expenditure programmes immediately cut and higher cost mines put on care and maintenance, standing by, waiting for the next upturn in the cycle. However, lessons are learned from every crisis and one that cannot be ignored from this one is that despite the focus on the Chinese economy, the monitoring tools used this time were not up to the task of identifying and analysing the signals coming from that market. This poses an interesting dilemma for those watching for the first signs of light while the dragon slumbers.

So what is on the minds of those in charge of steering a path through the current difficulties? That partly depends on the exposure of the companies they lead, with the two key differentiators appearing to be firstly their commodity mix and secondly the degree to which they completed deals close to the top of the market. Those with robust balance sheets are focussed on reducing their operating costs to best manage margins savaged by diving commodity prices and lower demand. Contrast this with the CEOs of heavily indebted companies which have these same issues but also need to service or refinance that debt to ensure their businesses survive intact in the shorter term. While short-term liquidity issues may be a new issue brought on by the global economic crisis, some of the old themes are still high on CEOs' minds although the problems have manifested themselves in different ways.

Cost has been a growing issue for many years. During the boom years, provided enough product was mined and processed, the high prices achieved outweighed the issue of rampant cost inflation with the effectiveness of operations overriding efficiency concerns. While prices for many mining services and consumables have recently decreased, there is still a lot of fat left which needs to be trimmed and in some areas appears to be baked in. CEOs clearly have this on their agenda but in some cases are frustrated at how difficult it has been to remove costs, while at the same time they are worried that they might cut too far.

Managing capital expenditure programmes and ensuring they were delivered on time and budget was top of the agenda of many CEOs during 2007 and 2008. Today the focus is on re-examining the feasibility of some projects, making difficult decisions where necessary whilst ensuring where possible, that their company still invests for the future.

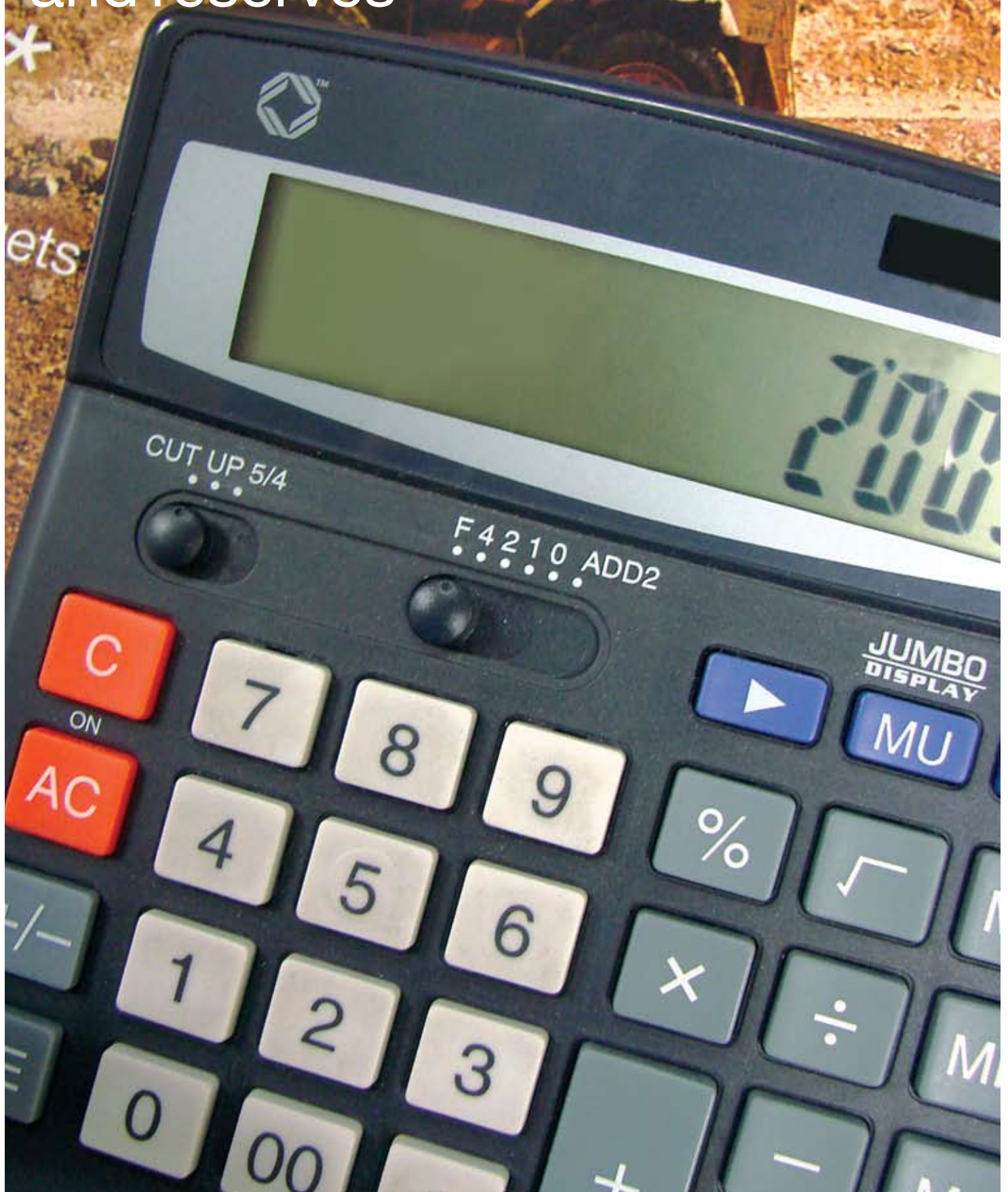
Human capital issues remain but have become more specific. Despite the number of redundancies, CEOs believe there is a shortage of management with the right skills and experience to manage in a downturn. During the boom years, experienced senior management cashed in their options and left the industry, leaving less experienced managers to try to run what are now more complex businesses. In many cases these new managers have not been exposed to as many parts of the business and lack the experience of a generation who spent a career working their way up in what were much leaner organisations. Whilst the 'Young Guns' exploited the opportunities of the boom years, experience could be the most precious commodity during the downturn.

Even the few CEOs sitting on significant cash surpluses face difficult decisions. With capital much less freely available, those at the top are much less likely to rush into major deals. Compared to recent history it might seem there are 'bargains' available but the fear of catching a falling knife continues to weigh heavily.

The job of the mining company CEO has clearly not become any easier and in many cases confidence has taken a blow. However it is reassuring to hear some CEOs talk of grasping the challenge presented today, building leaner and meaner organisations that will create value throughout the cycle, rather than trying to ride out the downturn. The upturn, however, may be too late for some organisations. While the opportunities are certainly there in the long term, the present is not short on challenges.

03

# Financial review and reserves





## 03 Financial review and reserves

### Income statement

	2008 \$ billion	2007 \$ billion	Change %
Revenue	349	284	23
Operating expenses	(208)	(164)	27
<b>Adjusted EBITDA*</b>	<b>141</b>	<b>120</b>	<b>18</b>
Impairment charges	(31)	(2)	1,450
Depreciation & amortisation	(26)	(20)	30
<b>PBIT</b>	<b>84</b>	<b>98</b>	<b>(14)</b>
Net interest expense	(6)	(5)	20
Income tax expense	(21)	(27)	(22)
<b>Net profit</b>	<b>57</b>	<b>66</b>	<b>(14)</b>

\* EBITDA adjusted to exclude impairment charges.

### Margin squeeze

For the second year in a row, operating costs increased more than revenues, impacting net profit margins. Although the effects of decreases in significant inputs, such as fuel, energy and labour,

are anticipated in 2009, margins are still expected to come under further pressure as the gap between revenues and costs continues to shrink.

Top 4 by revenue	2008 \$ billion	2007 \$ billion	2008 Adjusted EBITDA margin %	2007 Adjusted EBITDA margin %
BHP Billiton	60	48	45	46
Rio Tinto	54	30	35	34
Vale	36	32	47	52
Xstrata	28	29	34	39

The companies analysed in the table above account for 51% of total Top 40 revenue (compared to 49% in 2007). This increase is primarily due to the full year impact of the Alcan revenues within the Rio Tinto result, and the company's margin has also benefited from gains on divestments. Higher iron ore and coal prices and robust production supported BHP Billiton and Vale's performance. Xstrata reported a decrease in revenue and margin primarily due to reduced production volumes.

### Return on Equity and Return on Capital Employed

	2008 (%)	2007 (%)
ROE	18	21
ROCE	13	16

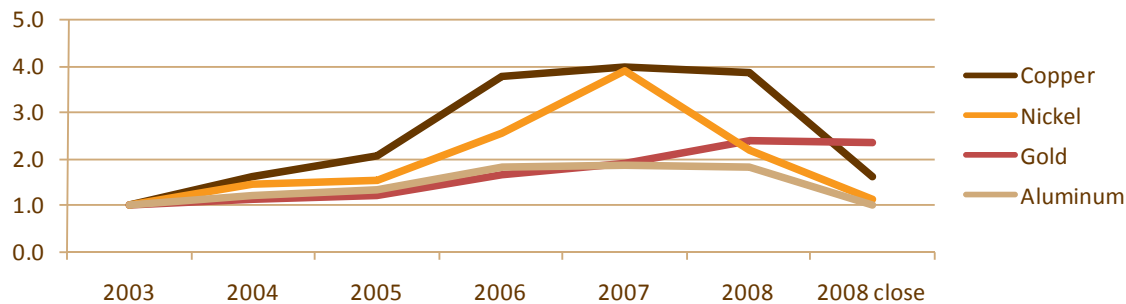
Given the lower level of revenue growth and increased costs, return on equity and return on capital employed decreased in 2008. The reduction was not specific to any one commodity or operating location and was impacted by the impairment charges booked.

## 03 Financial review and reserves

### Commodity Prices

Metals prices remained buoyant throughout the first three quarters of 2008, but a sharp decline in commodity prices in Q4 contributed to lower relative growth compared to 2007. With the full effect of these price reductions to be felt in 2009, along with expected lower benchmark price negotiations for iron ore and coal, total revenues will come under pressure to remain stable, let alone achieve growth.

### Commodity prices rebased since 2003



Year	Copper \$ / tonne	Gold \$ / ounce	Nickel \$ / tonne	Aluminium \$ / tonne
2003 (avg)	1,789	364	9,616	1,431
2004 (avg)	2,868	410	13,840	1,717
2005 (avg)	3,684	445	14,747	1,900
2006 (avg)	6,725	604	24,270	2,568
2007 (avg)	7,124	697	37,225	2,638
2008 (avg)	6,938	872	21,048	2,567
2008 (close)	2,902	862	10,808	1,454

The peak in commodity prices for many minerals occurred during 2007, with notable exceptions for gold and bulk commodities. The decline in nickel, zinc, copper and aluminium prices through 2008 and into 2009 has been well documented, with nickel and aluminium prices returning to 2003 levels. The reduction in price has placed continued pressure on margins for those operations that remain in production.

### Copper rallies

Despite the fall at the end of the year, the first quarter of 2009 has seen the copper price rally approximately 40% from the 31 December closing price to above \$4,000/tonne.



## 03 Financial review and reserves

### \$1,000 Gold

While the gold price fluctuated throughout 2008, including a brief period above \$1,000 per ounce, it closed the year only marginally higher than it opened. Some market analysts have forecast gold prices to once again exceed the psychological \$1,000 per ounce threshold during 2009.

### Bulk up

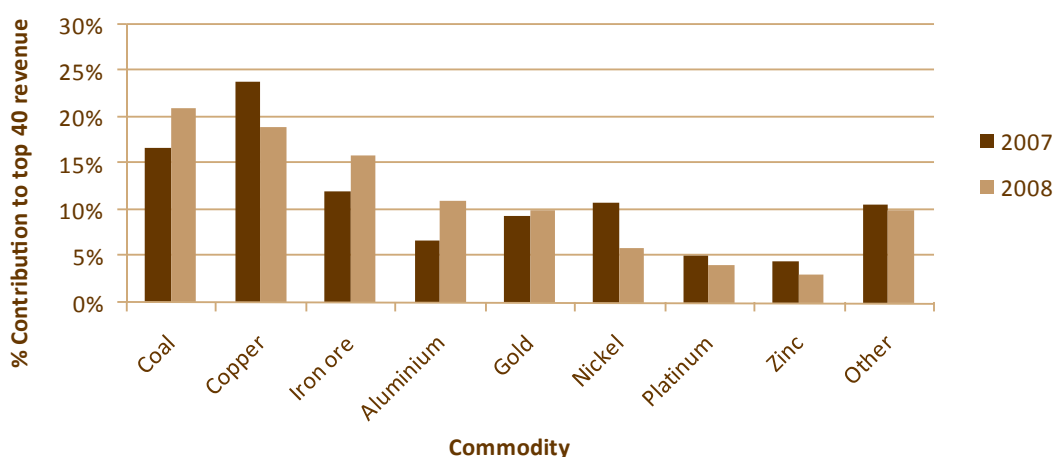
Iron ore and coal revenues were spared the full impact of the economic downturn due to the timing of price negotiations with customers. The majors achieved large iron ore and coal price increases as part of the 2008 annual negotiations, however getting Chinese customers to meet all of these contracts was a challenge. The 2009 contract process will certainly lead to substantial price drops as already determined with some of the coal negotiations.

### Ore wars

Iron ore has been the subject of a great deal of focus over the last 18 months, particularly around the benchmark setting process, with both customers and producers attempting to determine the appropriate way forward. The iron ore story is far from being finally written. The significant ownership by the customers of many projects cannot be a good long-term indicator for the industry, whilst immediately the major miners and the steel mills bump heads to determine a pricing mechanism for the year ahead. We consider the 'iron ore wars' have many twists and turns to play out in the next decade and recognise that the steel mills have the upper hand this year.

### Black Gold

#### Comparison of revenue by commodity



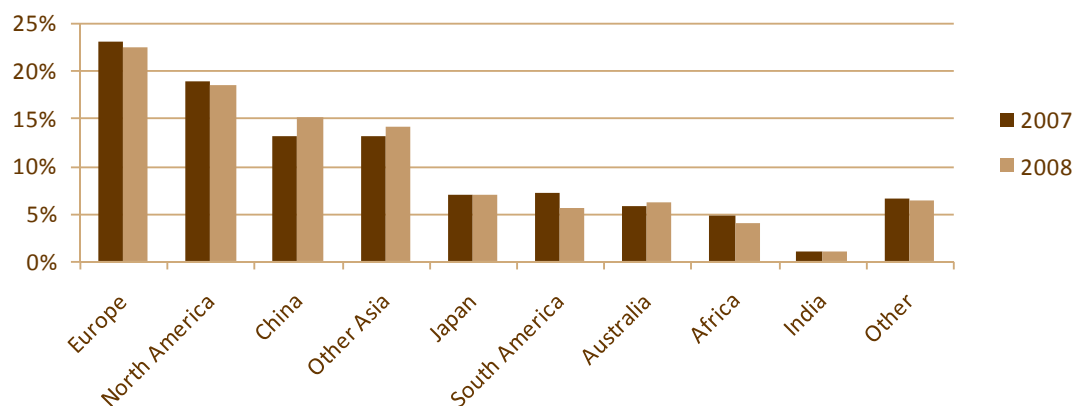
In 2008 coal has risen to the top of the revenue charts on the back of a 4% increase in production and large contractual price increases negotiated by the majors. Despite gold companies dominating the Top 10 in 2008, gold remains only 10% of total revenue.

### 03 Financial review and reserves

For several years copper has been the dominant commodity as a proportion of the total revenue of the Top 40. Flat production volume and a falling price has significantly reduced copper's contribution to total revenue in 2008. Nickel was also affected by significant price decreases, along with zinc, although for a longer period of the year.

The full effect of Rio Tinto's acquisition of Alcan saw aluminium compete with gold in total contribution to Top 40 revenue, despite the decrease in price.

#### Share of total revenue by customer



Revenue by location in 2008 was impacted by the fourth quarter, post-Olympic reduction in Chinese demand, although overall, the year was dominated by increases in revenue from China and the rest of Asia on the back of higher iron ore and coal prices. Despite the focus of many commentators, reported sales to India represent only 1% of the total.

As industrialisation and urbanisation continues in the developing world, we would expect Asian markets to continue to grow in the medium to long term. Supporting this, the Chinese Government has announced a 4 trillion yuan (\$586 billion) stimulus package that is to be spent by the end of 2010, significantly focussed on infrastructure.

Almost half of the commodities produced by the Top 40 are sold into Europe and North America, both of whom are experiencing deep recession and represent an exposure for the industry. Stimulus packages enacted by many governments are aimed at creating demand and increasing economic activity. It will be interesting to see whether these packages or a continuation of the downturn have a more pronounced impact on revenue in the next 12 – 18 months.

## 03 Financial review and reserves

### Production: 'making hay while the sun shines'

2008		
Commodity (quantity)	Production	change from prior year
Copper (Mt)	8	1%
Zinc (Mt)	3	2%
Gold (Moz)	37	(8%)
Platinum (Moz)	7	0%
Coal (Mt)	1,238	4%
Iron ore (Mt)	694	7%
Nickel (Mt)	1	(1%)
Bauxite (Mt)	47	49%

Iron ore and coal production reached record levels for a number of the Top 40, as additional capacity arising from major capital investment over the boom years came on-line. For other commodities production levels remained broadly consistent with 2007, highlighting that the impact of the announced mine suspensions and closures had not yet had an effect on the 2008 volume data.

Gold production decreased by 8%, with many of the majors reporting production below 2007 levels. This

was due to a number of factors, including the impact of power shortages in South Africa.

### Costs (out of) control

Operating costs continued to soar during 2008, rising 27%, four percentage points greater than the increase in revenue during the period. This, along with impairment charges, has resulted in declining net profit and EBITDA margins for 2008. Overall net profit for the Top 40 decreased 14% from 2007, and net profit margin decreased by 30%, continuing a worrying trend first noted in 2007. The strengthening of the US Dollar ('USD') helped contain costs for those companies in non-USD jurisdictions. Without the foreign exchange movements the increase could have been much worse.

During the boom years, volume growth took precedent over cost management as the industry chased high commodity prices, and companies across the cost curve were profitable.

The downturn will bring greater focus on positioning in the cost curve. As already seen in 2009, aluminium and nickel producers at the higher end of the cost curve have been either forced to close operations or seek other drastic alternatives.

### Rocky road ahead

An analysis of the potential effect of price reductions (assuming no decrease in production) paints a bleak picture for the industry in 2009:

Commodity	Scenarios	Impact on revenue \$ billion
Iron ore	20% reduction in benchmark prices	(8)
Coal	30% reduction in overall coal prices (both thermal and coking)	(15)
Copper	Assumed average price \$4,000 per tonne for 2009	(25)
Aluminium	Assumed average price \$1,500 per tonne for 2009	(14)
<b>Total</b>		<b>(62)</b>

The \$62 billion potential decrease in revenue under this hypothetical scenario represents an 18% reduction from 2008 results...and is more than the Top 40's net profits for the year. Whilst the adjusted total revenue level remains greater than that reported in 2006, the industry faces the challenge of costs that are now significantly higher than in 2006.

In order to maintain 2008 gross profit margins, the industry will need to find cost savings of \$41 billion to offset the 18% decline in revenues. This is a huge challenge facing management since removing almost one in five dollars spent will have significant short and long-term implications. Notwithstanding this, any cut-back in production could have further financial and non financial implications.



## 03 Financial review and reserves

### Return to fundamentals

A clear focus throughout 2009 will be to manage margins through a significant reduction in both fixed and variable operating and administrative costs. However, given the long-term nature of mining projects and associated capital commitments, it may be difficult for companies to drastically reduce costs in the short-term.

Other considerations when closing mines or deferring or cancelling planned capital expenditure include:

- Stakeholder management – how will investors respond?
- Financial reporting implications – what does it mean for asset values?
- Contractual implications – break or cancellation fees may be incurred
- Banking implications – bank covenants or guarantees
- Supplier implications – cancellation of supplier contracts at favourable prices may be renegotiated later at higher prices
- Tax implications – minimal additions to tax pools in respect of capital costs would result in lower tax deductions and possibly higher cash taxes
- Employee implications – in addition to the cash costs related to severance and restructuring, organisational knowledge and employee talent may be lost and morale may be impacted

By the end of the first quarter 2009, many of the Top 40 announced moves to reduce headcount and scale back or close some operations:

- BHP Billiton announced production cuts in its nickel, iron ore and manganese operations;
- Rio Tinto scaled back alumina operations in line with its expectation of global demand;
- Vale cut production and jobs in the nickel and iron ore sectors; and
- Xstrata is scaling back copper, coal and nickel operations.

Such announcements have been made across the industry and will inevitably lead to a decline in production.

In addition to actions within management's control, variable costs linked to commodity prices such as fuel and power have had a positive impact on the industry's cost base, however the speed and scale to which these costs impact the bottom line will be critical.

A question for the industry is whether production cut backs will reduce supply enough to increase prices despite falling demand in the short term. Companies should focus on how they will bridge the gap between the downturn and the recovery.

Other income statement items which moved significantly in the year include:

### Profit/(loss) from JVs and associates

Income from joint ventures and associates has increased 92% to \$3 billion. This may reflect the shift from sole ownership of projects to joint ventures and other shared ownership structures to reduce risk and cost commitments.

### Gain/(loss) on sale of assets/businesses/investments

Net gains increased \$4 billion (186%) primarily due to Rio Tinto's divestments, which accounted for \$3 billion of the total.

### Depreciation

Depreciation and amortisation expense increased 30% on the back of large rises in depreciable plant and equipment over the previous years from acquisition and project development.

### Exploration expense

Exploration expense increased 46%, continuing an upward trend from the previous year. There will be pressure on exploration budgets in 2009 as companies seek to reduce costs and discretionary expenditure.

### Asset impairment

Impairments recorded by the Top 40 were in excess of \$31 billion in 2008, and 50% of the companies in the Top 40 recognised impairments compared to only 25% in 2007.

## 03 Financial review and reserves

80% of the impairment relates to two companies: Freeport-McMoRan and Rio Tinto, who recorded charges against their investments in Phelps-Dodge and Alcan respectively. Both acquisitions were made in 2007, close to the top of the market. In addition BHP Billiton reported a \$4 billion impairment of its Australian nickel business in their half-year results to December 2008 (not included within the \$31 billion noted above).

Looking forward, the potential for further impairments exists as adverse markets conditions continue.

### Taxes and royalties

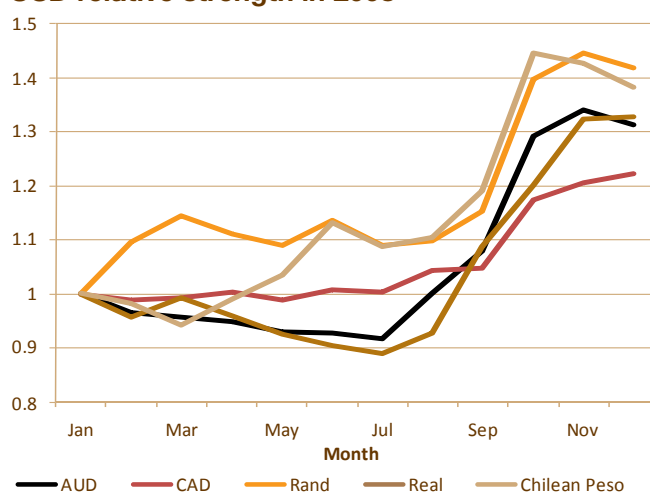
Royalty expense increased 28% in 2008 following the increase in revenue, while income tax expense decreased 22%. The effective tax rate decreased from 29% to 27%, possibly as a result of decreasing tax rates in some jurisdictions and a change in revenue location.

Taxes and royalties combined comprise approximately 7% of operating revenue for the 2008 year. Although taxes and royalties paid to governments are in themselves a significant contribution, there are still a large proportion of taxes and other contributions to government which are not separately disclosed in the financial statements and, therefore, may go unrecognised by shareholders. This is explored further on page 32 of this publication.

### The mystery of Foreign Exchange

2008 saw the USD strengthen against key mining currencies. As many of the Top 40 report or operate in currencies other than USD, this movement had a significant impact on the financial results of the Top 40, particularly when translating their closing balance sheet and where costs are denominated in non-USD currencies.

**USD relative strength in 2008**



Shareholders are aware that they are exposed to commodity price fluctuation when they invest in major mining companies, particularly where the companies are unhedged. In fact, many investors buy mining stock to gain this commodity price exposure. However exposure to movements in foreign exchange rates is less clearly understood or

explained, with many investors not only exposed to commodity prices, but also to exchange rates.

The following table illustrates the margin impact of the movements in the USD and Australian dollar (AUD) on a gold producer with operations in both the USA and Australia. It assumes exchange rate parity at 1 January, a consistent USD800 gold price, locally denominated costs of \$500 for each mine and a closing exchange rate of AUD1.312:USD1, equivalent to the movement over 2008.

	United States mine		Australian mine	
	1 Jan 08	31 Dec 08	1 Jan 08	31 Dec 08
Gold	USD	USD	USD	USD
Sale price per oz	800	800	800	800
Cost per oz	500	500	500	380
Gross Margin	300	300	300	420
Gross Margin (%)	38	38	38	53

The financial performance of Australian gold producers with predominantly AUD operating costs benefits significantly from the appreciation of the USD against the AUD. Similar results were experienced by other companies in other locations and commodities as a result of the exchange rate fluctuations. Conversely, assuming no other change, American producers have moved higher in the cost curve as a result of exchange rates, a factor outside of their control.



## 03 Financial review and reserves

### Cash flow

	2008 \$ billion	2007 \$ billion	Change %
<b>Cash flows related to operating activities</b>			
Cash generated from operations	119	102	17%
Taxation paid	(19)	(20)	(5%)
Other	4	1	300%
<b>Net operating cash flows</b>	<b>104</b>	<b>83</b>	<b>25%</b>
<b>Cash flows related to investing activities</b>			
Purchase of property, plant and equipment	(66)	(48)	38%
Purchase of investments	(38)	(72)	(47%)
Sale of investments	8	5	60%
Other	(6)	1	(700%)
<b>Net investing cash flows</b>	<b>(102)</b>	<b>(114)</b>	<b>(11%)</b>
<b>Cash flows related to financing activities</b>			
Issue of shares	23	29	(21%)
Share buy-backs	(7)	(16)	(56%)
Increase in borrowings	67	105	(36%)
Repayment of borrowings	(50)	(65)	(23%)
Distributions to shareholders	(22)	(21)	5%
Other	3	2	50%
<b>Net financing cash flows</b>	<b>14</b>	<b>34</b>	<b>(59%)</b>
<b>Net increase in cash and cash equivalents</b>	<b>16</b>	<b>3</b>	<b>433%</b>
Cash and cash equivalents at beginning of period	41	38	
Effect of foreign currency exchange rate changes	(5)	-	
<b>Cash and cash equivalents at end of period</b>	<b>52</b>	<b>41</b>	

## 03 Financial review and reserves

### Operating cash flows

For the first time, the Top 40 broke through the \$100 billion barrier, reporting net operating cash flows of \$104 billion. This represents a 25% increase and is primarily attributable to higher iron ore and coal prices following the record-breaking benchmark price negotiations, supported by sustained levels of production.

The global economic crisis only began to impact operating cash flows late in 2008 as companies began to actively manage their working capital. However, declines in customer demand and selling prices for most materials, despite working capital management initiatives, will make it difficult to achieve the same level of net operating cash flows in 2009.

### Investing cash flows

Net investing cash flows decreased 11% and were on par with operating cash flows. For the first time since 2005, and absent the large deals of 2007, cash flows associated with asset development were greater than purchases of investments, as companies continued to focus on organic growth.

The outlook for the industry suggests that investing cash flows will be dramatically reduced in 2009.

### Financing cash flows

Net financing cash flows fell dramatically in the year, driven mainly by the absence of debt funded acquisitions and the tightening of the credit markets in the latter part of the year.

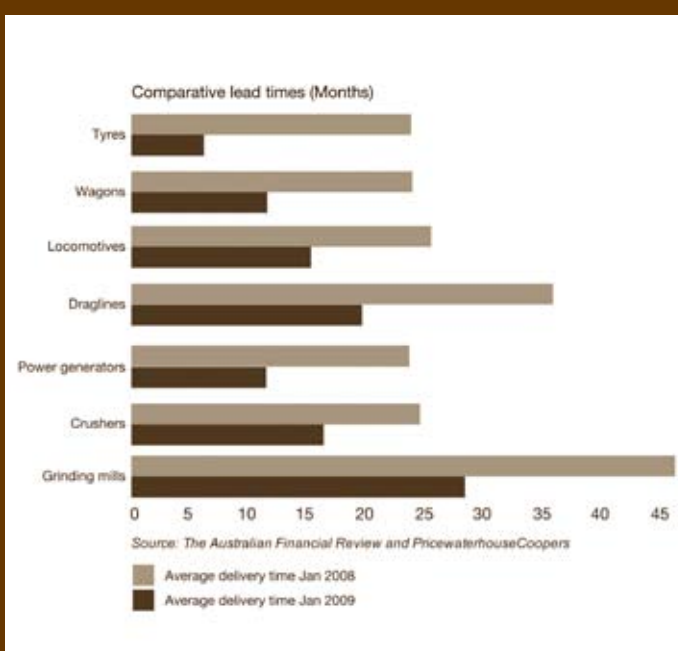
Proceeds from borrowings in 2008 were principally used to refinance existing debt, fund dividend distributions to shareholders, and finance capital expenditure.

Payments to shareholders decreased. Cessation of share buy-back programmes contributed \$9 billion of the reduction, and dividends remained relatively stable year-on-year. We note that the pressure to conserve cash has placed increased strain on all discretionary expenditure, which has resulted in a number of companies announcing the suspension of their dividends in the first quarter of 2009.

### Lead times: Shorter queues

The industry experienced widespread equipment shortages and long lead times for new equipment during the boom years as manufacturers declined to increase capacity during that time. Those lengthy lead times for equipment and the associated financial commitments may also hinder a company's ability to quickly reduce costs while maintaining operational efficiencies in reaction to the downturn. Offsetting this, the lead time has reduced significantly from 2007, which should allow projects to complete quicker.

As demand for equipment wanes, we expect lead times to continue to decrease. The actions of the industry and suppliers during this time may be pivotal in determining whether a similar challenge is experienced in the next upturn.





## 03 Financial review and reserves

### Balance sheet

	2008 \$ billion	2007 \$ billion	Change %
<b>Current assets</b>			
Cash	52	41	27%
Inventories	39	35	11%
Accounts receivable	37	37	0%
Other	35	23	52%
<b>Total current assets</b>	<b>163</b>	<b>136</b>	<b>20%</b>
<b>Non-current assets</b>			
Property, plant and equipment	402	365	10%
Goodwill and intangibles	54	68	(21%)
Other	57	55	4%
<b>Total non-current assets</b>	<b>513</b>	<b>488</b>	<b>5%</b>
<b>Total assets</b>	<b>676</b>	<b>624</b>	<b>8%</b>
<b>Current liabilities</b>			
Accounts payable	47	40	18%
Borrowings	38	24	58%
Other	29	29	0%
<b>Total current liabilities</b>	<b>114</b>	<b>93</b>	<b>23%</b>
<b>Non-current liabilities</b>			
Borrowings	129	123	5%
Other	96	101	(5%)
<b>Total non-current liabilities</b>	<b>225</b>	<b>224</b>	<b>0%</b>
<b>Total equity</b>	<b>337</b>	<b>307</b>	<b>10%</b>
<b>Total equity and liabilities</b>	<b>676</b>	<b>624</b>	<b>8%</b>

Ratios	2008	2007
Gearing (%)	33	32
Current (times)	1.43	1.46
Quick (times)	1.17	1.13
Net debt (\$ billion)	115	106

## 03 Financial review and reserves

### The big picture

Whilst there was only a small amount of movement in the key balance sheet ratios at the end of 2008, the Top 40 were already feeling the impact of the global economic crisis and were beginning to implement measures to prepare for the difficulties they would face in 2009. The initial indicators of the tough times ahead and the demands that would be placed on the industry and their balance sheets became clear late in 2008 through the impairment charges recognised against goodwill and intangible assets, increase in current and total borrowings and strain on working capital.

A strong indicator of the slow-down experienced in the last quarter is that accounts receivable remained consistent year-on-year, despite a 23% increase in revenue.

Overall, the increase in net assets of 10% was not as significant as that achieved in 2007. The reduction in the growth rates was principally due to the absence of significant acquisitions in 2008 and the weakening of prices impacting on receivables and asset values.

As expected, total mining-related assets of the Top 40 continued to have a bias toward base metals. There were only minor changes in the asset mix with coal increasing slightly, offset by corresponding declines in nickel and aluminium. These changes are consistent with the relative changes in the prices of these respective commodities during 2008, and despite the higher proportion of gold companies in the Top 40, the relative size of their net assets remains small in comparison.

Whilst the net assets of the Top 40 increased 10% in 2008, their market capitalisation has suffered, particularly for those who completed deals close to the top of the cycle. The aggregate net assets of the Top 40 as a percentage of their market capitalisation increased from 25% in 2007 to 62% in 2008. The net asset carrying value of the Top 10 as a percentage of their market capitalisation for 2008 as compared to 2007 is as follows:

#### Net assets as a % of market capitalisation

	2008	2007
BHP Billiton	35%	16%
Vale	75%	25%
China Shenhua	52%	17%
Rio Tinto	67%	16%
Barrick Gold	49%	36%
Anglo American	74%	32%
Goldcorp	66%	51%
Newmont Mining	42%	41%
NMDC	15%	3%
Kinross Gold	40%	37%

### Availability of credit and sources of liquidity

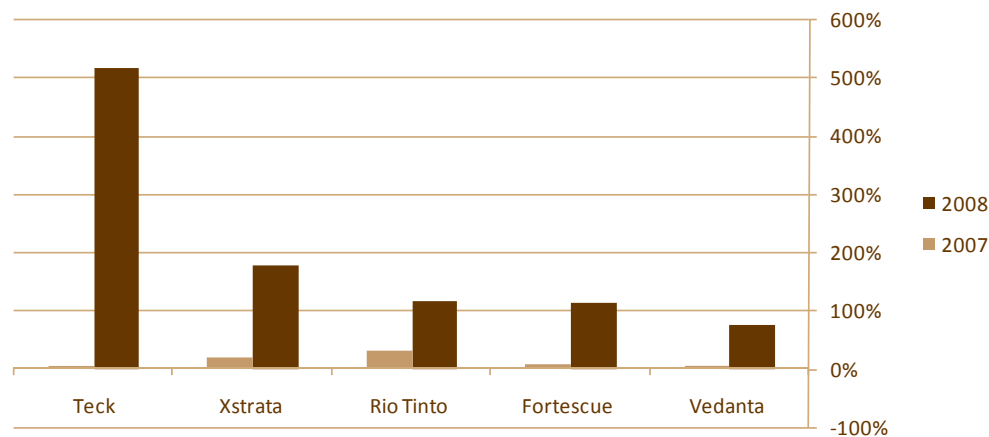
The tight credit markets, combined with the Top 40 re-investing cash generated by operations within their businesses, have resulted in a small movement in the gearing ratio. Total borrowings have only increased by \$20 billion, or 14%. However, short-term borrowings increased 58% as 2007 long-term borrowings became current in the year, working capital requirements increased and difficulties were encountered in refinancing short-term debt on a longer-term basis. Repayment of this debt is already an area of focus for many companies, illustrated by the number of financing activities undertaken in 2009 to date. Long-term borrowings increased by only 5% compared to an increase of 61% in the prior year, evidencing the lack of availability of long-term financing for many of the Top 40 at the end of the year.

Whilst in absolute terms debt levels grew modestly during 2008, debt as a percentage of market capitalisation for the Top 40 increased dramatically. Net debt as a percentage of market capitalisation for the Top 40 was 21% in 2008 as compared to only 8% in 2007. Teck faced the largest shortfall following a fall in their share price and concerns over their ability to refinance bridging facilities, that were refinanced in April 2009. The five most leveraged companies compared to their market capitalisation are shown in the overleaf.



## 03 Financial review and reserves

### Ratio of net debt to market capitalisation



Despite the reduced activity within the debt markets during the last quarter of 2008, from 1 January to 30 April 2009, seven companies in the Top 40 have secured debt financing. Proceeds from these activities totalled \$21 billion, of which only \$7 billion, or 33%, was designated for general corporate purposes, whilst the remaining \$14 billion was used to refinance previously existing debt facilities on a longer-term basis. Most notable were BHP Billiton, Rio Tinto, and Teck, who accounted for 80% of the debt raised in the four month period.

The continued tightness in the credit markets and the leverage positions of the Top 40 will continue to make obtaining long-term financing difficult throughout 2009. This may require companies to seek alternative sources of non-bank finance to support operations and future expansion. Such sources of funding include strategic partnerships, share or rights issues, sales of non-core assets and sales of royalty streams.

From 1 January to 30 April 2009, nine companies in the Top 40 raised \$10 billion from the equity markets. Most significant were Xstrata and Newmont, who raised \$6 billion and \$1 billion respectively. While the equity markets are proving to be a source of liquidity for some in the Top 40, the size of the offerings have been less significant than the proceeds generated from debt financings. For the same four month period, seven companies in the Top 40 have announced asset divestments that generated \$7 billion in proceeds.

### Working capital

Despite minimal movement in working capital year-on-year, there were some early signs of the impact of the global economic crisis within the balance sheet. For example current liabilities increased 23%, and accounts payable increased 18% as companies began to conserve cash. In addition, cash increased 27%, led by Vale, who reported a cash position \$9 billion greater than in 2007. Inventories increased, signalling that stockpiles are growing and are turning at a slower rate due to customers deferring their purchases to manage their own working capital positions. Lastly, the increase in other assets is principally due to an overpayment of taxes throughout 2008 in anticipation of strong results similar to those reported in 2007.

## 03 Financial review and reserves

Reserves	Gold (million oz)	Platinum (million oz)	Copper (million tonnes)	Zinc (million tonnes)	Coal (million tonnes)	Iron ore (million tonnes)	Nickel (million tonnes)	Bauxite (million tonnes)
Number of companies	17	3	16	9	15	10	6	4
2007 reserves	682	121	329	53	38,611	10,160	18	964
- Depletion	(37)	(7)	(8)	(3)	(1,238)	(694)	(1)	(47)
+ Other net additions/ (reductions)	62	9	(7)	1	1,900	5,623	(1)	344
<b>2008 reserves</b>	<b>707</b>	<b>123</b>	<b>314</b>	<b>51</b>	<b>39,273</b>	<b>15,089</b>	<b>16</b>	<b>1,261</b>
% change	4%	2%	(5%)	(4%)	2%	49%	(11%)	31%
Remaining life (years)	19	18	39	17	32	22	24	27

The varying fortunes of each commodity over the year has impacted the reserves reported by the Top 40, as cut-off grades have been adjusted to reflect the movement in prices both up (gold) and down (base metals). The remaining life of reserves disclosed above does not take into account the extensive resources available.

### Gold

Gold reserves and mine life have increased over the year as higher gold price assumptions were built into reserve determinations, making lower grade or harder to mine areas economically feasible. 2008 is the second year in succession where companies have reported using higher gold prices in their calculations.

### Copper / Zinc / Nickel

Reserves for the base metals have all declined over the period as the sharp fall in prices has impacted price assumptions used in reserve calculations. Companies reduced exploration activities for these metals and accordingly have not replaced production depletion.

Despite many companies announcing suspension or closure of operations, the total reserves have

decreased by only 4% for zinc and 5% for copper, indicating that the closures are short-term measures rather than permanent, the latter requiring the reserves to be removed from the calculations.

### Iron ore

Iron ore reserves have increased by almost 50% in 2008 – a remarkable result primarily driven by the majors.

Vale announced a doubling of their reserves following continued drilling programs over the past three years. BHP Billiton have also significantly increased their reserves, reporting a 24% increase, primarily in the Pilbara region, as attention has been focused to extend mine life whilst increasing production capacity through the 'Rapid Growth' programme. Rio Tinto has similarly increased their reserves by 11%.

### Bauxite

Bauxite reserves have increased by almost one third, despite the low aluminium prices currently being experienced and challenges market players are facing. Rio Tinto has contributed to the most significant increase, primarily due to the completion of studies at Weipa leading to a 42% increase in reserves.

### Reserves reporting – inconsistent analysis

During our analysis of the Top 40 companies we faced challenges in obtaining sufficient, consistent information on the mineral reserves disclosed by the industry. A wide range of reporting standards continue, differing between jurisdictions – including the Australian JORC code, the US based SEC-IG7, Canada's CIM and South Africa's SAMREC and disclosure levels continue to vary considerably. The result of this is that even the knowledgeable reader may struggle to compare and contrast reserve information between companies.

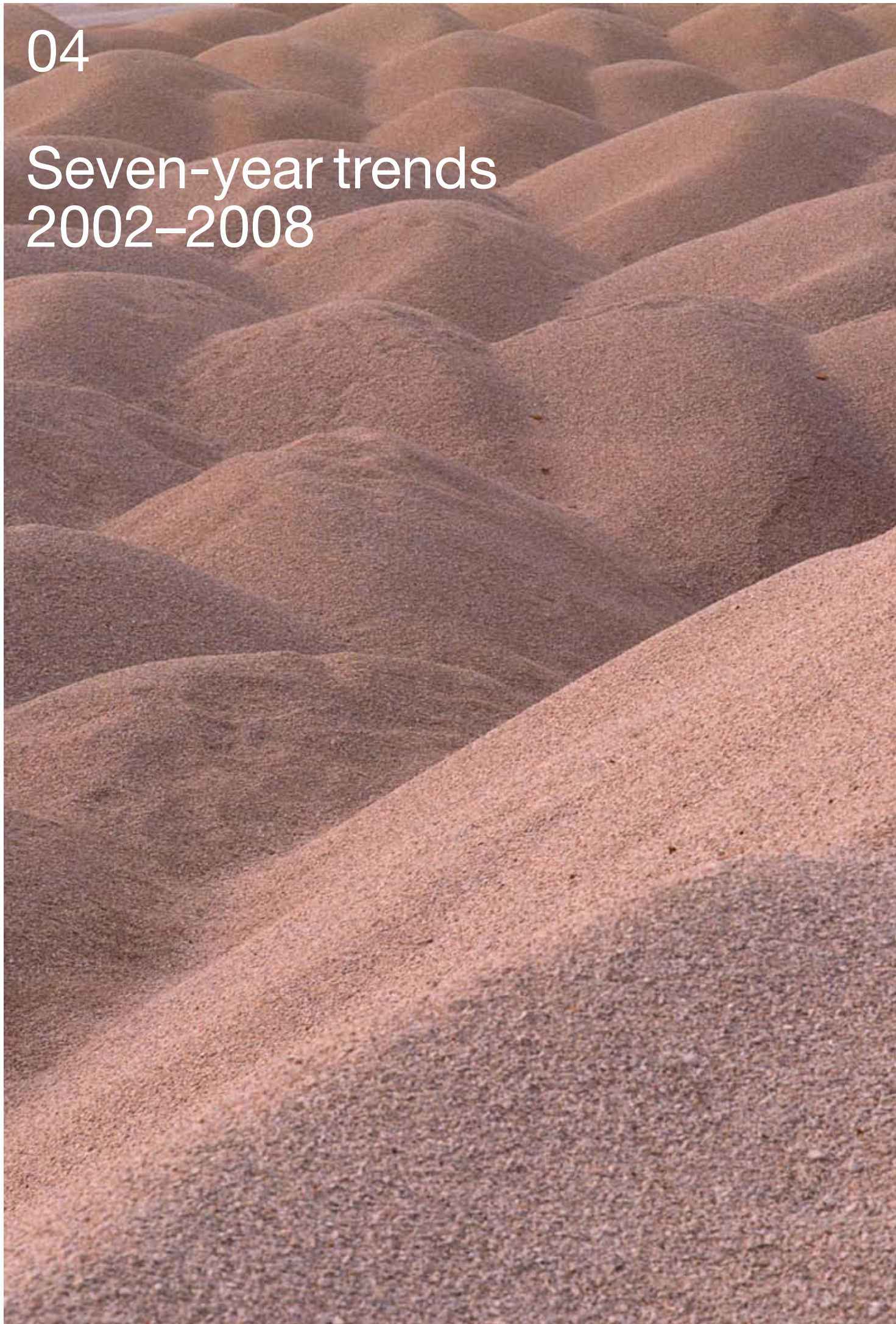
Consistency within global financial reporting has continued with more countries moving towards or adopting International Financial Reporting Standards (IFRS). Consistency within reserve reporting would further assist shareholders to understand and be able to compare and contrast crucial information relating to the future of the industry.

Due to data availability, our analysis is based on the reserve information of only 36 of the Top 40 companies.



04

# Seven-year trends 2002–2008





## 04 Seven-year trends 2002-2008

The information included below differs from our main analysis as it includes the aggregated results of the Top 40 in each of the years disclosed. As such the 2007 financial information differs from the amounts included in the main Financial Review section in respect of 2007 as it relates to the 40 companies that were included in our previous Mine publications.

	2008 \$ billion	2007 \$ billion	2006 \$ billion	2005 \$ billion	2004 \$ billion	2003 \$ billion	2002 \$ billion
<b>Aggregated Income Statement</b>							
Revenue	349	312	249	213	178	114	95
Operating expenses	208	176	141	134	125	85	75
Adjusted EBITDA	141	136	108	79	53	29	20
Amortisation, depreciation and impairment	57	19	12	15	14	10	9
PBIT	84	117	96	64	39	19	11
Net interest cost	6	5	3	4	3	3	5
PBT	78	112	93	60	36	16	6
Income tax expense	21	32	27	16	9	4	2
Net profit	57	80	66	44	27	12	4
Year on year increase in revenue	12%	25%	17%	20%	56%	20%	
Cumulative increase in revenue	267%	228%	162%	124%	87%	20%	
Year on year increase/(decrease) in net profit	(29%)	21%	50%	63%	125%	200%	
Cumulative increase in net profit	1320%	1900%	1550%	1000%	575%	200%	
Adjusted EBITDA margin	40%	44%	43%	37%	30%	25%	21%
Net profit margin	16%	26%	27%	21%	15%	11%	4%
<b>Aggregated Cash Flow</b>							
Operating activities	104	95	77	58	43	22	
Investing activities	(102)	(126)	(67)	(38)	(27)	(20)	
Financing activities	14	36	4	(11)	(9)	1	
<b>Aggregated Balance Sheet</b>							
Property, plant and equipment	402	371	262	214	187	140	117
Other assets	273	284	192	141	116	85	73
Total assets	676	655	454	355	303	225	190
Total liabilities	339	329	217	170	144	114	102
Total equity	337	326	237	185	159	111	88
Return on equity	18%	29%	33%	25%	19%	12%	6%

## 04 Seven-year trends 2002-2008

The 2008 financial results do not yet fully portray the impact of the global economic crisis, as we note:

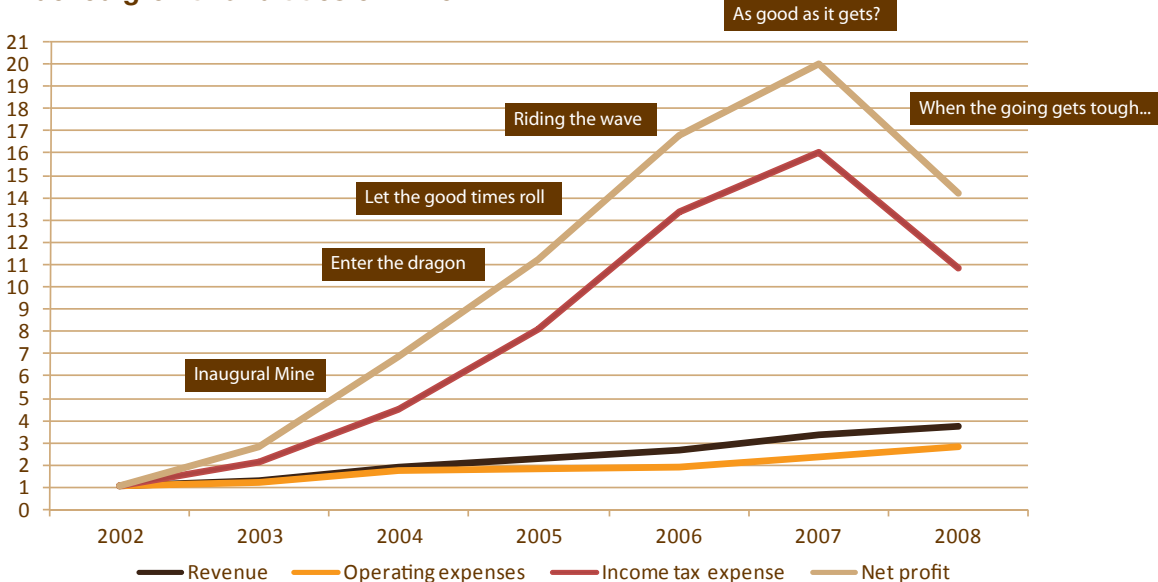
- Revenue in 2008 is 3.7 times that of 2002;
- The Top 40 reported robust net profit for 2008 of \$57 billion – the first decrease since the start of our analysis. This 28% reduction returns net profit to the levels recorded in 2005/6. Net profit remains well above the 2002-2007 average of \$42 billion;
- Operating costs continue to rise at a greater speed than revenue, further eroding margins. Costs continue the upward trend of the past six years with the current rise consistent with the 19% annual average; and

- Adjusted EBITDA increased to a record \$141 billion, seven times the result achieved in 2002. Higher costs eroded the percentage growth in EBITDA to the lowest levels experienced.

### As good as it gets?

Over the years in which PricewaterhouseCoopers has produced its Mine publication, we have witnessed the industry reaping the rewards of the commodity boom as illustrated in the income statement metrics. Our publications have highlighted a number of the key messages throughout this period. In 2009, what will happen when the going gets tough?

### Indexed growth and titles of Mine



### Cash flow

- In 2008 operating cash flows broke the \$100 billion barrier and were almost five times the 2002 level. However, the industry continues to spend its funds with almost all operating cash flows generated over the seven-year period matched by outflows in investing activities;
- In aggregate \$380 billion has been spent on investing activities by the Top 40 since 2002;
- Despite plant and equipment being at its highest level, the increase of 8% in the year is the lowest since 2002 (average of 23% p.a.). A significant part of this decrease results from impairment and reflects the high levels of M&A activity over the six years to 2007;

- Total assets are more than 3.5 times those reported in 2002 fuelled by acquisitions and expansion capital spending during the boom times. Total liabilities have increased 3.3 times to fund the growth; and
- Shareholders equity experienced only a small increase in 2008 – 3% growth versus an average 30% increase over the other reported years. Share issues and positive retained earnings were offset by significant negative fair value and other reserve movement primarily relating to currency translations from functional to presentation currencies. Total equity in 2008 is 3.8 times larger than total equity in 2002, representing a trend of investment in the mining industry, particularly in light of the number of share buy-back programmes.

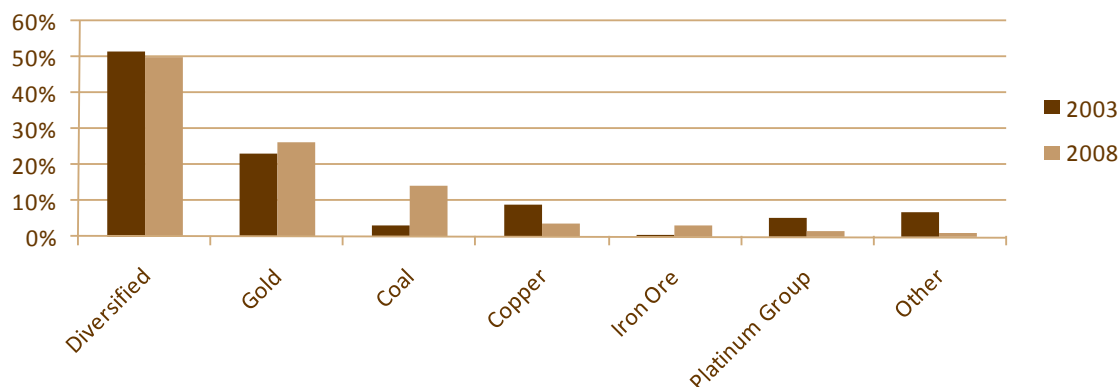
## 04 Seven-year trends 2002-2008

### 'Mix and match'

There has been limited change from 2007 in the market capitalisation by geographic listing and commodity, with the exception of gold companies who saw smaller declines in their market capitalisation (20% versus 62% industry average).

The overall increase in the market capitalisation of those companies included in the Top 40 in both 2003 and 2008 has been 82% over the seven year period. Of these 25 companies, only four have a 2008 year-end market capitalisation below that of their 2003 level. Interestingly, the same analysis using 2007 market capitalisations shows a 327% growth since 2003.

### Market capitalisation by commodity 2003 compared to 2008



### Decline in market capitalisation: impact on long-term investors

There has been significant focus on the impact of the market downturn on individual investors and their long-term savings. How have investors in large mining companies fared?

Based on a portfolio of investing \$1 in each of the Top 5 mining companies in 2003, an individual investor would have seen 119% capital growth in their portfolio value (excluding

dividends) by 31 December 2008 - not necessarily the catastrophic view of the industry portrayed recently. In addition, shareholders have received regular dividends and share buy-backs over the period, increasing their return.

However, the return is less than the 307% that would have been achieved if the portfolio had been disposed on 31 December 2007.



# 04 Seven-year trends 2002-2008

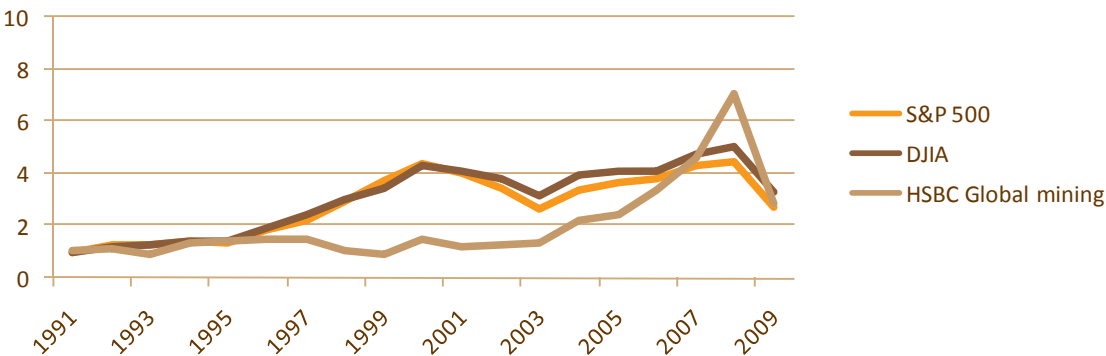
## Industry Performance – exacerbating the peaks and troughs

2008 has seen both the HSBC Global Mining Index and the wider market indices fall below levels experienced at 1 January 2006. Investors have felt double the pain as not only have share prices slumped, but many companies have either reduced or cut their dividends entirely in an effort to conserve cash.

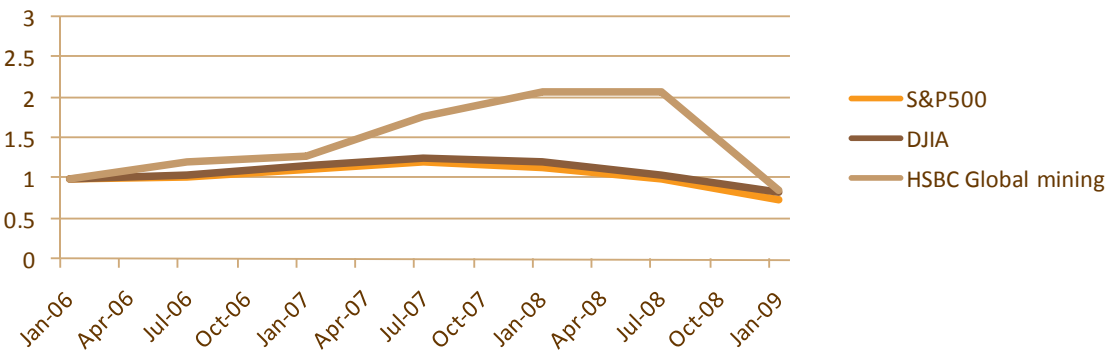
The HSBC Global Mining Index underperformed against the S&P 500 and the Dow Jones Indices from 1991 until 2003. From 2004 through to 2008 the mining boom saw the mining index outperform and indeed surge ahead in 2007.

Following the collapse of Lehman Brothers in September 2008, all indices have fallen sharply. However, the HSBC Global Mining Index has fallen significantly bringing the overall return back in line with wider industry benchmarks. It will be interesting to see which index rebounds first and when.

Global indices (January 1991 = 1)



Global indices (January 2006 = 1)



# A view from around

In the following pages we throw a spotlight on some of the issues facing the mining industry during the downturn, along with some innovative responses.

In addition, and whilst the focus of Mine is the financial data reported by the Top 40 mining companies, the space in Annual Reports dedicated to non financial data has increased significantly in recent years as companies seek to explain their vision, performance and the plethora of information that diverse stakeholders now demand. Approaches vary, as does the degree of information provided, however, with a few exceptions, we consider companies could do more to explain their strategies, identify the risks to its execution and how they manage these risks, and the factors relevant to the sustainability of their operations.

The financial reporting world is getting smaller, as IFRS is adopted by more countries. It is surprising that one of the biggest challenges faced by the PricewaterhouseCoopers Mine team was collecting data on some of the information that we view are key to the mining industry. In particular analyses of costs, reserve information, tax and contributions to local communities were hardest to source and most inconsistently reported.

In the following pages we also highlight an area where mining companies could consider increasing their disclosures, the potential long-term risk the industry faces as pressure to reduce costs impact the sustainable development agenda and one of the risks that is inconsistently covered in annual reports.







# Rewarding talent in the downturn— Back to basics?

Shareholder backlash against perceived excessive executive remuneration and claims of rewarding failure has extended across all industries, including the mining sector. Following the collapse of global share prices, boardrooms are now focussed on the implications for executive pay and how to reward talent in a downturn.

Executives within the mining industry have benefited from significant increases in their total compensation during the boom years; companies justified such payouts as the competitive cost of retaining highly sought-after skills in difficult locations. In the current environment, companies are making more realistic judgements about the risk of losing key people; however, the retention of scarce mining skills continues to be a challenge.

There is also a strong expectation from shareholders (and indeed the public) that executives should now see their realised compensation fall to reflect declines in future profits and share prices. But some companies argue that motivating executives to deliver in a bear market is harder to do than in the good times, and therefore performance (albeit results may be lower than last year) still warrants a similar bonus.

## How are mining companies responding to the reward challenges facing them?

PwC has recently worked with a number of global mining companies to address these challenges. Some of the company responses so far have included:

- The balance between short-term and long-term incentives should be re-examined. Annual bonuses provide a line-of-sight to key business priorities, and are generally considered to be more motivating than long term incentives. It is considered easier to set stretching, but reasonable annual targets than long-term targets, and the immediacy of reward increases the value of the bonus in employee's eyes.

While an annual bonus may provide more motivational 'bang for buck' than participating in long-term incentives, it may be unpopular with shareholders. A solution could be to defer part of the increased bonus into shares over the long term to ensure accountability and sustainability of short-term performance.

- Equity-based long-term incentives may provide some shareholder alignment and retention but they tend to be

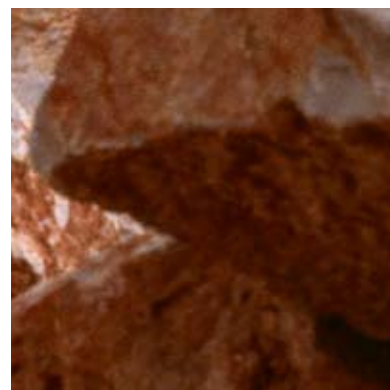
complex; provide no line-of-sight; typically do not payout for average performance, creating a 'feast or famine' incentive; and employees simply do not value shares paid tomorrow as much as cash paid today.

In response, some companies have graduated long term incentive plan payments over a wider range of performance so that average performance receives some recognition and companies do not receive superior rewards just for being volatile (a perennial problem for mining companies).

We are also seeing companies place less emphasis on using relative Total Shareholder Return and instead use absolute operational and financial efficiency metrics that are relevant to the company and within the executives' control, such as cost savings, production efficiency, cash flow, return on capital employed and economic profit.

- For executives below the shareholder disclosure radar, there is a trend towards granting more modest share awards, which are subject to continued employment only,





and dispensing with highly-leveraged plans that have complex and difficult performance conditions. Under this approach, the share award is at least worth something, even if the share price performance is lower than the boom time, thereby enhancing the retention value and shareholder alignment of the award. In some cases, the size of award granted has been linked to the individual's performance rating and/or talent assessment in the year.

- Some, but not many, companies have lowered the long-term incentive performance targets for future (and in a few cases, past) awards. There has also been some evidence of the use of one-off retention plans to plug the 'gap' left by long-term incentives that are unlikely to vest. However, these actions may simply add to shareholder concerns about the tenuous link between pay and performance.

Executive compensation has become increasingly complex over

the last five years, primarily in response to corporate governance demands for stretching targets, incentives only paying for out-performance, no opportunity to retest performance, and a distrust of discretion. These satisfy the rules but have resulted in growing complexity as companies seek workarounds to the governance constraints. Simpler and more effective compensation packages exist and one positive consequence of the downturn could be that it will encourage mining companies to go back to basics on their compensation design.







# Investing in the downturn

—best placed regardless of the ‘shape’ of the recession

**Many economists and industry participants agree that investing in resources during a downturn has the potential to generate significant value as asset prices will be lower relative to commodity prices. Nonetheless, few companies and investors apply this rationale as investing during a downturn requires a different investment mindset. Most investments in capital intensive industries will require a positive economic environment, which is why investment is heavily cut back where bad news is the norm.**

Asset prices during the present downturn have again presented greater volatility relative to commodities

prices. As shown below, the Dow Jones Mining & Metals Index (a proxy for asset prices) has come down 64% since its peak in Q2 last year, while the S&P Goldman Sachs Commodity Index is down 50% from its peak in July last year. The financial crisis has made funding options very scarce or expensive for those that would dare to acquire assets at bargain prices.

## **Balancing a benign long-term outlook with an extremely uncertain short term**

Most industry observers still believe that the industrialisation and urbanisation processes in China, India and other emerging countries are the key to the underlying long-term demand for commodities.

Percentage Value



Weekly Prices: 15-May-2004 - 15-May-2009

Reuters Investor





Indeed, China still targets 8% GDP growth in 2009. No one is expecting China to halt its economic development. This theory is easily sustained by the very low per capita consumption levels of energy, steel and copper of these countries. Despite China's size and role in consumption growth in recent years, it is worth noting that demand in nominal terms is still dominated by North America, Europe and Japan, whose economies will bounce back at some point.

Despite the long-term fundamentals remaining strong, the short to medium-term outlook is much more uncertain. Economists will point out that there are two different scenarios for this recession: an unlikely rapid

recovery with no more than three quarters of negative output ('V' shape) and a more likely delayed recovery ('U' shape) – indeed some even mention the possibility a long depression ('L' shape).

However, in the context of mining, the sheer scale of supply side response (cuts in production and project delays), combined with a decisive recovery package in major economies, means that the chance of a faster than expected recovery remains a possibility.

## Fraud in a downturn— Risky Business

Many of the frauds that emerged in 2009 will have begun some years earlier with the economic downturn acting as a catalyst in the detection of wrongdoing. The exaggerated peaks and troughs of the mining sector leaves the industry open to potentially significant frauds which may come to light as the boom time tide recedes.

A perfect storm of incentive, opportunity and ability of individuals to rationalise fraudulent behaviors exists in a downturn and leaves the industry potentially exposed.

Given the circumstances management should question whether they have the controls, information, training, and systems to not only detect but also to prevent fraud occurring.





# Flexibility in a downturn

## – Short term capex control versus long term growth

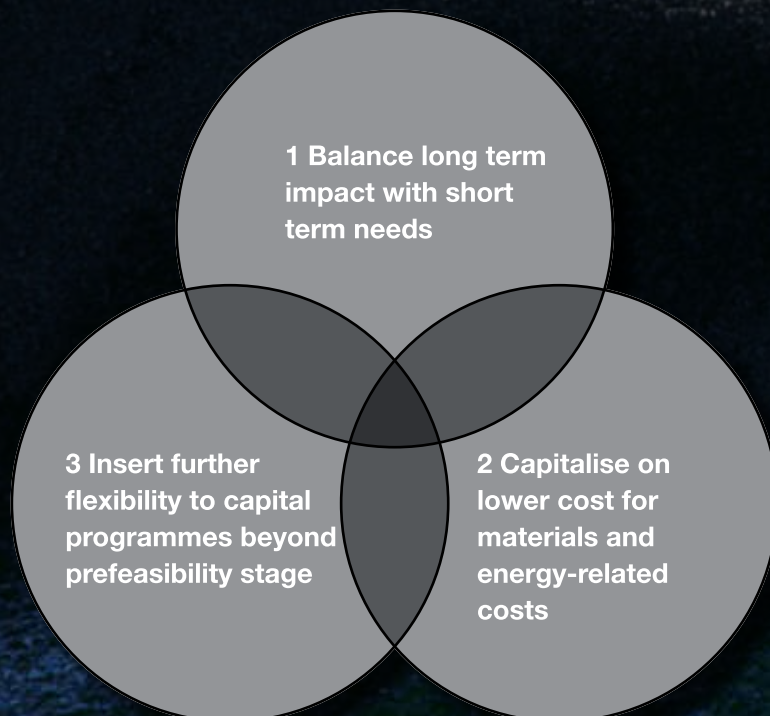
Despite the collapse in commodity prices, we consider that in the longer term the key demand and supply drivers that underpinned the last boom remain intact. However, from the perspective of mining executives managing multi-billion dollar capital expenditure programmes, this inconsistency between long term outlook and short term uncertainty creates a particularly difficult challenge given the inherent inflexibility associated with capital deployment. From the time a project is finally approved to the time the first tonne of material reaches the market a significant period of time may have elapsed.

The recent spate of major capex reductions and deferrals announced by companies as they seek to manage the short-term in the downturn may actually leave these companies exposed to

output shortages and limited growth options as conditions improve in the medium term. In addition, the requirement for Western companies to report quarterly information to the market exacerbates the pressure to deliver short-term solutions which could be at odds to the long-term nature of the industry. Accordingly, the industry must balance the risk of short-term reductions in capital expenditures against the potential financial and operational distress that could occur due to the considerable investment required to fund the capital pipelines that will be required when prices rebound.

### **The way forward: inserting greater flexibility in capital project strategy**

Although many mining executives may not have the luxury to plan for the long term as the pressure on short term cash generation and conservation becomes greater, there are still opportunities to maintain and secure value in a downturn.





# opportunities

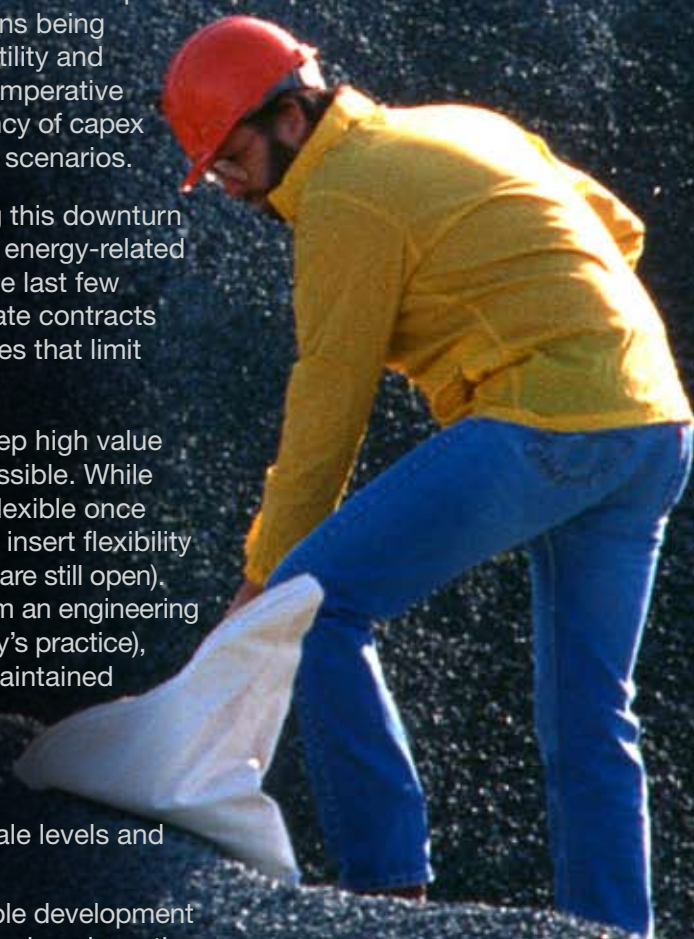
The first potential area for improvement is to step back from the day-to-day crisis management and balance strategic decisions, such as capital expenditure, with an understanding of the long term options being impacted. This means looking beyond the short term volatility and being able to isolate the market noise. In this regard, it is imperative companies strengthen and enhance the scope and frequency of capex reviews, stress testing such plans under different industry scenarios.

The second area of weakness for many companies during this downturn has been their inability to capitalise on the lower prices of energy-related costs and materials to reverse capital inflation trends in the last few years. There is a great opportunity to review and renegotiate contracts but, more importantly, to insert flexible budgeting structures that limit increases, but absorb price reductions quickly.

Lastly, there is an opportunity for mining companies to keep high value capital projects alive by inserting as much flexibility as possible. While the industry's environment makes capital projects very inflexible once the "go-ahead" has been given, there are opportunities to insert flexibility beyond the prefeasibility stage (where development options are still open). One of the greatest challenges in this process is moving from an engineering approach that narrows options as progress is made (industry's practice), to a fully multidisciplinary approach where optionality is maintained along the later stages of development and during the construction stage. Examples of how companies can create flexibility include:

- Modularity and scalability: exploring further different scale levels and modular development options;
- Multiple project paths: designing and developing multiple development plans, so the project team is ready to increase speed or slow down the project in line with market developments; and
- Flexible contracts with contractors and suppliers so prices, tariffs, volumes and scope of services are changeable within known rules and costs (although that flexibility may work against the company if supply costs go back up).

The speed and severity of the current downturn took most in the world by surprise. While speculation is natural, it is unlikely many companies will be able to pinpoint precisely when conditions will improve. In such a scenario the benefit of being able to quickly respond to market signals by keeping options flexible through the cycle could be a key differentiator in long term value creation.







# Total Tax Contribution

Last year we introduced the concept of PwC's Total Tax Contribution ('TTC') and how it can be used to provide a more complete understanding of a company's real tax contribution to governments. Mining companies are particularly in the spotlight in terms of how much they put back into the local community and their approach to the corporate social responsibility agenda. TTC is a good way of broadening the debate, considering all the taxes and payments companies make, as a fairer way of measuring their economic contribution. TTC also provides companies with a full picture of the impact of all taxes on business operations which, particularly in times of economic crisis, must be essential management information.

PwC have carried out a study of a number of the largest listed mining companies worldwide using the PwC TTC Framework. TTC provides a standardised methodology for companies to measure and communicate all the taxes and contributions that they pay. 14 of the largest listed mining companies provided data on their largest countries of operations in the year ended 31 December 2007 or equivalent period. The anonymous and collated results have now been published and are generating a great deal of interest worldwide.

The results of the study show that these companies make a very large economic contribution in the countries where they have operations. The average total contribution to government in a single country reported in the study is US\$743m. Considering that many of these mining companies operate in a number of territories, this contribution can add up to a considerable amount.

Mining companies pay many other taxes and contributions in addition to corporate income tax. Our study shows that on average in any country, corporate income tax is less than half (48%) of all taxes and contributions that mining companies bear. Of the 52% of non-income taxes borne, 29% of the total, on average, are additional taxes and contributions that are specific to the mining sector and effectively represent payment for extracting natural indigenous resources. These percentages differ widely by country and provide interesting insights and comparisons of the tax environments in the major mining countries. In addition some of these taxes are not linked to profitability, accordingly in a period of depressed prices and increased costs the percentages could increase significantly.

When comparing the results with the cross industry TTC studies that we have done in a number of countries, mining companies pay a higher percentage (12.5%) in taxes and other contributions borne to government in relation to the size of their turnover.



Another significant part of the contribution of mining companies is in the large workforce that they employ. The study results show that on average, per employee, mining companies pay US\$14,875 in employment taxes. It is also worth noting that many mining companies rely heavily on subcontractors, this study did not collect any data on these wider impacts but it could be a very interesting addition to our work in the future.

As far as we are aware, this study is the first of its kind to provide in-depth insights from a global perspective into the contributions of mining companies. Each company participating in the study has received a report on their total contribution to government, country by country. In PwC's view every company needs to have access to this information on a regular basis for all its operating markets. It is essential management information and can help to inform governments and other key stakeholders. Anglo American and Kazakhmys are examples of companies that are already using TTC to communicate their contributions through their corporate sustainability reports and annual accounts. Total Tax Contribution data can also be particularly relevant to governments looking to review mining concessions and for mining companies which are looking to explore and invest in any particular country.

In times such as these, especially where governments are heavily reliant on revenues from the mining sector, there is even more of a need for a greater understanding of the contributions of these companies. As profits decrease, corporate income tax is set to decrease, but many of these other taxes and payments to government are not linked to profitability and, therefore, become increasingly important. Governments may respond to the current economic climate by adjusting mining tax and/or



royalty rates applicable to the mining sector to encourage inward investment (or continued investment) into their countries. To protect its key copper mining industry from low prices, the government of Zambia, for example, recently approved the abolition of their 25% windfall tax, cut customs duties for heavy fuel oils from 30% to 15% and removed customs duties on copper powder, copper flakes and copper blisters. Zambia's Finance Minister said the actions were to safeguard the country's economic lifeblood at a time when commodity prices had fallen. Zambia depends on copper and cobalt for more than 63% of government revenues.

We hope to repeat the study and collect data for the period ending 31 December 2008. In the meantime, if you would like any further information on the results of the study or on how you might use TTC please contact us.

# Sustainable Development

—a long-term investment in a world with short-term expectations

During a rising commodity cycle maintaining investment in and focus on sustainable development ('SD') objectives was relatively easy. In the current downturn, investment in a long-term SD strategy that does not obviously provide a short-term, bottom line impact is more of a challenge. Companies who are tempted to rationalise investment in SD as part of a wider cost reduction programme could expose themselves to greater risk.

## **Maintaining the "health" of health, safety and environment management systems**

Reductions in headcount across the industry will, in many cases, mean management will be required to 'do more with less'. The focus on short-term financial performance may also increase the risk of operations taking greater health, safety and environment risks to achieve financial targets.

Maintaining robust policies and procedures and investing in management systems that monitor compliance in a changing environment will be challenging with fewer resources.

## **Managing SD risks through the supply chain**

Opportunities to reduce operating costs will no doubt extend to the supply chain. Similarly, suppliers and contractors increasingly desperate to survive in a shrinking economy may themselves take on greater risk when tendering for new contracts at lower prices.

A contractor, for example may be tempted to defer maintenance on machinery in order to keep costs down and retain a contract with a major customer. This could increase the risk of equipment failure and resulting environmental or social incidents.

# Sustainable Development (cont'd)

## Managing the impact on communities

Reductions in expenditure will invariably have an impact on the communities in which a mining company operates. Often, a reduction in investment may be accompanied by a backlash within the affected communities and a questioning of the authenticity of previous commitments actually, or perceived to have been, made by the company.

The extent to which the long-term future of the asset is impacted by such a backlash will depend in part on the history that the company has in engaging with and contributing to the community as well as how it responds to their grievances.

## Achieving public targets and commitments

Commitments and public targets set by mining companies prior to the downturn would have, in many instances, been made on a base set of business assumptions including but not limited to easy access to capital where required.

Stress testing SD targets to different economic and business assumptions is rarely performed in the same way that it is performed for financial targets and capital structures. As a consequence the impact of the global economic crisis on achievement of these targets may not be readily apparent.

The impact on mining companies could result in the need to publically recalibrate their existing targets (either upwards or downwards). For those companies that choose to adopt this option, it will provide stakeholders with an interesting insight into the relative priority ascribed by the company to SD.

Actions that Boards should consider taking to mitigate the risks include the following:

### Understand the appetite for risk

Is there a common understanding within the organisation around how much, and the nature of, the risk that is acceptable in relation to achieving SD objectives?

For example, a company may have a stated target of reducing freshwater use by 10% over 5 years but the short and long-term implications of not achieving the target may not be considered significant for the company. As such it will be willing to allocate fewer resources towards the achievement of the target and accept greater risk that it is not ultimately achieved.

On the other-hand, the company may be operating in a water scarce area where its ability to reduce its freshwater use is a fundamental issue to the local community. Higher levels of freshwater use may therefore put at risk its license to operate in the community and as such there is a lower appetite for not achieving the target.

Ensuring that there is a common understanding of the company's appetite for risk in relation to key SD objectives between the Board and Management will

prove vital in ensuring that resource allocation decisions balance short-term needs and long-term drivers of shareholder value.

### Consider the impact on SD goals when selecting cost reduction options

A company may choose to make cost reduction decisions that result in adverse SD outcomes in the short or medium term (where the company's going concern is at risk); however it should ensure that any decision is based on a full appreciation of the different options and their implications.

### Stakeholder trust is more often gained by the actions taken during tough times rather than good times.

When companies have to make tough decisions, the ability to engage (and be seen to be engaged) with stakeholders is crucial.

In particular, when a company is unable to find a compromise with stakeholders, the ability to be transparent regarding the rationale for decisions and to make this message believable is a critical element of long-term success.

Whilst time will tell how much patience stakeholders have with the industry during these tough times, what is clear is that the symbiotic relationship between long-term success and a robust SD strategy remains. The extent to which a short-term pressure undermines this relationship, and the way this pressure is publically managed will no doubt add to management's already busy agenda.





# Thirsty work



According to the International Monetary Fund, more than half of the world's available freshwater is already in use and, by some estimates; it could increase to as much as 90% by 2025.<sup>1</sup>

Water is essential to mining and metals production and enables energy production. Mining and metals activities can require significant volumes of water for processing and cooling. Without access to high volumes of fresh water, neither of these processes, critical to production, can take place. In addition, the by-product of many mining processes is water, which raises water quality issues for the surrounding environment. The water in the energy supply chain, required for cooling water or hydro-electric power, should not be underestimated as a potential threat to production.



Accordingly, the industry faces three significant types of risk with regard to water: physical, regulatory and reputational.

- Physical risks: reduced water supply could interrupt production due to insufficient process water. Equally, a failure to meet discharge requirements for wastewater or any major incident (e.g. dam failure, leaching into groundwater) could also close a plant;
- Regulatory risks: potential for higher prices for water or fewer abstraction licenses; and
- Reputational risks: conflict with local communities over access to water and concerns raised by shareholders. For example, gold mining operations have been subject to campaigns over extraction of glacial waters in Chile and from aquifers in water-stressed Nevada<sup>2</sup>, demonstrating it is not just an issue in the developing world.

Despite the risks, this trend also presents significant opportunities. Companies that develop efficient solutions and commodities or products with a low water footprint will be increasingly in demand. But to do so, water needs to be treated in its own unique way.

## Is water another carbon?

Despite water beginning to be seen as significant an issue as carbon by some companies, it cannot be treated in the same way. Whereas carbon can be traded in certain markets, water cannot readily be transferred between basins and therefore solutions must be sought within the region.

Some companies are considering concepts such as 'water neutrality' and 'water trading', but remain at the concept stage. Apart from water being more of a local issue than carbon, it is also potentially a more serious issue. Loss of water supply is a 'show-stopper' for mining operations, which is difficult to overcome at short notice.<sup>3</sup>

## Where's the catch?

Local factors make it difficult to manage water at a global level. An operation may be able to happily co-exist in a catchment area with plentiful resources and limited other water consumers; yet the same operation would have significant environmental and social impacts in another more sensitive location. Traditionally, water shortages have been tackled with an engineering solution to increase supply or improve efficiency, however a technological approach may not be the most cost effective or sustainable solution.



The private sector is now looking at improving catchment management, through working with local farmers or landowners to maintain water levels and introduce more efficient agricultural practices. This can work out more economical than a major capital investment in upgrading facilities.

### A corporate or a local issue?

While solutions for water access problems may not be delivered at a corporate level, a global approach to risk assessments should be adopted across operations, with key questions being raised before investments are approved. Companies should consider the following at site-level:

- Is there adequate information on the key sources of water demand and supply in the region?
- Have water risk assessments been conducted at a site level?
- How will climate change affect the watershed and is there an adaptation strategy?
- Does someone have clear responsibility for water issues?
- Has the right balance between managing water and energy costs been achieved?
- Has there been appropriate engagement with the right stakeholders on water issues?
- How would future water shortages affect production or the value of asset?

### Reporting gaps

Mining companies are already developing strategies to manage water risks and reporting on their performance in some areas, including:<sup>4</sup>

- Corporate water footprints
- Levels of water recycling
- Water intensity of products
- Water balance at site level
- Site-specific water management plans and efficiency targets
- Stakeholder engagement programmes and research
- Case studies on water partnerships

While information on water use is essential for managing operations, there is a trend emerging for a greater focus on strategy and risks, rather than simply disclosing overall levels of consumption and recycling without any local context. In February 2009, The US CERES coalition of responsible investors published a report with the Pacific Institute outlining the growing risks from water scarcity facing various sectors, including mining.

Greater disclosure is likely to be requested from mining companies regarding assessment of water risks and the strategy for managing them, given the potential impacts water could have on the industry. Importantly, as the race to secure water supplies heats up, there will be benefits for those who have developed their understanding about the water catchments they are operating in, and identifying the most efficient solutions.



<sup>1</sup> Business for Social Responsibility & the Pacific Institute, (2007), At the Crest of a Wave: A Proactive Approach to Corporate Water Strategy

<sup>2</sup> Chilean Copper Commission, (2008), Water and Energy Management in the North of Chile:

[http://www.ctwmi.com/ppt/s2/Ana\\_Zuniga\\_Cochilco.pdf](http://www.ctwmi.com/ppt/s2/Ana_Zuniga_Cochilco.pdf) <http://www.miningwatch.ca/index.php?/Barrick> <http://www.protestbarrick.net/article.php?list=type&type=5> <http://www.barrick.com/CorporateResponsibility/KeyTopics/PascuaLama/PascuaLamaQA/default.aspx> <http://www.barrick.com/CorporateResponsibility/KeyTopics/WesternShoshone/default.aspx>

<sup>3</sup> World Economic Forum, (2009), Energy Vision Update 2009: Thirst Energy: Water and Energy in the 21st Century  
WBCSD (2009) Water, Energy and Climate Change

<sup>4</sup> The Pacific Institute has conducted two corporate water reporting surveys with a breakdown by sector in 2007 & more recently for the CEO Water Mandate in 2009. [http://www.pacinst.org/reports/water\\_reporting/corporate\\_reporting\\_on\\_water.pdf](http://www.pacinst.org/reports/water_reporting/corporate_reporting_on_water.pdf) [http://www.pacinst.org/reports/water\\_disclosure/report.pdf](http://www.pacinst.org/reports/water_disclosure/report.pdf)

Corporate environmental reporting of Anglo American, BHP Billiton and Rio Tinto



06

# Other information



## 06 Other information

### Glossary

<b>Current ratio</b>	Current assets / Current liabilities
<b>EBITDA</b>	Earnings before interest, tax, depreciation and amortisation.
<b>Adjusted EBITDA</b>	EBITDA adjusted to exclude impairment charges. A measure that is close to the underlying cash earning stream of the company before servicing the capital base.
<b>PBIT</b>	Profit before interest and tax
<b>PBT</b>	Profit before tax
<b>EBITDA margin</b>	EBITDA / Revenue
<b>Adjusted EBITDA margin</b>	Adjusted EBITDA / Revenue
<b>Gearing ratio</b>	Net borrowings / Net borrowings plus shareholders' equity
<b>JORC</b>	Joint Ore Reserves Committee
<b>Market capitalisation</b>	The market value of the equity of a company, calculated as the share price multiplied by the number of shares outstanding
<b>Net profit margin</b>	Net profit / Revenue
<b>Return on capital employed ("ROCE")</b>	Net profit / Average property plant and equipment plus current assets less current liabilities
<b>Return on equity ("ROE")</b>	Net profit / Average shareholders' equity
<b>SAMREC</b>	South African Code for Reporting of Mineral Resources
<b>SEC-IG7</b>	Security Exchange Commission's Industry Guide 7
<b>Top 4</b>	BHP Billiton, Vale, China Shenhua, and Rio Tinto
<b>Top 40</b>	40 of the world's largest mining companies by market capitalisation
<b>TSR</b>	Total shareholder return: as measured by dividends and capital gain in a given period over the opening share price.



## 06 Other information

### Top 40 companies analysed

Company	Country **	Year end
African Rainbow Minerals Limited (ARM) (*)	South Africa	30-Jun
Agnico-Eagle Mines Limited (*)	Canada	31-Dec
Anglo American plc	UK	31-Dec
AngloGold Ashanti Limited	South Africa	31-Dec
Antofagasta plc	UK	31-Dec
Arch Coal Inc. (*)	United States	31-Dec
Barrick Gold Corporation	Canada	31-Dec
BHP Billiton Limited / BHP Billiton plc	Australia / UK	30-Jun
Cameco Corporation	Canada	31-Dec
China Coal Energy Limited	China / Hong Kong	31-Dec
China Shenhua Energy Company Limited	China / Hong Kong	31-Dec
Cliffs Natural Resources Inc. (*)	United States	31-Dec
Companhia Vale do Rio Doce (Vale)	Brasil	31-Dec
Compania de Minas Buenaventura SA	Peru	31-Dec
Consol Energy Inc.	United States	31-Dec
Eldorado Gold Corporation (*)	Canada	31-Dec
Eramet SA (*)	France	31-Dec
Eurasian Natural Resources Corporation PLC	UK	31-Dec
Exxaro Resources Limited (*)	South Africa	31-Dec
Fortescue Metals Group Limited	Australia	30-Jun
Freeport-McMoran Copper & Gold Inc	United States	31-Dec
Fresnillo plc (*)	UK	31-Dec
Gold Fields Limited	South Africa	30-Jun
Goldcorp Inc.	Canada	31-Dec
Grupo Mexico S.A. de CV (*)	Mexico	31-Dec
Harmony Gold Mining Company Limited (*)	South Africa	31-Dec
Impala Platinum Holdings Limited	South Africa	30-Jun
Industrias Penoles S.A.de CV (*)	Mexico	31-Dec
Kinross Gold Corporation	Canada	31-Dec
Lihir Gold Limited (*)	Australia / US	31-Dec
National Mineral Development Corporation Limited	India	31-Mar
Newcrest Mining Limited	Australia	30-Jun
Newmont Mining Corporation	United States	31-Dec
Peabody Energy Corporation	United States	31-Dec
Randgold Resources Limited (*)	UK	31-Dec
Rio Tinto plc / Rio Tinto Limited	UK / Australia	31-Dec
Teck Resources Limited	Canada	31-Dec
Vedanta Resources plc	UK	31-Dec
Xstrata plc	UK	31-Dec
Yamana Gold Inc.	Canada	31-Dec

(\*) Refers to companies which were not included in the prior year analysis.

(\*\*) Refers to the country of primary listing where the shares are publicly traded.

## 06 Other information

### **Explanatory notes for aggregated financial information**

We have analysed 40 of the largest mining companies by market capitalisation. Our analysis includes major companies in all parts of the world.

The results aggregated in this report have been sourced from the latest publicly available information, primarily annual reports and financial reports available to shareholders. Where 2008 information is unavailable at the time of preparing our analysis, these companies have been excluded. Companies have different year-ends and report under different accounting regimes, including International Financial Reporting Standards (IFRS), US Generally Accepted Accounting Practice (US GAAP), Canadian GAAP, and others.

Information has been aggregated for the financial years of individual companies and no adjustments have been made to take into account different reporting requirements and year-ends. As such, the financial information shown for 2008 covers reporting

periods from 1 April 2007 to 31 December 2008, with each company's results included for the 12-month financial reporting period that falls into this timeframe.

All figures in this publication are reported in US dollars, except when specifically stated. The results of companies that report in currencies other than the US dollar have been translated at the average US dollar exchange rate for the financial year, with balance sheet items translated at the closing US dollar exchange rate.

Some diversified companies undertake part of their activities outside the mining industry, such as the petroleum business of BHP Billiton and parts of the Rio Tinto aluminium business. No attempt has been made to exclude such non-mining activities from the aggregated financial information.

Entities that are controlled by others in the Top 40 and consolidated into their results have been excluded, even when minority stakes are listed.

## 06 Other information

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## 06 Other information

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PricewaterhouseCoopers ([www.pwc.com](http://www.pwc.com)) provides industry-focused assurance, tax and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 130,000 people in 148 countries work collaboratively using connected thinking to develop fresh perspectives and practical advice.

PricewaterhouseCoopers is a leading adviser to the global mining industry, working with a wide variety of explorers, producers and related service providers to ensure we meet the challenges of the global mining industry into the future.

Our strength in serving the global mining industry comes from our skills, our experience, and our seamless global network of dedicated professionals who focus their time on understanding the industry and working on solutions to mining industry issues.

For more information on this publication or how PricewaterhouseCoopers can assist you in managing value and reporting, please speak to your current PricewaterhouseCoopers contact or telephone/ e-mail the individuals below who will put you in contact with the right person.

**Visit our website: [www.pwc.com/mining](http://www.pwc.com/mining)**

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## 07 Other information

### Other PwC mining publications



#### Mining Deals\* 2008 Annual Review

##### Mergers and acquisitions activity in the global mining industry

The industry landscape is set to change dramatically. These changes are accompanying consolidation among all sizes of company and, in some parts of the world, vertical integration moves by metals and power companies are also shaping the sector.

We examine both the rationale behind the overall trends and look at the key individual deals. We look at the year under review, the context of the preceding two years, and ahead to the future direction of deal-making in the sector. We also highlight, in a series of deal dialogues throughout the report, some of the critical issues for companies engaging in deal activity within the sector. Drawing on our global experience as an adviser to mining industry M&A players, our commentary addresses all key markets in the sector.

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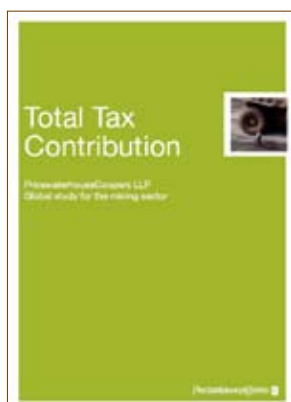
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#### Total Tax Contribution: Global study for the mining sector

The first ever Total Tax Contribution study for the global mining sector reveals the total taxes of fourteen of the world's largest mining companies, focusing on their largest operations in a variety of countries. The study was prepared by our London based Total tax contribution (TTC) group and is the first industry wide study our firm has prepared on a global basis for any industry.

The study will make the overall contribution of mining companies to the public finances of the countries where they operate much clearer. The results show that mining companies pay many other taxes and payments to government, as well as corporate income tax.

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#### Global Mine Bulletin Quarterly

A quarterly publication discussing trends and issues in the mining sector.

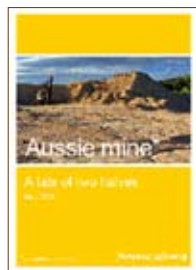
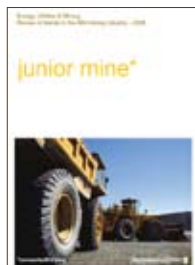
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## 07 Other information



### Junior Mine Series

Review of trends in the TSX-V mining industry / Review of trends in the AIM mining industry – 2008 / Aussie mine\* – A tale of two halves

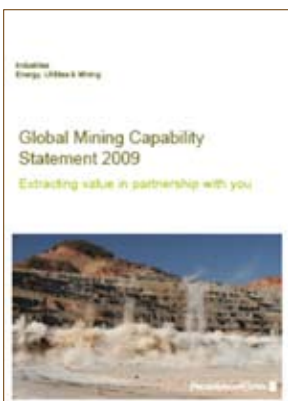
Our reviews of the Junior and mid-tier mining companies in Canada, the UK and Australia provide an overview of the financial performance, as well as, exploring key issues facing the industry.

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### Global Mining Capability Statement 2009

The mining industry is a truly global industry. Mineral deposits and mine developments are often in remote areas and host governments and other stakeholders often have stringent requirements for mining companies. These requirements on top of normal business challenges, such as commodity price movements, efficiency of operations, optimising taxes, environmental, health and safety, and community needs, ensure that mining is challenging for all industry participants. We have comprehensive resources to help mining companies understand and manage these challenges. Learn more from our Global Mining Capability Statement.

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### Financial Reporting in the Mining Industry

The mining industry is one of the world's most global industries, and many countries now require companies to prepare their financial statements in accordance with International Financial Reporting Standards (IFRS). Regulatory bodies in many other countries are converging national standards with IFRS. The move to adopt or harmonise with IFRS has advanced the transparency and comparability of financial statements around the world. This edition of 'Financial reporting in the mining industry' describes the financial reporting implications of IFRS across a number of areas selected for their particular relevance to the mining industry.

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