Miners adjust to volatile commodity markets

Gold, silver and copper price report 2015
Annually, PwC surveys gold mining companies around the world. Last year, we began including copper and silver companies from miners across the industry.

The results of our 2015 survey showed the industry’s average US dollar long-term planning prices for gold, silver and copper are:

- **Gold**: 1,284
- **Silver**: 22.03
- **Copper**: 3.11
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Note: All prices herein are in US dollars per ounce for gold and silver and US dollars per pound for copper.
Commodities continue to struggle in 2014

Commodities just can’t seem to get a break. Following a sharp correction during the 2008–09 global financial crisis, the price of many metals and minerals soared and hit record or near-record highs in 2011, driven largely by demand from resource-hungry China. The euphoria began to fade in the second half of 2011, as economic growth slowed in China. Unstable recoveries in Europe and the US have also weighed on global economic growth. The global economic uncertainty, combined with an oversupply of many metals and minerals, has led to a dramatic drop in commodity prices over the past three years.
The result has been devastating for the mining industry. There’s been widespread cuts across the sector to everything from exploration and production as well as operating and capital expenses. Write-downs have been the norm for many miners in recent years, as part of an industry wide restructuring effort. There’s also been a refocus on core assets, as well as quality of growth over quantity. Some skeptics believe the mining “super cycle” has ended, while others are convinced the current slump in commodity prices simply demonstrates the cyclical nature of the industry. We stand by the cyclical argument. It’s our belief that demand for metals will continue, but it won’t be the steady upward climb that we saw between the end of 2009 and early 2011, or in the years leading up to the 2008 commodities crash.

We see demand for metals continuing alongside a growing global population that will have greater overall need for products such as cars, computers and household goods – all of which can’t be produced without metals. How commodities will perform in future will depend on supply and demand fundamentals, and the industry’s response to the inevitable shifts.

**Key metals**

Some commodities react differently than others to temperamental global markets, and for different reasons. Our report focuses on three key commodities: gold, silver and copper.

Gold, which is considered a currency and hedge against inflation, has fallen by a third since 2011 to below $1,200 per ounce today, as the US dollar picks up, driven by the improving health of the American economy and US treasury policy with an expectation of increased interest rates in the future. While the price of gold has suffered over the past two years, the metal will continue to be stored by central banks as a backup to more common currency. The European economic recovery appears shaky right now and, if it falters, investors could flock back to gold as a traditional safe haven. That said, 60% of respondents to our survey did note that they expect to see the price of gold go down before it goes up again.

Silver, considered a hybrid metal for its use as a currency and in industrial applications, has been hit the hardest in the past three years, falling by more than half to below $20 per ounce today. Silver is in a slump, but demand for the metal will continue given its strength and thermal conductivity, which is used in a number of industrial applications from electronics to automobiles.

Copper, a widely used metal in everything from cars to electricity transmission, will always be needed to make the goods that the world’s growing population can’t live without. While the metal is now trading around $3 per pound, down from its record of $4.60 in early 2011, the price hasn’t bounced around as much as other commodities and is still considered high enough for many well-disciplined producers to make a profit.

**Cautious outlook**

Miners have been in survival mode these past few years as they adjust to the current lower commodity-price environment. They’ve had no other choice. Now that most of the cost cutting has been done, miners must move ahead and focus on the next stage of growth. They need to build a new track record, using strict cost management strategies and responsible investment in production growth. The current strength of the US dollar and declining oil price will help some miners manage costs today. It will continue to be a delicate balance of risk and reward: Companies don’t want to make mistakes, which means there’s a strong tendency to err on the side of caution. Still, bold moves are needed to propel the industry forward.

The next chapter won’t be easy for miners given that investment in the industry has slowed, including from key consumers in China as a result of recent reforms in that country. European growth appears to have hit a snag, which could impact the industry’s recovery. The US economy is rebounding, but still faces some strong headwinds. It’s a mix of good and bad news for the industry today, which will make it challenging for miners to find solid footing on what’s proving to be a rocky road to recovery. Given the volatility in prices, especially gold and silver, in the past couple of weeks, it is difficult to predict when the worst may be over for the industry. We’re convinced that the long-term fundamentals for metals remain strong. Now that companies have restructured and refocused, we see reasons for cautious optimism. In the past we’ve described the industry downturn as a “confidence crisis.” It will be up to the industry to work on regaining investor confidence to ensure its long-term sustainability.

*John Gravelle*

PwC’s Global Mining Leader
It’s been another dismal year in the gold industry as the price of the precious metal remains at lows not seen since 2010. Gold is now trading below $1,200 per ounce, down more than 35% from a 2011 record just above $1,900. Gold companies have made deep cuts over the past couple of years, and collectively taken billions of dollars in write-downs.

What gold prices are you applying to your reserves? (US$/ounce)
- Less than $1,200: 8%
- $1,200–$1,249: 25%
- $1,250–$1,299: 29%
- $1,300–$1,324: 34%
- $1,325 or more: 4%

What gold prices are you applying to your resources? (US$/ounce)
- Less than $1,200: 4%
- $1,200–$1,249: 21%
- $1,250–$1,324: 29%
- $1,325–$1,424: 17%
- $1,425 or more: 29%
The sector-wide cost cutting should better prepare gold miners for future price volatility. According to our survey, fewer companies expect prices to rebound quickly. Among those surveyed, only 20% said they see the price of gold increasing in the next 12 months, which is down from 47% a year ago and down from 88% two years ago.

In fact, more companies forecast the price of gold to drop next year. Our survey shows 60% of respondents expect the price of gold to head lower in the next 12 months. That compares to 7% last year. In 2012, none of our gold company respondents anticipated the price of gold to drop, which shows how sentiment has changed now that a new reality has set in.

But not everyone is calling for more gloom in gold. Among this year’s respondents, 20% expect the price to remain roughly the same and another 20% expect an increase. The overall long-term forecast being used by companies is for gold at an average of $1,284 per ounce, which shows companies continue to show a bit of confidence in the metal they produce. Note that the majority of gold companies prepare their forecasts on a real basis.

The average price of gold used for planning in 2015 among respondents is an average of $1,266 an ounce, according to the survey results, and ranges from a low of $1,200 to high of $1,400. Those predictions increase slightly over time. For instance, the average forecast price for 2016 and beyond 2016 is $1,280 an ounce and $1,284 an ounce, respectively. In the prior year, respondents predicted averages in 2016 and long term of $1,378 per ounce and $1,369 per ounce, respectively.

When asked what gold price companies are using to determine reserves, the average among respondents was $1,241 per ounce, with a range of between $950 and $1,350. For resources, the average was $1,331 per ounce with a range of between $950 and $1,600.

When it comes to reserve and resource pricing, 46% of respondents said they relied on management’s internal estimates as their main source of determining price, while 28% relied on consensus pricing. Another 10% looked more at the spot price, 8% at the forward curve, and 8% relied on historical averages.

For long-term pricing, 48% looked at consensus, 39% turned to management’s internal estimates, 9% looked at the spot rate, and the remaining 4% looked at historical averages.

Gold companies have been focused on cutting costs to adjust to the lower gold price. Our survey shows costs will continue to be a focus in the year ahead. Among those surveyed, 48% expect costs to fall next year as compared to 2014, 39% believe their costs will stay the same, and only 13% say their costs will increase.

We have started to see many gold companies really focus on cost reductions over the past year which will help to re-establish market confidence in the sector.
INTERVIEW

Harmony sees opportunity in depressed gold prices

The price of gold has fallen significantly from its record set in 2011, but Harmony Gold Mining Company Ltd. CEO Graham Briggs prefers to look at it as an opportunity rather than a setback for his company – and the industry as a whole.
Miners adjust to volatile commodity markets

“In tough times, when gold prices are going down, there will be companies trying to divest some of their assets, to repay their debt, get smarter and produce more cash,” Graham says. “For a company like ours with virtually no debt, it can be an advantage. At least, that’s the way we’re looking at it.”

Harmony is one of the world’s largest gold producers with operations in South Africa and Papua New Guinea. It produced 1.17 million ounces of gold in its 2014 financial year, a 3% increase from 2013. The company also saw a 5% improvement in its underground-recovered grade.

What Harmony is also proud of is how its been able to reduce costs, especially in the current environment, where gold prices have fallen by more than a third in three years to around $1,200 per ounce by the end of the third quarter of 2014.

For its 2014 financial year, Harmony reported an 18% reduction in all-in sustaining costs, to $1,242, compared to the year before. It also cut its capital expenditures by 30% year-over-year.

In August, Harmony announced it was refocusing its assets for long-term sustainability, including putting its Target 3 operation on care and maintenance until the gold price recovers.

“We continue to regenerate Harmony in order to remain efficient miners, keeping costs down and funding our own capital to ensure future growth and profitability,” says Graham. “This allows us to have low debt, financial flexibility and be highly geared against the gold price.”

In fact, he believes it would be best for the overall industry if gold prices stayed lower for a little while longer because it forces miners to cut costs and focus on the best assets.

“Everyone is much more competitive. You cut out the deadwood. That goes for everything from operations to overhead.”

Harmony’s five-year strategy is to boost margins by increasing free cash flow through higher grades, cost control and by growing its assets. That includes completing studies that would lead to the building of its Golpu mine in Papua New Guinea, which Harmony sees as one of the world’s premier new gold regions.

The company is also actively looking to buy open pit mines and bulk projects to help grow production down the road. Graham says the lower gold price makes it a good time to go shopping for assets, since valuations are lower.

Harmony is eyeing projects around its current operations, and in other developing regions.

“South Africa is our home front, therefore if there’s an opportunity there we should look at it,” Graham says.

The company operates in “different environments, typically not first world environments, which means we have advantages there.”

Harmony is also working on a bioenergy pilot project, which would involve growing giant king grass and sugar beet crops on mining lands set for rehabilitation. The bio crops will be used as feedstock to generate natural gas, which will power its Harmony 1 metallurgical plant.

“That will replace some of the fossil fuels we use in the plants for various things,” Graham told investors during a recent presentation.

“[In] the mining industry [it’s] certainly a different way of looking at environmental impact, turning something which is pretty barren in the dry Free State soil and converting it into energy.”

The project would also help to create jobs and ensure a sustainable legacy for the region, Graham said.
Silver price still stings

Silver continued its slide in 2014. The metal is now trading around $16 per ounce, down about 60% from $42 in early 2011. Silver has bounced between $16 and $20 in 2014 alone, demonstrating the volatility of the metal with dual purposes as a currency and an industrial commodity.
Some investors believe silver has been oversold and is poised for a recovery, while others are calling for more painful price drops to come. Among silver companies we surveyed, the expectations are split. Just over one-third (38%) said they expect the price of silver to increase in the next 12 months, while 31% expect it will remain at current levels. The remaining 31% anticipate the price of silver to fall further in the next year.

The long-term silver price being used for planning among respondents was an average of $19.56 per ounce for 2014, and ranged between $17.50 and $22.00. The average increased to $21.28 for 2016 and $22.03 beyond 2016.

When asked what silver price companies are using to determine reserves, the average price was $20.20 per ounce, and ranges from a low of $18.00 to a high of $25.00. For resources, the average price was $21.64, with a range of between $18 and $35 (although the second highest price was $25.00).

Among silver miners surveyed, the most important input used to determine the reserve price was management’s internal estimates (63%), followed by consensus pricing (19%), with the remaining inputs of spot prices, forward curves, and historical curves at 6% each.

As for long-term pricing of silver, 50% of our survey respondents said they relied on consensus, 40% on management’s internal estimate, and the remaining 10% on historical averages.

Reducing costs will be key for silver companies to survive through the current price rout. About half of the survey respondents believed their cash costs will drop in 2015, while one-third expected costs to stay the same. Another 11% expect their cash costs to increase in 2015.

“We can’t control metal prices,” says Keith Neumeyer, President and CEO of First Majestic Silver Corp. “What we can do is focus on cost cutting … and becoming more efficient.”
INTERVIEW

First Majestic moves to senior status amid silver downturn

The price of silver may be in a prolonged slump, but that hasn’t prevented First Majestic Silver Corp. from steadily increasing production over the past couple of years and prepping for better days ahead.

Keith Neumeyer, CEO
First Majestic

Photo courtesy of First Majestic Silver
The Vancouver-based, Mexico-focused silver producer has invested heavily in expanding its operations, while at the same time cutting costs to cope with the steep drop in the price of its core commodity.

CEO Keith Neumeyer says the company saw 19 consecutive quarters of growth as of the end of the second quarter of 2014, spurred by more than $250 million in investment made over the past three years.

“We've been profitable as a business, but because our investments are so high we've been burning cash. Now that has all come to an end,” Keith told us during the Denver Gold Forum in September.

“We'll start to see treasury growth, which will obviously be fantastic for us, and we can prepare ourselves for further investment in the years to come.”

First Majestic declared itself a senior producer in early 2014, after producing more than 10 million ounces of silver the year before. Total production in 2013 reached a record of about 13 million equivalent ounces of silver, an increase of more than 40% compared to 2012.

The company has the capacity to eventually grow production to about 23 million ounces through its five producing silver mines in Mexico: the La Encantada Silver Mine, the La Parrilla Silver Mine, the San Martin Silver Mine, the La Guitarra Silver Mine and the recently constructed Del Toro Silver Mine.

In August, the company announced that its shares began trading on the Mexican Stock Exchange. That's in addition to its current listings on both the Toronto Stock Exchange and the New York Stock Exchange.

“We're living in challenging times, but also very exciting times,” Keith says.

He wants to ensure investors that First Majestic is growing its operations prudently, especially with the price of silver falling by more than half since 2011, to below $20 per ounce as of mid-October 2014.

Keith is uncomfortable trying to predict the future price of silver, believing it's out of his company's control. For now, he says First Majestic is focused on trimming costs by automating parts of the operations, reducing staffing levels, and other cost-saving programs.

“We have to become more efficient,” Keith says.

The company also recently moved to spin out its non-core exploration assets into a separate company called First Mining Finance Corp. The new company is expected to go public with a roster of 19 projects early in 2015.

First Majestic will own 30% of First Mining Finance, which Keith believes will help bring value to shareholders.

“It’s not a huge event for First Majestic itself, the company, but from a shareholder standpoint it's exciting. It gives them some shares in the company,” he says. “My goal is for First Mining Finance to become another billion-dollar company.”

Keith, who will become chairman of the new company in addition to his First Majestic duties, describes First Mining Finance as a much-needed investment vehicle at a time industry coping with the current downturn, especially juniors.

“The mining industry is in a lot of pain and there’s no money available for juniors, so I think it's a great time to put an incubator like this together,” he says.
Copper companies treading cautiously

Compared to gold and silver, copper has been relatively resilient over the past two years. Copper has traded between about $3.00 and $3.80 per pound since the start of 2013. That’s still a big drop from its record of $4.60 per pound reached in April 2011. However, copper’s ability to stay above $3 is considered a good sign by those who see the demand for the industrial metal as a barometer of global economic growth.

What copper prices are you applying to your reserves? (US$/lb)

- Less than $2.75: 16%
- $2.75–$2.99: 8%
- $3.00–$3.24: 69%
- More than $3.25: 7%

What copper prices are you applying to your resources? (US$/lb)

- Less than $2.75: 21%
- $2.75–$2.99: 12%
- $3.00–$3.24: 58%
- More than $3.25: 9%
Copper’s current level is the result of a supply-demand imbalance, which some predict will worsen in the months ahead. That has some producers we surveyed feeling pessimistic about the price of copper in the near term. Our survey shows about 60% of copper producers believe the price of the metal will drop in the next 12 months. About 20% think it will stay the same, while the remaining 20% forecast the metal price to rise.

The long-term copper price being used for planning among respondents averaged $3.07 per pound in 2014, with a range of $2.72 to $3.25. In the long term, the average is $3.11 per pound, with a narrow range of between $3.00 and $3.40 (except one company at $4.00). The most important input used to determine the long-term price view was management’s internal estimate at 54%, followed by consensus pricing at 38%, with the spot rate trailing at 8%.

Diego Hernandez, CEO of Chilean copper miner Antofagasta plc, told Reuters in October that he expects copper prices to dip into 2014 as new projects boost supply. He expects the market to swing into surplus in the last quarter this year and to remain oversupplied in 2014 and 2015.

When asked what copper price companies are using to determine reserves, the average was $2.96 per pound, up from the average of $2.77 last year. Copper prices ranged from $2.25 to $3.40. For resources, the average was $3.07 per pound, ranging from $2.25 to $3.50.

Some companies are using the lower copper price as an opportunity for M&A activity. For instance, Lundin Mining announced in October it would buy Freeport McMoran’s 80% interest in the Candelaria/Ojos del Salado copper mining operations in Chile.

As with other commodities, there’s great potential for the copper industry as developing worlds continue to industrialize. We see the longer term prospects for copper as positive. China continues to drive the copper story. The growth rate of urbanization in China isn’t what it once was, but copper prices haven’t been hammered as they have for other industrial commodities such as iron ore, due to slower global production growth for copper. “Copper producers haven’t had the success their iron ore counterparts have in ramping up new low cost production and so the global copper supply is still lagging,” says Ken Su, PwC’s China mining leader. “As a result, the pressure on copper prices hasn’t been as dramatic.”
INTERVIEW

Capstone well positioned for copper comeback

While many mining companies are cutting back on projects and lowering production as a result of the drop in commodity prices, copper producer Capstone Mining Corp. is marching ahead.

Driven largely by its 2013 purchase of the Pinto Valley open pit copper mine in Arizona and the ongoing development of its 70%-owned copper-iron Santo Domingo Project in Chile, Capstone is planning to significantly increase production in the coming years, just in time for what it believes will be a growing copper deficit on global markets.

Capstone founder and CEO Darren Pylot says both its Pinto Valley mine, which accounts for more than 60% of production, and the Santo Domingo project set to begin production in 2018, well position the company for the changing market.

“We’re happy to be doing the exact opposite of what everyone else is doing,” says Darren. “We expect that our Santo Domingo project will be going into production when everyone else is rushing in to build their projects, as copper prices get stronger.”

The price of copper has fallen to around $3 per pound today, down 35% from a record $4.60 in early 2011, on concerns of a market oversupply and slowing Chinese demand.

Darren believes the current copper market is actually in a deficit, citing troubles with new projects that recently came online.
Miners adjust to volatile commodity markets

For instance, he says some major projects that were expected to begin commercial production this year have been delayed. Others are producing high amounts of arsenic, which means the product can’t be sold directly to smelters without first being blended with other clean concentrates, thereby slowing its time to market.

“The market has been conditioned to believe there will be a large surplus in copper in 2014–15. We haven’t seen it,” says Darren.

He also believes Chinese copper demand will remain strong. While overall economic growth in the country has slowed from double digits just a few years ago, today’s 7% growth rate is still robust and across a wider economic base, Darren argues.

The ways he sees it, the combination of steady Chinese metal consumption and fewer mining projects being built will help boost the price of copper starting in 2015.

“I think it’s a story of two halves for next year: In the first half I think copper will trade between the $3 and $3.20 range and in the second half it could move up to $3.15 and as high as $3.40 or $3.50,” he says. “Once we hit that supply gap, I’m looking for $4, around 2016.”

That’s good news for Capstone, with average cash costs of between $1.90 and $2 per pound.

Darren says those cash cost could also drop as it expands production and continues to find efficiencies across its operations.

Capstone produced about 100,000 tonnes of copper in 2013 and plans to reach 180,000 tonnes by 2018 with Santo Domingo. Darren says the company’s “ultimate goal” is to reach production in the range of 220,000 to 250,000 tonnes through expansion and/or acquisitions.

Capstone currently has three producing mines in the Americas; Pinto Valley, the Cozamin copper-silver mine in Zacatecas State, Mexico and the Minto copper mine in Yukon, Canada. It also has two copper development projects; the Santo Domingo project in partnership with Korea Resources Corp. and the 100%-owned copper-zinc Kutcho project in British Columbia, Canada, as well as exploration properties in Chile.

The company is on the hunt to buy near-production copper assets in low-risk mining-friendly jurisdictions in the Americas, at the right price.

“Our sweet spot is four-to-five operating mines with one development project always being built,” Darren says. “That’s the higher end of the production scale of the mid-tier copper producer.”

He says the company’s main focus right now is Pinto Valley, which is bought from BHP Billiton Ltd. in October 2013. In March, Capstone announced Pinto Valley will have an extended mine life of 12 years to 2026.

“Investors want to see that we’ve been able to integrate the acquisition and that we’d run it the way it should be run,” he says.

Capstone’s other focus is the strategic advancement of its Santo Domingo project, which Darren says is one of the few projects going through the permitting process in Chile’s Region III today.

“It’s great that we’re moving through the project when everyone else isn’t,” he says, “but we aren’t going to lever up the balance sheet more than we can handle.”
Continuing to cope with lower commodity prices

Managing costs and productivity are the top priorities for miners.
When asked to identify their top two business imperatives in 2015, executives identified cost management and managing productivity. To fund operations and other activities, about 30% said they hadn’t received financing in the past year, while about half said they needed to tap into equity markets or raise debt within the last 12 months. Another 7% said that they secured project financing. For the coming year, 51% said they anticipate not needing financing, while 20% said they believe they will be turning to equity markets. Another 12% plan to raise corporate debt and 10% expect to seek project financing. Streaming and royalty agreements remain on the radar of miners but to a much lower degree with 5% of respondents looking at streaming agreements and 2% checking out royalty deals.
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 our 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 provides our clients:

leading edge knowledge and global thought leadership

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:
  - global thought leadership publications including Mine and Mining Deals
  - flagship territory publications focused on regional and industry-specific issues
- an extensive industry development program for our people and clients. This features our annual learning and development programs:
  - Americas School of Mines (North America)
  - London School of Mines (United Kingdom)
  - Asia School of Mines

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
- maximized deal potential through a well-connected global community of mining leaders
- a mobile workforce to ensure effective service delivery in even the most remote mining locations.

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 organizational 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 optimizing 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.

“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
Global contacts

Global Mining Leader
John Gravelle
Canada
T: +1 416 869 8727
E: john.gravelle@ca.pwc.com

Stuart Absolom
U.S.A
T: +1 720 931 7246
E: stuart.absolom@us.pwc.com

Ronaldo Valino
Brazil
T: +55 (21) 3232 6139
E: ronaldo.valino@br.pwc.com

Jock O’Callaghan
Australia
T: +61 3 8603 6137
E: jock.ocallaghan@au.pwc.com

Jason Burkitt
UK
T: +44 (20) 7213 2515
E: jason.e.burkitt@uk.pwc.com

Hein Boegman
South Africa
T: +27 11 797 4335
E: hein.boegman@za.pwc.com

Ken Su
China
T: +86 (10) 6533 7290
E: ken.x.su@cn.pwc.com

Kameswara Rao
India
T: +91 40 6624 6688
E: kameswara.rao@in.pwc.com

Sacha Winzenried
Indonesia
T: +62 21 5289 0968
E: sacha.winzenried@id.pwc.com

Evgeny Orlovskiy
Russia
T: +7 (495) 223-5070
E: evgeny.orlovskiy@ru.pwc.com

Key contributors
James Lusby
T: +1 416 365 8181
E: james.m.lusby@ca.pwc.com

Sarah Dobenko
T: +1 416 815 5248
E: sarah.dobenko@ca.pwc.com

Samuel Karamanis
T: +1 416 941 8383 ext.13399
E: samuel.karamanis@ca.pwc.com

A special thanks to writer
Brenda Bouw and interviewers
Amy Hogan and Chris Sullivan.

Sources
Bloomberg
Capital IQ
Intierra
World Gold Council
A special thank you to the executives we interviewed for this report. To view the full interviews visit www.pwc.com/ca/commoditiesdig