

Energy, Utilities & Mining

Mine

Back to the Boom...

Review of global trends in the mining industry—2010

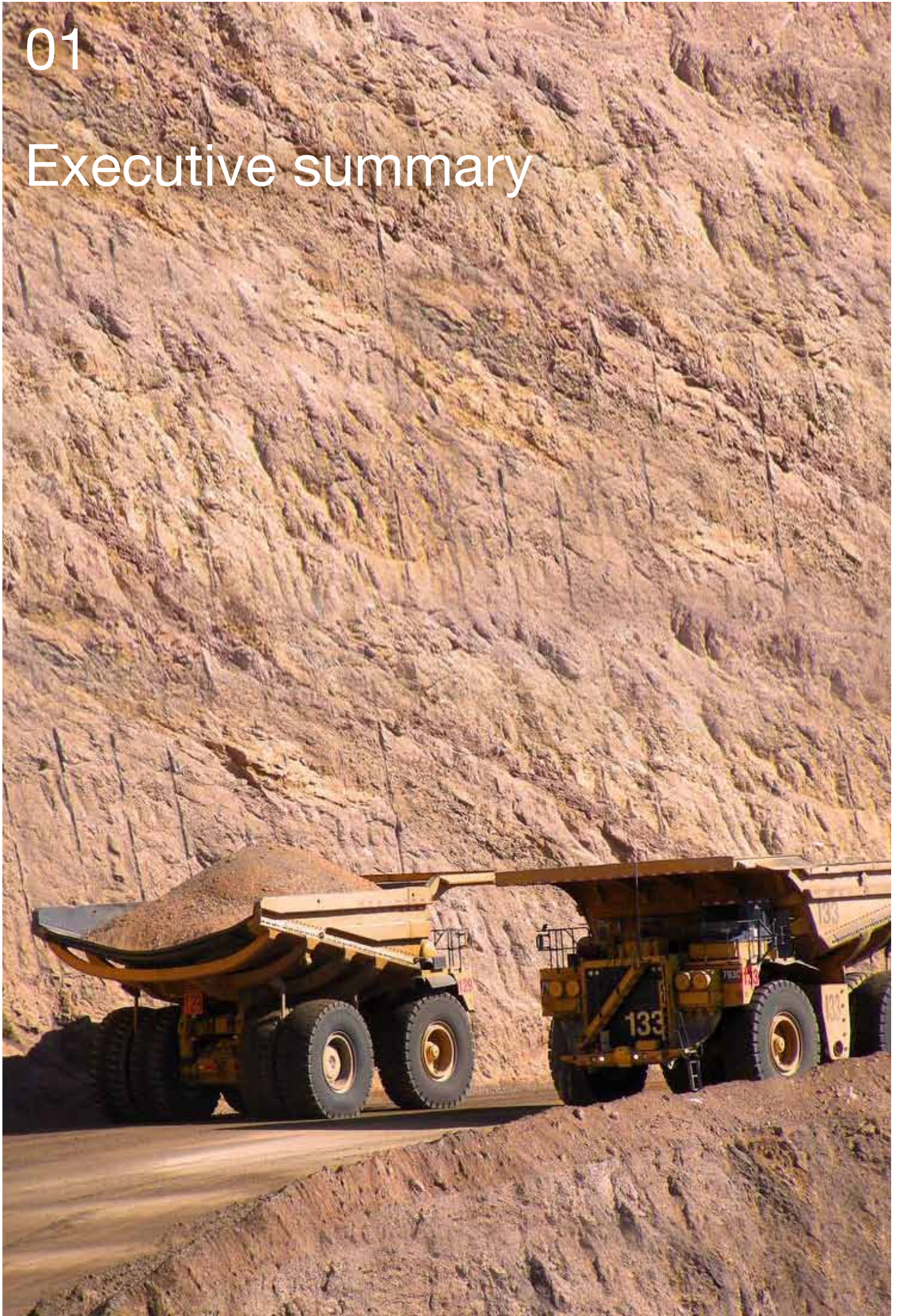


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Executive summary



01 | Executive summary

Welcome to PricewaterhouseCoopers' seventh 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 Top 40 mining companies by market capitalisation.

2009 certainly was a year of two halves. It began with commodity prices continuing to fall, tough price negotiations with customers and challenging market conditions. However, companies responded swiftly and decisively; funding was restructured, mines were closed and production cut as margins declined.

However, in contrast, the year ended with the market capitalisation of the Top 40 returning to the heights of 2007 and a cautious optimism returning to market releases. Was it Back to the Boom?

Despite the increase in market capitalisation, the aggregated financial results showed the impact of a challenging year on the Top 40 in 2009:

- Revenues declined 15% year-on-year against 2008
- Net profit was down 26%
- Cash flow from operations decreased 27%
- Net debt decreased by 21%

It is notable that through the global economic crisis none of the Top 40 companies were subject to bankruptcy or voluntary administration provisions. This was largely due to their ability to remove their debt overhang, strengthening commodity markets over the year and the positive impact of government stimulus packages around the world. Balance sheets were strengthened through a combined \$103 billion of debt and equity financing obtained by the Top 40.

On the other hand, there were no significant transactions completed during the year—pointing to a potential missed opportunity for those that may have had the available financial resources. It was a very short window of opportunity, but it was open.

While cash flow from operations decreased, the Top 40 still spent \$74 billion on investing activities in 2009. The vast majority of the spend was on plant and equipment as funds were channelled to existing projects, which had greater potential for a short-term impact on reserve replacement and production. However, despite approximately \$200 billion of capital expenditure over the past three years, production remained flat across most commodities, with companies shutting down higher cost operations in response to market conditions, and longer-term assets remaining under construction.

Exploration spend by the Top 40 declined significantly, not surprising given its discretionary nature. As reserve replacement becomes more challenging, the lack of spend on exploration poses the question—when and where will the next world-class mines be found?

The outlook expressed by industry leaders is more positive than in 2008, when tough decisions were required to steer through challenging times. In *View from the Top*, the CEOs point to strong fundamentals on the demand side supporting the next phase of the mining boom. They also express concern that governments facing challenging budget deficits will look to the mining industry as a source of additional taxation revenues—with the potential to kill the goose that lays the golden eggs. The Australian government recently announced a “Resources Super Profits Tax” and royalty increases have been flagged in several other jurisdictions. Mining and politics are intertwined, but the industry has recently moved even further up the political agenda, with focus on matters such as taxation, carbon and sovereign influence.

The recent volatility has inevitably brought a focus on risk. In *Stomaching the next Black Swan* we ask the question whether companies now understand the risks they face and whether they have the processes in place to respond to the type of unpredictability the market has experienced.

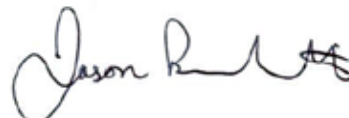
The industry continues its relentless focus on the safety and health of its workers. In reviewing the information published by mining companies, a key challenge is the lack of comparable data and significant inconsistency in the level of transparency—some companies providing no health and safety statistics while others provide full, detailed reports to the market.

After a hiatus, the future is looking bright again for the industry. Although significant short-term volatility remains—the 2009 results show there was a dip and there may well be other dips (such as the impact of the Sovereign Debt Contagion in Europe)—the long-term demand fundamentals will drive this cycle. However, it is essential that lessons from the past are learned and organisations are prepared for the inevitable new uncertainties, so that the industry can fully extract the benefits of being Back to the Boom!

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



Tim Goldsmith
Global Mining Leader
PricewaterhouseCoopers



Jason Burkitt
UK Mining Leader—Mine Project Leader
PricewaterhouseCoopers

02

Industry in perspective



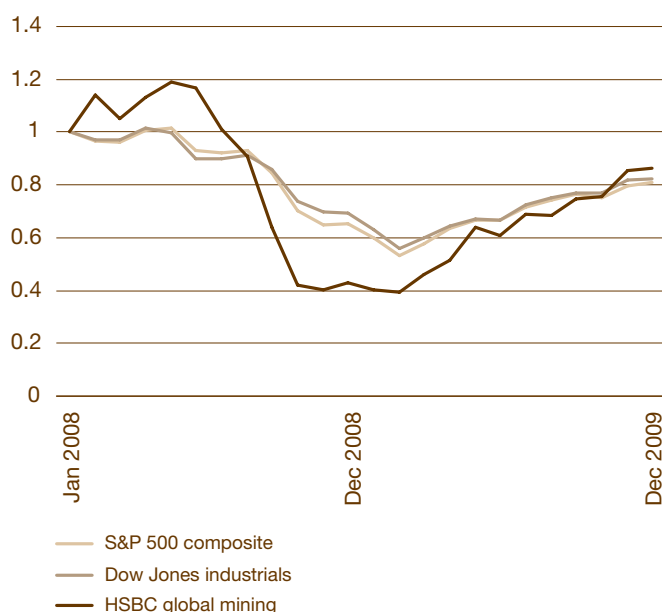
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Market cap rebound

In 2009 the global mining industry experienced rapid recovery of market capitalisation lost in 2008. The market capitalisation of the Top 40 increased an incredible 118%, or \$696 billion, reaching levels just short of the peak prior to the global financial crisis. The recovery has largely been driven by a sharp resurgence in commodity prices during the second half of 2009, the repair of damaged balance sheets, and an overall improved investment climate.

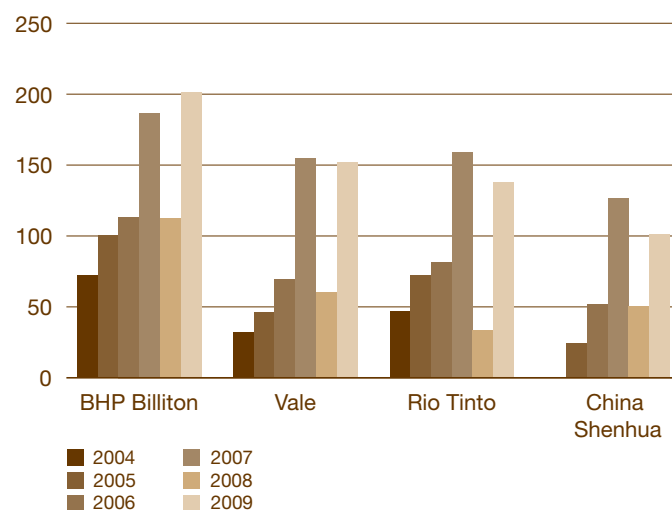
In comparison to the prior year, the market capitalisation cut-off for inclusion in the Top 40 has increased to levels similar to those seen in 2007, from \$2 billion in 2008 to around \$6.5 billion in 2009.

Global indices (January 2008 = 1)



Throughout the global financial crisis, the mining sector showed greater volatility than the broader market—rising higher in early 2008, but falling faster through the year to a deeper low point, as many speculative investors scrambled to close positions. Equally, it has gained momentum quicker than the rest of the market and, by year-end, had surged ahead as the industry moved Back to the Boom.

Top 4 market capitalisation (\$ billion)—31 December



Major movements

The volatility experienced during 2008 continued during 2009 and overall there were eight changes in the Top 40. These changes primarily took place at the bottom end of the Top 40, but also included movements within the Top 10.

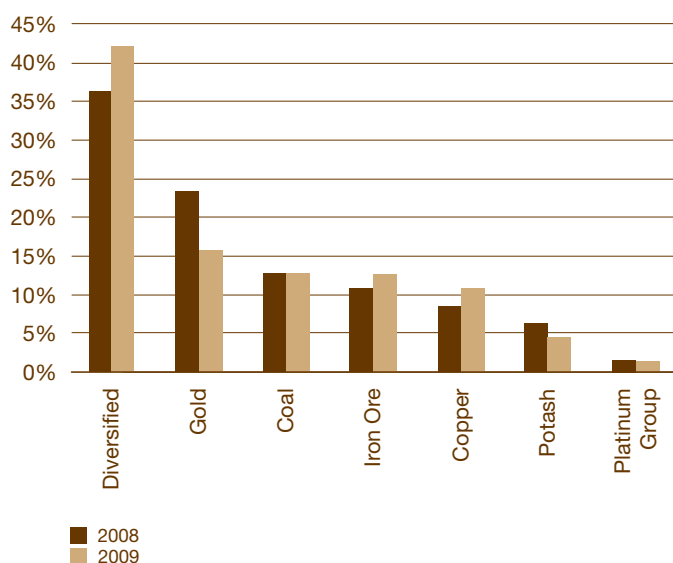
Changes in market capitalisation of the Top 40 varied widely, from a decrease of 37% to a staggering increase of 774%. Five of the Top 40 realised market capitalisation gains in excess of 500%, although these companies also took some of the hardest hits in 2008. Even the leading diversified majors experienced significant volatility, with fluctuations in the market capitalisation of the Top 4 ranging between 79% and 312% (Rio Tinto undertook an equity raising during the year). Such volatility is unusual given the Top 40 are the blue chip companies of the sector.



Gold continues to glitter

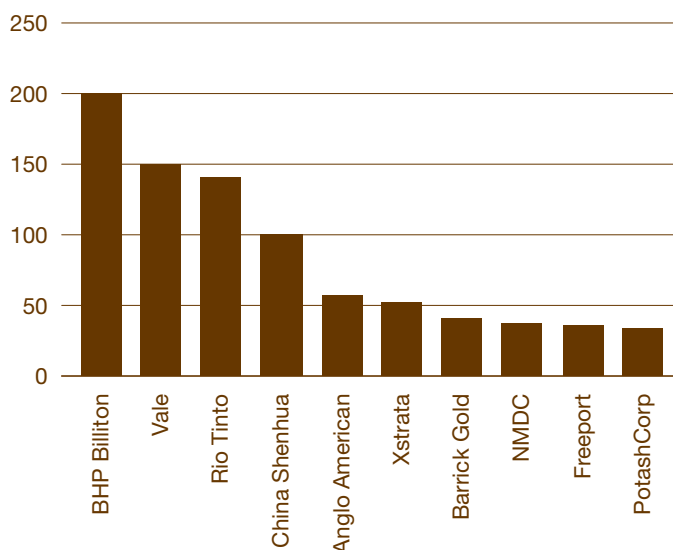
Gold companies showed their strength as a safe haven during the economic turmoil. During 2009 gold consistently traded at levels above \$1,000 per ounce and reached an all time high of \$1,214 per ounce in December. Although making up a much lower percentage of the overall market capitalisation of the Top 40 in 2009, the market capitalisation of gold companies increased by 47% or \$64 billion. This follows a lower decline than the wider industry in 2008, showing gold appears to be seen as a place of relative stability in troubled times.

Percentage of market capitalisation by commodity



The Top 40 remained dominated by the diversified miners, supported by investment in infrastructure development around the globe, numerous government stimulus packages, and continued infrastructure spending by the developing economies.

Top 10 market capitalisation (\$ billion)—31 December 2009



Changes to the Top 10 in 2009 were primarily due to a reduction in the number of gold companies as the share price of the diversified majors surged.

Repairing the balance sheet

Onerous debt levels resulting from acquisitions prior to the global financial crisis added enormous financial stress, with many balance sheets straining under the pressure. However, most Top 40 companies in this position successfully repaired their balance sheets and equity markets quickly rewarded these companies with a re-rating of their stock price.

Recovering markets brought with them significant opportunities and some of the Top 40 were able to capitalise on these, while others were forced to secure additional funding to refinance maturing debt. The Top 40 raised combined total gross proceeds of \$103 billion from various debt and equity transactions during the year. In all, the Top 40 used funding obtained to repay debt of approximately \$78 billion, leaving \$25 billion to be utilised for growth and capital expenditure funding. Some of the significant milestones included:

- Xstrata led the way with a rights issue during January 2009 and Xstrata and Rio Tinto

completed a combined \$21 billion of rights issues. Both deals were well supported by shareholders looking to secure additional investments at low prices. The proceeds were used to repay debt.

- Barrick demonstrated their confidence in future gold prices by completing \$6 billion of debt and equity offerings, which were utilised primarily to eliminate the group's gold hedge positions.
- Anglo American and Teck undertook \$9.9 billion of debt refinancing through bond transactions. Teck also completed a \$1.5 billion private equity placement to the Chinese sovereign wealth fund, China Investment Corporation, which was used primarily to repay debt.

In an effort to free up cash and focus on core activities, many of the Top 40 undertook sales of so called non-core assets. In particular, Rio Tinto completed \$6 billion of 'non-core' asset sales during 2009 and shortly after year-end reached a significant milestone by achieving its previously targeted goal of



Potash debuts

For 2009 we have included potash miners for the first time. Potash companies have historically been excluded on the basis that their secondary production and marketing were significant portions of the total business. Potash companies have drawn notice during 2009 as a commodity of interest for the diversified miners, particularly as the significance of their mineral development and extraction business grows. Two potash companies are included in the Top 40, assuming spots within the Top 15.

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\$10 billion in ‘non-core’ asset sale agreements. Companies were intent on conserving cash resources and reducing costs during 2009 and, as a result, cash reserves increased an astonishing 32% or \$18 billion.

Investment in the industry was focused on organic growth and lower cost deals, such as joint ventures. This is evident in the investing cash flows, where investment in property, plant and equipment remained consistent with 2008 (in dollar terms), but increased dramatically as a percentage of overall investing cash flows.

As a result of the ‘clean up’, some of the biggest losers in market capitalisation in 2008 have turned the corner and become the largest gainers during 2009. Xstrata, Rio Tinto and Teck, who all managed to complete key refinancing and equity transactions, showed some of the largest rises in market capitalisation with 491%, 312% and 774% respectively.

The global financial crisis brought the need for focused balance sheet management to the front of mining executives’ minds. Some of the key lessons learned include:

- It is essential for companies to understand the sensitivity of their balance sheet to fluctuations in the economic cycle and, therefore, be able to proactively manage their balance sheet to the desired risk level in order to ensure an appropriate balance between survival and structuring for growth;
- Companies need to determine the optimal gearing level to ensure survival through the commodity cycle;
- The importance of understanding and managing debt portfolios to ensure there is an appropriate balance between long and short-term debt and exposure to individual counterparties.

And the winners are?

While timing plays a key role, shareholders willing and able to invest may have proved to be the major winners from the recovery in the industry during 2009. Although dividends remained down, deeply discounted equity offerings in the first half of the year and the tremendous recovery in share prices in the second six months provided shareholders with strong capital gains. Those who took advantage of equity offerings were able to increase their holdings and generate substantial returns in a very short space of time. Investor confidence and support was evident in the strong participation of shareholders in the largest equity offerings by Rio Tinto

and Xstrata, each of which received in excess of 95% shareholder participation.

With the sudden resurgence in market prices, have the Top 40 missed out on the opportunity to acquire cheap assets in bargain deals? In last year’s publication we touted the potential for ‘bagging a bargain’, as the few cash rich companies or potential new entrants into the mining space would have an opportunity to secure assets and complete acquisitions at low prices as a result of the downturn in the industry. However, has the sudden resurgence of the industry caught everyone off guard and has the industry missed an opportunity here?

PwC’s Mining Deals publication noted that although the total number of mining deals increased 16% from the prior year, activity was largely focused on smaller scale deals of less than \$250 million, with average deal values of \$52 million, down nearly \$72 million from 2008. Government backed companies, often with a different investment agenda, were able to take advantage of the lower prices as they were not constrained by the investment risk sentiment, which potentially deterred the Top 40. While some companies had the resources to execute potential transactions, opportunity gave way to caution and no major deals were consummated.

As a result, Chinese investment was at the forefront of transactions, indicating China’s appetite to secure future commodity supply may have resulted in the Chinese ‘bagging the bargains’. Chinese investment in 2009 made up \$17 billion or 22% of all global mining M&A activity and 30% of the Top 10 deals by value.

Despite potential missed opportunities, 2009 still turned out to be an excellent year for mining companies, contrary to what many may have expected, and the market reacted favourably to the resurgence of commodity prices in the second half. The share price recovery however comes ahead of an actual recovery in profits, demonstrating confidence in the long-term fundamentals supporting the industry.

Total Shareholder Return (TSR)—returning value

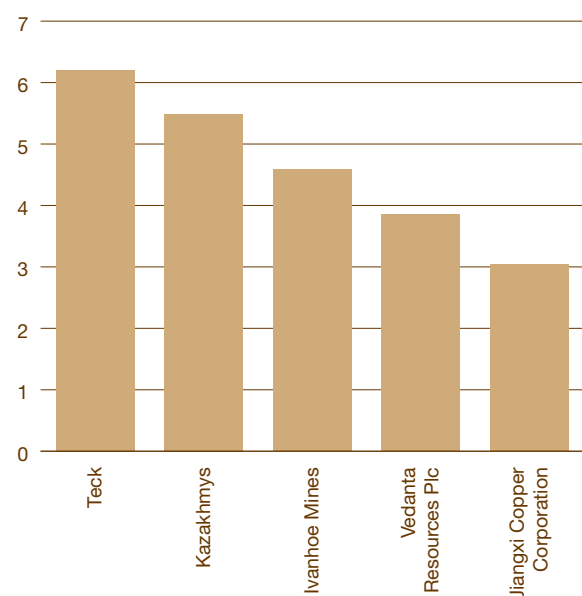
It has been a roller coaster ride for investors in the Top 40 over the past three years. The 2009 TSR performance indicates the industry is Back to the Boom, although some remain concerned that this return is more of a bounce than a Boom.

In contrast to the prior year, 2009 saw all but one of the Top 40 producing positive TSRs. The diversified

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miners and base metal producers led with the greatest increases, achieving TSRs well in excess of 100%. The top five TSRs also reflected a shift from gold to copper and diversified miners. This year eight companies had one year TSRs greater than 200%, which is in stark contrast to 2008 when only three companies were able to produce positive returns.

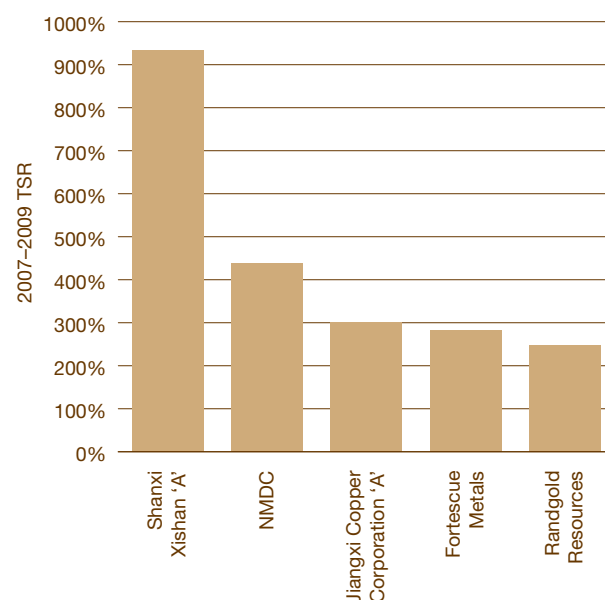
Top 5—TSR performance: 2009



A look at the Top 5 three-year TSRs clearly indicates there is significant value to be gained by investing in

companies from the developing nations. The insatiable appetite to secure natural resource supplies to support the continued growth of these countries has also resulted in companies in these countries generating the most significant returns over the last three years. Notably BHP Billiton and Vale, as the two largest miners, achieved three-year TSRs of slightly in excess of 100%. This contrasts with some of the best TSR performers for 2009, who have three-year TSR of almost nil, reflecting the significant volatility in their respective share prices.

Top 5—TSR performance: 2007-2009



03

A view from the top



03 | 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.

It seems like a long time since we last reflected on the views of CEOs of the largest mining companies in the world. However, it was only 12 months ago that many were preoccupied fighting fires started by the global financial crisis, doing what they could to contain the damage and ensuring that their companies adjusted to a fundamentally different environment. Yet here we are today with much of the lost ground recovered. A job well done?

While the CEOs' confidence may have taken a dent as they began to fully appreciate the extent and impact of the crisis, most rose to the challenge, making the necessary difficult decisions. We are now starting to see the dividends from the industry's rapid reaction to the crisis.

So what is on the minds of some of those in charge of the largest 40 mining companies in the world? While views may differ, almost without exception the number one agenda item is the global economy. It is clear that the lessons of recent history have been well learned; however this doesn't automatically translate into an ability to interpret market signals. Recovery has begun but clearly at different paces, with Europe and the United States lagging well behind the resurgent Chinese economy. The ever present concerns of a double dip recession and, more recently, instabilities in the government bond markets worry more than a few CEOs and are impacting their strategic decision-making today. Fundamental to success will be the ability to understand the lead demand indicators, particularly obtaining a good read on China and other developing nations.

The strength and speed of demand re-emergence in 2009 surprised many, with the exact role being played by inventory movements and the return of speculators potential clouds over otherwise strong demand-side fundamentals. The industry was quick to cut capacity in early 2009, but how fast will it bring back higher cost production if potential margins begin to look enticing once again?

In contrast with last year, we were surprised that cost saving was not mentioned earlier in discussions, being relegated to some extent by the focus on the global economy. We suspect this is because such focus was given to taking costs out of their businesses over the last two years that most programmes and initiatives are now well underway or

embedded. Today's CEO is more focussed on other macroeconomic factors, such as foreign exchange rates, the cost of energy and the impact potentially unsustainable government budget deficits will have on interest rates, tax regimes and the global economy.

None the less, cost remains a key value differentiator, and while the global financial crisis may have initiated the focus on costs, the CEOs are still driving through change. Many have used the changing market conditions as an opportunity to introduce structural changes in their organisations, both immediate and, in some cases, multi-year change programmes. Relationships with suppliers have been revisited at different levels, including pricing, terms and a focus on sharing risks and rewards.

Relationships with customers are also changing, both in terms of markets and new entrants to the markets. Downstream players are moving more and more to acquire mining assets and thereby secure supply. Steel mills have led the charge, but there are many others also acting. The CEOs maintain a watching brief on this front for now.

While some of the pressure may have been taken out of the labour market generally, the mining labour market is starting to tighten again, particularly in certain hotspots where miners are competing with other resource companies and infrastructure projects for skilled labour. However, the advent of remote, automated technology is creating opportunities to remove costs from mine sites and move people to lower cost centers in ways that would have been unheard of just a few years ago. The mantra of flexible resourcing is also part of the change. Ultimately, however, there remains a common view among the CEOs that investment in human capital must remain a long-term priority.

While the worst of the crisis may be behind us, we didn't get the sense that CEOs were about to loosen the purse strings. Stretched balance sheets and reduced margins may have forced companies to ration capital among their operations, but capital discipline is now being enforced and only the best opportunities are progressing to the next phase. There is, of course, only so long that discretionary expenditure can be cut or deferred before it begins to impact the industry. Greenfields exploration expenditure was one of the early casualties, with exploration budgets redirected to near-term brownfield expansion projects. While this creates an opportunity for the junior sector, such organisations won't necessarily have the capability to perform some of the work likely to lead to significant new finds.

As the industry moves into a new phase in the cycle, new threats to its long-term prosperity have begun to emerge. Copenhagen has come and gone and the debate about climate change continues. While there was no agreement around binding targets, individual countries will go it alone to drive the agenda. Most CEOs believe it is only a matter of time—with the questions being what price for carbon and will there be a level playing field?

The influence of politics on the industry is growing and the CEOs identified that it was more pronounced than at any other time they could recall. Mining companies are accustomed to operating in far flung locations, where security and nationalism are critical issues. However, in recent times, new uncertainty has come to traditionally more 'stable' political environments as governments seek to influence the industry and maximise the benefits that flow to constituents. CEOs are also watching with interest the

Stomaching the next Black Swan

How risk resilient is the mining sector?

You cannot refer to any market without considering the state of the global economy. We recognise that a lot has been written about the global financial crisis. Why didn't anyone see it coming; how did the securitisation of US mortgages, with associated risk transfer, have such a devastating impact? We're not going to add to that; other than likening the Global Financial Crisis (GFC) to a bad bout of food poisoning. Most of us didn't see it coming, we lost a fair bit of weight, governments around the world have worked fervently to flush the system, and things finally appear to be settling.

Until their discovery in Australia, it was unimaginable by the then civilised world that a swan could be any colour other than white. Therefore the widespread denial of the existence of a Black Swan was a blind spot. Although debatable, the broad consensus is the global financial crisis was a "Black Swan event"¹. That is, it was unpredictable, it carried a massive impact, and after the fact, an explanation that made the event appear less random and more predictable that it was at the time it was developed. Now looking forward,

there will be more Black Swan events. Arguably, the important role that China has played in stabilising the world economy by investing and even stockpiling commodities through the global downturn is another Black Swan. In general, positive Black Swan events take time to show their effect while negative ones can happen very quickly, largely because it is much easier and faster to destroy rather than to build.

Therefore, is the mining industry thinking about where tomorrow's Black Swans potentially lie? In some

currently unforeseen way, it is highly probable that the world's developing economies and their interactions across international borders will produce the next 'unpredictable, impactful, and retrospectively justifiable' event that will shock the mining industry. What thought has been given to the topic?

Returning to the overall state of the global economy, it's fair to say that the next few years herald uncertain times for the mining community. We've intentionally used the term 'uncertain' because it captures both

reactions of governments in the countries in which they operate as they seek to plug growing budget deficits. A Boom, but for whom?

As custodians of one of the most global industries, the CEOs have a duty to invest where their shareholders will receive the highest return. Such investment favours long-term fiscal stability, which can be easily undermined by short sighted policy changes. While the effects won't be felt within the country overnight, decisions today could kill off whole industries in the

medium to longer term as investment and production shifts to more predictable locations. As one member of what is effectively a collaborative partnership, it's difficult to predict how successful CEOs will be in shaping the outcome of such debates with government. To be successful, partnerships need to be enduring and, in this case, the changes may benefit one party in the short term, but will have a much wider impact on the other in the longer term. Enter diplomacy as a key prerequisite of today's Top 40 CEO.

risk and opportunity according to most definitions, including the far corners of possibility that are very difficult to map out through any company's strategic planning process. A tremendous amount of value is at stake for those who are both open-minded, nimble and disciplined through their approach to the market. Supporting the required levels of strategic flexibility and dexterity, corporate foresight and strength must also be employed to maintain the right levels of resilience to weather future shocks to the industry, which are undoubtedly present but have yet to show themselves.

So let's get back to food and the metaphorical backbone of the article. Which of you really knew what a Black Swan tasted like before the demise of Lehman Brothers? Did the western palate become too refined or delicate? And might future Black Swans take on a Sovereign Debt Contagion flavor, so to speak? Additionally, let's introduce the concepts of risk appetite and risk resilience. We believe we can fairly quickly deal with risk appetite, because anybody reading this article wouldn't be in the mining industry if you didn't hold a strong appetite for risk. Risk appetite is a relative measure; it varies. Depending on which mode the mining sector is in: growth, consolidation, or survival; it's going to drastically impact company decisions with respect to how much risk it takes on.

Risk resilience is an emerging concept that promises to help balance the contextual and ephemeral nature of a risk appetite consideration, particularly in the corporate world, inclusive of the mining sector. Risk appetite and risk resilience share a certain duality; however, we'd argue that investing

substantial amounts of time, money or resources to better understand a company's risk appetite is less important, because appetite 'will be what it will be' at particular points in time.

By relative comparison, how is risk resilience different? Risk resilience is an organisation's ability, rather than willingness, to bear risk. By contemplating risk resilience, it elevates more traditional considerations such as risk tolerance, risk capacity, or risk robustness to higher levels, ideally creating greater awareness and raising debate along the way. It also helps to focus attention on portfolio and systematic impacts, rather than individual risk factors. We argue that the risk resilience context is how the industry should be discussing its fitness to meet today's clear and present challenges.

Clear and present challenges we suggest? Without doubt! Mining stands at the very beginning of the global value chain. However, what happens downstream of mining minerals from the ground, often across oceans and geopolitical boundaries, matters. Sovereign and political risks are rising, fanned by current political and economic uncertainty, as the industrialisation and urbanisation of the world's developing markets continues.

Importantly, risk resilience can be measured and expressed at the asset, liability, cashflow, resource and non-financial performance levels² of any organisation. Questions of 'where are we weak' and 'what can be done about it' are intuitively managed by many; however, the umbrella concept of 'risk resilience' has been perhaps missing. With greater application, it may start to yield improvements to how we measure and communicate organisational fitness.

Now it's time to tie a few threads together. Considering the next Black Swan event(s) must be balanced by rising attention to how best to employ the right skills and techniques to measure organisational risk resilience. The two must go hand in hand. Suffering a negative Black Swan can be simply a matter of perspective and awareness; therefore, the industry needs to be alert in order to stay resilient and not suffer an avoidable bout of 'food poisoning' in the future. What are the signs to be alert to? And in particular, what observations taken in combination could be conceived to present tremendous opportunity or equally, devastating peril, if we are tuned into them in this uncertain and volatile world?

We rightly recognise that miners are risk seeking, tough and resilient by nature. The GFC was a Black Swan, served up by Wall Street's wrapping and packaging of US home loans of varying quality. Whilst there is no way to know for sure, the place to logically focus our scrutiny of potential 'known unknowns' and 'unknown unknowns' is on how the world's developed and developing economies are interacting, in order to carefully consider the nuances of economic and geopolitical interactions across international borders. With this in mind, how well prepared is the global mining sector to stomach the risk in resilience terms? While the global industrialisation trends may be clear, the ride promises to be wild at times. It's certainly within this context that the next Black Swan, along with corresponding resilience to the same, should be carefully considered.

¹ "The Black Swan, the Impact of the Highly Improbable", Nassim Nicholas Taleb, 2007.

² For example: health & safety, reputational measures or other relevant objectives

04

Financial review



Income statement

	2009 \$ billion	2008 \$ billion	Change %
Revenue	325	383	(15)
Operating expenses	(217)	(231)	(6)
Adjusted EBITDA*	108	152	(29)
Impairment charges	(11)	(36)	(69)
Depreciation & amortisation	(20)	(21)	(5)
PBIT	77	95	(19)
Net interest expense	(6)	(7)	(14)
Income tax expense	(22)	(22)	(0)
Net profit	49	66	(26)

* EBITDA adjusted to exclude impairment charges.

Key ratios

	2009 %	2008 %
Adjusted EBITDA margin	33	39
Net profit margin	15	17
Effective tax rate	31	25
Return on capital employed	9	15
Return on equity	12	20
Gearing ratio	17	24

Revenue declines

For the first time since our analysis began, revenues decreased year-on-year, down 15% to near 2007 levels. The decline in revenue is primarily attributable to lower commodity prices for much of the year and an overall marginal decline in production levels.

Top 4 companies by revenue	2009 Revenue \$ billion	2008 Revenue \$ billion	2009 Adjusted EBITDA margin %	2008 Adjusted EBITDA margin %
BHP Billiton	51	60	40	45
Rio Tinto	42	54	32	40
Vale	23	37	37	41
Xstrata	23	28	29	33

The companies analysed in the previous table account for 44% of total Top 40 revenue, compared to 47% in 2008. All of the companies experienced Adjusted EBITDA declines, despite differing commodity prices. Rio Tinto was hit the hardest, with its margin down 20%.

A focus on cost control

Operating expenses decreased 6% from 2008 to 2009. This drop, coupled with a marginal decline in overall production shows that the industry did manage to decrease costs slightly, following the actions taken in the first quarter of 2009. However, despite the drastic action, a step-change down in the cost base was not achieved. Key elements of the cost base remain and a lower proportion of costs than expected appear to be truly variable.

A significant portion of the decrease in costs was attributable to a decline in the cost of energy. In addition, companies strived to negotiate lower prices on raw materials and other mining inputs. These cost savings were partially offset by general inflationary pressures in some mining jurisdictions—especially Australia, South Africa and South America.

Another portion of cost savings resulted from efforts to increase operational efficiencies. Over recent years we have noted that volume growth took precedence over cost management, as the industry chased high commodity prices and good margins were made even on higher cost operations. In 2009 this trend was definitely reversed. Higher unit cost operations were shut down and discretionary spending was cut—including exploration, outside contractors and head office costs.

The move to cut costs was driven, initially at least, by necessity. While the reaction of the industry was swift—it was just that—a reaction. What has been demonstrated is that when commodity prices fall, short-term costs able to be stripped out by management actions are limited:

- Energy costs are largely beyond management control;
- Labour costs generally increase in boom times, but are hard to cut as revenues decline. Salaries and wages did not decrease significantly over the global financial crisis; and

- Transportation costs remain largely driven by market forces, and unable to be controlled directly by the miners.

Last year we noted that during Q1 2009 announced mine closures, production cuts and the move to place mines on care and maintenance led to combined planned redundancies of more than 40,000 people.

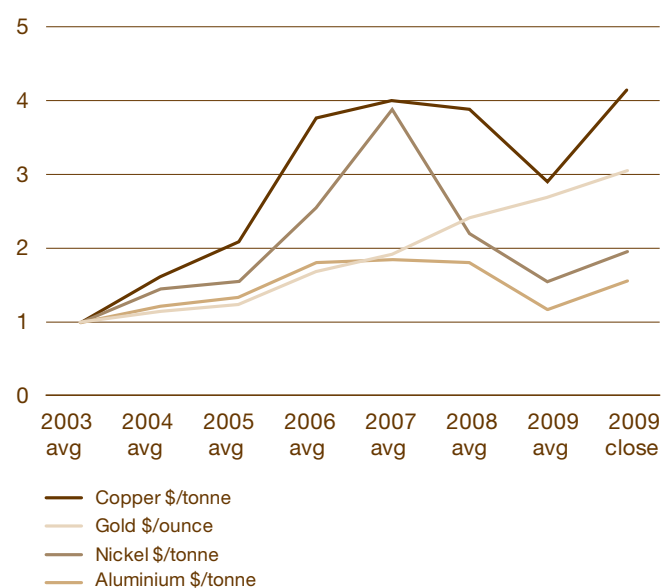
Many of these plans were acted on, however in some cases the market had started to turn before such action could be fully implemented. This allowed companies to continue to operate without shutting down.

Skilled labour remained relatively scarce. Throughout this time labour costs have not declined—the basic cost of a worker remains. With the mining labour market tightening again, labour costs will remain a significant challenge for the industry over the medium term.

In 2010 the weakening of the US dollar against most mining currencies will likely increase costs in US dollar terms, requiring continued management of costs and diligence. As we are Back to the Boom, the exchange rate movement coupled with stable labour costs and increasing energy prices, gives real risk of costs rising again.

Commodity prices

Commodity prices re-based since 2003



Commodity prices

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
2009 (avg)	5,178	974	14,712	1,671
2009 (close)	7,342	1,099	18,452	2,197

Commodity prices tell a tale of a year with two halves. Metal prices continued on a downward trend for the first six months of 2009, with a sharp recovery in the second half for most commodities. The upward trend in commodity prices continued to the year-end price and beyond into 2010 in many cases.

There is little consensus on the prospects for prices in the medium term. A number of different factors influence the pricing for individual commodities, including demand, inventory levels and near and longer-term supply.

Unusually, we note that inventory levels reported by major exchanges have been increasing at the same time that commodity prices have risen. This may indicate that current price levels have already factored in anticipated future supply shortages, which, in turn, could lead to a dip in prices in the medium term. Equally, other factors could be at play and in years to come we may look back on the relatively 'low' prices at the end of 2009.

Copper—market strength?

The turnaround in copper prices has been most notable, with the 2009 year-end spot price reaching \$7,342 per tonne.

Consumption indicators at the end of Q1 2010 show that there is fundamental support for higher copper

prices. While copper production has remained consistent, and promising brownfields projects are on the horizon, a copper supply shortfall is expected by many in the short and medium-term.

Chinese demand continues to be the primary driver of consumption, with North American and European markets lagging behind. The recent Chinese government pronouncements on curbing government spend creates uncertainty as the government seeks to retain control on inflation. While the signals remain mixed the sentiment remains positive—a strong copper price is here to stay...for now.

Bulk Commodities—new benchmarks?

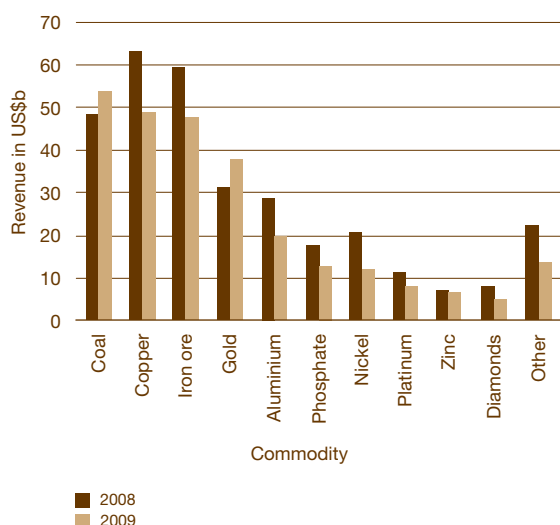
In both iron ore and metallurgical coal markets we have seen a recent trend towards short-term contracts, driven by the big miners. For 2010 a contractual quarterly pricing system (using a China CFR spot index) has been rolled out. For example, BHP Billiton reported that almost all contracts for 2010 were settled on this basis. This shift exposes both producers and consumers to more volatility.

Iron ore pricing will continue to be an issue in the near-term, as sellers and buyers work to develop a mutually beneficial system. It remains to be seen where this will go in the future.

Coal—market shift

Historically, coal resource ownership and production has largely been a domestic industry, particularly in the thermal coal market. The major coal players have typically produced coal primarily in their home jurisdictions (BHP Billiton and Rio Tinto in Australia, and Peabody and Consol in the US, for instance). Over the past few years, however, especially as China's demand for coal has exceeded its own domestic supply, the major coal producers have looked beyond their own borders for opportunities. Coal players are looking at mines and acquisition targets outside their home jurisdiction and company forecasts indicate a greater portion of future production is expected to be for the export market.

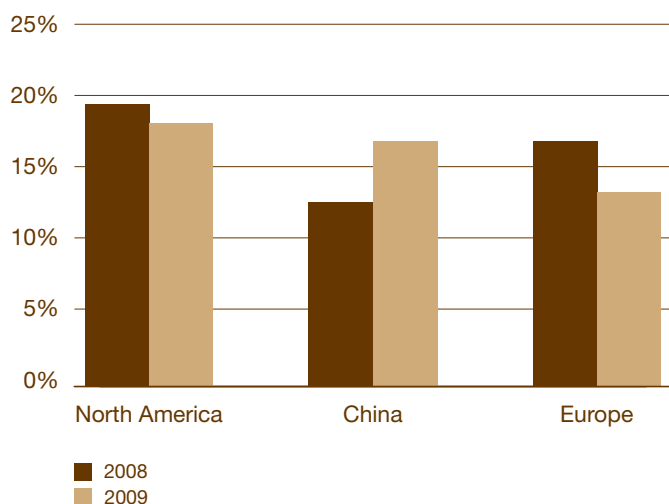
Comparison of revenue by commodity



In 2009, coal sales revenue increased by \$4.6 billion during the year. Whilst Xstrata and Anglo American saw a decrease in their coal production and revenues, BHP Billiton recorded an increase in coal revenues of \$4.1 billion, China Shenhua an increase of \$1.6 billion and Teck a \$1.4 billion increase. The strong performance of these three companies can be attributed to increasing pig iron production in China and other developing nations, where their coal is an integral component in smelting iron ore.

Gold, on the back of a 7% production increase and a 12% increase in the average price from 2008 to 2009, saw its share of total revenue increase from 10% to 14% in 2009.

Share of total revenue by customer



Revenue by location was impacted by the global economic downturn. While China's demand increased, partly as a result of the large government stimulus package enacted in early 2009, demand in all other regions declined. We are approaching a watershed moment, with China almost surpassing North America to become the industry's biggest customer. Notably absent from this chart is India, which remains a small, but increasing, portion of the total.

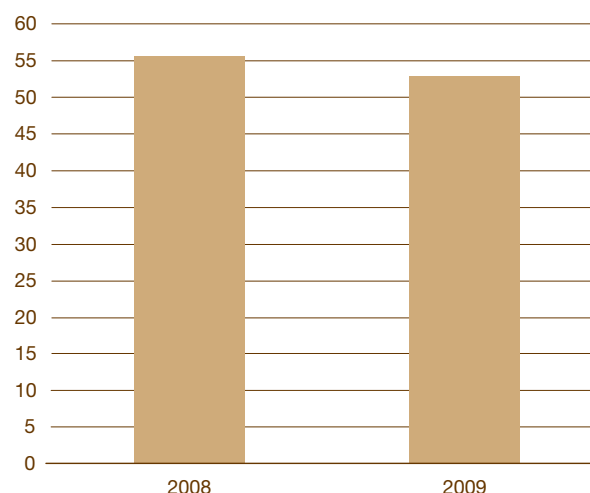
Production:

Commodity (quantity)	2009	
	Top 40 Production	change from prior year %
Copper (million tonnes)	8	0
Zinc (million tonnes)	3	9
Gold (million ounces)	36	7
Platinum (million ounces)	4	(4)
Coal (million tonnes)	741	(2)
Iron ore (million tonnes)	911	(3)
Nickel (million tonnes)	1	(11)
Bauxite (million tonnes)	43	(7)
Diamonds (million carats)	17	(29)
Potash (million tonnes)	10	(67)

The graph below shows a comparison of total production of the Top 40 year-on-year, using one tonne of copper as an equivalent unit, based on 2009 closing prices. This methodology allows for a comparison of relative production across all commodities.

Total production

(Using Copper equivalent tonnes – 2009 closing spot)



Across the industry, production declined slightly in 2009, with most commodities showing small decreases and some, such as gold and zinc, being the exception and reporting increases.

In 2008 and 2009, the Top 40 spent over \$134 billion in new property, plant and equipment. Such investment heralds an increase in capacity as new projects come online, however for the most part the impact has not yet been felt. While some of this investment is already bearing fruit in the form of new production, much of the investment is in large scale, multi-year projects and the real production step-up is not expected by the Top 40 until 2010 and 2011.

During 2007 and 2008, production volume was increased as a priority, as even high cost production returned positive margins. However, during the economic downturn the Top 40 took a portion of the higher cost production offline. This scaling back in the late stages of 2008 and early 2009 impacted the 2009 production result, offsetting any production gains resulting from new investment.

In particular, potash production was significantly curtailed in 2009 due to the impact of the global financial crisis on agricultural demand for potassium-based fertilisers. Potash miners also chose to de-stock inventories during this period, again lowering production levels.

Ancillary income statement items

Exploration expenses

Exploration spending flowing through the income statement decreased 23% from 2008 levels. During the downturn, companies reduced discretionary

spend, including exploration, and shifted their focus to more mature exploration projects. The shift to brownfields exploration changes the focus from long-term growth to near term projects with a quicker payback. Inherently this approach focuses on reserve replacement instead of resources growth. It takes a long time from initial exploration success to production and therefore the decline in exploration spend leaves the challenge of finding tomorrow's production as a looming storm cloud on the horizon.

Asset impairment

With the effect of the global financial crisis largely behind the industry, asset impairment charges have decreased by 63% to \$9 billion in 2009.

Impairments during the 2009 year were mainly as a result of write downs by BHP Billiton, Rio Tinto and Xstrata of nickel and zinc assets; net of a write back of impairments by AngloGold Ashanti.

Income taxes

Income tax expense remained flat in a year where net profit before tax decreased substantially. This resulted in an increase in effective tax rates from 25% in 2008 to 31% in 2009. While cash income tax paid decreased as anticipated, deferred income taxes increased, largely due to deferred tax assets, such as tax losses, being derecognised. Income tax is far from the complete taxation story for the industry—as noted below.



Total tax contribution

In response to the global financial crisis governments around the world initiated stimulus packages in a bid to kick start economic activity. Now that calm has returned, governments find themselves in circumspect mode. Analysing the past decade has in some cases left two burning questions in their minds:

- (1) Did the country benefit sufficiently from the mining boom of the last decade?
- (2) How can government recoup the stimulus packages handed out?

In answering these questions, governments are likely to review the tax and regulatory landscape. We have already seen this in Australia with the Rudd Government's proposed 40% "Resource Super Profits Tax". Similarly, other countries around the world may be looking at the Mining sector for possible new or revised tax regimes. In an industry with 20+ year investment horizons, this shifting landscape creates significant uncertainty, making it more difficult to raise financing for new projects.

Mining companies will no doubt be engaged by governments in the jurisdictions in which they operate. In preparation, it is important for all stakeholders to understand PwC's Total Tax Contribution (TTC) framework. TTC provides a standardised methodology for companies to measure and communicate all the taxes and contributions they pay.

Focus on tax

The mining industry, perhaps more than most others, remits large amounts of non-income taxes to various levels of government in various forms. These non-income taxes are seldom highlighted in financial statements, leaving an incomplete picture.

While some companies are now releasing further data on the taxes they pay, they represent only a minority. PwC's latest TTC study for the mining sector aims to bring greater transparency to the contribution that mining companies make to public finances in the countries in which they operate.

The TTC framework goes beyond income taxes to collect data on all taxes and other contributions to government, to give a wider view of the entire tax burden of an enterprise. By focusing on payments, it provides a measure of what companies contribute to the public finances and to the creation of prosperity and stability for the communities where they operate.

The latest TTC study for the mining sector analyses the total taxes of 22 mining companies which have provided data on their taxes and other contributions paid to government in their main countries of operation during their financial year to 31 December 2008. This data thus lags behind the results analysed elsewhere in Mine, a function of the time taken to collect what is, in the main, unpublished data. Data on operations in a total of 20 countries around the world was collected, enabling regional analysis and comparison to be made for the first time for three regional and economic groupings of countries—Africa, Latin America and OECD countries.

The study covers a turbulent period, which saw the advent of the global financial crisis. During this same period, commodity prices fell heavily. The impact on the mining sector is reflected in the study results, with an increase in the Total Tax Rate (the tax cost as measured in relation to profitability). The average Total Tax Rate for mining companies increased from

32.2% to 39.3% since the first study was conducted. This is because, while taxes on profits may fall with lower profitability, other taxes and contributions, which are not linked to profits, do not fall and thus become relatively more expensive.

However, the results show that despite the downturn, mining companies continue to make a large economic contribution in the countries where they operate. On average, taxes and contributions borne by mining companies are equivalent in size to 10.8% of their turnover. Importantly, corporate income tax represents only 40% of all the taxes and contributions that these companies bear. This has fallen from 48% recorded previously, again reflecting the impact of the economic downturn on the sector. This also demonstrates that the mining industry pays substantial government levies just by operating, even when less profitable.

Mining companies also continue to make a significant contribution to public finances in terms of the large workforce they employ. The study results show that, on average, mining companies pay \$15,349 (\$14,875 for 2007) per employee in employment taxes. These taxes are an indication of the direct benefit brought to the public finances for each job created or maintained by these companies.

Mining companies are subject to intense scrutiny from government, civil society organisations and other stakeholders in terms of the contribution they make in return to these economies. TTC provides data, in a non-technical form that is relatively easy for all stakeholders to understand, about the broader 'economic footprint' of mining companies through the taxes and other contributions they pay.

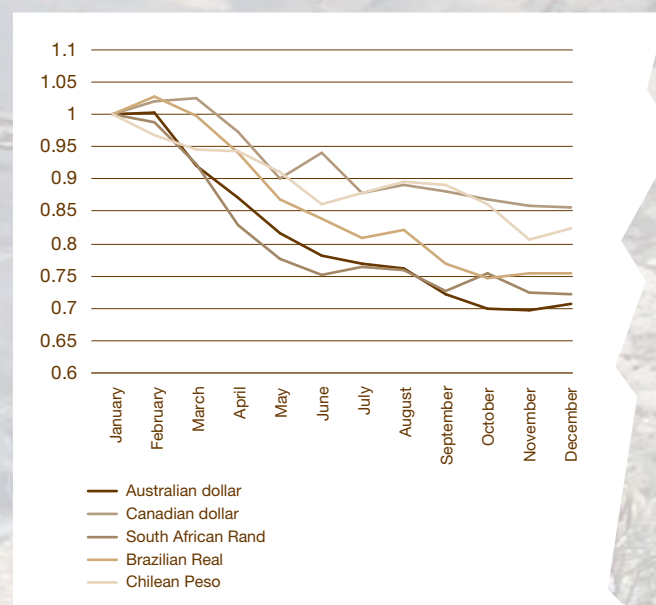
If you would like any further information on the results of the study or how you might use TTC, please contact us.

The weakening of the U.S. dollar

2009 saw the US dollar weaken against most major mining currencies—a complete turn around from 2008. Many of the Top 40 companies analysed in this publication operate in currencies other than the US dollar. As a result, the appreciation of these currencies against the US dollar has had a significant impact on their financial results, as their domestic currency costs and liabilities grow in US dollar terms.

When investors seek to gain exposure to commodity prices, one of the simplest ways of achieving this is to invest in major unhedged mining companies. Intimately linked to such an investment is the potential exposure to exchange rate movements faced by such mining companies. The exchange rate linkage to the investment decision is not always clearly understood, although it can significantly influence the financial results of these companies.

USD relative weakness in 2009



Cash flow statement

	2009 \$ billion	2008 \$ billion	Change %
Cash flows related to operating activities			
Cash generated from operations	106	145	(27)
Taxation paid	(18)	(26)	(31)
Other	(5)	(5)	0
Net operating cash flows	83	114	(27)
Cash flows related to investing activities			
Purchase of property, plant and equipment	(64)	(70)	(9)
Purchase of investments	(19)	(37)	(49)
Sale of investments	16	16	0
Other net investment-related cash flows	(7)	(15)	(53)
Net investing cash flows	(74)	(105)	(30)
Cash flows related to financing activities			
Issue of shares	33	24	38
Share buy backs	(0)	(11)	(100)
Increase in borrowings	70	70	0
Repayment of borrowings	(78)	(53)	47
Distributions to shareholders	(15)	(20)	(25)
Other	(0)	(4)	(100)
Net financing cash flows	10	6	66
Net increase in cash and cash equivalents	19	15	27
Cash and cash equivalents at beginning of period	56	47	
Effect of foreign currency exchange rate changes on cash and cash equivalents	(1)	(6)	
Cash and cash equivalents at end of period	74	56	

Operating cash flows—back below \$100 billion barrier

As predicted last year, the Top 40 were not able to sustain the 2008 level of operating cash flows during 2009. With revenue declines exceeding cost savings, lower realised margins resulted in lower net operating cash flows generated by the Top 40, at \$83 billion. While down, the Top 40 companies have still been able to generate positive net operating cash flows amidst the global economic crisis. This is still a relatively strong performance compared to a number of other industries.

Income taxes paid have also decreased due to the overall decrease in income. This may lead some to think that fewer total taxes are being paid; however, the majority of the miners' tax burdens fall outside of income tax. As noted in our Total Tax Contribution study of the mining industry, miners will still be paying payroll taxes, infrastructure funding, royalties and other levies which are not based on income; therefore the total economic contribution to the government remains substantial while profits earned by miners decreased.

Investment of net operating cash flows into current or future operations has always been critical in the mining industry. In 2009 we continue to see operating cash flows being re-invested into the business, as companies continue to spend for future growth.

Investing cash flows—cautious and trigger shy

Cash flows invested in property, plant and equipment represented an astonishing 86% of net investing cash flows as compared to 67% in the prior year, showing that the global financial crisis appears to have influenced the Top 40 towards a focus on organic growth. Purchases of property, plant and equipment may have been expected to fall significantly due to the deterioration in the global market; however, the decrease was a relatively modest 9%.

Net investing cash flows have decreased 30% from the prior year, partially as a result of the decrease in operating cash flows, but also due to a response to market conditions. Many miners had to react quickly and revised their capital expenditure portfolios to adjust to the fall in commodity prices and the inability to access debt in early 2009. Major players deferred capital expenditures on either early-stage projects or non-core assets and redirected scarce cash to core growth projects with shorter-term paybacks. Delays in capital expenditures could have implications in times of high demand and gear the industry towards

another time of major acquisitions as the primary source of growth.

Alternatively, the need to invest in significant capital projects may result in more joint venture arrangements to share the risk amongst partners as well as lower the required capital.

Purchases of investments decreased by 49% in 2009 as a result of sluggish deal activity, characterised by low deal values. The largest deal struck in 2009 would not have made it into the Top 10 deals by value in 2008, a striking example of this decline in M&A activity, which we discuss in greater detail in our Mining Deals publication.

Financing cash flows—equity saves the day

Financing cash inflows increased significantly during the year, driven mainly by the increase in share issues. The success of such measures show that while the mining companies may not have bought at the bottom of the market, shareholders took advantage of the opportunity, and did well as share prices subsequently recovered.

Cash raised from share issues increased by 38% in 2009 with the Top 40 raising approximately \$33 billion. In contrast to the rest of the industry, gold players appear to have raised equity to further fund capital expenditures, close out hedge positions and make acquisitions. Other players had to raise cash, principally to repay existing debt, much of which had been taken on to fund major acquisitions during the earlier phase of the boom.

While shareholders benefited from gains in stock prices, many saw the distributions received from their investments decrease. Dividends paid to shareholders in 2009 have been scaled back significantly, decreasing 52% from 2008. The cessation of share buy-back programs of approximately \$11 billion also indicated the preference to preserve cash. It was notable that BHP Billiton was the only major to retain its progressive dividend policy through the downturn.

Cash on hand increased from the prior year, which is another indicator of a conservative attitude and preference to preserve cash for the time being. The overall rebound of commodity prices at the close of 2009 could trigger companies to increase deal activity or make significant investments in existing projects to bring them online.

Balance sheet

	2009 \$ billion	2008 \$ billion	Change %
Current assets			
Cash	74	56	32
Inventories	44	43	2
Accounts receivable	36	38	(5)
Other	42	39	8
Total current assets	196	176	11
Non-current assets			
Property, plant and equipment	467	409	14
Goodwill and intangibles	53	54	(2)
Other	85	70	21
Total non-current assets	605	533	14
Total assets	801	709	13
Current liabilities			
Accounts payable	46	48	(4)
Borrowings	21	38	(45)
Other	32	33	(3)
Total current liabilities	99	119	(17)
Non-current liabilities			
Borrowings	145	134	8
Other	110	98	12
Total non-current liabilities	255	232	10
Total equity	447	358	25
Total equity and liabilities	801	709	13

Ratios	2009	2008
Gearing (%)	17	24
Current (times)	1.98	1.48
Quick (times)	1.54	1.12
Net debt (\$ billion)	92	116

Financial position and liquidity: Improving prognosis

2009 was characterised by companies restructuring balance sheets—driven either by necessity (debt burdens) or because they were able to (typically gold companies). As a result, the financial position and liquidity of the Top 40 improved in almost all measures when compared to 2008.

Net assets increased by 25%, or a massive \$89 billion in 2009. This result compares with 10% growth in 2008, when balance sheets were hit by significant impairment charges. While such an increase was significant, it was not as large as the 38% achieved in pre-crisis 2007. The tighter credit markets and the leveraged position of some companies in the Top 40 required them to seek financing from both equity and debt markets. During 2009 the Top 40 raised \$33 billion from the equity markets. Most significant were Rio Tinto, Xstrata, Barrick and Teck.

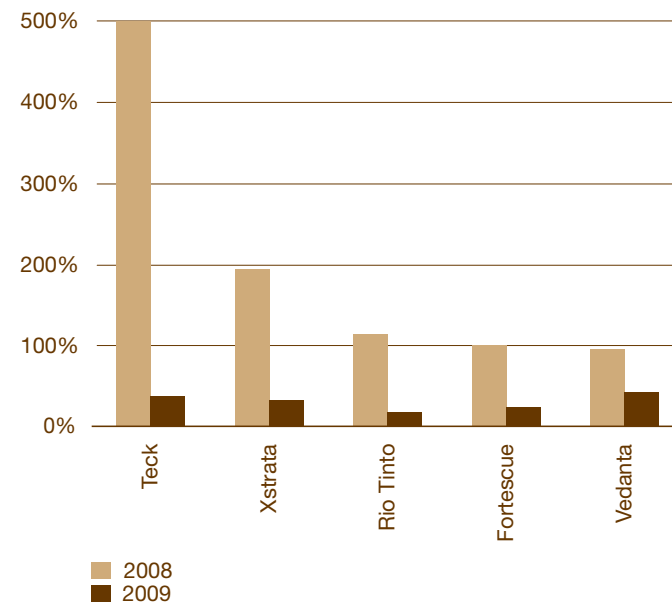
Debt markets: Open to miners

The share of short-term debt decreased from 22% in 2008 to 13% in 2009 as debt books were refinanced during the period and many companies in the Top 40 focused on the restructuring of their short-term liabilities, which in many cases included extending their maturity period. Following its successful rights issue, Rio Tinto repaid \$19 billion of debt and Xstrata and Teck also used the proceeds from their equity raisings to reduce their gearing. At the same time more than \$20 billion of new debt was issued by BHP Billiton, Vale, Newmont and Barrick to finance their developments, showing that the debt markets remained open to the industry's major players. As a result, the total borrowings of the Top 40 declined only slightly in 2009.

In 2008, debt as a percentage of market capitalisation for the Top 40 increased dramatically as share prices spiraled down. The five companies with the highest percentage each held significant debt and with varying degrees of uncertainty in the market as to their ability to survive lower commodity prices and service their debt.

Following the recovery of share prices in 2009, the ratio of net debt to market capitalisation of the Top 40 decreased to 13%. The following graph illustrates the five most leveraged companies from 2008 compared with their current market capitalisation, the highest of these in 2009 being Vedanta at just 39%.

Net debt as a % of market capitalisation



While most of these companies were able to raise equity in the period, the ratio improvement stems largely from a recovery in their share price. The market has regained confidence in the industry and, more importantly, in these companies' ability to work through their debt challenges.

Cash on hand

Despite net operating cash flows decreasing in 2009, cash on hand at the end of the year increased from 2008 by \$18 billion, or 32%. As noted above, overall debt levels for the Top 40 remained relatively stable and, as such, much of the financing raised during the period remained liquid at year-end. Decreases in dividends and reductions in investing cash flows contributed to the improved cash position; however, it seems that in some instances companies have taken advantage of market conditions to raise cash—but have not yet spent it on any projects or transactions. It remains to be seen where this cash will go in 2010.

Inventory and accounts receivable balances remained relatively stable during the year and, as such, the higher cash balance in combination with a reduction in short-term liabilities led to a solid improvement in the liquidity ratio of the Top 40.

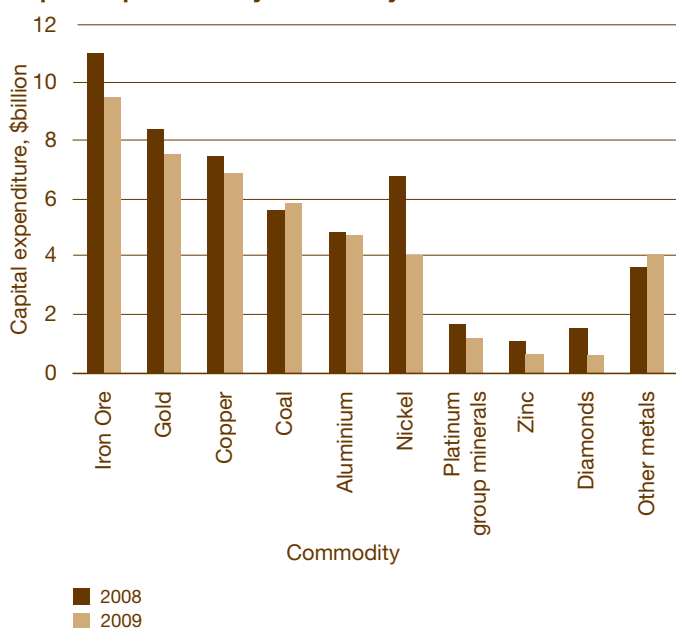
Do-it-yourself: Organic growth

Despite the challenges of 2009, the Top 40 companies continued to invest in the development of existing mines and projects, in order to safeguard their future.

While capital expenditure reduced by 8% from 2008, the \$64 billion of cash spent in 2009 on capital investments is a staggering number in the context of the global financial crisis and drive to conserve cash. The carrying value of property, plant and equipment increased as a result, despite some further impairment charges.

The graph below shows the capital expenditure on mining assets by commodity in 2009 in comparison with 2008:

Capital expenditure by commodity



Capital expenditure by commodity

As in 2008, the most significant capital investments were in iron ore and gold, reflecting the continued strong fundamentals of these commodities. Iron ore spending was led by BHP Billiton, Vale and Rio Tinto as they continued to drive increases in annual throughput. Almost 75% of capital investments in gold projects were performed by four companies: Newmont, Goldcorp, Barrick and AngloGold Ashanti. The most significant reduction of capital investments in 2009 was in nickel, a result of the significant decline in prices for this metal that led to the subsequent suspension of a number of major projects.

Still goodwill

Despite the impairment charges in 2008, significant amounts of goodwill remain on the balance sheet at period end, concentrated within a few companies. The balance remained stable from 2008, with impairment charges “flushed through” during 2008 and there were no significant acquisitions during 2009.

Currency crazy

As noted above, in 2009 the US dollar weakened against most major mining currencies. As a consequence, the translation of balance sheets of the companies having functional currency other than US dollar at closing exchange rates resulted in a positive currency translation effect of approximately \$12 billion on equity. This fact has also contributed to an improvement of net asset position of the Top 40 when presented in US dollars.

Joint Ventures

Sharing the risks and rewards

Amongst the flurry of annual and interim reports, production reports and notices of rights issues that have been released over the last year, it will not have escaped anyone's attention that Joint Ventures ("JVs") have become a hot topic within the global mining industry. The headline-grabber is undoubtedly the BHP Billiton—Rio Tinto agreement over their iron ore assets in the Pilbara, a union which is expected to yield significant cost savings. However, JVs remain prevalent in frontier regions such as Africa and Central Asia, to spread risk (such as the Antofagasta and Barrick JV in Pakistan) or to benefit from relationships, such as those held by some government backed companies to gain access to minerals. For instance, the Rio Tinto and Chinalco tie-up in Guinea will tap into China's advantage of having a strong presence in Guinea and the in-country expertise of other Chinese organisations.

Joint venturing as a practice is well established in the oil & gas sector, with major players frequently combining their capital, expertise and influence to access potentially rich but risky resources. Historically, though, major miners have favoured 'going it alone', reaping the benefits of significant majority holdings.

The global economic crisis has slowed down the availability of cheap funding sources and heightened the focus on risk and utilisation of scarce resources. This, combined with the factors mentioned above, has given a renewed perspective on how capital should be employed. So, how can miners make sure that these JVs are a success for themselves and their shareholders?

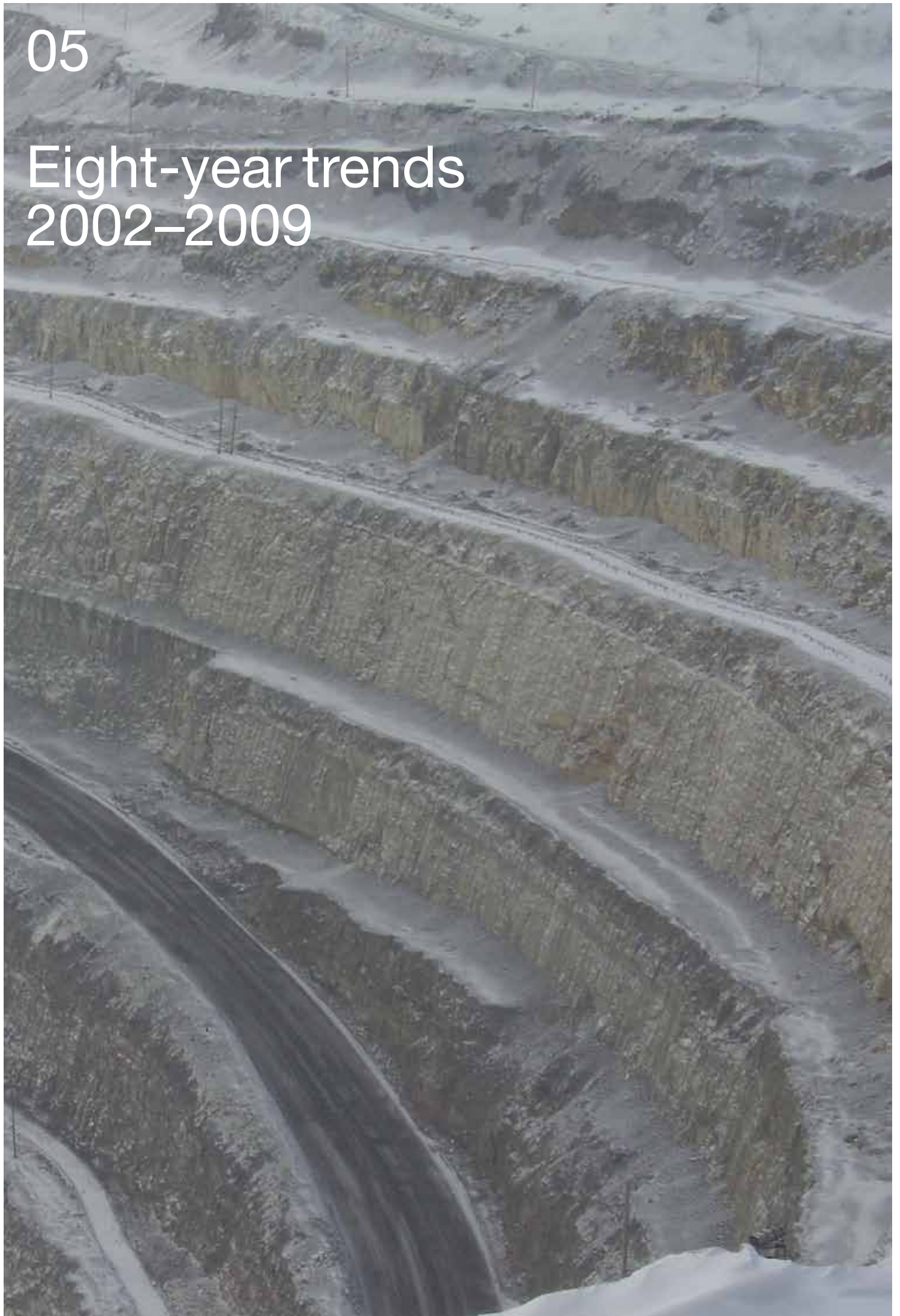
- Structure of the JV: consider financial reporting, project finance, taxation and legal aspects;
- The End Game: a lack of clarity may become a source of conflict, however keeping in mind the mutual benefit from gaining access to resources, will keep a focus on the prize;
- Organisational Issues: adequately address the need for sound management structures, IT systems, controls framework, dispute resolution process; and
- Post-Implementation Management: consider appropriate monitoring, internal audit function, execution of joint venture partners' goals and objectives.

The increasing involvement of governments in mining projects, whether directly or through intermediary companies, poses further challenges for joint venturers, most notably in effectively managing the partnerships in unfamiliar political and operational climates. In many locations, a successful JV arrangement with a state-backed entity can provide significant benefit to the project.

The need to spread risk and fund larger and more complex projects in unfamiliar territories means that JVs will become a more important tool for today's mining industry. We also anticipate further tie-ups involving Chinese companies as securing supply continues to be a significant motivation. What remains to be seen is whether joint venture partners can work together to achieve their objectives and create additional value.

05

Eight-year trends 2002–2009



05 | Eight-year trends 2002-2009

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 2008 information differs from the main Financial Review in respect of 2008 as it relates to the 40 companies that were included in our previous Mine publication.

	2009 \$ billion	2008 \$ billion	2007 \$ billion	2006 \$ billion	2005 \$ billion	2004 \$ billion	2003 \$ billion	2002 \$ billion
Aggregated income statement								
Revenue	325	349	312	249	213	178	114	95
Operating expenses	217	208	176	141	134	125	85	75
Adjusted EBITDA	108	141	136	108	79	53	29	20
Amortisation, depreciation and impairment	31	57	19	12	15	14	10	9
PBIT	77	84	117	96	64	39	19	11
Net interest cost	6	6	5	3	4	3	3	5
PBT	71	78	112	93	60	36	16	6
Income tax expense	22	21	32	27	16	9	4	2
Net profit	49	57	80	66	44	27	12	4
Year on year increase in revenue	(7%)	12%	25%	17%	20%	56%	20%	
Cumulative increase in revenue	242%	267%	228%	162%	124%	87%	20%	
Year on year increase/(decrease) in net profit	(14%)	(29%)	21%	50%	63%	125%	200%	
Cumulative increase in net profit	1225%	1320%	1900%	1550%	1000%	575%	200%	
Adjusted EBITDA margin	33%	40%	44%	43%	37%	30%	25%	21%
Net profit margin	15%	16%	26%	27%	21%	15%	11%	4%
Aggregated cash flow statement								
Operating activities	83	104	95	77	58	43	22	
Investing activities	(74)	(102)	(126)	(67)	(38)	(27)	(20)	
Financing activities	10	14	36	4	(11)	(9)	1	
Aggregated balance sheet								
Property, plant and equipment	467	402	371	262	214	187	140	117
Other assets	334	273	284	192	141	116	85	73
Total assets	801	676	655	454	355	303	225	190
Total liabilities	354	339	329	217	170	144	114	102
Total equity	447	337	326	237	185	159	111	88
Return on equity	12%	18%	29%	33%	25%	19%	12%	6%

The 2009 financial results present a number of trends that demonstrate the uneven impact that the global economic crisis has had on the mining industry. In particular, we see that:

Income statement

- Revenue has fallen for the first time since the inaugural Mine, and is down 7% from 2008. However, revenues remain 4% above 2007 levels, suggesting that mining has not been hit as hard as

many may have feared. Since 2007 was regarded as a stellar year at the time, does this imply that the mining industry has weathered the global downturn with relative ease?

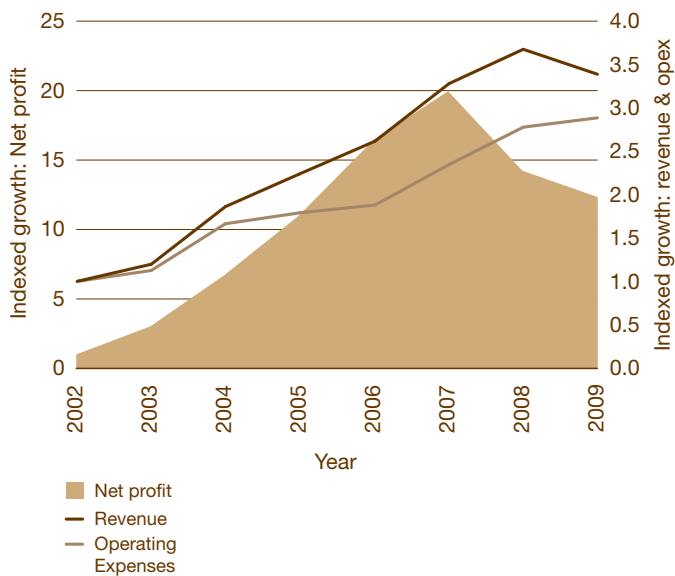
- A look further down the income statement suggests not necessarily, as EBITDA has also dropped, going against a consistent trend of growth since 2002. The decline in revenue has not been mirrored by a drop in operating expenses, although the increase of 4% is the lowest seen

05 | Eight-year trends 2002-2009

since inception, and significantly lower than the 2002-2008 average of 19%, implying success in trimming costs over 2009. The challenge will be to ensure these are more than just 'one-off' savings.

- Amortisation, depreciation and impairment charges of \$31 billion were 46% down on 2008, but remained double the 2002-2007 average of \$13 billion. Impairment charges made up 35% of this balance in 2009, compared to 54% in 2008, showing that not all the 'bad news' had been captured in 2008.
- Perhaps most significantly, the fall in revenue and continued erosion of margin have seen net profit fall for the second year in a row, now back to early-2006 levels. While revenue has remained relatively robust, the cost base looks to have irreversibly changed. Even adding back 'exceptionals' such as impairment charges only brings 2009 in line with mid-2006 figures, highlighting the long-term underlying cost pressures faced by the industry.

Eight year income statement trends



Cashflows

- Operating cashflows have fallen 20% since 2008, reflecting lower profitability. This is the first decline witnessed since we have studied the Top 40.
- The decline in investing cashflows gathered pace, with a reduction in 2009 of 27% following a 19% fall in 2008. However, the \$74 billion invested in 2009 remains above the 2002-2008 average of \$63 billion, and purchases of property, plant and equipment saw only a 9% drop off in 2009, highlighting that investing in capital expenditure remains a necessity during a downturn, but mergers and acquisitions activity does not.
- Cashflows from financing activities fell for the first time in 3 years as companies paid back borrowings.

05 | Eight-year trends 2002-2009

Balance sheet

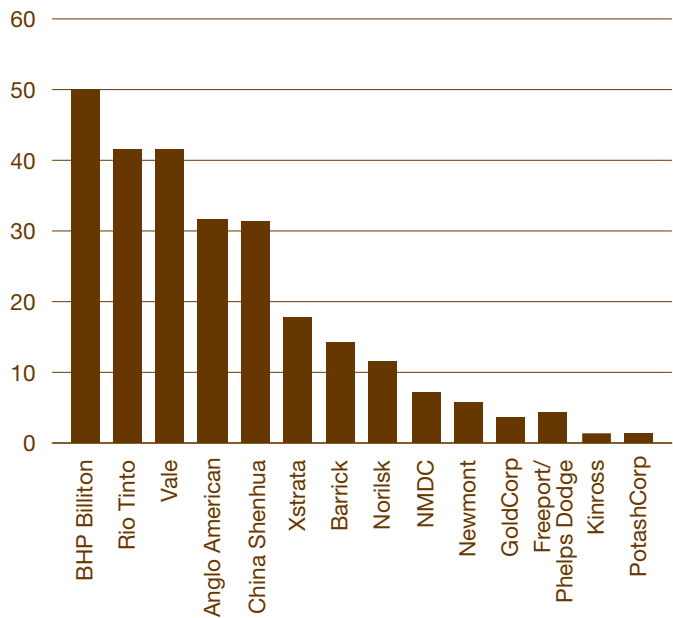
- Despite the fall noted in investing cashflows above, property, plant and equipment grew by 16%, twice the 2008 increase. Property, plant and equipment is now nearly four times greater than the 2002 balance, with asset impairments in the past two years doing little to dent the trend of cost inflation in mining assets over this period.
- Equity increased by 33% in 2009, against only 3% in 2008, driven by rights issues used to shore up balance sheets. After only 3% growth in 2008, this represents a return to the average increase in equity of 30% between 2002-2007, although motivations clearly differed between the two periods. The Top 40 have tapped the market to fund the boom and to mitigate the bust.

Top 10 analysis—top of the stocks

In each of the last five publications, we have examined the composition of the Top 10. Looking back we can see the following:

- The Top 10 listing is remarkably consistent. Of the current Top 10, seven were there in 2005, and only one company, China Shenhua, has broken into the Top 4, at the expense of Anglo American.
- Two companies, Newmont and Norilsk have left the Top 10, but they have not fallen far, to 15th and 12th respectively, suggesting a degree of stability at the top of the pile.
- Although the composition of the Top 10 is fairly established, there is much jockeying for position, with only BHP Billiton and Vale in their current places for more than one year.
- New entrants to the Top 10 over this period include beneficiaries of the strength of gold in 2008 (Goldcorp and Kinross), state-backed enterprises (NMDC), companies taken over by other Top 10 inhabitants (Phelps Dodge—now part of Freeport McMoRan) and Potashcorp, included in our analysis for the first time in 2009.
- As can be seen below, the Top 10 has been dominated by five companies over this period, although a ‘second tier’ comprising Xstrata, Barrick and Norilsk has emerged.

Aggregated top 10 positions: 2002-2009



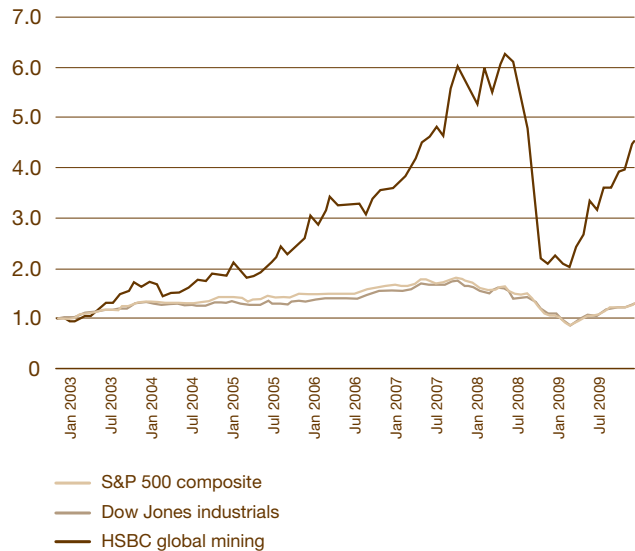
(Chart compiled by awarding 10 points for 1st place, 9 points for 2nd and so on, aggregated over 8 years)

Industry performance – riding the rollercoaster

Over the lifetime of Mine, performance of the HSBC Global Mining Index has been monitored against the wider market.

In spite of the global economic crisis, mining stocks have continued to better the S&P 500 and Dow Jones indices since we commenced our analysis, with investors who held on to their shares still ahead of the market. Following the pain of 2008, investor confidence in the mining sector returned in 2009, with those who bought at the bottom of the market particularly well rewarded.

Global indices (January 2003 = 1)



05 | Eight-year trends 2002-2009

Return on equity and return on capital employed

Year	ROE	ROCE
2009	12%	9%
2008	18%	13%
2007	29%	22%
2006	33%	23%
2005	25%	18%
2004	19%	14%
2003	11%	8%
2002	7%	5%

ROE has decreased significantly from its peak—falling from 33% in 2006 to 12% in 2009. ROCE has seen similar declines over the same time period. 2007 saw large equity and debt raisings, which were not fully matched by the increased profits of that year. In 2008 and 2009, profits fell as revenues decreased, with operating costs falling at a slower rate. The increase in commodity prices toward the end of 2009 should carry through to higher revenues in 2010. As a result, provided that the Top 40 manage costs well, we should see higher ROE and ROCE. The question will be how high, and whether the 20% plus ROEs of the 2005 to 2008 period can be achieved and maintained.



A close-up, slightly blurred image of a document titled "PRODUCTION". The document features a grid-like structure with various fields and checkboxes. The word "PRODUCTION" is prominently displayed in large, bold, capital letters across the middle. Below it, there are several columns and rows of data, including fields like "CHARGE", "FIRED", "BOG", and "REMOTE". The document appears to be a form or a checklist, possibly related to a production process. The background is a light, textured surface, and the overall tone is slightly muted.

A close-up, slightly blurred photograph of a document titled "PRODUCTION". The document features a grid-like layout with various fields and checkboxes. The word "PRODUCTION" is prominently displayed in large, bold, capital letters across the middle. Below it, there are several columns and rows of smaller text and checkboxes. Some of the visible text includes "DERM", "PREP", "CHARGE", "FIRED", "BOG", "REMOTE", and "PD18". There are also checkboxes labeled "Y/N" and "Y". The document appears to be a form or a checklist, possibly related to production or quality control. The background is a light, neutral color, and the overall tone is professional and technical.

06 | Reserves

Commodity	Gold (million oz)	Platinum (million oz)	Copper (million tonnes)	Zinc (million tonnes)	Nickel (million tonnes)	Iron ore (million tonnes)	Diamonds (million carats)	Coal (million tonnes)	Bauxite (million tonnes)	Potash (million tonnes)
No. of companies	17	3	19	7	5	10	4	9	4	3
2008 reserves	620	107	253	50	25	14,676	256	23,088	1,230	780
Depletion	(36)	(4)	(8)	(3)	(1)	(911)	(17)	(741)	(43)	(10)
Other net additions/ (reductions)	73	(8)	15	(4)	(0)	1,286	2	1,068	38	(22)
2009 reserves	657	95	260	43	24	15,051	241	23,415	1,225	748
% change	6%	(11%)	3%	(14%)	(4%)	3%	(6%)	1%	0%	(4%)
Remaining life (years)	18	26	33	13	31	17	14	32	28	75

Reserve replacement?

The fortunes of remaining reserves fluctuated between commodities in 2009, in most cases reflecting the sentiment on the underlying commodity. Gold, copper, iron ore and coal increased, whereas zinc, nickel, platinum, diamonds and potash were down. The remaining reserves life on the basis of 2009 annual production remains stable in comparison to 2008, indicating overall reserve replacement. However, as commodity prices increased, lower grade resources that were previously excluded became more economically viable for companies, and were therefore included in their reserve calculations to extend the remaining life of the mines. Few major discoveries have occurred and exploration costs have been drastically reduced over the period, pointing to a long-term challenge to replace depleting resources.

Shining in the dark...

PwC's annual Global Gold Price survey for 2009 highlighted the use of higher gold prices in reserves leading to lower gold cut-off grades. The surging gold prices have made the mining of lower grade ore areas and higher cost mines economically feasible. Furthermore, there have been successful exploration projects throughout the year, such as in Turkey, Greece, Cote d'Ivoire and Papua New Guinea that have also pushed gold reserves higher.

Rebound

There was a uniform increase in copper reserves across the Top 40, again fueled by increasing long-term price assumptions by the industry. The increase in copper reserves was led this year by Grupo México (which integrated the mining assets of Asarco) and Newcrest (which added copper reserves in New South Wales, Australia). Only the latter represents a real net gain to the industry, as the former reflects movements between companies. This demonstrates the challenge of reserve replacement.

Iron ore reserves increased by 3% over the period, due primarily to significant additions made by BHP Billiton, which increased their total reserves by 23% on the back of continued resource conversion in the Pilbara. Production was led slightly down on 2008 by Vale, partially offset by production increases by BHP Billiton and Rio Tinto from their respective Pilbara operations.

Hard to make it

The downward trend in zinc reserves over the period confirms the current challenge to replace annual depletion, as exploration programs have not discovered significant new ore bodies in the last few years. As a consequence, remaining life of reserves disclosed by the Top 40 companies has decreased from 17 years at the end of 2008 to 13 years. Such a shortening in remaining life may have been expected to cause a sharper price increase than has been experienced.

Reserve control

Coal reserves have been relatively stable over the period, thanks to additions that have offset annual production. Main additions to the Top 40 are attributable to BHP Billiton (due in part to the resource conversion at the Mt Arthur Coal mine), Xstrata (whose coal reserves increased by 39% after the acquisition of

the Prodeco coal mine from Glencore) and Vale (whose feasibility study completion at the Moatize mine in Mozambique resulted in a 15% increase). These additions accounted for close to 1.4 billion tonnes of coal, but were slightly offset by Rio Tinto's divestiture of their North American coal assets. The Top 40's coal reserves remaining life is above 30 years.



Reserves reporting

—time for consistency?

There is a wide range of reporting standards used by Top 40 companies to disclose their reserves, including Australasian JORC code, the US based SEC-IG7, Canada's CIM and South Africa's SAMREC. During the exercise of gathering and analysing the ore reserve data from the Top 40 companies; we faced significant challenges in obtaining sufficient and consistent information and the code used as the basis for the calculations was not always clearly defined.

The extent and quality of the reserves data disclosed by Top 40 companies varies drastically between companies, and therefore creates a challenging exercise to collate industry information and benchmark data amongst peers. It is difficult to believe that this assists potential investors in determining whether the industry is a good place to invest.

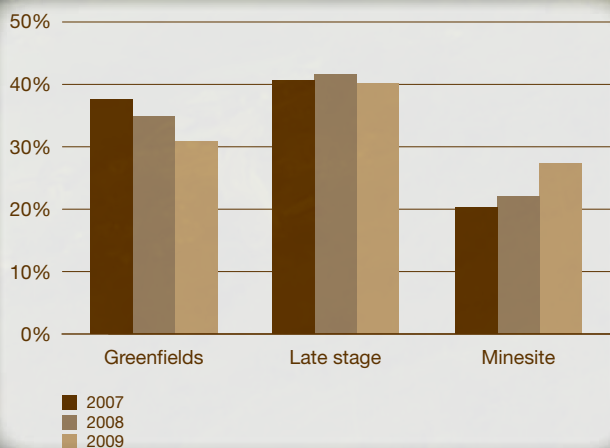
As a consequence our analysis of reserves includes only 34 of Top 40 companies.



Where are the green shoots?

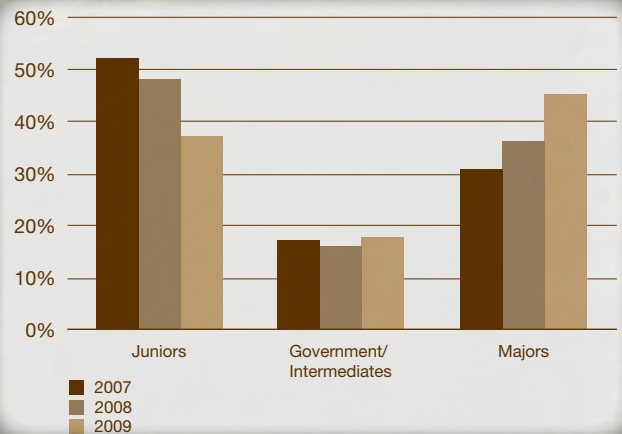
2009 saw a drop in exploration spend of 23% across the Top 40 companies as the boom of the previous six years came down with a crash. Whereas in the past exploration expenditure had risen consistently year on year, as the global economic crisis accelerated through 2008 and into 2009 and debt markets tightened up, companies cut back on discretionary expenditure in their need to conserve cash.

Relative share of exploration cost¹



Although the record high gold price is propping up exploration in that industry, it is amongst the base metals and bulk commodities, crucial for economic expansion, that we have seen exploration spending drop. When gold companies are excluded, the decline in exploration expenditure becomes 29%, nearly \$1 in every \$3 spent. This is notable in particular amongst Greenfield sites¹ whose share of exploration expenditure has been slashed from 2007 to 2009. This is as companies focus more on late-stage projects with more certain short-term returns, and mine-site exploration which is inherently cheaper but tends to be more focused on increasing the certainty of the resource base and replacing production.

Relative share of worldwide exploration budgets¹



A significant portion of Greenfield expenditure is conducted by, or outsourced to, the junior exploration sector. The effect of the downturn was felt strongly by juniors as they rely almost solely on equity funding.

As this source of financing dried up in 2009, junior companies were forced to slash their exploration budgets significantly more than the major companies in order to survive¹.

The move of the industry to 'come home' during tough times is an understandable result of short-term funding pressures; however it has the long-term effect of fewer major discoveries. These are a product of Greenfield exploration, and a drop in these discoveries today will reduce the resources and revenue streams of tomorrow. It begs the question: When and where will the next world class mines be found?

¹ Source: Metals Economics Group: 2010 World Exploration Trends

From Copenhagen to Mexico—what is the roadmap for the industry?

Looking for carbon clarity



2009 has been characterised by political discussion and debate on how to face climate change, curb Greenhouse Gas (GHG) emissions and provoke a shift to a low carbon economy. A lot has been said on political negotiations, and rumours abound in lobbies and corridors, but in the end what should be in mining leaders' toolboxes for business planning and long-term project development?

Business pressed governments to send clear, long term signals about the pace and direction of climate policy. On any credible measure,

the Copenhagen Accord does not do this, and failed to deliver any specific emissions targets or mitigation plans.

However the industry hasn't sat on its heels, waiting for the outcome of Copenhagen to take action on climate change. Many Top 40 companies have publically taken a position regarding climate change. Many are taking steps on GHG emissions and exposure management, through effective reporting and integration of carbon value in the core business performance monitoring and

project development. Even if it hasn't provided the clarity that was called for, Copenhagen has reinforced a number of themes and trends that will require action by mining companies in the foreseeable future:

- **Energy efficiency:** Pressure on margins and cash flows has reinforced the need to manage down energy costs and ultimately the assignment of cost to carbon. Technological innovation is critical in this space.

07 | Looking for carbon clarity



- **Regulation and standards:** Individual governments are expected to complement market measures with non-market regulations, such as stricter standards on fuel and energy efficiency in transport, appliances and homes, and encourage more sustainable practices.
- **Carbon management:** Business is investing in carbon and energy management systems which are integrated in their operations and monitored by key performance indicators. Ultimately this information is flowing to assist investment decisions, highlighting the need for readily available and reliable information, including project sensitivity to policy, carbon price and climate scenarios.
- **Reporting:** The requirements for business to report credible or verified GHG data are increasing; even within the same jurisdiction a company may submit emissions data in multiple formats for different regulatory purposes. Securing a robust and flexible data management system is key for mining companies to meet these changing obligations.
- **Carbon markets:** Given there will not be a common global price for carbon in the short to medium-term, companies will still have uncertainty and opportunity in determining facility locations. The shadow price of carbon used for investment appraisal should cover a range of scenarios and vary for different national outcomes.
- **Taxation:** Tax will clearly play a role, as evidenced by recent announcements of carbon taxes in Ireland and France and the revisions to the EU Energy Tax Directive currently out for consultation. It will take a while for changes to the tax system to filter through, but variations between territories will create cost burden that business will need to prepare for.

Meanwhile, we expect continuing domestic and international policy and carbon market uncertainty which, exacerbated by pressure on public expenditure, will constrain investment in low carbon infrastructure. This will determine whether the Copenhagen Accord goal of 2 degrees Celsius still remains achievable.



Health & safety

—front and centre

The mining industry regularly—and rightly—points to the health and safety of their workforce, communities and stakeholders as an absolute priority. Safety incidents have a serious and direct impact on an organisation, primarily through the risks posed to employees and contractors, but also through business interruption, corporate reputation damage and morale challenges. Beyond these direct implications, there are deeper risks to an organisation's reputation and potentially even its license to operate, critical considerations in the light of tight labour markets and the need for good relations with governments to enable access to new reserves and to navigate approval processes. In particular, it is becoming evident that governments are more likely to intervene in the mining sector

where there is a perception of systemic performance issues. As the principle mechanism of Government is regulation, intervention typically results in more stringent operating conditions.

Across the industry mining companies are 'walking the talk' in a bid to bring policies such as BHP Billiton and Anglo American's "zero harm" programs to life. However, despite the stated goals, injuries and fatalities continue to occur across the industry.

Transparency and consistency in reporting needed

Public reporting of safety risk management is a statutory reporting requirement in many jurisdictions, and a stakeholder expectation. Further, the quality of this reporting is an important indicator of the degree to which safety has been embedded in the mind-set and actions of management and the organisation.

Whilst health and safety is a stated priority for the industry, transparency and consistency in safety management reporting is sorely lacking. Among the Top 40 mining companies, key performance indicators and other health and safety data is incredibly challenging to gather and benchmark. Different measurement standards and criteria are used by each company, based on differing corporate policies and definitions, statutory requirements and the relative priority placed on transparency in this area. Reporting varies from companies who release comprehensive statistical results, based on their definitions and categorisations of certain events to those entities who have no health or safety information publically available at all.

Only when safety performance can be measured consistently, enabling it to be assessed and contrasted across the industry, will it be considered a reliable performance measure. A common, agreed framework for definitions, reporting tools and metrics is essential to bring the ability to benchmark relative performance and provide truly transparent information about the industry's performance as a whole. This is an important next step for the industry, and the companies in the Top 40 must take the lead.

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

10 | Top 40 companies

Name	Country **	Year end
Anglo American plc	UK	31-Dec
AngloGold Ashanti Limited	South Africa	31-Dec
Antofagasta plc	UK	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
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
Fortescue Metals Group Limited	Australia	30-Jun
Freeport-McMoran Copper & Gold Inc	United States	31-Dec
Gold Fields Limited	South Africa	30-Jun
Goldcorp Inc.	Canada	31-Dec
Grupo Mexico S.A. de CV	Mexico	31-Dec
Impala Platinum Holdings Limited	South Africa	30-Jun
Ivanhoe Mines Limited (*)	Canada	31-Dec
Jiangxi Copper Company Limited (*)	China / Hong Kong	31-Dec
Kazakhmys Plc (*)	UK	31-Dec
Kinross Gold Corporation	Canada	31-Dec
Lihir Gold Limited	Australia	31-Dec
MMC Norilsk Nickel (*)	Russia	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
Potash Corporation of Saskatchewan Inc. (*)	Canada	31-Dec
Randgold Resources Limited	UK	31-Dec
Rio Tinto plc / Rio Tinto Limited	UK / Australia	31-Dec
Shanxi Xishan Coal and Electricity Power Company Limited (*)	China	31-Dec
Teck Resources Limited	Canada	31-Dec
The Mosaic Company (*)	United States	31-May
Vedanta Resources plc	UK	31-Dec
Xstrata plc	UK	31-Dec
Yamana Gold Inc.	Canada	31-Dec
Zijin Mining Group Company Limited (*)	China / Hong Kong	31-Dec

(*) Refers to companies which were not included in 2008 analysis.

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

11 | Explanatory notes for aggregated financial information

We have analysed 40 of the largest listed mining companies by market capitalisation. Our analysis includes major companies in all parts of the world whose primary business is assessed to be mining.

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 2009 information was unavailable at the time of data collation, 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 2009 covers reporting periods from 1 April 2008 to 31 December 2009, with

each company's results included for the 12-month financial reporting period that falls into this timeframe.

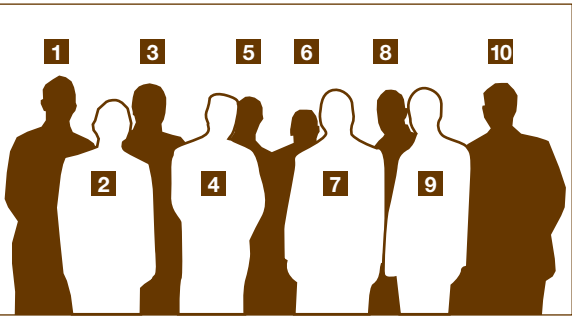
All figures in this publication are reported in US dollars, except when specifically stated. The results of companies that report in currencies other than the US dollar have been translated at the closing US dollar exchange rate for the respective year.

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.

Certain photos have been provided courtesy of Gold Fields Limited. We thank them for the contribution.

Key contributors to Mine



- 1 Nick Box (UK)
- 2 Peter Luk (China)
- 3 Yuri Muravlev (Russia)
- 4 Ben Gargett (Australia)
- 5 Mathieu Vallart (Chile)
- 6 Megan Naidoo (South Africa)
- 7 Tim Johnston (Canada)
- 8 David Buist (USA)
- 9 David Opperman (Australia)
- 10 Sanjay Chandrasekhar (Australia)

Contacting PwC

PricewaterhouseCoopers (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 163,000 people in 151 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

Global Mining Leadership Team

Global Mining Leader and Australia

Tim Goldsmith, Melbourne
Telephone: +61 3 8603 2016
Email : tim.goldsmith@au.pwc.com

Canada

John Gravelle, Toronto
Telephone +1 (416) 869 8727
E-mail: john.gravelle@ca.pwc.com

China

Ken Su, Beijing
Telephone: +86 (10) 6533 7290
E-mail: ken.x.su@cn.pwc.com

India

Kameswara Rao, Hyderabad
Telephone: +91 40 6624 6688
Email: kameswara.rao@in.pwc.com

Latin America

Colin Becker, Santiago
Telephone: +56 (2) 940 0016
E-mail: colin.becker@cl.pwc.com

Russia and Central and Eastern Europe

John Campbell, Moscow
Telephone: +7 (495) 967 6279
E-mail: john.c.campbell@ru.pwc.com

South Africa

Hein Boegman, Johannesburg
Telephone: +27 11 797 4335
Email : hein.boegman@za.pwc.com

United Kingdom

Jason Burkitt, London
Telephone: +44 (20) 7213 2515
E-mail: jason.e.burkitt@uk.pwc.com

United States

Steve Ralbovsky, Phoenix
Telephone: +1 (602) 364 8193
E-mail: steve.ralbovsky@us.pwc.com

Knowledge Manager

Ben Gargett, Melbourne
Telephone: +61 3 8603 2539
Email : benjamin.gargett@au.pwc.com

Country Mine publications

Besides the Global Mine publication PricewaterhouseCoopers prepares a number of Country Mine Publications which focus on analysis of trends in the mining industry in particular regions.



Canada

Junior mine: Trends in junior mining—2009 | February 2010

PricewaterhouseCoopers Canada's review of trends in the TSX-V mining industry includes a snapshot of 20 mining companies on the TSX Venture Exchange with market capitalisations of \$500-700 million.

Contact John Gravelle, Toronto
Telephone +1 (416) 869 8727
E-mail: john.gravelle@ca.pwc.com



Australia

Aussie mine—Road to recovery? | November 2009

PricewaterhouseCoopers' annual review of trends in the mid-tier Australian mining industry. This report focuses on the annual results of the largest 50 mining companies listed on the Australian Stock Exchange with a market capitalisation of less than \$5 billion at 30 June 2009.

Contact Tim Goldsmith, Melbourne
Telephone: +61 3 8603 2016
Email: tim.goldsmith@au.pwc.com

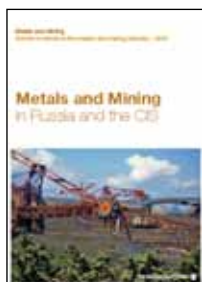


South Africa

South Africa Mine | November 2009

This inaugural edition of SA Mine focuses on the state of the mining sector in South Africa. It aggregates the financial results of mining companies with a primary listing on the Johannesburg Stock Exchange (JSE) and mining companies with a secondary listing on the JSE whose main operations are in Africa.

Contact Hein Boegman, Johannesburg
Office: +27 11 797 4335
Email: hein.boegman@za.pwc.com



Russia and CIS

Metals and Mining in Russia and CIS | April 2010

This inaugural edition of Metals & Mining in Russia and CIS focuses on the state of the mining sector in this region and the major trends in its development. It analyses the financial results of 20 major mining companies in Russia, Ukraine and Kazakhstan.

Contact John Campbell, Moscow
Telephone: +7 (495) 967 6279
E-mail: john.c.campbell@ru.pwc.com

Other PwC mining publications

Our commitment to the industry goes beyond our services. As industry leaders, we are globally recognised for our broad knowledge of the mining industry and the laws that govern it.

Set out on this page below are examples of recent mining thought leadership publications.



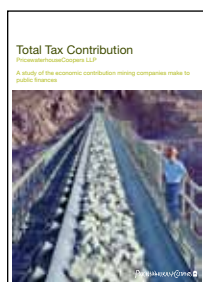
Mining deals | February 2010

In 2009 mining M&A saw significant decreases in values and also changes in the characteristics of buyers and sellers. Sellers were acting largely through necessity to strengthen balance sheets for survival rather than seeking expansion and development capital according to 'Mining Deals', PwC's annual publication on deal activity in the mining sector.

Contact Tim Goldsmith, Melbourne

Telephone: +61 3 8603 2016

Email : tim.goldsmith@au.pwc.com



Total Tax Contribution—Global study for the mining industry | May 2010

The taxes and other contributions that mining companies pay to government are an important element in the creation of prosperity and stability in the countries in which they operate. However, the full extent of this contribution is not always recognised. Using the PwC Total Tax Contribution framework, this second study for the mining sector aims to bring greater transparency to the wider economic contribution that mining companies make to public finances.

Contact Susan Symons, London

Total Tax Contribution Leader

Tel: +44 (0)20 7804 6744

Email: susan.symons@uk.pwc.com

Steve Ralbovsky, Phoenix

Global Mining Tax Leader

Tel: +1 602 364 8193

Email: steve.ralbovsky@us.pwc.com



Gold Medal Performance—2009 Global Gold Price Survey Report | December 2009

This survey covers 45 gold mining and development companies with global operations, which together reported expected production of 33,343,385 ounces in 2009.

Contact John Gravelle, Toronto

Telephone +1 (416) 869 8727

E-mail: john.gravelle@ca.pwc.com



Global Mine Bulletin

This quarterly bulletin highlights a number of reports and surveys recently issued by the PwC global mining team, as well as other mining industry topics.

Contact Ben Gargett, Melbourne
Telephone: +61 3 8603 2539
Email: benjamin.gargett@au.pwc.com



Financial reporting in the mining industry

This provides a comprehensive analysis of financial reporting in the global mining industry. It sets out the major accounting practices adopted by the mining industry under IFRS in respect of issues of particular relevance to the mining sector. We are currently updating this publication to address all recent changes and developments in IFRS and industry practice.

Contact Debbie Smith, Melbourne
Telephone: +61 3 8603 2249
Email : debbie.smith@au.pwc.com

Jason Burkitt, London
Telephone: +44 (20) 7213 2515
E-mail: jason.e.burkitt@uk.pwc.com



