

2Q13 Global Mining & Construction Survey

Pricing & Aftermarket Next Shoe to Drop

- **Citi Global Mining & Construction Survey** — We examine the results of our quarterly proprietary Mining & Construction Survey, which tracks the 12-month forward-looking capex intentions of mining and construction customers. The survey captures >\$320bn in annual sales by customers (including mining and construction equipment dealers, mining, construction and minerals processing companies).
- **Negative Pricing Now Expected** — Pricing sentiment for mining equipment turned negative for the first time since 4Q09. On average, prices are now expected to go down by 4.4% Y/Y over the next 12 months compared to an average 4% increase expected in our past 16 surveys and c8% at the peak of 2012. In terms of equipment type, the highest risk is for mining trucks, pyro processing, hydraulic excavators; filtration, drilling and crushing equipment. The pricing risk is also emerging with regards to service related contracts with more and more miners are willing to push back. This signals a structural change amongst miners with the new CEOs focused on turning away from “empire growth building” towards cost and returns.
- **Mining Capex Outlook Weakens Further Across All Commodities & All Equipment Types** — Survey participants now expect mining capex to decline by 16% Y/Y over the next 12 months compared to 11% Y/Y decline expected during our 1Q13 survey with a greater risk of projects being deferred to 2015 and beyond. Capex cuts are expected across all commodities and across all type of mining equipment. The risk lies on the downside as 70% of the respondents are considering lowering future capex budgets. Separately, our own mining capex model (based on >40 mining companies worldwide) points to a cumulative decline of 30% over 2013-15E from the peak level of 2012 (with 2014 taking the biggest hit and a further decline expected in 2015).
- **Aftermarket The Next Shoe To Drop?** — We note a number of recently announced mine closures and production cut backs or deferrals (Figure 5). If this trend continues it could lead to softer aftermarket growth than currently expected.
- **CAT Dealers in China** — Our recent survey of CAT dealers in China points to downward sales expectations, with a slowing economy, cooling local government investment and heightened competitive activity some of the factors cited (with responses fielded mostly prior to the recent SHIBOR spike). Mine closures - especially amongst smaller mines - have picked up with the recent downdraft in coal prices, contributing to the weakness in large excavators. The majority of dealers noted inventories were at “average” levels (an improvement from last survey).
- **Top Picks** — Our survey findings support our negative stance on mining capex, which we first highlighted in March 2012 in our report [Mining Capex - Downside Risk Emerging](#). Globally, we prefer FLSmidth (new CEO, US housing and US EPA legislation, although we acknowledge near-term headwinds) and Electrolux (a net beneficiary of falling commodity prices) – both Buy rated – over Atlas Copco and Metso – both Sell rated – and over Caterpillar, Joy Global, HCM, Komatsu ([Downgrading to Neutral: Mining woes cast a deeper shadow](#)), Sandvik and Weir Group – all Neutral rated.

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Executive Summary

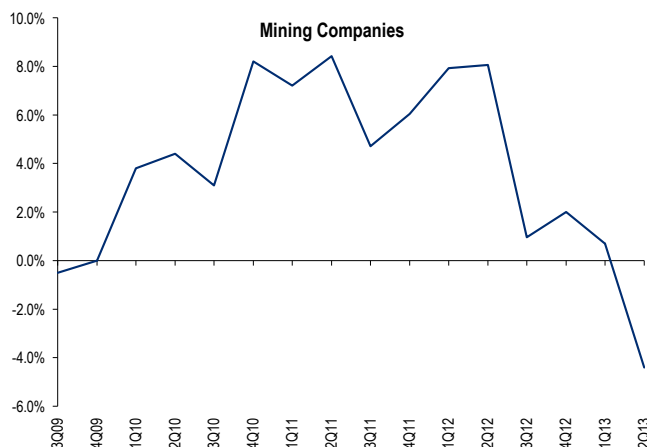
Mining Survey: Negative Pricing Now Expected

Outlook for mining pricing equipment has deteriorated considerably from 1Q13 survey. We had highlighted in our report [Global Mining Capex - 2014 Risk Still Lies to the Downside](#) that pricing risk lies to the downside and the results from our 2Q survey now confirms this. On average, prices are expected to decline by 4.4% Y/Y over the next 12 months compared to c.1% Y/Y increase expected at the time of our 1Q survey and an average c.4% increase expected in our past 16 surveys. The last time we saw negative pricing expectations was in 3Q09 when we launched our survey. This survey shows around 81% of the respondent are not willing to accept price increases from equipment suppliers.

This signals a structural change amongst miners with the new CEOs focused on turning away from “empire growth building” towards cost and returns. We believe the consequence will likely be a multi-year decline in capital spending and a dramatic shift in buying power within the supply chain alongside compressing lead times. One major miner noted that lead times for certain large surface products have dropped from over 2 years at the end of 2011 to in some cases 2 weeks today. Another major miner has recently pushed down on price iron ore related supplier by 15% Y/Y. In terms of equipment type, the highest risk is for mining trucks, pyro processing, hydraulic excavators; filtration, drilling and crushing equipment. The downside pricing risk is also emerging in aftermarket with miners are more and more willing to push back on price.

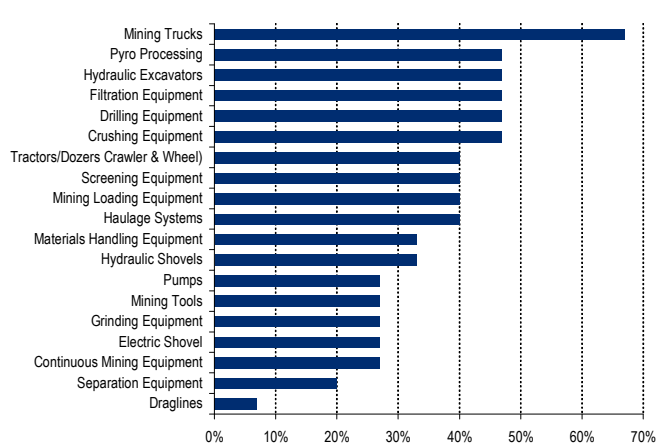
So far amongst global equipment providers, only Boart Longyear, Fenner and Metso have alluded to some evidence of pricing pressure. Recently, Boart Longyear has guided for mid-to-high-single-digit FY13 drilling services price erosion. Our Australian analyst notes that recent industry feedback suggests FY13 drilling services pricing will be down around 10% y/y, with further price erosion in FY14 reflecting the annualized effect of FY13 price reductions ([Boart Longyear Ltd \(BLY.AX\) - Risk to Guidance on Downside, Balance Sheet Risk Managable](#)). We had previously highlighted Fenner facing some margin pressure in Australia (first noted in October), which may take a few quarters to play through. Metso had also alluded to pricing pressure in some of large mining projects ([Metso Oyj \(MEO1V.HE\) - Feedback from Pre-Silent 1Q13 Conference Call](#)).

Figure 1. Mining Companies Prices of New Equipment Purchases Over the Next 6-12 Months Compared to the Last Year



Source: Citi Research

Figure 2. Mining Survey Participants: Over the next 12 months, on which type of equipment are you considering to push back on price?



Source: Citi Research

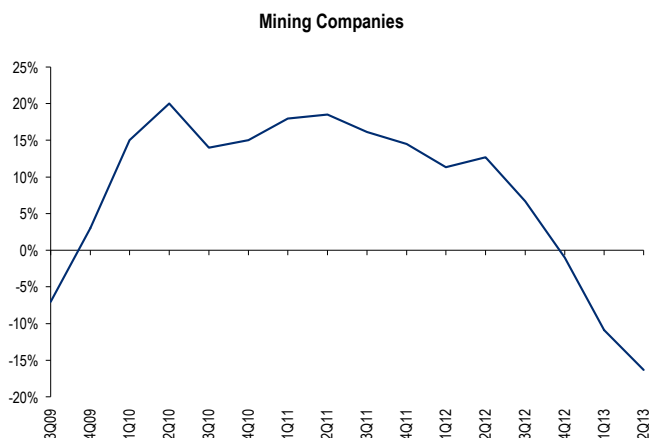
Mining Survey: Mining Capex Continues To Deteriorate

For the third time since we rolled out our proprietary Mining & Construction capex survey in October 2009, our survey points to a decline in capex expectations. Mining survey participants now expect mining capex to decline by 16% Y/Y, compared to 11% Y/Y decline expected at the time of our 1Q13 survey and the average of 14% growth expected between 4Q09 and 3Q12. Worth noting that the weakness is notable across all types of equipment and all types of commodities.

Separately from the mining capex survey, our own mining capex model (based on >40 mining companies worldwide) points to a 4% Y/Y decline in 2013E, followed by a 19.3% Y/Y decline in 2014E (compared with -12.0% in our [Global Mining Capex - 2014 Risk Lies on The Downside](#) in April). Our model also points to a 9.5% decline in mining capex in 2015E. Overall this translates into a cumulative decline of 30% over 2013/15E from the peak level of 2012. We believe risk to mining capex lies on the downside, especially as we look into 2014E and 2015E as miners are still working through long lead-time capital projects.

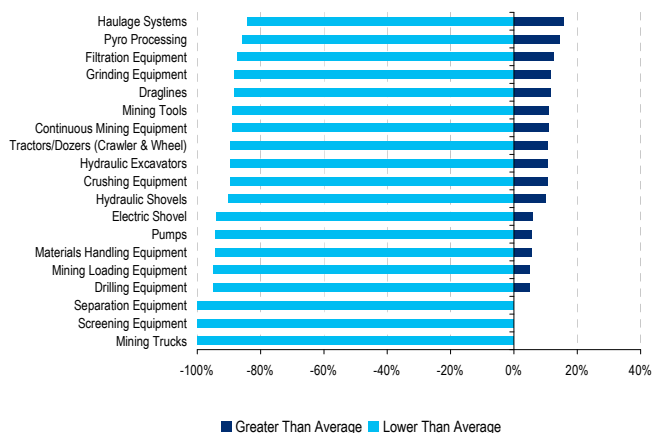
We note our previous survey ([1Q13 Global Mining & Construction Survey](#)) has pointed out that there is now a greater risk of further deferrals of mining capex plans, with intentions of purchasing new equipment now being shifted to 2015 and beyond. This survey also confirms that purchasing intentions have indeed been pushed out to 2015 and beyond, with a greater risk of purchasing intentions being cut down for 2014E and 2015E (Figure 13).

Figure 3. Mining Companies Equipment Purchasing (CAPEX) Intentions Over the Next 12 Months Compared to the Last Year



Source: Citi Research

Figure 4. 2Q13 Mining Companies: Over the next 12 months, demand for which of the following types of equipment will be lower or greater than average or unchanged?



Source: Citi Research

Furthermore, we had highlighted in [Global Mining Capex - 2014 Risk Lies on The Downside](#) report that our channel checks suggest miners are cutting back production and lowering their future capex budgets with more cut-backs in copper and gold mining. We have seen further evidence of these trends since then (Figure 5) and our 2Q survey confirms that mining companies are most likely to cut back spending, especially on gold (Figure 25)

Figure 5. Mining Capex Channel Check - Capex and Production Cutbacks

Date	Company	Details
Mining Production Cutbacks		
Jul-13	Perseus Mining	Expects production in 2H of FY2012/13 to fall below its previously issued guidance of at least 105,000 ounces
Jun-13	Glencore Xstrata	Glencore Xstrata cut back coal production of 3m tonnes of coal production at its Newlands and Oak Creek mines in Australian
Jun-13	Golden Star	Reduced gold production of 320,000-350,000 ounces this year to a range of 290,000-310,000 ounces from its two operating mines in the Ashanti Gold Belt
Jun-13	McEwen Mining	lowering its production growth forecast to 225,000 gold equivalent ounces in 2016 from 290,000
May-13	Yantai Penghui Copper Industry	Production in April was cut by about 20% from the same time last year. Production may fall by 15% in the 2Q from a year ago
May-13	North Copper	For this year, the production could be about 20% lower than its targeted 120,000 tonnes
May-13	Yunnan copper & Jiangxi copper	Announced production cuts this year due to the shortage of scrap supply
May-13	Jinchuan Group	Company has shut down 200000 tons of annual production capacity of facilities, for copper scrap raw material shortage
Apr-13	Rio Tinto	Rio Tinto now expects mined copper output of about 540,000 tonnes and refined copper output of 205,000 tonnes in 2013. In February, it had forecast 2013 mined copper output at 665,000 tonnes and refined copper output at 305,000 tonnes
Apr-13	Pan Pacific Copper	Plans to reduce output by 3.2% in the first half of this fiscal year compared with a year earlier
Apr-13	OZ Minerals	Produce less copper than expected after a setback at its Prominent Hill mine in southern Australia. OZ Minerals cut its forecast for copper output in 2013 to 82,000-88,000 tonnes, compared with an earlier projection of 90,000-95,000 tonnes
Mar-13	Newcrest Mining	Lowered its gold output guidance by about 10%, limiting its ability to capitalize on high gold prices
Jan-13	Yamana Gold	Expects to produce about 1.44m to 1.60m GEO this year. The company had earlier forecast production of 1.48m to 1.66m GEO, with a target level exceeding 1.5m GEO
Mining Capex Cutback/Deferral		
Jul-13	Vale	Rio Colorado potash (\$6bn) is postponed and Moatize coal (\$6bn) faces potential delays given local threats and weak coal prices
Jun-13	Glencore Xstrata	Suspends the \$142m Liddell underground expansion at its Ravensworth mine in NSW
Jun-13	Aquila Resources	Re-prioritise some works on the project due to soft coal prices and pushed back completion of the mine to the first half of 2017 from November 2016
Jun-13	Newcrest Mining	Capex budget cut to ~\$1bn for FY14 (~\$1.5bn prior)
Jun-13	MDI	Lower levels of demand have significantly increased competitive pressures and will likely continue to have an impact for the rest of calendar 2013.
May-13	AngloGold Ashanti	Targeting more capex savings across the regions, in addition to last year's \$500m capex budget reduction to \$2.1bn
May-13	BHP	BHP Billiton expected capex of \$18bn in 2014 and \$15bn in two to three years from \$22bn currently
May-13	Harmony Gold	Said will reduce its services and corporate costs by R400m and overall capex in South Africa and Papua New Guinea by R1.4bn for the 2014 financial year
May-13	Hochschild Mining Plc	2013 exploration budget is revised by 29% to \$55m. Sustaining capex now expected to be appx \$160m (previous guidance was \$180m)
May-13	Rio Tinto	The company said it is well on track to reduce \$750m in exploration and evaluation expenditure this year. The company is cutting its capex to \$13bn this year compared with \$17bn the year before
May-13	Hecla Mining Co	Lowered its planned capital spending for 2013 to \$145m from the \$152m it had forecast in February
Apr-13	African Barrick Gold	2013 capex guidance of US\$100m of sustaining capital. Reduced 2013 sustaining capex by over \$50m against 2012
Mar-13	Codelco	Considering \$500mn-600mn in spending deferrals for the year, albeit will not impact the company's structural projects
Mar-13	Newmont Mining	Expects to invest appx \$2.1-\$2.3bn in attributable capex in 2013, of which appx 40% is allocated to development capital and remaining on sustaining capital.
Jan-13	Anglo American	So far approved capex of \$5bn for 2013 and \$3.5bn for 2014 (vs. expectations of \$7.5-\$8bn in 2013 previously)
Jan-13	Bumi Resources	Expects capex of \$150m in 2013.
Jan-13	Consol Energy	Consol Energy expects to invest between \$835-\$865m in its coal, gas and water businesses in 2013, less than the \$1.5bn estimated in Oct
Dec-13	Lundin Mining	Capex for 2013 is expected to be \$270m (vs. \$380m in 2012). Exploration expenditures are expected to be in the range of \$40m in 2013 (2012 - estimated at \$50m).
Dec-13	Vale	Budgeted \$16.3bn for capex for 2013, including \$10.1bn for project execution, \$5.1bn for sustaining existing operations and \$1.1bn for R&D. Vale's 2013 capex budget is down from \$17.5bn in 2012
Gold and Copper Mining Capex Cutback/Deferral		
Jul-13	Medusa Mining	Reduce exploration expenditure from \$25m in FY13 to \$12m in FY14.
Jul-13	Barrick Gold	Delaying first production into mid-2016 and deferring capex at Pascua. 2013 capex guidance reduced by \$0.7-0.8bn to \$1.8-2.0bn and 2014 capex lowered by \$0.8-1.0bn to \$1.0-1.2bn
Jun-13	Golden Star	Exploration spend for the year has been reduced from \$20m to \$16.5m
May-13	Harmony Gold	Reducing its services and corporate costs by R400m and overall capital expenditure in South Africa and Papua New Guinea by R1.4bn for the 2014 financial year
May-13	AngloGold Ashanti	Targeting more capex savings across the regions, in addition to last year's \$500m capex budget reduction to \$2.1bn
May-13	Saracen Mineral Holdings	Suspended its expansion plans for the Carosue Dam plant, along with the development of its Deep South underground operation, as a response to the gold price volatility indefinitely
May-13	Randgold Resources	Will cut its capital spending and reduce production from its Loulo-Gounkoto complex, in Mali, negotiating the effects of a sharply lower gold price, and a weaker 1Q performance
May-13	Gold Fields	Slashed exploration expenditure and is closing down marginal production at Tarkwa in Ghana and the St Ives and Agnew mines in Australia. The group's lower production in the quarter stems in large part from these decisions
Apr-13	Sibanye Gold	Looking at ways to minimise the losses and depending on discussions with the government and unions there may be lay-offs
Apr-13	Barrick Gold	Plans to cut at least \$500m from spending on major projects this year and may consider suspending work at its troubled Pascua-Lama development in South America

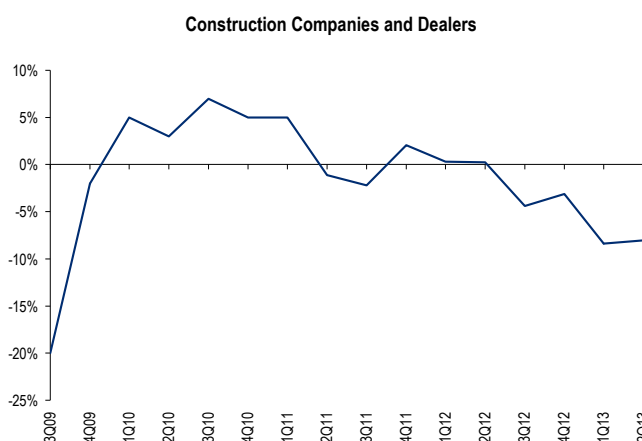
Source: Citi Research; Company Reports

Construction Outlook Weakens Further

Construction Capex Outlook Deteriorates – Capex is expected to decline by -8.1% Y/Y over the next 12 months, worse than -8.4% Y/Y expectations at the time of our 1Q13 survey. This marks the fourth consecutive decline in capex expectations and continues to remain below the average 1% growth expected in our past 16 surveys. We also note meaningful capex spending has been pushed out further into 2015 and beyond.

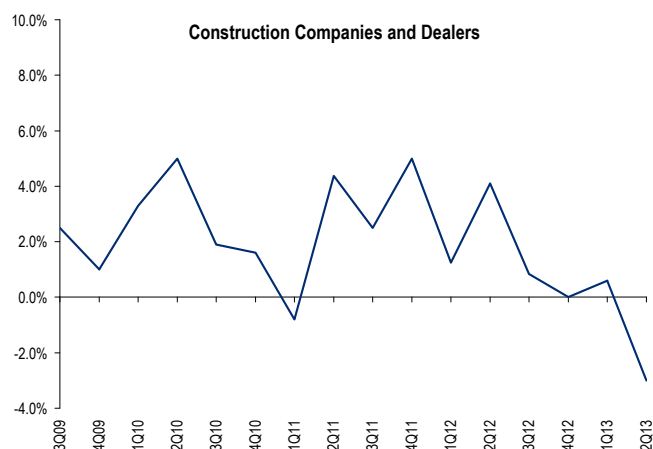
Construction Pricing Remains Weak – Survey respondents expect price for construction equipment to decline by -3% during the next 12 months. This marks the first time our survey showed a decline in pricing expectations since our launch in October 2009. Pricing expectations remain well below 0.6% increase at the time of our 1Q survey and the average of 2% growth expected in our past 16 surveys. Majority of the respondents (70%) would be unwilling to accept price increases from suppliers, if suppliers were to raise prices.

Figure 6. Construction Companies & Dealers: Equipment Purchasing (CAPEX) Intentions Over Next 12 Months Compared to Last 12 Months



Source: Citi Research

Figure 7. Construction Companies and Dealers Prices of New Equipment Purchases Over Next 6-12 Months Compared to Last Year



Source: Citi Research

Caterpillar Dealers in China

Our recent survey of CAT dealers in China points to downward sales expectations, with a slowing economy, cooling local government investment and heightened competitive activity some of the factors cited (with responses fielded mostly prior to the recent SHIBOR spike). Mining closures, especially amongst smaller mines, have picked up with the recent downdraft in coal prices, contributing to the weakness in large excavators. The majority of dealers noted inventories were at "average" levels (an improvement from last survey).

Top Picks

Global mining equipment companies are trading on our 2013E forecasts on a P/E of 12x. European stocks are the most expensive trading on 12.9x, whilst US and Japanese stocks are on 10.3x and 11.3x respectively.

Globally, we prefer FLSmidth (new CEO, US housing and US EPA legislation, although we acknowledge near-term headwinds) and Electrolux (ELUXb.ST; SKr171.40; 1) (a

net beneficiary of falling commodity prices) – both Buy rated – over Atlas Copco and Metso – both Sell rated – and over Caterpillar, Joy Global, HCM, Komatsu (recently downgraded from Buy to Neutral for detail see [Downgrading to Neutral: Mining woes cast a deeper shadow](#)), Sandvik and Weir Group – all Neutral rated.

Figure 8. Global Mining Equipment Manufacturers – Comparable Valuation

Company Name	Ticker	Price	Rating	EV/Sales		EV/EBIT		EV/EBITDA		P/E		EBIT Margin	
				2013E	2014E	2013E	2014E	2013E	2014E	2013E	2014E	2013E	2014E
Europe													
Atlas Copco	ATCOa.SE	165.30	(3)	2.3	2.2	11.3	11.0	9.8	9.5	15.5	15.6	20.4%	20.4%
Fenner	FENR.GB	3.17	(1)	0.8	0.8	8.6	7.0	5.7	5.0	10.5	9.1	10.5%	11.7%
FLSmidth	FLS.DK	267.10	(1)	0.7	0.7	8.8	7.6	7.7	6.1	11.4	9.8	8.0%	8.8%
Metso	MEO1V.FI	27.59	(3)	0.7	0.8	8.8	9.7	6.7	7.3	11.8	12.6	7.9%	8.0%
Sandvik	SAND.SE	81.95	(2)	1.4	1.3	10.7	10.0	8.2	7.3	14.6	13.1	12.9%	13.5%
Weir	WEIR.GB	21.27	(2)	1.9	1.8	9.9	9.2	8.7	8.1	13.7	13.2	19.3%	19.2%
US													
Caterpillar	CAT.US	85.33	(2)	1.0	0.9	9.3	7.8	6.8	5.8	12.3	10.9	10.7%	11.9%
Joy Global	JOY.US	49.48	(2)	1.2	1.3	6.3	6.4	5.6	5.6	8.4	9.0	20.0%	19.7%
Japan													
Hitachi Construction Machinery	6305.JP	2117.00	(2)	0.9	0.8	10.7	9.1	6.1	5.2	10.7	9.5	10.0%	10.5%
Komatsu	6301.JP	2,338	(2)	1.4	1.2	10.0	8.9	7.0	6.3	12.0	11.3	14.3%	14.6%
China													
Sany Int'l	0631.CN	2.01	(2)	1.4	1.2	7.7	5.7	6.3	4.8	11.2	8.9	18.1%	20.6%
Others													
Boart Longyear	BLY.AU	0.48	(3)	0.6	0.5	nm	nm	6.1	4.9	nm	nm	-0.8%	0.0%
Doosan Infracore	042670.KR	10650.00	(2)	0.2	0.2	4.6	3.6	3.1	2.5	nm	10.0	4.8%	5.9%
Global Mining Equipment Average				1.1	1.1	8.9	8.0	6.8	6.0	12.0	11.1	12.0%	12.7%
European Mining Equipment Average				1.3	1.3	9.7	9.1	7.8	7.2	12.9	12.2	13.2%	13.6%
US Mining Equipment Average				1.1	1.1	7.8	7.1	6.2	5.7	10.3	9.9	15.4%	15.8%
Japan Mining Equipment Average				1.1	1.0	10.3	9.0	6.6	5.7	11.3	10.4	12.2%	12.6%
China Mining Equipment Average				1.4	1.2	7.7	5.7	6.3	4.8	11.2	8.9	18.1%	20.6%

Source: Powered by dataCentral. Prices as of 9 July 2013

Mining & Construction Survey Results

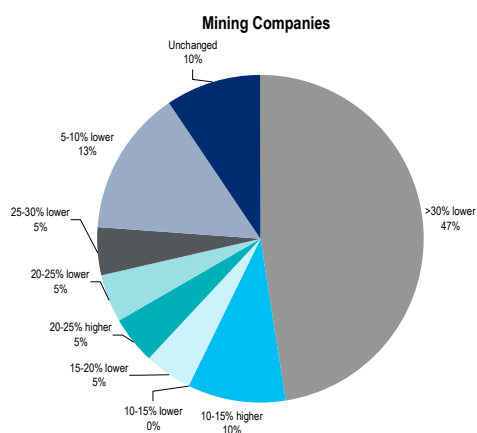
12-month mining capex growth expectations continue to deteriorate pointing to double digit decline

1. For the next 12 months, what are your equipment purchasing (CAPEX) intentions compared to the last 12 months?

Mining capex survey participants said that over the next 12 months, capex on average is expected to decline by c.16% Y/Y (Figure 9) vs. -11% expected at the time of our 1Q13 survey (-1% in 4Q12, 7% in 3Q12, 13% in 2Q12 and 11% in 1Q12). This marks the third consecutive time that our survey shows capex decline over next 12 months since we launched our proprietary Mining and Construction Survey in October 2009. Moreover, the proportion of participants who plan to decrease capex has surged to 76% from 61% in 1Q13 (vs. 46% in 4Q12 and 27% in 3Q12). On the other hand, proportion of participants who plan to increase capex has reduced sharply to 14% from 22% in 1Q13 (vs. 36% in 4Q12 and 53% in 3Q12). More importantly, of the 76% who plan to decrease capex, the average decline is of the magnitude of 20-25% over the next 12 months.

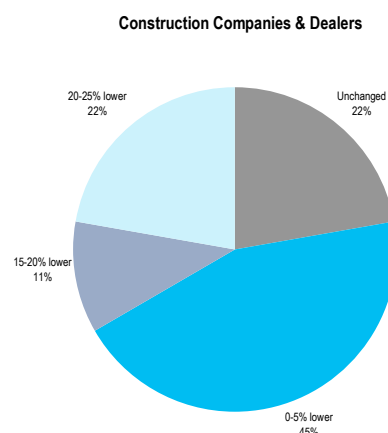
Construction companies and dealers expect capex on average to decline by 8.1% Y/Y during the next 12 months (Figure 10), almost in line with 8.4% Y/Y decline expected in 1Q13 survey (vs. -3.1% Y/Y in 4Q12 and -4.4% Y/Y in 3Q12), indicating a sharp deterioration from the flat growth expected during 1Q12 survey, +2% in 4Q11, -2% in 3Q11, -1% in 2Q11, and +5% in our 1Q11 survey.

Figure 9. Mining Companies' Equipment Purchasing (CAPEX) Intentions Over the Next 12 Months Compared to the Last 12 Months



Source: Citi Research

Figure 10. Construction Companies' and Dealers' Equipment Purchasing (CAPEX) Intentions Over Next 12 Months Compared to Last 12 Months



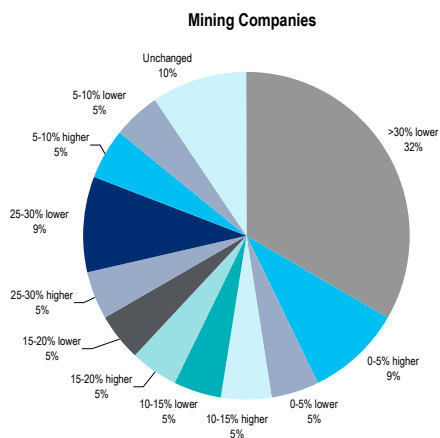
Source: Citi Research

2. What are your equipment purchasing (CAPEX) intentions for 2014 compared to the last 12 months?

Mining capex survey participants said that capex on average is expected to decline by c.16% Y/Y (Figure 11) in 2014. More importantly, 62% of participants plan to decrease capex (average: -23.5% Y/Y), while a mere 29% plan to increase (average: +11.7% Y/Y) and 10% intend to keep their capex levels unchanged.

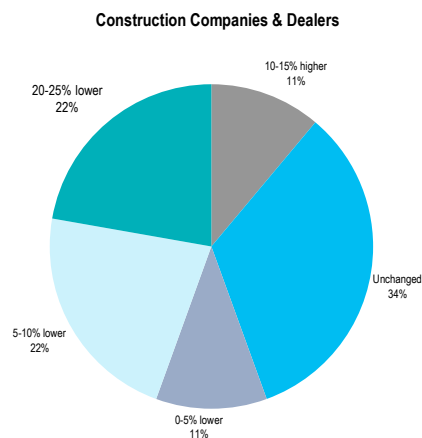
Construction companies and dealers expect capex on average to decline by 5.6% Y/Y in 2014 (Figure 12). A majority (56%) of participants plan to decrease capex (average: -12.5% Y/Y), while only 11% plan to increase (average: +12.5% Y/Y) and 34% intend to keep their capex levels unchanged.

Figure 11. Mining Companies' Equipment Purchasing (CAPEX) Intentions in 2014 Compared to the Last 12 Months



Source: Citi Research

Figure 12. Construction Companies' and Dealers' Equipment Purchasing (CAPEX) Intentions in 2014 Compared to Last 12 Months



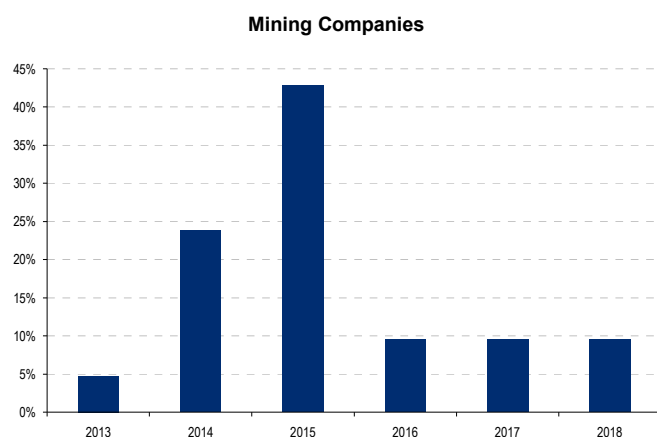
Source: Citi Research

3. Based on your medium-term demand environment outlook, in which year are you most likely to substantially increase equipment purchasing (CAPEX)?

We had previously pointed out (in our 1Q13 and 4Q12 survey) that there is now a greater risk of further deferrals of mining capex plans, with intentions of purchasing new equipment now being shifted to 2015 and beyond. Results from this quarter's survey confirm this view. Overall, 71% of mining participants are planning to substantially increase equipment purchasing between 2015 and 2018 compared to 65% of mining companies were still planning to spend c35% of their budgets during the same period at the time of our 1Q survey.

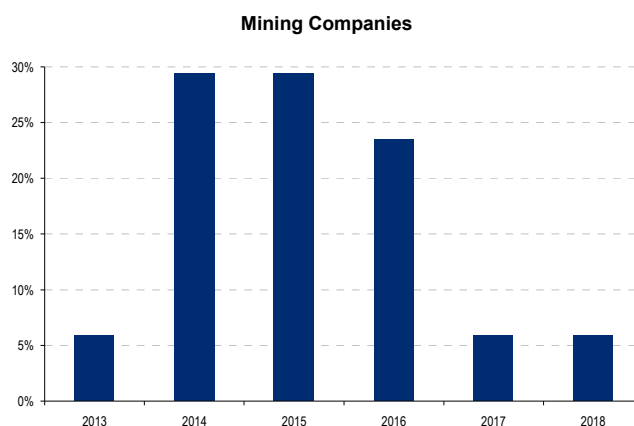
We also note that a smaller share of mining participants (24% vs. 29% in 1Q13 and 44% in 4Q12) are planning to make substantial investment in 2014. Clearly, the mining capex expectations for 2014 have moved down markedly. We continue to believe risk to mining capex lies on the downside, especially as we look into 2014E and 2015E as miners are still working through the long lead-time capital projects.

Figure 13. 2Q13 Survey - In Which Year Do Mining Participants Expect a Substantial Increase in Equipment Purchasing (CAPEX)?



Source: Citi Research

Figure 14. 1Q13 Survey - In Which Year Do Mining Participants Expect a Substantial Increase in Equipment Purchasing (CAPEX)?



Source: Citi Research

Construction companies and dealers have also pushed out their purchases to 2015 and beyond, with marked deterioration in 2014 capex expectations. This survey shows that only 30% of respondents plans to make substantial investment in 2014 compared with 38% in 1Q13 and 50% in 4Q12. 2Q13 survey shows around 80% of respondents have postponed their capex plans to 2015-2018 compared with 63% in 1Q13 survey and 33% in 4Q12 survey.

Figure 15. 2Q13 Survey - In Which Year Do Construction Companies and Dealers Expect a Substantial Increase in Equipment Purchasing (CAPEX)?



Source: Citi Research

Figure 16. 1Q13 Survey - In Which Year Do Construction Companies and Dealers Expect a Substantial Increase in Equipment Purchasing (CAPEX)?



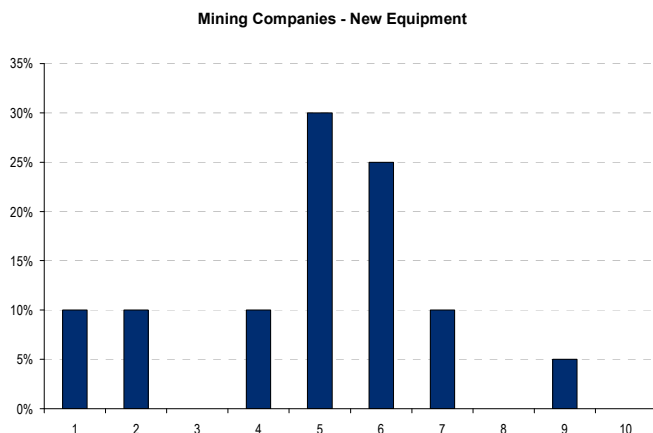
Source: Citi Research

New and used equipment inventories remain average for mining and above-average for construction.

4. On a scale of 1 to 10 (1 - Too little inventory, 10 - Too much inventory), can you rank the level of your current inventory of equipment?

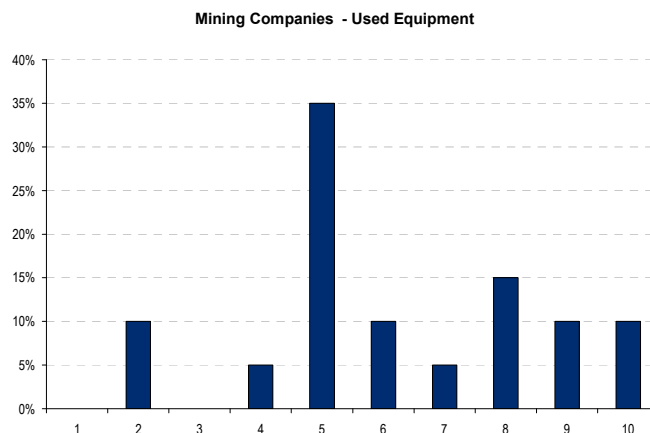
Mining companies on average rate their inventory level 5.1 (vs. 5.1 in 1Q13 and 5.8 in 4Q12) and 6.4 (vs. 6.0 in 1Q13 and 5.3 in 4Q12) for new and used equipment, respectively (Figure 17 & Figure 18).

Figure 17. New Mining Equipment Inventory Level (1 - Too little inventory, 10 - Too much inventory)



Source: Citi Research

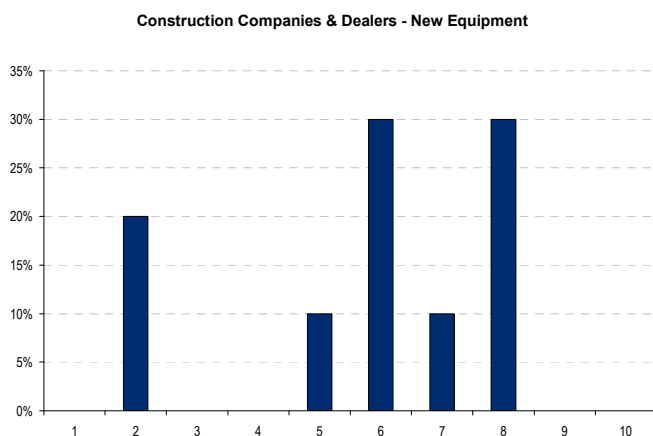
Figure 18. Used Mining Equipment Inventory (1 - Too little inventory, 10 - Too much inventory)



Source: Citi Research

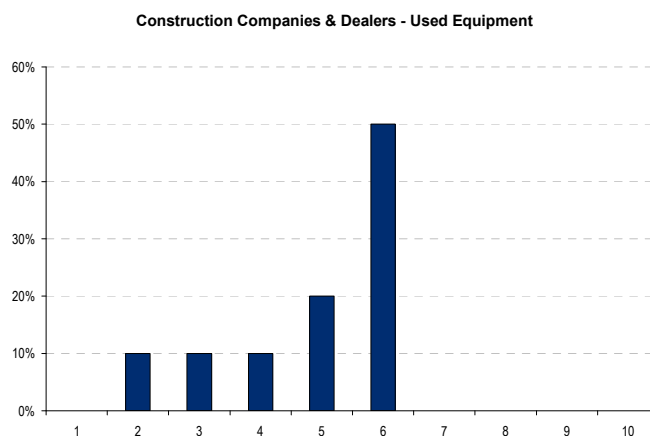
Construction companies and dealers on average rate their inventory level 5.8 (vs. 6.1 in 1Q13 and 6.1 in 4Q12) and 4.9 (vs. 5.6 in 1Q13 and 5.1 in 4Q12) for new and used equipment, respectively (Figure 19 and Figure 20).

Figure 19. New Construction Equipment Inventory Level (1 - Too little inventory, 10 - Too much inventory)



Source: Citi Research

Figure 20. Used Construction Equipment Inventory (1 - Too little inventory, 10 - Too much inventory)



Source: Citi Research

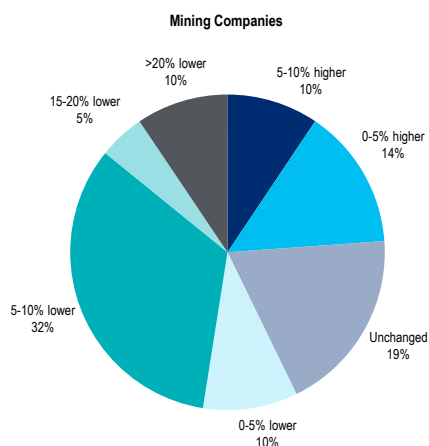
Price expectations shows decline for the first time since we launched our survey.

5. For the next 6-12 months, what do you expect prices of new equipment purchases compared to last year to be?

Pricing for new mining equipment is expected to decline by 4.4% (Figure 21) during the next 6-12 months vs. the same period last year. The last time our survey recorded negative pricing expectation was at the time we launched our proprietary Mining and Construction Survey in October 2009. Pricing expectations remain below 0.7% increase in 1Q13 and the single digit increase we observed last year (2.0% in 4Q12, 1.0% in 3Q12, 8.1% in 2Q12, 7.9% in 1Q12).

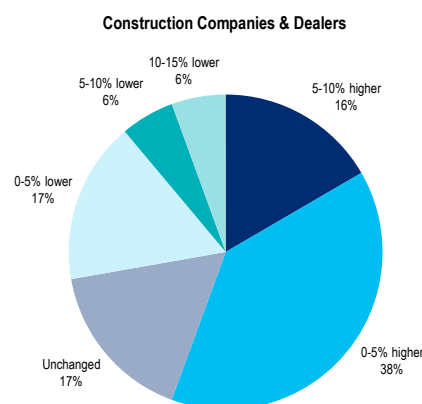
Construction companies and dealers also expect pricing to decline -3% in the next 6-12 months. This also marks the first time that our survey shows pricing decline for construction companies over next 6-12 months since we launched our survey. We would note that pricing expectations with construction participants has always been lower compared to mining companies since 3Q09. However, this time pricing expectations are better than miners albeit being worse than 1Q13 survey.

Figure 21. Mining Companies Prices of New Equipment Purchases Over the Next 6-12 Months Compared to the Last Year



Source: Citi Research

Figure 22. Construction Companies and Dealers Prices of New Equipment Purchases Over the Next 6-12 Months Compared to the Last Year

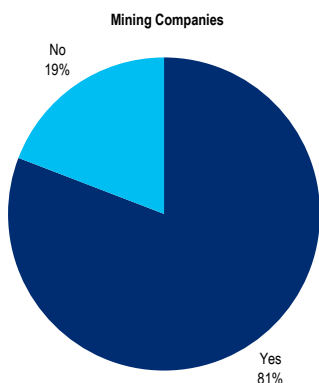


Source: Citi Research

6. Do you have intentions to push back on equipment providers price over the next 12 months?

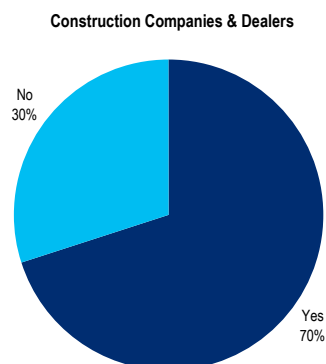
Majority of respondents (81% vs. 81% in 1Q13 and 88% in 4Q12) continue to plan push back on equipment providers prices over the next 12 months (Figure 23). A significant number of construction respondents (70% vs. 75% in 1Q13 and 67% in 4Q12) were planning to push back on equipment providers' prices (Figure 24).

Figure 23. Mining Companies – Do you have intentions to push back on equipment providers price over the next 12 months?



Source: Citi Research

Figure 24. Construction Companies & Dealers – Do you have intentions to push back on equipment providers price over the next 12 months



Source: Citi Research

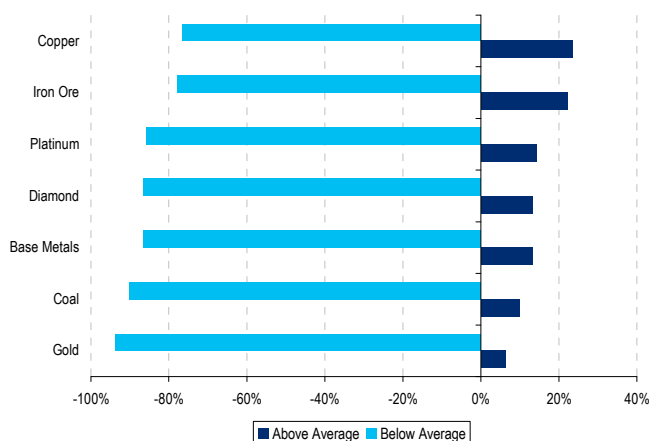
7. Over the next 6-12 months, equipment demand for which of the following types of mining market segments will be greater or lower than average?

All commodities at risk with Coal & Gold being the highest while Copper & Iron Ore being the least

We had highlighted in our report [Global Mining Capex - 2014 Risk Still Lies to the Downside](#) that our channel checks indicates a large number of capex cutback/deferrals were associated with mining of gold and copper. The results from our 2Q13 survey confirm this.

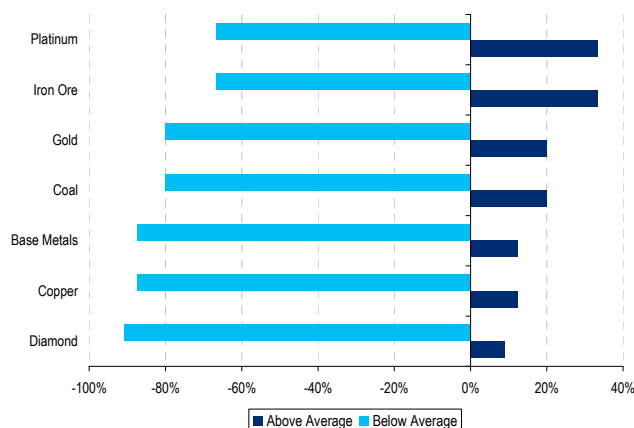
On a segmental basis, mining companies are most likely to cut back spending on gold, coal and base metals (Figure 25). For these categories, the number of “lower than average” responses significantly outnumbers the “greater than average” responses. Relative to our 1Q13 survey results, all categories of metals have moved further down the ladder, with “lower than average” responses now greatly outnumbering “greater than average”.

Figure 25. 2Q13 Survey - Over the next 6-12 months, equipment demand for which of the following types of mining market segments will be:



Source: Citi Research

Figure 26. 1Q13 Survey - Over the next 6-12 months, equipment demand for which of the following types of mining market segments will be:



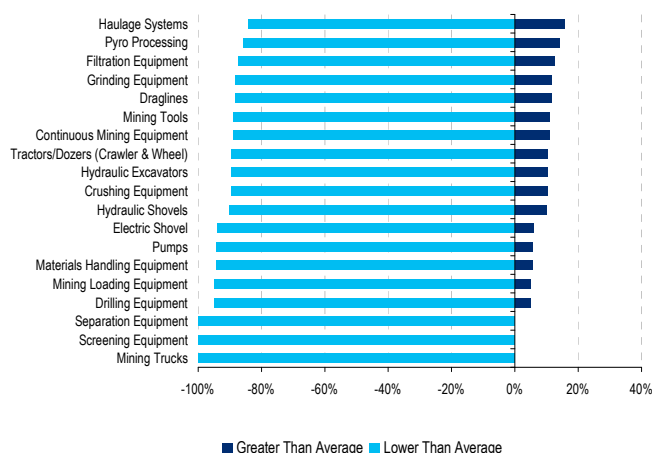
Source: Citi Research

Majority of mining companies are planning to spend below average on most mining equipment, similar to Construction survey participants who also plan to spend below average on most equipment.

8. Over the next 12 months, demand for which of the following types of equipment will be lower or greater than average or unchanged?

According to our 2Q13 survey, mining companies are planning to spend less than average on all mining equipment, particularly on mining trucks, screening equipment, separation equipment and drilling equipment. The survey also points to relative strength in demand for haulage systems, pyro processing and filtration equipment (Figure 27 and Figure 28).

Figure 27. 2Q13 Mining Survey Participants: Over the next 12 months, demand for which of the following types of equipment will be lower or greater than average or unchanged?



Source: Citi Research

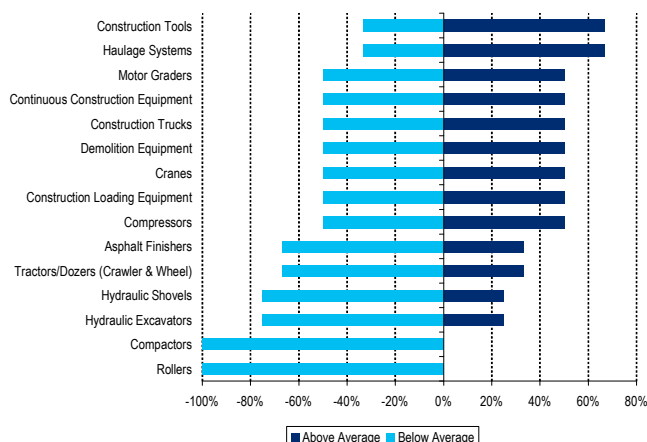
Figure 28. European Mining Equipment Suppliers – Key Product Overlap

	Atlas Copco	FLSmidth	Metso	Sandvik	Weir Group
Haulage Systems			X	X	
Pyro Processing		X	X		
Filtration Equipment		X			
Grinding Equipment		X	X		
Draglines					
Mining Tools	X			X	
Continuous Mining Equipment	X			X	
Tractors/Dozers (Crawler & Wheel)					
Hydraulic Excavators					
Crushing Equipment		X	X	X	
Hydraulic Shovels					
Electric Shovel					
Pumps		X			X
Materials Handling Equipment		X	X	X	
Mining Loading Equipment	X				
Drilling Equipment	X			X	
Separation Equipment			X		
Screening Equipment			X	X	
Mining Trucks	X			X	

Source: Citi Research

Responses from our construction companies and dealers were similar, with less than average spending indicated for most equipment category. Responses from construction participants (including direct customers and dealers) show relative weakness for rollers, compactors and hydraulic excavators. The survey also points to relative strength in demand for construction tools, haulage systems and motor graders (Figure 29 and Figure 30).

Figure 29. 2Q13 Construction Survey Participants (Dealers and Direct Customers): Over the next 12 months, demand for which of the following types of equipment will be lower or greater than average or unchanged?



Source: Citi Research

Figure 30. European Construction Equipment Suppliers – Key Product Overlap

	Atlas Copco	FLSmidth	Metso	Sandvik	Weir Group
Construction Tools	X			X	
Haulage Systems			X	X	
Motor Graders					
Continuous Construction Equipment	X			X	
Construction Trucks					
Demolition Equipment	X				
Cranes					
Construction Loading Equipment					
Compressors	X				
Asphalt Finishers	X				
Tractors/Dozers (Crawler & Wheel)					
Hydraulic Shovels					
Hydraulic Excavators					
Compactors	X				
Rollers	X				

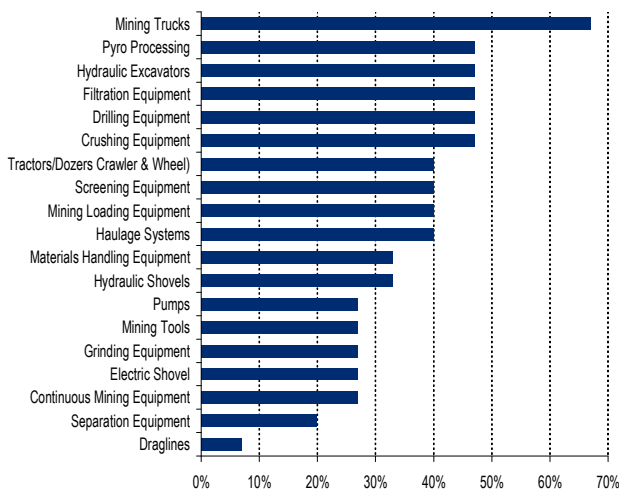
Source: Citi Research

Mining companies are planning to pushback on prices on most mining equipment particularly mining trucks and pyro processing.

9. Over the next 12 months, on which type of equipment are you considering to push back on price?

According to our 2Q13 survey, most mining companies are planning to pushback on prices for most mining equipment, particularly on mining trucks, pyro processing and hydraulic excavators. The survey also points to relative less pushback on prices for draglines, separation equipment and continuous mining equipment (Figure 31 & Figure 32).

Figure 31. Mining Survey Participants: Over the next 12 months, on which type of equipment are you considering to push back on price?



Source: Citi Research

Figure 32. European Mining and Construction Equipment Suppliers – Key Product Overlap

	Atlas Copco	FLSmidth	Metso	Sandvik	Weir Group
Mining Trucks	X			X	
Pyro Processing		X	X		
Hydraulic Excavators					
Filtration Equipment		X			
Drilling Equipment	X			X	
Crushing Equipment		X	X	X	
Tractors/Dozers (Crawler & Wheel)					
Screening Equipment			X	X	
Mining Loading Equipment	X				
Haulage Systems			X	X	
Materials Handling Equipment		X	X	X	
Hydraulic Shovels					
Pumps		X			X
Mining Tools	X			X	
Grinding Equipment		X	X		
Electric Shovel					
Continuous Mining Equipment	X			X	
Separation Equipment			X		
Draglines					

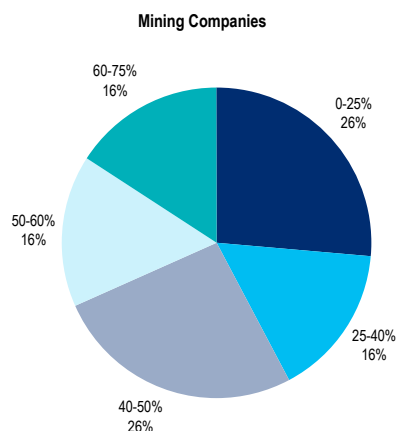
Source: Citi Research

Only c.35% of mining capex budgets are for equipment and machinery

10. What proportion of your capital expenditure budget is used for equipment and machinery?

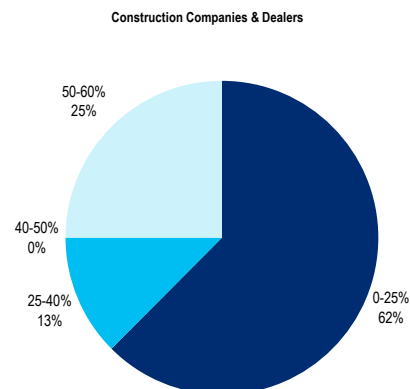
Our survey finds that on average 39% of the capex budgets of mining participants are spent on equipment and machinery, which partly explains the limited impact on orders for equipment suppliers (Figure 33). This is above results as at the time of our 1Q13 survey of 35% and 4Q12 survey of 31%. Our construction participants spend 33% on average of their capex budget on equipment and machinery.

Figure 33. Mining Companies: What Proportion of your Capital Expenditure Budget is used for Equipment and Machinery?



Source: Citi Research

Figure 34. Construction Companies and Dealers: What Proportion of your Capital Expenditure Budget is used for Equipment and Machinery?



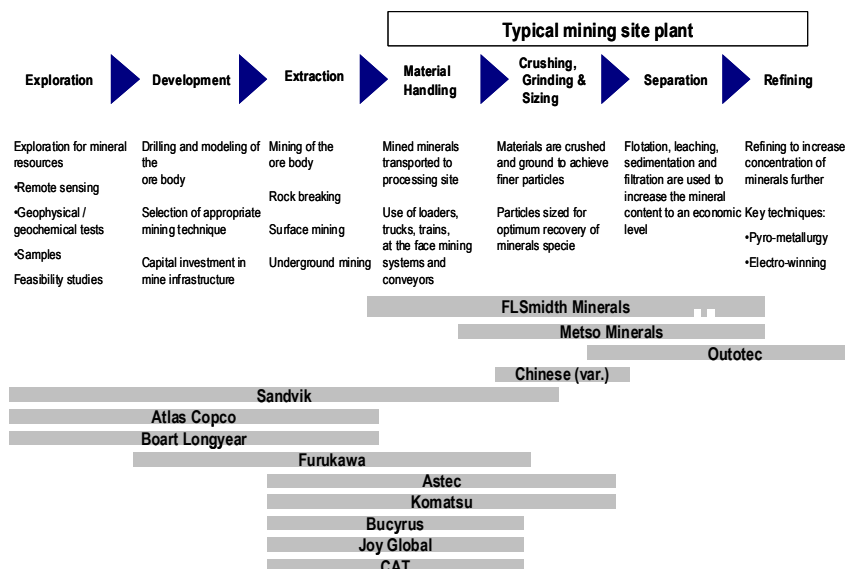
Source: Citi Research

67% of mining participants would consider buying from low-cost equipment providers

11. Would you consider buying from a low-cost equipment supplier?

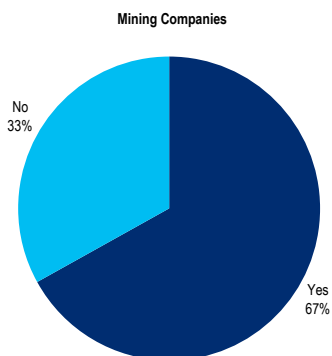
The results of our survey show that 67% of mining participants would consider buying from a low-cost equipment supplier (Figure 36), in-line with our 1Q13 survey and above 55% at the time of 4Q12 survey. In terms of equipment type, some participants have singled out crushing and grinding equipment, pumps and motors as examples of equipment that they would generally be willing to purchase from low cost suppliers. This is supportive of our conclusions from our recently published report, [Global Engineering Sector in China - Step-Up in 'Go Global' – Revised Winners & Losers](#), where we highlighted the increasing threat from Chinese competition, featuring FLSmidth and Metso, amongst the mining equipment providers, as stocks that, in our view, have the least to gain and perhaps more to lose.

Figure 35. Mining Equipment Suppliers



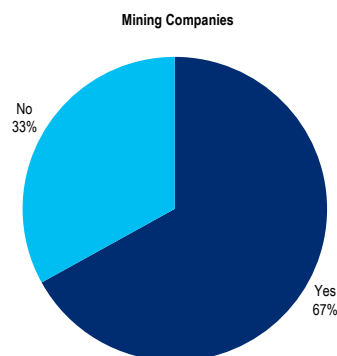
Source: Citi Research

Figure 36. 2Q13 Survey - Mining Companies: Would You Consider Buying From a Low Cost Equipment Supplier?



Source: Citi Research

Figure 37. 1Q13 Survey - Mining Companies: Would You Consider Buying From a Low Cost Equipment Supplier?



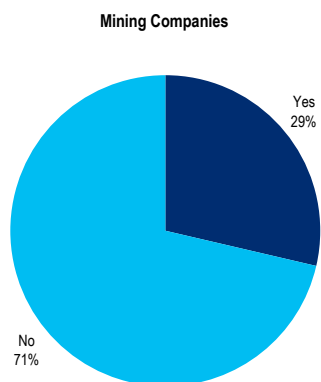
Source: Citi Research

Funding sentiment continues to be challenging, albeit showing some improvement

12. Is it becoming easier to fund equipment purchases?

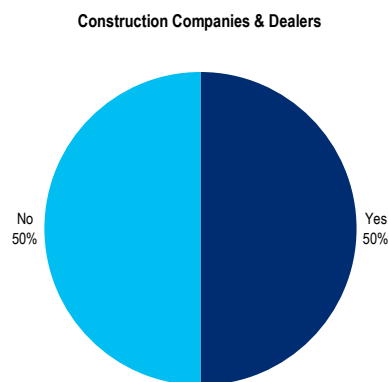
The results of our survey show that 71% of mining participants are finding it more difficult to fund equipment purchases (Figure 38), compared with 83% in the 1Q13 survey. 50% (vs. 62% in 1Q13) of construction companies and dealers find it harder to fund purchases (Figure 39).

Figure 38. Mining Survey Participants: Is it Becoming Easier to Fund Equipment Purchases?



Source: Citi Research

Figure 39. Construction Companies and Dealers: Is it Becoming Easier to Fund Equipment Purchases?



Source: Citi Research

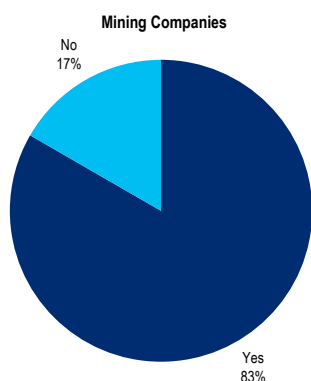
13. Given the prevailing macroeconomic uncertainty, are you considering lowering your future capex budgets?

Majority of survey participants are still considering lowering their future capex plans

Macroeconomic uncertainty increased during 2013 and commodity prices such as copper, which is strongly correlated to mining capex, have been volatile. Results from our survey find that majority of participants (70%) still consider lowering their future capex albeit lesser compared to 83% of participants in 1Q13 and 80% in our 4Q12 survey (Figure 40).

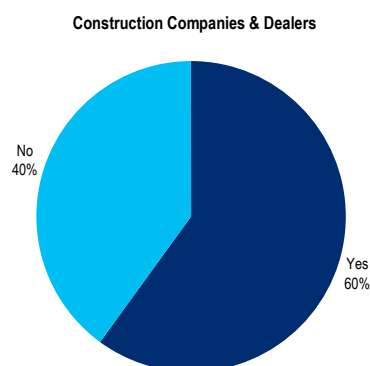
Construction companies and dealer participants considering lowering budgets have deteriorated to 60% in this survey compared to 50% in 1Q13, 56% in 4Q12, 62% in 3Q12 and 70% in the 2Q12 survey (Figure 41).

Figure 40. Mining Companies: Given the prevailing macroeconomic uncertainty, are you considering lowering your future capex budgets?



Source: Citi Research

Figure 41. Construction Companies and Dealers: Given the prevailing macroeconomic uncertainty, are you considering lowering your future capex budgets?



Source: Citi Research

Appendix A-1

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