Aussie Mine 2013 Unloved ... survival of the fittest

Aussie Mine November 2013





Foreword

Welcome to the 7th edition of *Aussie Mine – Unloved… survival of the fittest*. This report provides an industry and financial analysis of the largest 50¹ mining companies listed on the Australian Securities Exchange (ASX) with a market capitalisation of less than \$5 billion at 30 June 2013 (the mid-tier 50). For the first time in *Aussie Mine*, we include a feature on mining services contractors.

It's been a challenging year for the mid-tier 50 with falling commodity prices and increased costs impacting the bottom line. These conditions together with declining investor confidence have seen the combined market capitalisation of the mid-tier 50 plummeting 50% in two years. The entry level to make the mid-tier 50 is now just \$172 million.

Yet with continued strong demand from China and other developing nations, the outlook is positive for the mid-tier 50. The investment in new production over recent years is starting to pay off, with half of the mid-tier 50 producers increasing production by greater than 30%. In particular, those who can capitalise on current market conditions will regain the love of investors and deliver shareholder value in the near term.

We hope you enjoy reading *Aussie Mine*, and welcome the opportunity to receive your feedback.



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Executive summary

Australia's mid-tier miners are facing a tough market where regaining the love of investors is key. To avoid this temporary separation becoming a divorce, the mid-tier 50 realise it's time to slim down, get fit, and remain competitive to ultimately survive and regain that love. At Diggers and Dealers this year CEO after CEO came to present, seemingly with one goal in mind – to convince the market that they had got their company wrong, that they were different and undervalued. It would be fair to say that plenty were feeling "*Unloved*". After a torrid run on the share market and continued press about the demise of the mid-tier and junior miners, it's little wonder this view was expressed.

Over the 12 months to June 2013 the mid-tier 50 lost \$17 billion or 33% of its market capitalisation, a staggering number. More than this however, for the first time since PwC started this analysis we have seen the market capitalisation of the mid-tier 50 fall below their net asset value, which sits at \$39 billion (Figure 1) - showing that the industry is carrying its assets on the balance sheet at higher values than the stock market is saying they are worth. This occurred despite record impairment charges in excess of \$3.5 billion being recorded against assets as companies pared back asset values following falling commodity prices and a gloomy outlook. However, there were bright lights, lead by Sirius Resources (as a result of exploration success) and BC Iron (as a result of the shift into profitable production), that paid off for shareholders.





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Key findings from our analysis of the mid-tier 50

Financial headlines:

Net operating loss of >\$1 billion Impairment charges totalled \$3.5 billion Net assets of the mid-tier 50 > market capitalisation

Operating cash flows down **17%**

Cost challenges have again been a hallmark of the mid-tier 50, with costs marching up a further 7% this year, and margins down from 40% in 2012 to 34%. The coal sector took the brunt with gross margins falling to 13%. This, coupled with falling commodity prices, has meant FY13 was a challenging year for the mid-tier 50. Our financial analysis at section 2 takes you through the financial results and our observations in further detail.

Mid-tier industry analysis:

Operating and capital efficiency is the aim of the game...

Volumes up > 30% for half of the producers

This huge increase in production follows years of investment in developing projects. Those that can control costs are now well placed to capitalise on continued demand growth.

Driving costs down will continue to be the main focus of mid-tier miners... but it can't just be austerity

With commodity prices down from recent highs and no obvious catalyst for upward momentum, at least for the short-term, the industry has acted on costs and has cut ruthlessly to survive. Cost cutting however is a one-time only opportunity – structural shifts in productivity and removal of unprofitable volume is the only longer term area where a real difference can be made. For our analysis on productivity, see section 6.

Focus and alignment of business goals across the entire organisation is critical

We are seeing some of the mid-tier 50 recognise the importance of aligning performance goals with strategy across the entire business. We interviewed Bill Beament (CEO of Northern Star Resources) who outlines his key messages for industry – refer to section 3 to read our interview with Bill, and section 7 for our analysis into performance alignment.

Deals & fund raising – doors closed...?

Deal activity has slowed significantly... but expect to see changes to the mid-tier

The mid-tier 50 all but shut their doors to deal activity in the 12 months ended 30 September 2013, with the number of completed and pending transactions declining by 8 transactions to only 14. Deal size also declined significantly, falling 85% to \$2.6 billion. We expect deal volumes to pick up as a period of consolidation occurs, however we expect the value of these deals to remain low as investors exercise caution. Refer to section 4 for our analysis into deal activity.

Equity funding down 65%... and lower than cash used in acquisitions

Of great concern to the mid-tier 50 is where the future capital is going to come from. In a capital intensive industry, equity funding has fallen by 65% to \$1 billion and net proceeds from borrowings has remained flat. While the big players are taking advantage of cheap debt both in the US and Europe, the mid-tier 50 continues to find it challenging to raise debt financing, with only 22% of payments for plant and equipment being funded out of debt, the balance coming from operating cash flows.

Without access to significant debt funding, the mid-tier 50 have traditionally turned to equity markets. In 2013 this has however also become problematic. Falling share prices have made new equity expensive, prohibitively so in some cases, and reduced the ability for companies to deal on the back of their script. We analyse the trends amongst the mid-tier 50 in obtaining funding and provide our 7 tips for success in accessing capital in section 5.



Mining services contractors – survival of the fittest... and most agile!

Relationship is key with the mining services companies in these uncertain times

As new projects dry up and companies look to 'in-source', work for mining services contractors has fallen. The miners are taking advantage of a market which suddenly has excess people and yellow kit to open a round of contractual renegotiations in a bid to rein in costs. Some care is needed to balance this with operational risk. For the first time in *Aussie Mine*, refer to section 8 of the publication for our specific analysis of 30 ASX listed mining services contractors and equipment providers. This includes our point of view on the importance of the relationship between the mid-tier 50 and mining services companies.

2014 Outlook

So where to from here for an industry feeling *Unloved*? On the demand side we believe the long-term fundamentals remain unchanged and very much still positive for the industry as the majority of the world's population, led by China, looks to industrialise. However, it is the supply side of the equation which should be exciting for those in the mid-tier 50 who 'have': Have operating assets, have projects that are easily able to be developed and have the funding to do so.

Against the backdrop of continued capital constraints, reduced funding for exploration, new projects typically being found in either challenging geology or challenging locations and declining grades, the question we ask this *Unloved* group of miners is not so much who is going to consume your products, but; how are you going to bring sufficient production on line economically to meet the growing needs of the world?

An opportunity exists for the mid-tier miners to capitalise on these market conditions – the fittest will have the best opportunity to regain the love of investors and really flourish.



Aggregated income statement

\$1 billion loss as commodity prices and impairments take their toll

The mid-tier 50 shifted from a record profit in 2012 to the first \$1 billion + net loss since we started the *Aussie Mine* series. It is a stark reminder of the volatility the industry is exposed to, as falling commodity prices, combined with a 7% increase in costs, reduced margins. \$3.5 billion of impairment charges put any chance of a bottom line profit to rest.

However, the news wasn't all bad as strong production results in FY13 helped operating revenues increase by 2% in the face of a downward price pressure in most commodities.

	2013 \$m	2012 \$m	Change %	
Revenue from ordinary activities	·····			D C
- Operating revenue	22,335	21,826	2%	Revenue flat despite production
- Non-operating revenue	492	317	55%	well up
Total revenue	22,827	22,143	3%	
Less expenses from ordinary activities	(16,382)	(15,239)	7%	
Gross profit	6,445	6,904	-7%	
Exploration expenses	(682)	(679)	0%	
Other income/(expenses)	(584)	(525)	11%	
EBITDAI*	5,179	5,700	-9%	
Gain/(loss) on sale of investments	437	7	5843%	\$3.5 billion
Impairment	(3,552)	(1,129)	215%	of impairment
EBITDA	2,065	4,579	-55%	charges
Depreciation and amortisation	(2,768)	(2,039)	36%	
EBIT	(703)	2,540	-128%	
Net interest income/(expense)	(348)	(177)	96%	
Profit from ordinary activities before tax	(1,051)	2,362	-144%	
Income tax expense	14	(411)	-103%	Net loss >
Net profit/(loss) from continuing operations	(1,037)	1,951	-153%	\$1 billion for
Source: Company Financial Statements, PwC analysis				first time

*EBITDAI = Earnings before interest, tax, depreciation, amortisation, impairments and investments

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Figure 2: Revenue and gross margin % by commodity – FY13

*Adjusted to exclude non-mining components of Arrium and Mineral Resources Note: Bubble size reflects the number of producing mid-tier 50 companies in the sector in FY13

Margins under pressure as prices fall

The mid-tier 50 this year achieved a gross margin of 34%, down on the 40% achieved in 2012, despite significant growth in production. With revenue growth of only 2% and costs up 7% – margins have faced further erosion this year – continuing a trend that has occurred over a number of years.

There were very few miners who achieved higher gross margins in FY13, lead by Sandfire Resources who contributed to copper being the stand-out performer by achieving a gross margin of 59% in its first year of commercial production.

Consistent with previous years, the lowest gross margin product is the coal sector, down to just 13% in FY13 as tumbling prices took their toll. All this in a year where production rebounded strongly.



Figure 3: Gross margin of mid-tier 50 producers

Note: Includes only producing companies in the mid-tier 50 and gross margin defined here excludes non-operating revenues.

Q Click to zoom in

Production performance of the mid-tier 50

Commodity	Unit	Sales vol	ume 000's	Change	\$ cost	t per unit*	Change
		2013	2012		2013	2012	
Coal	tonne	29,441	23,105	27%	82	83	-1%
Copper	tonne	223	166	35%	4,205	4,567	-8%
Gold	ounce	2,934	2,357	24%	902	774	17%
Iron ore	tonne	40,408	27,955	45%	61	59	4%

*Based on total operating costs excluding depreciation, royalties and exploration expenses Source: Company Financial Statements, PwC analysis

Is the mid-tier 50 getting fitter or fatter?

This year's mid-tier 50 achieved impressive growth in their production volumes across the board, but the new production has come at a cost in some cases. Is it simply a case of unavoidable industry cost pressures and higher costs associated with ramp up of new operations? Or are there plenty of opportunities still out there for the mid-tier 50 to cut the fat or innovate to achieve more profitable growth?

The mid-tier coal and iron ore sector held steady on unit costs as cost cutting drives started to positively impact, while copper managed to improve unit costs thanks to Sandfire Resources.

With a massive 17% increase in unit costs, gold was the worst performer. Declining grades, challenges integrating acquisitions and the impact of the carbon tax were blamed for the jump.

While cost pressures varied by each company, there were common areas impacting unit costs for the industry as a whole:

- Higher cost on ramp up of new mines and integration of existing operations acquired
- Reduction in grades
- Higher input costs for labour, contractors and power.

Sector analysis

Movements in aggregated mid-tier 50 revenue by sector

Gold: no longer the "safe haven"?

Our 2012 publication highlighted gold as the shining light in terms of top line growth, while other commodities struggled. For the first half of 2013 this story continued, contributing to higher revenue. However, the gold price took a turn for the worse in January and plummeted in April 2013, stopping a 10 year march up in its tracks. FY14 promises to be a challenging year for gold.



Figure 4: Revenue analysis – Gold

Source: Company Financial Statements, PwC analysis Q Click to zoom in The impact on revenue of the fall in gold price revenue was relatively minor as it occurred later in the year for June reporters and after the year end for December reporters. There was a 24% increase in production, equating to an additional 577,000 ounces. Production grew across the sector as the mid-tier gold miners brought new projects online and expanded existing operations, with the key contributors being as follows:

- **Regis Resources** (up 146k ounces) New ounces derived from 10 months of production at the company's Garden Well gold mine.
- **Perseus Mining** (up 106k ounces) Ramp up of operations at its Edikan Gold Mine in Ghana as the company enjoyed its first full year of production.
- Evolution Mining (up 88k ounces) Primarily due to 2013 being its first full year of wholly owning the Cracow and Mt Rawdon gold mines. Increased throughput and grade at its Edna May and Mt Rawdon mines also boosted production.
- **PanAust** (up 78k ounces) Whilst historically a copper miner, PanAust saw first production at its new gold-silver operation in Laos in May 2012.

However, a dark cloud hangs over gold. With costs up significantly, grade down and prices stabilising at a lower level – watch out for next year when the full impact is shown and the numbers demonstrate why gold is currently *Unloved*.

Iron ore: back from the brink

The dip in the iron ore price in September 2012 was widely reported as the beginning of the end for the mid-tier iron ore miner. Pundits have predicted a glut of new supply will come online from the majors that will outstrip demand, resulting in downward price pressures squeezing margins for the higher cost mid-tier. To date this has not manifested itself.

Demand from China continued to rise as data demonstrated no signs of a hard landing and sentiment, although fragile, has improved as the new government gets on with the job of rebalancing the economy to make its growth more sustainable over the long-term.

The price rebound from the September low limited the adverse impact on revenue to \$521 million. The midtier iron ore miners made light work of overcoming the shortfall in price, achieving an impressive 45% increase in production in 2013.



Figure 5: Revenue analysis - Iron ore*

*Adjusted to exclude Arrium and Mineral Resources' non-mining component Source: Company Financial Statements, PwC analysis

Q Click to zoom in

The biggest contributors to the increase in iron ore revenue were:

- Mineral Resources' mining business (up \$236 million) Further expansion at the Carina mine and ramp up of Phil's Creek mine, partially offset by lower realised price.
- **Mount Gibson Iron** (up \$204 million) Due to significant increase in production volumes from the Mid West and Koolan Island operations, partially offset by a lower realised price.
- Arrium's mining business (up \$158 million) Saw a significant increase in volumes from the ramp up of the Southern Iron expansion, with a lower realised price detracting somewhat from the production boost.
- **BC Iron** (up \$121 million) Ramp up of operations at Nullagine joint venture with Fortescue Metals Group, coupled with increase in ownership stake from 50% to 75% in December 2012.

Coal: falling price wipes out 1/3 off revenue

Coal prices suffered a steep decline from March 2012 and remained flat, resulting in a \$1 billion fall in revenue.

In a year of falling prices the industry ramped production back up following the floods in 2012. The increase in production meant that revenue dropped by only 5% in FY13. Whitehaven Coal was the only coal miner in the mid-tier 50 that managed to avoid a shrinking top line, holding steady at \$0.6 billion on the back of a 34% increase in production.



Figure 6: Revenue analysis – Coal Source: Company Financial Statements, PwC analysis

🔍 Click to zoom in

Yancoal Australia, new to the mid-tier 50 this year, managed a 4.6 million tonne boost to production in FY13 which equated to a \$641 million volume impact on revenue. The majority of these tonnes came from new operating mines Middlemount, Donaldson and Stratford/ Duralie, which were acquired as part of the merger with Gloucester Coal in July 2012. In contrast, mid-tier 50 veteran New Hope Corporation suffered a 450,000 tonne decline in sales volumes in FY13 due to a three-week rail outage in early 2013.

Record impairment charge of \$3.5 billion a blight on the mid-tier 50

For the second year in a row, the mid-tier 50 have suffered huge impairment write-downs on its assets. The FY12 impairment charge of \$1.1 billion pales in comparison to this year's \$3.5 billion, which represents 9% of net assets. This is the ugly face of falling prices, coupled with continued cost challenges and assets on the balance sheet at prices paid during better times. The impairment charges are reflective of continued uncertainty and are why the mid-tier 50 are currently *Unloved* by the market.



Figure 7: Impairment charge by commodity – FY13 \$ million

Q Click to zoom in

After a dream run lasting a decade, the shine has come off gold, with the price falling from record highs over the first half of 2013. The view on gold is mixed and indeed it is difficult to gain an understanding of the underlying drivers – but there are many commentators who believe the price has further to go, in a downward direction.

The gold sector has been close to immune from impairment charges that have plagued the mid-tier 50 since the GFC. However, in 2013 they have been hit in a major way, recording impairment charges of just under \$2 billion.

Four of the top five impairment charges within the mid-tier 50 came from gold miners Alacer Gold (\$473 million), Evolution Mining (\$384 million), Silver Lake Resources (\$352 million) and Kingsgate Consolidated (\$333 million), all of which flagged the deteriorating gold price as the primary driver for the write-downs. Each of these companies completed acquisitions or transactions in recent years, with the impairment charge recognising that the view of the future has changed.

Cost pressures across the board in Australia were evident, with 75% of the mid-tier 50 impairment relating to assets in Australia. As well as gold assets, Atlas Iron took a \$458 million impairment on assets it had acquired over the preceding years.

The majority of impairment losses have come from 30 June reporters, which is not surprising given that the gold price only started deteriorating from around January 2013 and thus we won't see the impact of this for December reporters until their 2013 reporting. A further \$1 billion of impairment was recorded by December reports in their 30 June 2013 half year accounts – showing there was more pain to come.

Aggregated balance sheet

Honey, I've shrunk the mid-tier 50!

For the first time since we began publishing *Aussie Mine*, the mid-tier 50 net assets position has shrunk, dropping 3% or \$1 billion on the back of impairment charges and lower capital raising. To put this in perspective, the lowest level of net asset growth we have reported in any of the past five publications was 18%:

	Year of publication				
	2009	2010	2011	2012	2013
Change in net assets	36%	18%	35%	18%	-3%

There are a range of drivers but it is clear that the downward trend in prices, coupled with cost pressure and challenging funding outlook has played a large role.

	2013 \$m	2012 \$m	Change %	
CURRENT ASSETS				Cash down 19%
Cash and cash equivalents	5,563	6,892	-19% ┥	as funding is squeezed while
Inventories	4,270	3,880	10%	capex continues
Receivables	2,645	2,842	-7%	
Other current assets	2,511	2,397	5%	
Total Current Assets	14,989	16,010	-6%	
NON-CURRENT ASSETS				
Investments in associates	3,935	3,981	-1%	
Property, plant and equipment	24,673	21,833	13%	
Capitalised development expenditure	5,997	4,492	33%	
Capitalised exploration expenditure	7,556	7,897	-4%	
Goodwill	1,832	2,566	-29%*	
Other non-current assets	3,306	2,874	15%	
Total Non-current Assets	47,299	43,643	8%	Assets increased despir
				\$3.5 billion of impairment
TOTAL ASSETS	62,288	59,653	4%	charges
CURRENT LIABILITIES				
Accounts payable & accrued liabilities	3,934	3,841	2%	Debt to equity rat
Interest bearing liabilities (short-term borrowings)	1,500	2,343	-36%	has increased fro
Provisions	798	618	29%	26% in FY12 to 3 in FY13
Other current liabilities	1,619	685	136%	
Total Current Liabilities	7,850	7,487	5%	

	2013 \$m	2012 \$m	Change %	
NON-CURRENT LIABILITIES				
Interest bearing liabilities (long-term borrowings)	10,985	8,143	35%	
Provisions	2,328	1,931	21%	
Other non-current liabilities	1,929	1,861	4%	
Total Non-Current Liabilities	15,242	11,936	28%	
TOTAL LIABILITIES	23,091	19,424	19%	Net assets l declined 30
NET ASSETS	39,197	40,229	-3%	FY13 – a fir Aussie M

*Note: Virtually all of the decrease in goodwill relates to Arrium's non-mining components.

Under priced or over capitalised?

In a startling sign of the change in investors' appetite for the mid-tier 50, their net asset value (\$39 billion) now exceeds market capitalisation (\$35 billion), despite \$3.5 billion of asset write-downs in the period. Only two conclusions can be drawn – either the market has oversold the mid-tier 50 or it remains over capitalised. Iron ore, led by Arrium showed the greatest deficiency, whilst gold and coal were not too far behind. Most of the companies which drive this are December reporters and you only have to look to their 30 June 2013 halfyear results to see this disparity in market capitalisation translate to further impairment charges of \$1 billion.



Figure 8: Difference between market capitalisation and net assets – FY12 vs FY13 Q Click to zoom in

The need for focus on quality over quantity

Last year we reported that the mid-tier 50 grew its asset base by 20% as they looked to maximise growth while the top line was strong. It's a different story in FY13, with that figure shrinking to just 4%.

Shareholders have driven a change in approach by the majors. No longer is it a growth only agenda where adding additional ounces or tonnes was seen to be value accretive, but the demand is for capital discipline and increased returns to shareholders. The mid-tier 50 are also caught up in this wave.

Despite the challenging conditions, the mid-tier 50 continued to invest heavily in their projects in FY13 as we saw expansion of existing mines and several new mines coming online. These included Evolution Mining's Mt Carlton gold-silver-copper project, Mineral Resources' Phil's Creek Mine and Regis Resources' Garden Well gold mine.

Like the major miners, capital projects for the mid-tier 50 are a long-term decision. The companies who spent the most capex during the year, as shown at right, did so on projects which were approved and started before commodity prices started to come down. Mining is a long-term game and decisions to spend shareholder funds take years to play out. Once projects are started they are very difficult to slow down, as the incremental dollar spent to finish generates a higher return than the overall project. In a market where capital is tight this can put pressure on balance sheets.

Looking forward, we expect to see capital expenditure and cash flows for PP&E declining next year as companies react to the new paradigm and preserve cash, and reduce capex and the number of new mines coming on line.

The upshot of this? For the medium term, supply will be constrained and will struggle to keep up with the demand of emerging markets. The following companies in the mid-tier 50 had the largest additions to capitalised development and PP&E, outside of M&A activity:

	Company	Spend \$m	Activity
1	Mineral Resources	433	Construction of Phil's Creek mine and capital expenditure relating to the mining services business.
2	Evolution Mining	394	Construction and commissioning of Mt Carlton gold-silver-copper project and mine development at other sites.
3	Yancoal Australia	349	Stage 3 development at Austar, infrastructure upgrades at Yarrabee and other mine development projects.
4	Arrium	303	Southern Iron and Whyalla Port expansion projects, mine development at Peculiar Knob.
5	OceanaGold Corporation	297	Construction and commissioning of the Didipio project in the Philippines.

Is Australia still the location of choice for miners?

It's no secret that Australia is one of the most expensive locations for miners to operate. However, it is also one of the most politically stable. In recent years, high cost has not been a major cause for concern as prices remained strong. Now that it's time to get fitter, we are seeing more Aussie miners look abroad, where there is an abundance of lower cost locations in which to expand production. Africa, with over 200 miners owning projects on the continent, and Asia continue to see most of this interest, but which commodity sectors are more foreign-focused than others?

	Gold	Platinum	Copper	Iron ore	Uranium	Coal	Other	TOTAL
Africa	1,282	2,072	0	487	521	390	555	5,308
Asia	1,273	0	1,407	0	0	0	103	2,783
North America	0	0	0	0	283	195	98	576
South America	303	0	31	0	0	0	1,209	1,544
Europe	513	0	0	0	0	0	0	513
Other foreign	517	0	0	0	0	0	3	520
Australia	5,277	0	4,083	15,533	2,655	14,726	5,878	48,152
Unallocated	349	100	162	42	361	67	1,811	2,893

2013 total asset value of the mid-tier 50 by location and commodity

Clearly gold miners are the most heavily invested overseas – although this is only 13% of the total assets of the mid-tier 50. Only 18% of the mid-tier 50's assets are currently based in foreign locations – which is flat year on year. Is sovereign risk holding the mid-tier 50 back? Or is it the comfort of home turf which demonstrates that the Australian market still has a long way to go to be truly global?

It is expected that investor sentiment toward mining projects in developing nations will improve in the medium and longer term. As these nations begin to establish strong legal and fiscal frameworks, sovereign risk levels will begin to decline. This addresses one half of the value equation (risk) – the other half (returns), will also grow as the level of social and economic infrastructure supporting companies in these regions also builds over time.

Australia will be unable to compete on wage levels with these developing nations, and as such, will be forced to look to technology and education for productivity growth as well as focussing on making ourselves an attractive country in which to invest, to compensate.

The going gets tough for Aussie miners looking for funding

The aggregate debt to equity ratio of 32% has grown from the previous year. The increase in the net debt to equity ratio from 8% to 16% highlights the adverse impact of declining cash levels on the balance sheet strength of the mid-tier 50.

While the mid-tier 50 have reduced their short-term borrowings by \$0.8 billion in FY13, overall debt has increased by \$2.1 billion. The majority of debt financing was obtained by the top end of the mid-tier, with 6 of the top 16 companies accounting for 79% of net debt financing as they boast the assets to raise the debt on. While the mid-tier 50 are not in a distressed position, it is clear that those at the smaller end are struggling to find funding on both debt and equity fronts. This makes them prime targets for takeover.

Cash is king

The deterioration in both current and quick ratios of the mid-tier 50 reflects the decrease of \$1.3 billion or 19% of cash and cash equivalents on hand.

Thirty of the mid-tier 50 recorded a decrease in cash balances during the reporting period and cash reserves for the mid-tier 50 haven't been this low since FY09 when the industry was just starting to recover from the global financial crisis.

Commodity	Quick Ratio at 30/6/13	Quick Ratio at 30/6/12
Gold	1.00	1.62
Copper	3.02	4.70
Iron ore	1.23	1.28
Coal	1.28	1.41

Note: Quick Ratio is calculated as current assets (excluding inventory), divided by current liabilities.

The quick ratio of all but copper has fallen to just above 1, demonstrating the squeeze on cash in the mid-tier 50. In a market where debt and equity funding has proven impossible for all but the largest companies (debt) or extremely expensive (equity), cash truly is king and those with it are in a much stronger position to those without.

Aggregated cash flow

Cash squeeze

A clear contrast exists between this year and last. Cash levels of the mid-tier 50 have been strained in FY13 as miners continue to invest in completing capital projects against a backdrop of lower operating cash flows and limited access to external funding.

Whilst the mid-tier 50 have embarked on the journey of cost reduction and capital discipline, the financial results show that this is difficult to achieve and takes time for previous longer-term decisions to complete. In substance this means executives and boards need to be aware of the impact of decisions they make, not just on the current year, but into the future.

	2013 \$m	2012 \$m	Change %	
CASH FLOWS GENERATED FROM OPERATIONS				
Cash generated from operations	6,518	6,998	-7%	
Net borrowing costs	(315)	(305)	3%	
Other	(1,524)	(1,141)	34%	
Income taxes (paid)/refunded	(326)	(281)	16%	Margin squeeze
Net operating cash flows	4,352	5,271	-17%	reduce operating cash flows
CASH FLOWS RELATED TO INVESTING ACTIVITIES	•••••••••••••••••••••••••••••••••••••••			
Purchases of property, plant and equipment	(5,338)	(4,487)	19%	
Exploration expenditure	(734)	(820)	-10%	
Purchases of investments and intangibles	(964)	(1,626)	-41%	
Other	(823)	(816)	1%	
Proceeds from sale of property, plant and equipment	668	561	19%	
Proceeds from sale of investments	657	850	-23%	Cash raised from equity and
Net investing cash flows	(6,535)	(6,338)	3%	debt, fund ¹ / ₃ of investing cash flows
CASH FLOWS RELATED TO FINANCING ACTIVITIES				
Proceeds from ordinary share issues	1,050	3,021	-65%	
Net borrowings	1,180	1,224	-4%	
Distribution to shareholders	(1,317)	(1,911)	-31%	
Other	(108)	(407)	-74%	
Net financing cash flows	805	1,927	-58%	
Net increase/(decrease) in cash and cash equivalents	(1,378)	860	-260%	



Figure 9: Major Operating and Investing Cash flow Components by Commodity – 2013 vs 2012

Q Click to zoom in

Operating cash flows: a two sided story

As a whole, the mid-tier 50 experienced a decline in cash generated from operations of 7%. However this result is

flattering for the group, as a handful of high performers in iron ore, gold and copper bucked the trend to generate significantly higher operating cash flows in FY13. The best performers were:

- Sandfire Resources (copper) experienced a \$451 million increase in operating cash flow due to the ramp up of the DeGrussa project following commencement of mining in February 2012.
- Mount Gibson Iron (iron ore) recorded an increase of \$147 million driven by increased volume, despite a decline in price.
- **Regis Resources** (gold) achieved a \$236 million increase predominantly due to record production from its Moolart Well Gold Mine.

In contrast, Iluka Resources (mineral sands) suffered a significant decrease (\$338 million) as sales volume fell away due to market conditions and lower grades. Cash generated from operations declined significantly for coal as price pressures hit home. Yancoal Australia saw its operating cash flows decline by \$400 million as coal prices struggled and costs increased.

Investing cash outflows: still on the rise, for now...

While cash spend on PP&E/Development has continued to rise by 19%, there has been a clear slowdown from FY12 where it grew by 50%. As existing projects complete, we expect new capex to slow to a trickle as funding is difficult to come by, prices remain challenged and shareholders demand capital efficiency.

The tight funding position is shown by only 22% of PP&E purchases being funded by debt and proceeds from equity raisings barely covering acquisitions.

What does all this mean for supply? With cash flow from operations decreasing as a result of lower commodity prices and continued cost pressure, debt markets closed to all but the biggest players and equity expensive – where will the mines of the future come from?

Financing cash flows: the well has dried up

In FY13, financing cash flows generated by the mid-tier 50 from share issues declined by 65%. This paints a very clear picture of the change in investors' appetite for the mining industry – demonstrating that it is *Unloved*.

This presents a challenge to the industry – convince the world of why you are worthy of the investment you need to continue to operate and grow. In short – break the fears over future demand for commodities and the ability for mining companies to effectively use the capital they are provided to generate returns to shareholders.



Figure 10: Major Financing Cash flow Components by Commodity – 2013 vs 2012

Q Click to zoom in

The decline in funds from capital raisings has been lead by the coal sector, which after several years of \$1 billion+ of equity raised has come off the boil in FY13 following the decline in share price, making raising new capital prohibitively expensive in all but the most critical of situations.

Top	Five	Capital	Raisings	2013	vs 2012
-~r					

Top 5 – 20)13	Top 5 – 2012			
Company	Amount \$m	Company	Amount \$m		
Lynas Corporation	175	Yancoal Australia	909		
Coal of Africa	139	Energy Resources of Australia	488		
Western Desert Resources	87	Indophil Resources	213		
OceanaGold Corporation	81	Evolution Mining	158		
Gujarat NRE Coking Coal	77	Base Resources	154		

Dividends to shareholders have come to a halt, as companies seek to preserve cash in difficult times. For FY13, the top 5 companies have declared only \$296 million in dividends expected to be paid, in comparison to the \$869 million paid in FY12. In FY12 Oz Minerals paid a one-off return of capital amounting to \$388 million, accompanied by a \$100 million share buy-back program, distorting the comparative period.

Other than coal, all other sectors paid consistent dividends year on year, despite the dive in profits and sentiment. This shows the lag effect of decisions made by boards and the difficulty in stopping activity, even distributions to shareholders. Look out for FY14 however as gold companies in particular face the cash squeeze and the mid-tier 50 struggle to generate sufficient cash flows to pay a dividend and continue to invest in growth.

Focus and alignment Bill Beament (Northern Star Resources)

Aussie Mine sat down with Bill Beament, Managing Director of Northern Star Resources (NST) to discuss NST's approach to success and the challenges facing the Australian midtier gold industry.

In the current environment many mining companies are implementing cost and productivity reviews. NST is one of the lowest cost gold producers in Australia, how has NST achieved this?

A program to reduce costs, in itself does not produce lasting growth. Successful companies are those that focus on, and deliver productivity and margin growth.

I have always held the view that it is not the cost inputs that create profitability problems. The real driver of profitability (or lack of) is the productivity that is achieved out of your inputs. Throughout the recent mining boom, productivity of the workforce throughout the industry has decreased as can be seen through analysis of productivity metrics such as ore tonnes and jumbo development metres per month. For example, in 2004 the average development metres per jumbo was 250m per month. Today, the industry average is approximately 200m per month.

At NST we have taken productivity back to historic levels which has resulted in achieving strong margins from our Paulsens Gold Mine. That is the result of a lot of hard work focussed on productivity, in particular optimising our mine plan and utilising new, high specification equipment. As a contrast to many of our peers, we only use new mobile fleet as opposed to rebuilt equipment.

If you focus on ensuring you have the right people, the right equipment and optimise the technical design of your operations, productivity will follow.

Many mid-tier mining companies outsource their mining operations. NST has adopted a different approach to establish in-house mining operations. How did you arrive at this strategy?

The strategy to establish an in-house mining services division allows NST the control and flexibility to maximise productivity. Many of our senior staff (including myself) have come from a mining services background. Embedded in culture is the importance of knowing every breakeven point and our cost lines in detail.



Our in-house mining services division is set up on a stand alone basis, complete with its own administrative support function that operates 24/7. This minimises any delays/ disruptions to the mine operations.

We recruit specialised labour to ensure that every member of the mining services division has the correct skills to perform their role. The division is managed by team members with real mining experience that look out for our people and our equipment. We have a long relationship with our labour providers which means we have highly motivated and skilled people. It also gives flexibility to vary the workforce as required.

Our in-house mining services division is a major advantage to NST which is difficult to replicate given the team and experience we have. It is a highly productive team and enjoys a staff turnover rate less than 5%. I consider this a measure of the ownership and respect the division has for the project and the company. In this regard, we are proud to note that during the GFC, we did not retrench any operational staff – this is how highly we value them as part of the team.

As gold prices increased over the last decade, many companies substantially increased resource estimates by lowering the cut off grade, however margins remained flat despite the increase in gold price. More recently we have seen the industry shift their focus from production to margin. What lessons can the industry learn from this? As an industry we have not demonstrated consistent profitability, even at times of record commodity prices. The ability of the industry to meet its production and cost guidance has also been inconsistent. As a result, we have lost investor trust and support in the mid-tier mining bracket. The industry has a lot of work to do to draw investors back to gold.

The mid-tier gold industry competes against other commodities and industries for investor funds. To encourage investors we need to deliver on an industry wide focus on margin. That means achieving sustainable increases in productivity and discipline in our cost structures. This means understanding what our mines can deliver and being realistic and transparent in our guidance to investors. Importantly, we need to ensure our workforce is aligned with the long-term benefits that productivity change will bring.

Bill's key messages for the mid-tier industry:

- 1. Focus on margin per unit
- 2. Focus on productivity labour and machines
- 3. Alignment of your workforce's goals with margin and productivity
- 4. Provide realistic and transparent guidance to the market.

By doing this we will then be able to demonstrate the profitability of the industry and only then will we see investor confidence increase in the mid-tier gold industry.

Mining companies are often criticised for the continued reinvestment of surplus cash resulting in a low level of dividend returns. Do you believe that a change in dividend strategy will draw new investors into the industry?

With any business, investors have a right to expect returns. To be successful, a business must generate enough cash flow to both grow the business and to give back to investors. Dividends should be expected, included in budget forecasts and maintained as a priority. At NST, our dividend equates to over a 4% fully franked yield. Our investors have responded very positively to our dividend policy and I believe it demonstrates sound financial management to balance our responsibilities to provide a return to investors in conjunction with our development/growth opportunities.

The mid-tier gold industry has a large number of single mine operations. What is your view on potential consolidation at the mid-tier level?

The Australian share market is waiting for its next ASX 100 gold producer. Currently there are not enough truly mid-tier gold producers to offer enough investor choice. As a result, and given recent market conditions, there is likely to be consolidation in the industry.

In particular, the mid cap Australian gold sector is in for changing times. The international gold majors are looking to divest their Australian exposure and many of their operations are officially or unofficially for sale. We welcome the recent deals for Australian assets previously held by Barrick Gold and Alacer Gold. The Barrick Gold deal in particular has set a value precedent for the industry which should allow further transactions to be reached in the near future.

The next 6-12 months will really change the make up of the mid-tier sector. This is an exciting time for the market and it will be interesting to see who will end up with what asset/mine. This is a once in a generation opportunity for gold companies.

The decision to acquire or divest mining operations is significant to the success of a company and its management. In the current environment, how does management assess these opportunities and maximise value?

We at NST are always looking at potential growth opportunities, particularly over the last 12 months. In assessing these opportunities, it is important to be very disciplined with the due diligence you perform. There must be a focus on margins and a clear understanding of the expected payback period from any investment. At NST, we aim for a payback period no longer than 18 to 24 months.

Importantly, trust the investment guidelines that you have set yourself. Some of the best investment decisions are often the ones you decline.



Deals – Treading with caution

Deal activity within the Australian mid-tier miners fell off a cliff in the 12 months ended 30 September 2013, with completed transactions representing only 3% of the value of completed transactions in the preceding 12 months.

The total value of announced transactions between 30 September 2012 and 30 September 2013 was \$6.2 billion, down from \$24.9 billion in the preceding 12 months. The number of transactions was also down from 25 to 15 over the same period. The total value of pending and completed transactions was only \$2.6 billion, down 85% from the previous 12 months. The two largest transactions represent Zimplats and Aquarius Platinum's forced divestment of majority stakes of their Zimbabwean platinum assets which were acquired by the Zimbabwean Government. The rationale for these transactions extends beyond purely commercial factors and highlights the resource nationalism risk in certain parts of Africa. Excluding these two transactions, the value of pending and completed transactions was only \$1.1 billion.

Announced M&A Transactions within the ASX listed mining companies

	Completed		Pending		Cancelled		Total	
	Deal value \$m	Deal Numbers						
Iron ore	190	1	-	-	3,662	1	3,852	2
Gold	57	3	181	2	-	-	238	5
Mineral sands	17	1	-	-	-	-	17	1
Coal	63	2	506	2	-	-	569	4
Platinum	-	-	1,442	2	-	-	1,442	2
Other	-	-	126	1	-	-	126	1
Total	326	7	2,255	7	3.662	1	6.243	15

30 Sept 2012 to 30 Sept 2013

30 Sept 2011 to 30 Sept 2012

	Completed		Penc	Pending		Cancelled		al
	Deal value \$m	Deal Numbers						
Diversified	195	1	-	-	-		195	1
Gold	1,497	4	1,359	2	16	1	2,872	7
Coal	9,884	7	-	-	4,113	1	13,997	8
Uranium	1,270	1	-	-	-	-	1,270	1
Nickel	68	1	-	-	-	-	68	1
Iron ore	40	1	2,483	4	3,153	1	5,676	6
Copper	-	-	830	1	-	-	830	1
Total	12,954	15	4,672	7	7,282	3	24,908	25

Source: CapitalIQ, PwC analysis

Investors' tolerance for the risks of Australian mining projects appears to have fallen away over the 12 months to 30 September 2013. This risk aversion has progressed over the course of the year and impacted the industry as a whole, but has had a more pronounced effect on companies exposed to large capital expenditure profiles, long construction periods, higher degrees of operational complexity and relatively high costs of production. Predevelopment magnetite projects are a prime example of a type of asset which has lost investor interest in recent times, with no transactions from the mid-tier 50 announced in the 12 months to 30 September 2013.

Miners with operating assets on the upper end of the cost profile, which have been sheltered during periods of higher commodity prices, have become significantly exposed of late. These companies have experienced sharp reductions in margins. Some have chosen to place these higher cost operations on care and maintenance while others have decided to sell assets to focus on their core, most profitable projects. Prices achieved through asset sales are generally at lower valuations than may have been achieved in recent years – consistent with the large scale impairments that were booked in FY13.

Gold... a tale of two halves

In the six months ended 31 March 2013, gold transactions occurred in an environment of optimism. The spot price remained above US\$1,550/ounce and nearly reached US\$1,800/ounce in early October 2012. Transactions that took place were prior to April 2013 and appeared to be driven by a desire to lock in resources for future development. This was the case in Troy's acquisition of Azimuth in March 2013.

Optimism quickly turned to pessimism in the second quarter of 2013, when the gold price declined by 15% from the beginning of May to the end of June, to finish the quarter at US\$1,230/ounce. Many projects were not profitable at these gold prices. The market reacted quickly, with the enterprise value of gold companies in the mid-tier top 50 more than halving over Q2 2013. Companies in turn reacted quickly, opting to sell marginal projects to focus on their most profitable assets or placing assets on care and maintenance. Along with Alacer's announced divestment of its Australian gold assets to Metals X, and Gold Fields acquisition of a number of Barrick Gold Australian assets, divestments of Australian gold assets are expected from larger gold miners. This may provide acquisition opportunities for the more nimble mid-tier producers to add projects to the pipeline.



Figure 11: Spot gold price and enterprise value of gold companies in the mid-tier top 50 Click to zoom in

Bulk commodities... the 'haves' and the 'have nots'?

The value of transactions relating to bulk commodities (iron ore and coal) experienced the most significant decline over the 12 months ended 30 September 2013, compared to the prior 12 months. Only four coal transactions (with a value of \$569 million) and two iron ore transactions (with a value of \$3.9 billion, of which \$3.7 billion related to the failed bid for Arrium) were announced over this period compared to 14 transactions worth \$19.7 billion in the previous 12 months.

Bulk commodity projects are typically large scale, long life projects. Projects in the development stage often require significant up-front capital expenditure, long-term infrastructure access and must meet various approvals. As a result, they often experience relatively long construction periods.

The widely publicised recent construction cost overruns at a number of development projects, coupled with delays have resulted in investors showing a reluctance to participate in the risks associated with large scale predevelopment bulk commodities projects in Australia. This has been exacerbated by increased uncertainty around future commodity prices.

We see opportunities for further consolidation in the Australian iron ore and coal sectors, driven by:

- Ability to reduce operating and capital costs associated with shared infrastructure;
- Production pricing benefits associated with greater blending opportunities; and
- Other synergies captured through cost reductions due to economies of scale.

We expect companies with strong balance sheets and/ or access to infrastructure (the 'haves') to consolidate with pre-development assets and projects which are constrained by a lack of infrastructure (the 'have nots'). We expect the haves to factor in their position of relative strength during future sales processes. This position of power has been bolstered, as those who are interested in acquiring these types of projects, are likely to be bidding against a smaller pool of interested investors. The have nots are also becoming more aware that investors are less willing to contribute large amounts of capital to the construction of new infrastructure. The success of BC Iron's transactions with Fortescue Metals Group which provided BC Iron access to Fortescue's infrastructure is a good example of how a proactive and collaborative approach to shared infrastructure can benefit both infrastructure owners and third party users.

Coal: 2012 – A hard act to follow!

Coal deals were the market stand-out in the 12 months ended 30 September 2012 with 8 deals announced and 4 of the 5 largest transactions by value contributing \$9.3 billion to the yearly total. In contrast, the 12 months ended 30 September 2013, saw 4 coal deals announced for a combined transaction value of \$569 million.

In 2013 there was a noticeable absence of a 'mega deal'. The average announced coal deal size in the preceding period was \$1,750 million compared with \$143 million in the 12 months ended 30 September 2013.

Coal transactions suffered due to a very tough environment for coal producers and developers who experienced a marked decrease in margins as a result of a combination of a decrease in price and increase in costs.

There was a general aversion to acquisitions by the larger miners who are focussed on organic growth opportunities and capital discipline as demanded by their shareholders. Whilst the larger miners fall outside our mid-tier 50, they are particularly relevant as they have historically featured as potential acquirers of larger companies in the mid-tier 50.

The larger miners reportedly placed several coal assets on the market during the review period to 30 September 2013. Besides the conditional deals between Linc Energy and Rio Tinto to acquire Blair Athol and Rio Tinto's sale of the Clermont Mine to Glencore Xstrata, both announced after the review period, none of the coal assets being marketed by the larger miners transacted. Further, the potential divestment considered by BHP Billiton for its jointly owned Gregory Crinum operation was cancelled in late July 2013 following several months of marketing. This illustrates that there is still a price expectation gap between sellers and buyers in the current market. A consistent theme in 2013 was that the acquirer in each instance had a pre-existing interest in the company or project. While the motivation behind each transaction was different, the willingness of these parties to take increased positions in pre-existing investments is indicative of each party's confidence in the fundamental value of the underlying assets compared with the lower values being placed on the assets by the wider market.

Does Asia still want Australian mining projects?

The transaction activity over the 12 months ended 30 September 2013 suggests that Asia's appetite for investment in mining projects in Australia has cooled. Only 4 transactions (with a total announced transaction value of \$4.0 billion) were announced over this period involving Asian buyers, of which the failed Asian consortium bid for Arrium accounted for \$3.7 billion. These levels of investment are well down on the 12 months ended 30 September 2012, which saw Asian companies involved in 8 transactions (with a total announced transaction value of \$5.5 billion).

In the near term, we expect Asian investment in Australian mid-tier resource projects to continue the conservative trend seen over the past 12 months. We expect this to be driven by:

- The transition of government in China and Australia and corresponding process of changing leadership of Chinese SOEs have lead to a noticeable slow down in deal flow. While we do not believe that this impacts the Chinese desire to acquire more Australian mines, it appears likely that transaction flow will remain tepid until June 2014.
- The changing risk and reward dynamic for Australian resource projects. Rewards have been squeezed by declines in productivity, while perceived relative risks of doing business in less developed countries appears to be declining. The stubbornly high exchange rate also means Australia is an expensive place to work.
- The track record of Chinese investment into these types assets in Australia remains chequered, which in a risk averse time in the cycle can also reduce enthusiasm of Chinese investors.

The dampened enthusiasm of China may be offset to some extent by investment from other parts of Asia, such as Japan and Korea. Japanese and Korean trading houses have had significant success in taking minority stakes in Australian resource projects. With much fewer resource projects within their borders, these countries need to make overseas investment to lock in supply for their downstream industries. 2014 may give these companies an amazing opportunity to acquire assets without too much Chinese competition.



Cancelled M&A Activity in the mid-tier 50: Deals greater than \$15 million (September 2012 to September 2013) Target Acquirer

Arrium Limited	Noble Group Limited; POSCO Australia Pty Ltd; Korea Investment
	Corporation; National Pension Service; Korea Finance Corporation
Total	
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Pending M&A Activity in the mid-tier 50: Deals greater than \$15 million (September 2012 to September 2013) Target Acquirer

Alacer Gold Pty Ltd	Westgold Resources Limited
Perilya Ltd	Zhongjin Lingnan Mining (HK) Company Limited
Yancoal Australia Ltd	Yanzhou Coal Mining Company Ltd
Boardwalk Resources Pty Limited; Aston Resources Investments Pty Limited (interest in Whitehaven were key assets of these companies)	Farallon Capital Management, L.L.C.
Mungari East, Lake Greta Joint Venture and Avoca Joint Venture (Alacer Gold was a seller in this transaction)	La Mancha Resources Australia Pty Ltd
Zimbabwe Platinum Mines (Private) Limited (Zimpats was a seller in this transaction)	National Indigenisation and Economic Empowerment Fund
Mimosa Investments Limited (Aquarius Platinum was a seller in this transaction)	National Indigenisation and Economic Empowerment Fund
Total	

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Completed M&A Activity in the mid-tier 50: Deals greater than \$15 million (September 2012 to September 2013) Target Acquirer

Oromin Explorations Ltd (Mineral Deposits sold its interest)	Teranga Gold Corporation
PKD Resources (Private) Ltd	Iluka Resources Ltd
Azimuth Resources Limited	Troy Resources Limited
Vickery Pty Limited	Whitehaven Coal Limited
Gujarat NRE Coking Coal Limited	Jindal Steel & Power (Australia) Pty Ltd
St Barbara Ltd, Southern Cross Operations	Hanking Gold Mining Pty Ltd
Nullagine Iron Ore JV	BC Iron Limited
Noble Mineral Resources Ltd	Resolute Mining Limited
Total	
	•

Pending M&A Activity in the mid-tier 50: Deals greater than \$15 million (Post September 2013)

Target	Acquirer
Arrium Limited, OneSteel Sheet and Coil Processing and	BlueScope Steel Limited
Distribution Businesses Xstrata Frieda River Limited	PanAust Limited
Total Source: CapitallQ, PwC analysis	

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Sector	Acquirer country	Ownership interest	Approximate deal value \$m	Announcement date	Status
Iron ore	Various	100%	3,662	1/10/2012	Cancelled
			3,662		

Sector	Acquirer country	-		Announcement date	Status
Gold	Australia	100%	40	23/09/2013	Pending
Zinc	China	47%	126	3/09/2013	Pending
Coal	China	22%	156	8/07/2013	Pending
Coal	Australia	12%	350	19/06/2013	Pending
Gold		,	141	11/02/2013	Pending
Platinum	Zimbabwe	51%	921	11/01/2013	Pending
Platinum	Zimbabwe	51%	521	14/12/2012	Pending
			2,255		
	Gold Zinc Coal Coal Gold Platinum	GoldAustraliaZincChinaCoalChinaCoalAustraliaGoldAustraliaPlatinumZimbabwe	GoldAustralia100%ZincChina47%CoalChina22%CoalAustralia12%GoldAustralia49%, 24.5% and 40%PlatinumZimbabwe51%	Australia100%40ZincChina47%126CoalChina22%156CoalAustralia12%350GoldAustralia49%, 24.5% and 40%141PlatinumZimbabwe51%921	value \$m date Gold Australia 100% 40 23/09/2013 Zinc China 47% 126 3/09/2013 Coal China 22% 156 8/07/2013 Coal Australia 12% 350 19/06/2013 Coal Australia 49%, 24.5% 141 11/02/2013 Gold Australia 49%, 24.5% 141 11/02/2013 Gold Australia 51% 921 11/01/2013 Platinum Zimbabwe 51% 521 14/12/2012

Sector	Acquirer country	Ownership interest	Approximate deal value \$m	Announcement date	Completion date
Gold	Canada	27%	18	27/08/2013	4/10/2013
Mineral sands	Australia	100%	17	5/08/2013	3/10/2013
Gold	Australia	100%	190	28/03/2013	12/07/2013
Coal	Australia	29%	30	8/03/2013	8/03/2013
Coal	India	81%	33	31/01/2013	28/03/2013
Gold	Australia	100%	18	8/01/2013	19/04/2013
Iron ore	Australia	25%	190	10/12/2013	18/12/2013
Gold	Australia	20%	21	25/10/2012	20/11/2012
			327	••••••	•••••

Sector	Acquirer country	Ownership interest	Approximate deal value \$m	Announcement date	Status
Steel	Australia	100%	23	14/10/2013	Announced
Copper	Australia	80%	81	1/11/2013	Announced
			104		

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Raising funds in challenging times

Tips for the mid-tier 50

Commodity price and resource demand challenges have made accessing new funding and meeting the needs of existing financiers increasingly challenging for the mid-tier of the mining industry. Nonetheless, success stories are there and lessons can be learnt for others seeking to follow.

In the mining industry notwithstanding the strength of domestic banks, even mid-tier miners compete for capital and funding in a global market environment. More than for most other industry sectors, Australia's mid tier miners are measured and directly assessed against their global peers when competing for capital. With commodities being globally sourced and traded, the sector is exposed to the consequences of changes in global market sentiment and outlook. Miners must be able to deliver commodity output competitively and reliably – the current market has served to further raise that bar, causing projects and participants to reappraise and realign their operations, commercial strategy and, in some cases, their funding platform.

Whilst only just over 20% of the mid-tier 50 raised or refinanced debt facilities across the last year, a number still managed to increase their equity base – often by offering scrip as acquisition consideration for new assets and mergers. Cash flow generating assets and capital investment efficiency have become the primary focus of debt and equity markets alike. In an environment of softer commodity prices and outlook, capital and operating costs will determine which projects have the capacity to support new financing.

In contrast there is a widening range of capital looking for investments that are able to deliver solid and sustainable returns. Agility and preparedness to respond to market 'windows' from this diverse funding range has been a major differentiator between success and otherwise for many.

Managing capital in challenging times

Across the mining industry the dominant theme and messaging to stakeholders has been of 'optimising returns on capital investment' and 'managing available cash flows to meet critical project needs'. Spending on prospective exploration and development has been largely curtailed in all but the best projects, which typically have short lead times to production.

So what makes the difference? Certainly, having a number of projects in various stages of development and production has, and continues to be, the primary risk mitigant in securing capital for miners and investors/financiers alike. Larger mid-tier 50 companies such as Iluka Resources and Alumina are able to raise financing in more similar ways to other listed corporates, reducing but not completely alleviating the project specific scrutiny that might otherwise apply. Smaller and newer miners need to look to other factors and strategies to secure their financing success.

Development versus production

It is well recognised across the industry that securing funding for a mining development project is extremely challenging. With the market being naturally risk averse, attention is given to projects and companies that are or are highly likely to be cash flow producing – whether or not there is an intention to distribute earnings beyond servicing and repaying debt. This is in material contrast to the continued competitive activity from domestic and international players in pursuing oil and gas sector exploration and development activity.

External funding for mining exploration has largely dried up, but there are pockets available where strategic reasoning and risk can be balanced for both parties allowing limited access to funding. This prospective interest in exploration resides in limited specialist non-conventional lenders. These financiers still focus on value, and to a lesser extent cash flow of the existing assets, with positive exploration outcomes merely enhancing value coverage for them.

Debt remains a core capital funding element

Not all mining projects will necessarily seek debt funding – even for producing assets. As gold producers will recognise, debt funding is not always the best means to deliver value to equity investors. Lenders naturally look to less optimistic views, particularly when it comes to commodity price outlook. Without the benefit of downside hedging protection, lenders will typically factor in further price declines from even soft market conditions when assessing debt sizing and servicing capacity. Nonetheless, debt funding remains a natural choice across commodity segments when seeking non-dilutive capital funding.

Management capacity and experience in delivering projects

Debt and equity markets are acutely aware of the importance of relevant experience in senior management and, to a lesser extent, board members in delivering new projects. It is not uncommon that management changes may be required when progressing from an exploration stage to a development, funding procurement and implementation stage.

With softer commodity prices, even the better projects are being evaluated and developed in a lower project operating margin environment. Management experience that can mitigate issues such as construction cost blowouts, increased operating costs, commissioning delays and/or reduced production and cash flow are valued strongly by all key prospective stakeholders.

Typical conventional lender concerns

Whilst most banks will confirm that lending requirements have not been tightened in response to depressed market conditions and outlook, it is apparent that these requirements are now more rigorously applied by the banks' internal credit departments. With softer commodity prices dampening project development activities, project finance opportunities have become less frequent for lenders. Despite this, mining projects with strong fundamentals and technical features remain keenly sought after.

Historically low term base interest rates (see Figure 12 above right) – whether in USD or AUD – have assisted in enhancing debt sizing calculations. However, well regarded lenders are primarily focussed on the rigour applied to the project's technical analysis and features in making lending decisions – often the first step undertaken by in-house specialists when considering these opportunities.



Figure 12: AUD and USD 5 year swap rates Source: Bloomberg

Q Click to zoom in

With a primary concern of getting a project into cash flow generating production, traditional project financiers are mindful of the capacity of the project sponsors to support and meet the funding shortfalls. This may arise due to any project delivery costs overruns, unexpected commissioning challenges and other unplanned events that require additional capital injection. Smaller listed companies, often with more volatile share prices, have limited capacity to raise capital to protect project investment without undertaking more complicated shareholder approved equity placements of above 15% in a given year.

Project lenders will vary in emphasis on the need for commodity price hedging when providing debt facilities. With soft commodity prices offering lesser earnings margins to service and repay debt, lenders and companies alike are mindful of the need to maintain at least some downside protection to preserve necessary servicing capacity headroom.

Role of alternative financing solutions

In response to the challenges of raising equity to close the 'non debt' funding gap, miners have looked to other forms of non or less dilutive funding available from specialist investors and financiers.

In its simplest form, these solutions may be asset financing solutions such as mobile equipment or coal handling and prep plants provided by way of operating leases.

Royalty agreements and streaming arrangements, such as those employed by companies including Regis Resources and Alacer Gold, are also becoming more widely considered and used in the Australian mining industry. These approaches do not typically cause dilution of existing shareholders and do not generally give rise to management control or operational interference considerations as can be the case in joint ventures. Though they can become materially more expensive than originally anticipated. Upfront payments are generally based on prevailing drilling results, but the rights that are sold typically extend to the whole of mine life. This means that future improvements to the mine and its life from further drilling and subsequent production are not subject to any further payments. They become a 'free carry benefit' for assisting the project to move into initial production.

7 tips for success in accessing capital

It is apparent that there are a number of key lessons to be followed in being best prepared and able to access capital funding for projects:

- 1. Ensure your project demonstrates sustainable capacity to operate on a commercially competitive basis – critically challenge all key assumptions as prospective lenders will do so anyway.
- 2. Ensure that your technical analysis, studies and other resource related information has been rigorously and robustly developed and collated.
- 3. Ensure that your management team has the demonstrated experience, knowledge and skill set used to deliver similar projects in the past.
- 4. Identify and understand the likely differences in key assumptions and outlook that financiers in differing markets are likely to apply to your opportunity managing expectations and developing early deal momentum around these issues is important.
- 5. Identify and understand the key considerations of the possible range of funding markets that may be available for your project, and the threshold considerations that will open and close this window for you.
- 6. Undertake early preparation of materials that are expected to be required by prospective financiers in order to minimise lead time to enabling executions.
- 7. Maintain awareness of likely alternative funding markets and solutions to best ensure execution certainty and competitive outcomes.

PanAust – A base metal corporate financing delivered but not the only option considered

PanAust managed an uncommon feat for the midtier 50 in January 2013 – securing a US\$275 million committed revolving debt and working capital syndicated bank debt facility to support its extensive copper, gold and silver operations in Laos.

Operating in an uncommon mining location such as Laos, PanAust worked with its existing financiers and also new financiers, to negotiate a flexible revolving debt facility with fewer commercial and hedging restrictions than it had under its earlier bank debt facility.

Key takeaways

A recognition of the importance of looking into a number of financing alternatives and strong relationships with financiers, can deliver an efficient financing structure outcome.

OceanaGold – Benefits of being prepared and flexible

Across the mid-tier 50, OceanaGold Corporation (OceanaGold) achieved an uncommon funding outcome in securing successful and significant debt and equity raisings. These raisings together provided funding and liquidity capacity to meet the needs of developing its company transforming Didipio project in the Philippines, which has now moved into full production.

A recap

In June 2012, OceanaGold sought and secured a US\$225 million 'club deal' bank financing from a small number of targeted and experienced project finance lenders. The funding commitment enabled OceanaGold to meet the redemption payment monies due on convertible bonds expiring across December 2012 and 2013. Importantly, this unexpected debt solution removed the 'overhang' pressure on its share price as the market had expected equity raising to be the most likely solution. With the improved share price reflecting OceanaGold's anticipated journey into production at the new project, OceanaGold then secured a \$93 million 'bought deal' share placement targeted at sophisticated North American investors as well as its traditional Australian institutional investors. Source: Bloomberg

Key takeaways

Mark Chamberlain, CFO of OceanaGold, believes that a core element of success in a financing outcome arises from solid planning and understanding of the likely needs of targeted experienced financiers. "Selecting financiers and funding markets experienced in understanding and evaluating the resource project funding including having relevant 'in country' experience, materially improves the likelihood of success, enhance delivered pricing efficiency and minimises the time required to achieve funding certainty" he states. "Likewise, taking control of the early preparation and delivery of the materials known to be necessary for the lenders' review ensures early momentum is gained, and problems and issues can be identified and worked through before being found by financiers".



5 The productivity challenge

Balancing productivity and profitability

The cyclical nature of the mining industry has illustrated how a pursuit of production volume can become unbalanced, to the detriment of productivity. The previous focus on quickly delivering volume has led to inefficiencies which are now structurally built into many mining operations.

In what appears to be a reactive change rather than a proactive cost focus, many of the mid-tier 50 are now seeking to maximise returns through optimisation and enhanced productivity.

The real challenge lies in setting a path towards sustainably reduced costs and capital efficiencies and effectiveness.

How do you achieve this?

Through technological innovation,

There are many technologies and innovations that reduce the effort required to extract resources across the entire supply chain. However, before investment in technology is made, a detailed understanding of data and processes is critical to capital efficiencies. Technology alone cannot provide the solution if inefficiencies are not well understood.

... understanding what happens at operational level,

The devil is in the detail. While technology enables miners to collect mass amounts of data, you don't fatten a pig just by weighing it – it's the interpretation of the data that supports effective decision making.

Consider this real life example, based on a fleet of 22 haul trucks...



Improvement in maintenance strategy, practices and unplanned vs planned mix

Improvement in process bottlenecks, operator training and equipment suitability

The 19% increase is a factor of the time allocation in the model that equates to:



Many of the emerging miners are undertaking studies to unlock latent capacity. Our experience suggests that many mines operate at well below 50% fleet utilisation, whilst overstating real availability and reliability.

This highlights the size of the prize for those mines looking to unlock their full operational potential. However, to make the most of any such exercise, impacts must be considered over both the life of the assets and the entire portfolio.

Increased asset utilisation can improve margins by increasing throughput with minimal capital expenditure. In some instances, miners add new fleet to make up for production inefficiencies, rather than increasing utilisation of the existing equipment.

... and by bringing people on the journey with you.

Culture plays an important role in implementing new processes and technologies – the workforce must be willing and able to support change in the transition phase to minimise the impact productivity. Too often, the importance of having a workforce that is not only skilled in operations, but also supportive of the implementation process is disregarded. Performance alignment across the different functions of an organisation is crucial to the sustainability of any productivity program.

Position on the cost curve is now a primary focus

Getting the most out of your assets is the new focus. Achieving this through investing time and money in productivity improvements, will leave miners well placed to build renewed confidence in the industry's performance.

These thoughts are at the forefront of the minds of boards of the mid-tier miners, many of whom have publicly stated that productivity is a key focus area to address in creating value for shareholders. This included, Ken Brinsden, MD of Atlas Iron, who noted in Atlas' 2013 annual report:

> "Seven key measures were approved for the 2013 financial year, all of which aimed to drive business growth, generate efficiencies in cost and drive shareholder value."

While not in the mid-tier 50, Peabody Energy has also announced in October 2013 that improvements in productivity were able to reduce unit costs by 18% from 2012 – another example of how much value there is to be gained.





Mining for performance alignment

Mining companies around the world are adjusting to a new paradigm of lower asset prices because of rising operational and capital costs, and a loss of investor confidence. In addition, fears over uncertain forecasts have led to a number of miners delaying major projects and expansion plans. This is particularly the case for the mid-tier 50 who are dealing with greater debt/capital constraints than their larger more diversified peers. Faced with challenges on all fronts, and a shift away from growth to productivity and capital discipline, strategy execution has never been more important in mining.

While much has been said about the importance of execution, there has been little clarity around what drives it. We recently asked more than 200 Australian and Asian mining executives to complete a detailed survey on their company's strategic priorities and ability to execute against them – this survey revealed that effective strategic execution remains elusive to many Australian miners. Specifically, we found that while 80% of Australian respondents believe their organisations have the right strategy to reach their full potential, only 50% believe their organisation is currently executing their strategy well. This theme is consistent across miners of all size.

Our research indicates that strategic alignment is the critical enabler of execution and long-term competitiveness. Further, the research shows that highly aligned organisations are 5-6 times more likely to be executing successfully than their less aligned counterparts, with corresponding improvement in financial ratios. Top teams that clearly align behind strategy and successfully cascade and translate its intent through their organisations typically deliver an 'alignment premium' to the market.

While the alignment challenge has exercised our minds across industries, we believe it is especially poignant within the mid-tier mining sector given the challenges facing today's mining organisations. In addition, many mining organisations are comprised of operations that have been acquired through acquisitions at different times, and are not fully integrated into a single organisation. The operating models that result from such M&A activity are often highly siloed, with significant alignment challenges experienced by leaders across the organisation.

Closing the gap

The 'alignment gap' is the distance between strategic intent and what actually happens across the organisation on a day-to-day basis. The wider the gap, the more likely that managers at all levels will cascade their own interpretations and agendas instead of the organisation's agreed strategic priorities.

Based on the research undertaken, there are four alignment lenses that are critical to closing the gap between strategic intent and execution. Translating strategy through these four lenses creates leadership clarity and provides employees with the context, motivation, and decision-making framework they need to pursue the organisation's business goals and objectives:

- 1. Strategic priorities and trade-offs: The current strategic focus of many miners often leads to significant trade-offs between productivity and growth. As these organisations delve deeper into an austerity regime, their ability to adapt to and prepare for the next growth phase is constrained. Within these constraints, it is imperative that clear decision making frameworks are in place to provide leaders, managers and front line employees with enough direction to pursue the company's strategic objectives. However, our research shows that only 52% of Australian mining executives surveyed believe that their people understand the strategy sufficiently to inform effective decision making.
- 2. Strategic risks: These are the uncertainties both on the downside and upside – that are embedded in the organisation's strategy and can be triggered either internally or externally. The identification, evaluation and mitigation of strategic risks are particularly important for mining organisations as executives seek to de-risk the choices they make, and adjust those choices when necessary, to respond to changes in economic conditions.
- **3. Critical behaviours**: Mining organisations need to define and embed the specific mindsets, behaviours and culture that will encourage discretionary effort and support their company's strategic objectives at every level. In pursuit of productivity outcomes, for example, today's mining workforce requires different planning, prioritisation and execution skills compared

to the past. Our research highlights a clear gap in this respect – only 26% of Australian mining executives surveyed believe their organisation has people with the right experience and capabilities occupying their critical roles.

4. Performance drivers and KPIs: Performance – both of the business and individuals – must be managed against the leading measures that underpin the strategy and drive disproportionate value for the company. These measures need to be hard-wired into the organisation (eg. through strategic planning, budgeting processes, resource allocation, monthly dashboards and the overall people framework). With the strong focus on productivity, it is imperative that mining organisations create an environment that inspires people to work smarter, enables assets to be worked harder, and rewards productivity improvements. Productivity agendas tend to underwhelm and be unsustainable without alignment.

Our research focused on both Australian and Asian miners. While it is difficult to draw comparisons given the different cultures and biases, we can observe in Figure 13 that miners in both geographies share many common characteristics. For instance, executives rated their alignment highest against the strategic priorities & trade-offs and critical behaviours lens, and lowest against the strategic risk and performance drivers and KPIs lens in both geographies. Respondents felt that their company's strategic priorities expose their companies to unacceptable risks, and that new and evolving strategic risks from the front line are not efficiently communicated to senior leaders. Australian miners also highlighted the challenges they face in managing performance at a business and individual level. In particular, Australian respondents highlighted the inability of reward systems to recognise individual contributions to delivering the strategy (eg. productivity improvements), as well as the low quality of management information generally available to them.

Getting there

The findings of our alignment research in the mining sector point to several areas where Australian and Asian mining companies can strengthen their practices to achieve better execution outcomes. However, realising these improvements also requires the leaders of these organisations to adopt a radically different approach. Only mining leaders with the courage to highlight and address their company's alignment gaps will restore the performance and confidence to the sector that investors now find lacking.



Figure 13: Mining executive survey results – level of alignment by lens



Focus on Australian mining service contractors

Survival of the fittest... and most agile

For the first time in *Aussie Mine* we have included an analysis of the Australian mining service contractor market. The recent focus by most mining companies (including many mid-tier miners) on productivity and cost reduction necessitates consideration of the services sector.

The mid-tier miners are heavy users of outsourced services. Combined with the majors in their search for productivity improvement during FY13, this has resulted in many mining service and equipment providers being forced to adapt to both a lower margin and utilisation environment. With the miners continuing to focus on lowering costs and reducing capital, the worst is likely yet to come for mining services contractors.

It is crucial that mid-tier miners consider how the current market conditions are impacting service providers to ensure they engage the best way with the right contractor in order to achieve an optimal outcome.

Mining service company profitability significantly declined in FY13

Mining service company performance decreased significantly during 2013. Analysis of the 2012 and 2013 results of a selection of ASX listed mining service (20) and equipment provision (10) companies, demonstrates some key trends:

• FY12 growth was debt fuelled: Whilst profitability for both service and equipment companies increased during FY12, the market capitalisations did not, with

equipment provider valuations declining in that year. Combined with a probable expectation that good operating conditions for the sector may have peaked in the short-term, a key driver of the disconnect between results and valuations in FY12 appears to be the significant increase in net debt levels during FY12. Net debt has further increased during FY13.

- FY12 margin improvement began reversing in FY13: EBITDA and NPAT of the sector underperformed revenue in FY13 suggesting a reversal of the margin growth that was achieved during FY12. The decline in margins is consistent with slowing capital expansion and exploration that has resulted in increased competition within the mining services sector as well as miners' increased focus on cost control. This has manifested itself to provide a triple whammy to the contractors through;
 - 1. More competitive tender activity (both number of tenderers and pricing)
 - 2. More difficult scope variation negotiations
 - 3. Surprise changes to the sourcing strategy for mining operations.
- **Equipment providers have been the hardest hit**: Revenues and profits of the equipment providers suffered far more than their service company counterparts. This has resulted in market capitalisations of our sample companies declining by 60% in FY13. Yellow goods providers in particular have suffered lower utilisation and a related negative impact on the valuation of their equipment – see *A wave of yellow* at right.
Comparative analysis of 30 ASX Mining Service Companies



Source: Bloomberg, Company reports, PwC analysis

The above analysis includes the following 20 ASX listed mining services contractors and 10 ASX listed mining industry equipment providers:

AAX, ANG, ASL, BKN, BLY, BOL, CDD, CGH, COF, DCG, DOW, EHL, FGE, FWD, GNG, IMD, LYL, MAH, MIN, MLD, MND, MYE, NWH, RCR, RQL, SDM, SWK, SXE, UGL, WDS.

A wave of yellow

The cost of new equipment and the value of used equipment is currently extremely volatile.

When miners were racing to capitalise on high commodity prices, much of their support services were outsourced, or were in the very least supplemented by third party contractors. Open cut mining, for example, saw many contract mining arrangements put in place to ensure continuity of service, equipment, people and ore making its way to processing plants without interruption. To fund the excavators, shovels, dozers, dump trucks, water carts and service trucks (colloquially referred to as 'vellow goods') contract miners either paid cash or financed through sale and leaseback arrangements with third party financial institutions. Many of these leases were entered into 4-5 years ago and are now due, or soon will be, for refinancing or return (ie. handing back to the financier to sell or re-lease).

We are already receiving reports of yellow goods being parked at mine sites awaiting their fate. As miners race to offset lower commodity prices by reducing costs, many outsourced functions are once again being brought back in-house, such as operating yellow goods. The quantity of yellow goods being placed on the second hand market will continue to grow.

These next 12-24 months will see only the fittest survive. Financiers and their asset remarketing divisions will have some serious choices to make: Sell equipment now and crystalise losses, or hold the equipment and wait for market conditions to improve. In contrast, the growing oversupply of yellow goods presents itself as an opportunity for astute buyers. With the strength of the Australian dollar against the US and the cost of debt (interest rates) at historic lows, market conditions will soon be perfect for purchasers of 4-5 year old yellow goods.

The FY13 decline in profitability of the mining service sector reflects structural change being sought by all miners. The majors appear to have pushed harder, earlier

The structural change in metals and mining companies from focusing on maximising production to that of focusing on lower costs, higher productivity and capital discipline has occurred. Targeted cost savings forecast by large and small miners is widespread, encompassing most cost categories. However, the major miners appear to have pushed harder and earlier relative to the aggregated results of the mid-tier miners when cash flows on capital expenditure and exploration are compared.

Both Rio Tinto and BHP Billiton recently announced significant reductions already achieved with more to come (noting that such reductions include operations outside of Australia).

To have already achieved this level of productivity improvement/cost reduction is at least in part attributable to the negotiating power of Rio Tinto and BHP Billiton, given the volumes associated with bulk commodities and contractor willingness to reduce price in order to maintain volumes and maximise utilisation. A further example of this is Alcoa of Australia, who recently stated they have been successful in achieving a 7% reduction in contractor rates after seeking a 12% reduction from all contractors.

Cost savings	achieved

Rio Tinto	 US\$977m of operating cash cost improvements US\$483m exploration costs (six months to Jun-13 vs Jun-12 comparative) 				
BHP Billiton	 US\$1.5bn exploration and business development US\$1.1bn of mining operations, labour and contractors cash costs in 2013 				
Additional cost savings forecast					
	Additional cost savings forecast				
Rio Tinto	 Additional cost savings forecast US\$2bn of operating costs over 18 months US\$267m exploration expenditure for the six months ended Dec-13 				

Is the worst yet to come for mining service companies?

"Management focus on costs...cost of sales down... administration costs down" New Hope Corporation Limited, 17 September 2013 (31 July 2013 Appendix 4E)

"Significant focus on cost reduction, including contract and supplier renegotiation" Oz Minerals Ltd, 14 August 2013 (30 June 2013 half year financial results presentation)

"Substantial savings in corporate, exploration and project evaluation costs...and further savings will be sought in the coming year" Atlas Iron Limited, 22 August 2013 (30 June 2013 annual results announcement)

"Performance, productivity drive and cost cutting... suppliers and service providers are reacting to the challenging commodity prices" Northern Star Resources Ltd, 17 September 2013 (company presentation)

There are mixed views! It depends on the customer, commodity and geographical exposure as well as existing length of contracts and strength of order book:

Yes:

- In May 2013, Morgan Stanley's **Australia Mining Cost Survey** reported that approximately 30% of large miners surveyed predicted at least 25% of cost cutting initiatives would be permanent rather than temporary. The survey also highlighted:
 - The largest targeted savings were expected to occur in 6-12 months time (being largely FY14); and
 - By weighting, general contractor prices, was the most significant area of cost saving being sought/ expected.
 - We expect that the mid-tier 50 will likely reduce capital and exploration expenditure in FY14 (contrary to the increase in FY13) with the lead times being such that FY13 actions will result in reduced FY14 spending. Service and equipment companies exposed to exploration and development should continue to be challenged.
- Development project indices have recently reached record lows after significant declines during the second half of FY13 (SNL Metals Economics Group's Pipeline Activity Index, Australian Infrastructure Metric).

No:

- FY14 will see a continued increase in production volumes (particularly for iron ore) resulting from capacity expansion that has occurred in recent years coming on stream benefitting mining service companies that are predominantly exposed to the production phase (extraction, processing and transport).
- Some industry players predict there will be an increase in demand for repairs and maintenance services as miners look to operate their existing fleet longer and harder before investing in new equipment. Conversely, reduction in repairs and maintenance expenditure is often seen as a simple and straight-forward cost savings measure to implement and there is anecdotal evidence to support that this is happening, including the cannibalisation of parts from existing/parked up fleet.

What does this mean for mining service providers?

Looking into FY14, we expect to see:

- Continued pressure on mining service providers to diversify – across the value chain, service offerings, commodities and geographically – to maintain earnings or achieve further growth. Morgan Stanley's Australia Mining Cost Survey reported in May 2013 that a number of firms were targeting maintenance and operations as mining capital expenditure declines, for example Downer EDI, Leighton Holdings, Forge Group and NRW.
- As mining companies implement cost saving measures and look to further insource work, contractors will have increased capacity. This will increase competition between contractors and there will be a greater focus on services which are value-adding to achieve greater production efficiencies.

"Austin is working with customers to develop equipment that will have enhanced payloadcarrying capabilities and to offer more value-adding repair and maintenance services"

Austin Engineering Limited, 22 August 2013 (30 June 2013 preliminary financial report)

"...working constructively with our customers to reduce costs and improve productivity"

and the second

Downer EDI Limited, 7 May 2013 (Investor Presentation)



- An increase in the number of mining services companies in distress as debt levels continue to grow. Companies that fail to respond to the changing market conditions will struggle to refinance their debt facilities due to tougher funding requirements.
- Lower valuations should present buying opportunities for well capitalised domestic players looking to build scale and inbound investors looking to establish or build on existing footprints in Australia (eg. US listed Jacobs Engineering Group's acquisition of Australian firm SKM). Australian service providers looking to diversify across commodities or capabilities may also look overseas; the recent acquisition of North American based Taggart Global by ASX listed Forge Group being an example.
- Conversely, if capital markets become readily accessible for junior and mid-tier 50 miners again, this will increase funding available for exploration and development projects which will have flow on benefits to mining services companies.

"Should there be continued irrational pricing and further reduction in contractor profits, it may potentially lead to dislocation, thereby putting overall mining productivity at risk"

ASX listed mining contractor CFO

What does this mean for mid-tier miners?

- There will be less demand for and excess capacity of mining services, increasing opportunities for mid-tier miners to get a good or better deal with a 'provider of choice' that did not previously operate for the mid-tier.
- The current environment provides mid-tier miners with an opportunity to work towards joint outcomes with contractors in order to achieve optimal outcomes:
 - Flexibility for both sides in terms of resourcing (eg. minimising capacity constraints, balancing insourcing vs outsourcing)
 - Ensure service companies can deal with cost cutting (ie. moving from high margin to low margin environment) and still provide acceptable standard of service
 - Ability for both parties to share in cost cutting achieved by the contractor
 - Asset ownership/financing ability for miners with available financing (which may be limited for the mid-tier) to own rather than rent operating assets such as yellow goods given lower prices (thereby avoiding paying a margin on the asset) and reduce financing risk to the contractor.
- Supplier due diligence will be ever more important to ensure financial robustness of suppliers and that they can deliver the contract as well as meeting operational performance standards.
- The importance of the relationship and need for a commercially beneficial outcome for both parties must not be underestimated in these uncertain times.



This year's mid-tier 50

Movements in the mid-tier 50

Despite ongoing volatility in gold markets, this year's mid-tier 50 continued to be dominated by gold miners, comprising 14 of the 50 miners. While gold miners maintained their position, they have seen their overall market capitalisation diminish by 44% in FY13. Amidst ongoing uncertainty surrounding the gold price and the ability of the sector to generate profits, the 14 miners will need to remain fit in order to survive the tough climate.

FY13 saw the composition of the mid-tier 50 transform with ten companies changing in the group. The most

remarkable being Sirius Resources, who enters this year's list at 23 after recording a 5334% increase in market capitalisation following the discovery of a giant nickel sulphide system in the Fraser Ranges of WA.

Another success story was BC Iron, who increased their net profit after tax by 243%, or \$51 million, in FY13. This resulted from increased output and increasing their interest in the Nullagine Joint Venture with Fortescue Metals Group.

Symbol	Entity name	Year end	Market capitalisation as at 30/6/2013 \$m	Rank by market capitalisation
(ASX:AQG)	Alacer Gold Corp.	31-Dec	216	42
(ASX:AWC)	Alumina Limited	31-Dec	2,764	3
(ASX:AQP)	Aquarius Platinum Limited	30-Jun	316	31
(ASX:AQA)	Aquila Resources Limited	30-Jun	733	13
(ASX:ARI)	Arrium Limited	30-Jun	1,057	9
(ASX:AGO)	Atlas Iron Limited	30-Jun	678	16
(ASX:BSE)	Base Resources Limited	30-Jun	213	43
(ASX:BCI)	BC Iron Limited	30-Jun	398	26
(ASX:BDR)	Beadell Resources Limited	31-Dec	393	27
(ASX:BOC)	Bougainville Copper Limited	31-Dec	172	50
(ASX:BCK)	Brockman Mining (Wah Nam International Holdings Ltd)	30-Jun	521	20
(ASX:CZA)	Coal of Africa Limited	30-Jun	194	46
(ASX:CPL)	Coalspur Mines Limited	30-Jun	182	49
(ASX:CDU)	CuDeco Limited	30-Jun	410	24
(ASX:ERA)	Energy Resources of Australia Limited	31-Dec	619	18
(ASX:EVN)	Evolution Mining Limited	30-Jun	404	25
(ASX:GRR)	Grange Resources Limited	31-Dec	185	48
(ASX:GNM)	Gujarat NRE Coking Coal Limited	31-Mar	234	38
(ASX:ILU)	Iluka Resources Limited	31-Dec	4,183	1
(ASX:IGO)	Independence Group NL	30-Jun	526	19

Symbol	Entity name	Year end	Market capitalisation as at 30/6/2013 \$m	Rank by market capitalisation
(ASX:IRN)	Indophil Resources NL	31-Dec	319	30
(ASX:KCN)	Kingsgate Consolidated Limited	30-Jun	193	47
(ASX:LYC)	Lynas Corporation Limited	30-Jun	735	12
(ASX:MML)	Medusa Mining Limited	30-Jun	292	33
(ASX:MIN)	Mineral Resources Limited	30-Jun	1,534	5
(ASX:MGX)	Mount Gibson Iron Limited	30-Jun	507	21
(ASX:NHC)	New Hope Corp. Limited	31-Jul	2,965	2
(ASX:NST)	Northern Star Resources Limited	30-Jun	248	37
(ASX:OGC)	OceanaGold Corporation	31-Dec	348	29
(ASX:OMH)	OM Holdings Limited	31-Dec	257	35
(ASX:OZL)	OZ Minerals Limited	31-Dec	1,244	7
(ASX:PDN)	Paladin Energy Limited	30-Jun	733	14
(ASX:PNA)	PanAust Limited	31-Dec	1,130	8
(ASX:PIR)	Papillon Resources Limited	30-Jun	226	39
(ASX:PRU)	Perseus Mining Limited	30-Jun	199	45
(ASX:RRL)	Regis Resources Limited	30-Jun	1,375	6
(ASX:RSG)	Resolute Mining Limited	30-Jun	385	28
(ASX:SFR)	Sandfire Resources Limited	30-Jun	797	11
(ASX:SLR)	Silver Lake Resources Limited	30-Jun	226	40
(ASX:SIR)	Sirius Resources NL	30-Jun	418	23
(ASX:SPH)	Sphere Minerals Limited	31-Dec	677	17
(ASX:SBM)	St Barbara Limited	30-Jun	220	41
(ASX:SMM)	Summit Resources Limited	30-Jun	277	34
(ASX:SDL)	Sundance Resources Limited	30-Jun	212	44
(ASX:SYR)	Syrah Resources Limited	30-Jun	301	32
(ASX:WSA)	Western Areas Limited	30-Jun	457	22
(ASX:WDR)	Western Desert Resources Limited	30-Jun	249	36
(ASX:WHC)	Whitehaven Coal Limited	30-Jun	2,359	4
(ASX:YAL)	Yancoal Australia Limited	31-Dec	716	15
(ASX:ZIM)	Zimplats Holdings Limited	30-Jun	916	10



Explanatory notes

We have analysed the largest 50 mining companies listed on the ASX with a market capitalisation of less than \$5 billion at 30 June 2013. The results aggregated in this report have been sourced from publicly available information, primarily annual reports and financial reports available to shareholders.

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 FY13 covers periods between 1 January 2012 and 30 June 2013, 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 Australian dollars, except where specifically stated. The results of companies that report in currencies other than the Australian dollar have been translated at the average Australian dollar exchange rate for the financial year, with balance sheet items translated at the closing Australian dollar exchange rate.

Some diversified companies undertake part of their activities outside of the mining industry. Unless specifically stated, no adjustments have been made to exclude such non-mining activities from the aggregated financial information.



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Mining Excellence at PwC

Delivering local solutions to global challenges

The mining sector is facing a range of competing trends and a rapidly changing global business environment. Against the backdrop of commodity price fluctuations, miners need to balance shareholder dividend expectations whilst maintaining an investment pipeline in the midst of increasing operating costs. Safety, environmental and community principles also continue to shape the industry as miners look to achieve their licence to operate and deliver on corporate responsibilities.

Mining Excellence at PwC has been designed to mobilise and leverage PwC's collective global knowledge and connections to deliver an exceptional and tailored client experience, helping our clients navigate the complex industry landscape and meet their growth aspirations. Our team of specialists is exclusively focused on the sector and brings an industry-based approach to deliver value for you and your organisation.

Mining Excellence at PwC provides our clients:

leading edge **knowledge** and insight

With significant investment in the research behind our mining publications and a comprehensive industry learning and development program, our professionals can share both industry and technical insight with our clients, such as:

- A library of industry publications designed to help challenge "conventional" thinking and delve into topical industry issues. This includes:
 - flagship publications including Mine and Mining Deals
 - The Insight Series focuses on specific issues most important to miners



- An extensive industry development program for our people and clients. This features our annual university-style courses:
- Hard Hat: The Mining Experience (Australia)
- Americas School of Mines (North America)
- London School of Mines (United Kingdom)
- Asia School of Mines (India, 2013)



connections to our vast network of mining experts and global client portfolio

We have the widest network of industry experts who work out of strategic mining hubs across the globe to help better connect you to vital mining markets. Our connections provide:

- seamless client service delivered with collaborative cross-border account management
- maximised deal potential through a well-connected global community of mining leaders
- a well-connected and mobile workforce to ensure effective service delivery in even the most remote mining locations.

"The positive story for miners is that the long-term growth fundamentals remain in tact. But, mining companies are facing significant downward pressure. As an industry, we need to fully address the confidence crisis, before we are able to move on to the next phase of the cycle."

John Gravelle, PwC Global Mining Leader

the **delivery** of an experience that meets our clients' definition of 'value'

With mining experts working around the globe, our award winning teams are helping clients deliver on specific projects and organisational growth aspirations. We offer advisory, tax and audit services to global corporations and locally listed companies.

Mining Excellence at PwC complements this with:

- a suite of niche mining consulting capabilities focused on optimising value across mining operations and effectively managing risk to help our clients grow their business and deliver shareholder value
- a comprehensive client feedback program to ensure we are always improving and delivering on individual client needs.



Aussie Mine Team

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2013 Aussie Mine Core Project Team



Justin Eve Project Leader



Olivier Marion Project Director



Jason Creek Senior Consultant



Steve Mann Manager



Alex Mayberry Manager

2013 Aussie Mine - key authors

Ben Gargett Alex Mayberry Rob Gray Financial analysis

Roger Port Steve Mann Alex Walker Deals, treading with caution

Matthew Santoro Michael Branson Raising funds in hard times **Franz Wentzel** The productivity challenge

Matt Guthridge Alena Mackie Performance alignment

Darren Carton Scott Stephens Robert Van Raay Focus on Australian mining services contractors Wesley Goh Olivier Marion Focus and alignment, CEO interview with Bill Beament

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