Value Creation in Mining 2016

Restoring Investor Confidence

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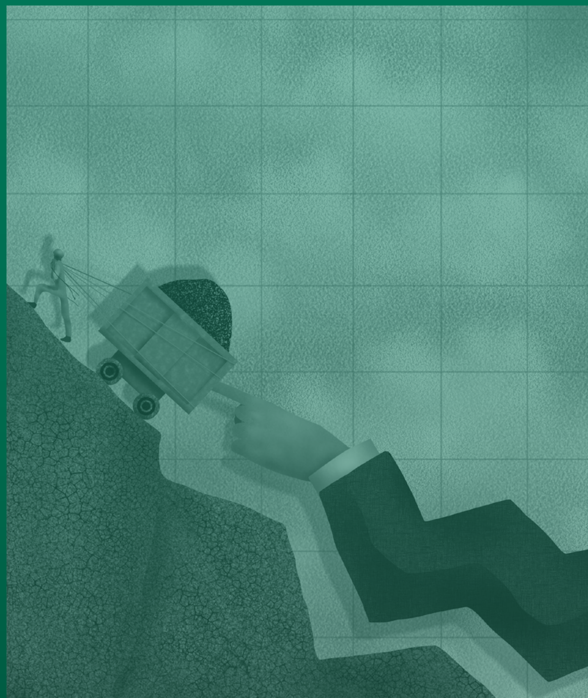

Value Creation in Mining 2016

RESTORING INVESTOR CONFIDENCE

GUSTAVO NIEPONICE

THOMAS VOGT

ALEXANDER KOCH

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INTRODUCTION

The mining sector has suffered a sharp drop in total shareholder returns since 2010, halving its market value and leaving investors skeptical about its future. While companies have worked to cut costs and boost productivity, these efforts haven't been enough to put the sector back on a solid footing. Debt levels, leverage ratios, returns on capital, and free cash yield remain discouraging. As a result, generalist investors have reallocated billions in capital away from the sector. And activist investors, especially in North America, are increasingly targeting mining companies for reform.

To regain investors' confidence, miners need to take three fundamental steps: address their balance sheet concerns, re-earn the right to grow, and develop a compelling path forward and a solid investment thesis. But first they have to determine the financial health of their current position. The industry has fragmented into the haves (those in relatively decent shape), the stretched (those that are grappling with challenging cost positions or debt pressures), and the distressed (those that are fighting to stay afloat). Where it fits in this landscape should determine which of the three steps a company should tackle first and how much it should focus on each.

For companies that need to address balance sheet concerns, demonstrating capital discipline can show investors that they are able to withstand a range of market scenarios. For those seeking to defend against activist investors, it will be vital to understand what kinds of underperformance are most likely to attract such investors' attention. Miners needing to re-earn the right to grow must supplement existing initiatives with next-level productivity improvements, such as by taking a holistic approach to optimizing the full value chain and aggressively committing to the use of the latest technologies. For those seeking to develop a compelling path forward and a solid investment thesis, it will be vital to tailor their business, financial, and investor strategies to their TSR aspiration (this may be counterintuitive for many companies, which instead view TSR as simply the end result of their strategic efforts).

Digging themselves out of their current difficulties will not be easy, but miners cannot afford to shy away from the effort. Those that embrace this critical work now will stand the best possible chance of winning back the investors they need, allowing them to achieve—and sustain—a leadership position in the sector.

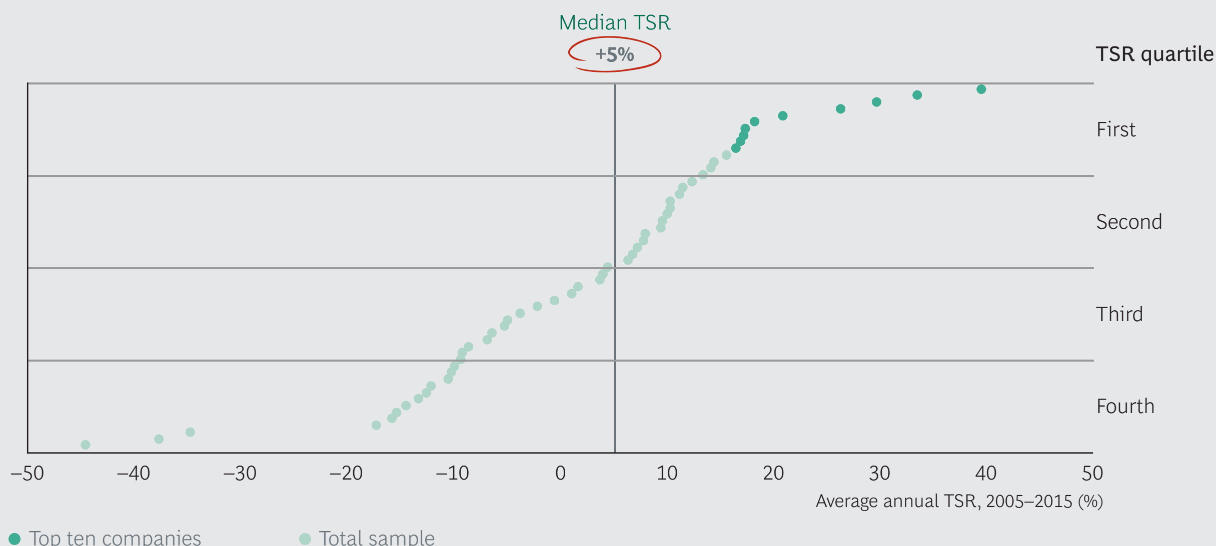
A SPLINTERING INDUSTRY WITH SKEPTICAL INVESTORS

SINCE 2010, THE MINING sector has experienced a sharp drop in TSR, leaving investors skeptical about its future. A price recovery in 2016—in zinc, silver, iron ore, and manganese, in particular, along with a fairly meager improvement in the price of copper—brought a sigh of relief from mining companies, followed by renewed discussion about growth and expansion. But these improvements in price have not been nearly enough for miners to declare victory and attract investors back to the sector. Much remains to be done to win investors' confidence after a decade of subpar returns.

The State of the Industry

The Boston Consulting Group analyzed the performance of 55 leading mining companies from around the globe from 2005 through 2015. We found that these companies delivered a median annual TSR of just 5% during that period, lagging behind the S&P 500's 7.3%. (See Exhibit 1 and the sidebar "The Components of TSR.")

EXHIBIT 1 | Mining TSRs Were Flat from 2005 Through 2015



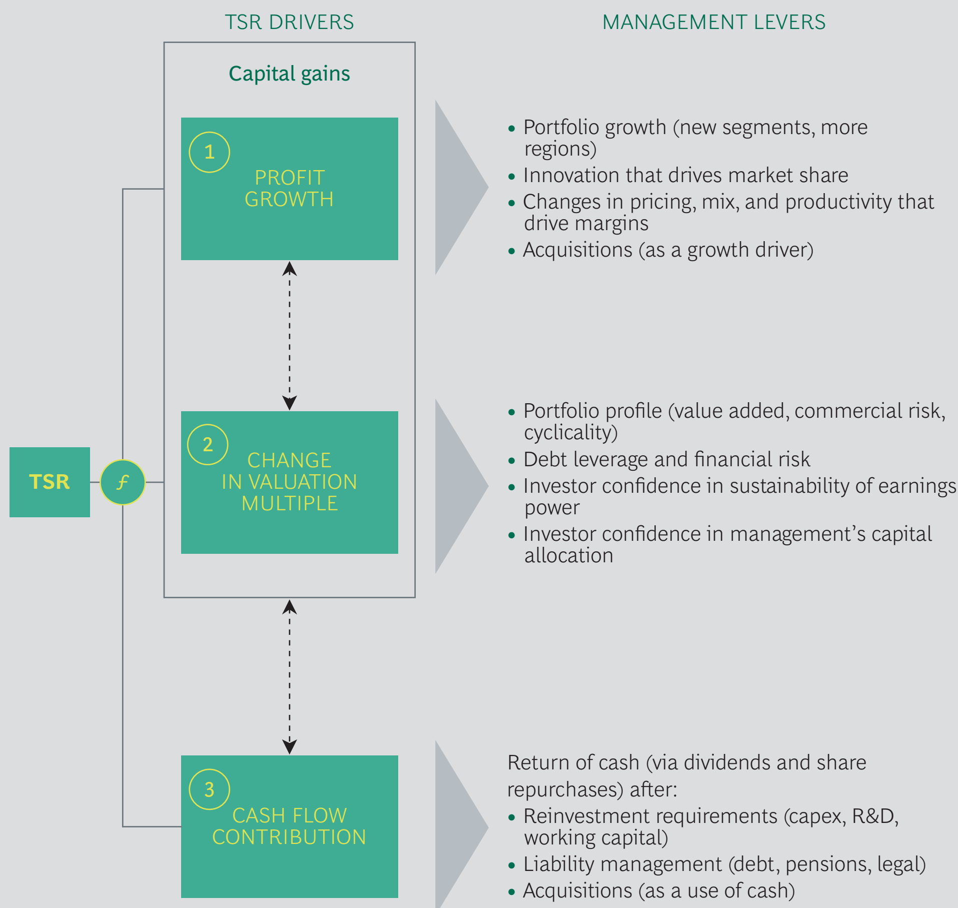
Sources: S&P Capital IQ; annual reports; BCG analysis.
Note: Sample comprised 55 leading companies with a market value greater than $3 billion at year-end 2015 and/or a market value greater than $3 billion at year-end 2005, at least 25% free float. TSR was derived from calendar-year data.

THE COMPONENTS OF TSR

Total shareholder return is the product of multiple factors. Regular readers of the BCG Value Creators report will be familiar with BCG's methodology for quantifying the relative contribution of the various sources of TSR. (See the exhibit below.) The methodology uses the combination of revenue growth and change in margins as an indicator of a company's improvement in fundamental value. It then uses the change in the company's valuation multiple to determine the impact of investor expectations on TSR. Together, these two factors determine the change in a company's enterprise value. Finally, the model also tracks the distribution of free cash flow to investors and debt holders in the form of dividends, share repurchases, or repayments of debt in order to determine the contribution of free-cash-flow payouts to a company's TSR.

The important thing to remember is that these factors all interact—sometimes in unexpected ways. A company may grow its earnings per share through an acquisition and yet not create any TSR, because the new acquisition has the effect of eroding the company's margins. And some forms of cash contribution (for example, dividends) have a more positive impact on a company's valuation multiple than others (for example, share buybacks). Because of these interactions, we recommend that companies take a holistic approach to value creation strategy.

TSR Is the Product of Multiple Factors



Source: BCG analysis.

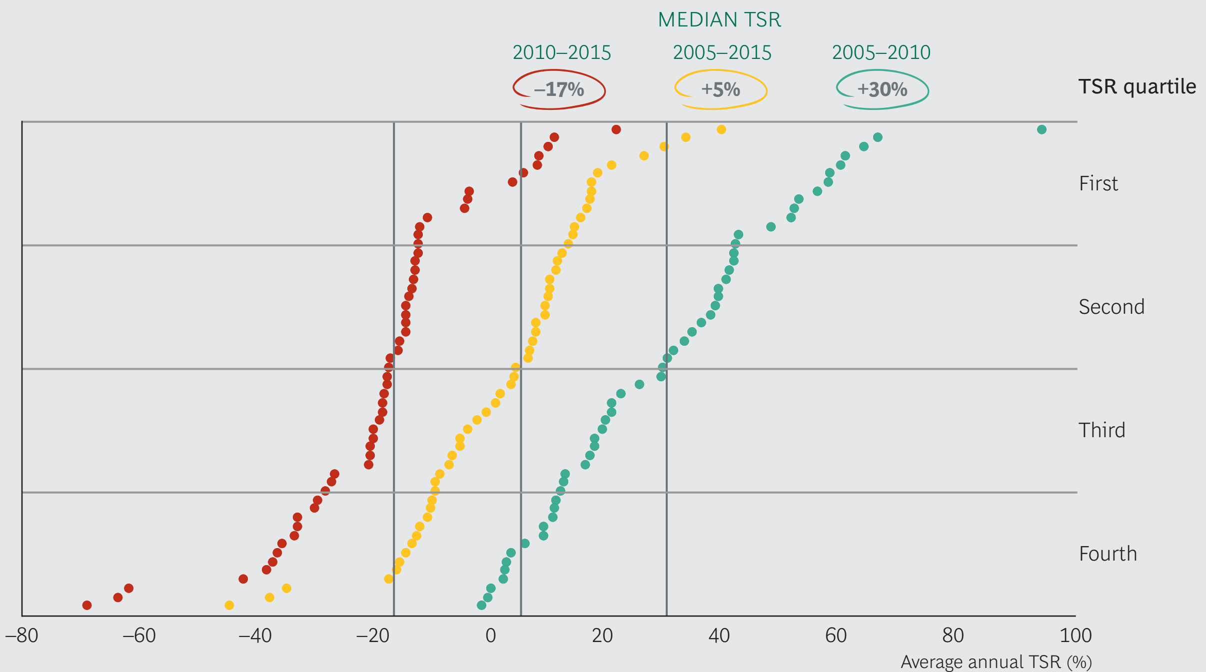
An investment in the mining sector made in 2005 would have been worth about 25% less by 2015 than an investment of the same amount made in the S&P 500. Performance varied radically during the decade. Median annual TSR was 30% from 2005 through 2010—but plummeted to –17% from 2010 through 2015 as the mining boom turned into a bust. (See Exhibit 2.)

The downswing after 2010 hit companies hard, especially gold and coal producers, halving the overall sector's market value over the five-year period. South African companies were particularly affected because of their gold exposure. Struggling miners faced precipitous declines in value, and some (notably several major US coal companies) entered bankruptcy protection. In response, companies have pursued multiple programs aimed at cutting costs and boosting productivity, but these efforts have not been sufficient to put the sector back on a solid footing.

The message is clear: despite miners' considerable efforts, the industry's performance is still significantly below where it needs to be. Many companies worldwide remain heavily indebted (relative to the volatility of their cash flows), with the highest leverage ratios in a decade. Returns on gross investment haven't improved over the preboom lows, even after sharp cost-cutting efforts. (See Exhibit 3.) And capital expenditures are still elevated, exceeding 80% of cash flow from operations and limiting the free cash yield to investors. Such expenditures also remain elevated relative to depreciation.

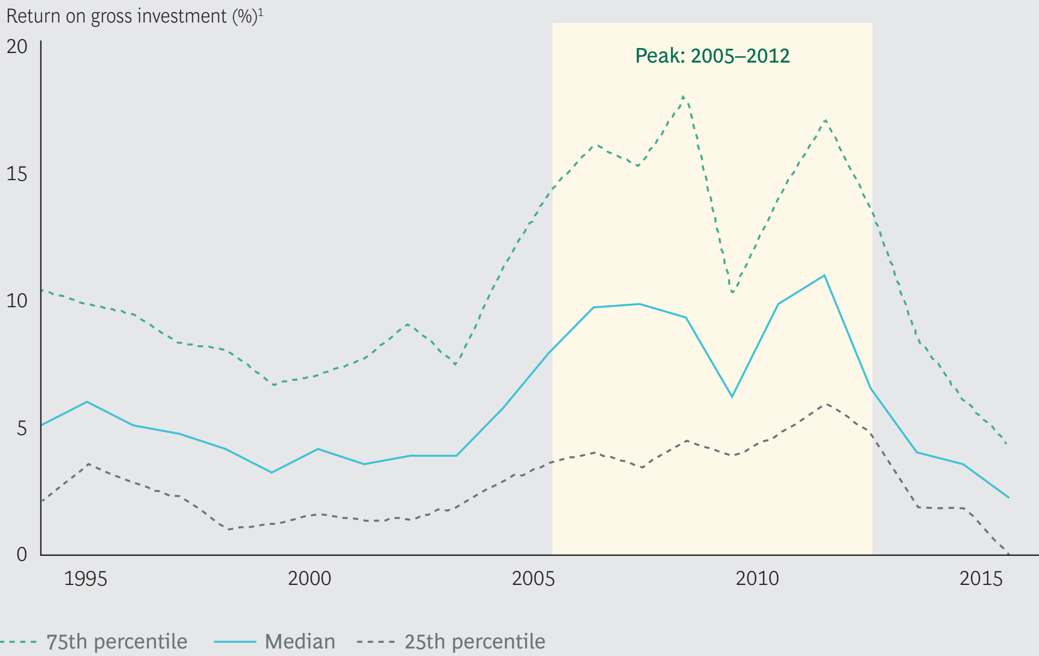
Meanwhile, skeptical generalist investors have reallocated billions in capital away from natural resources. (See Exhibit 4.) This includes large outflows that have been drained away from mining companies, particularly by growth-oriented investors. And in some regions, pressure from activist investors has intensified, further signaling concerns about company strategy and performance and management effectiveness. Meanwhile, valuation multiples remain depressed and access to capital constrained—conditions that have contributed to mining companies' depressed stock prices.

Exhibit 2 | TSR Performance Varied Radically from 2005 Through 2015



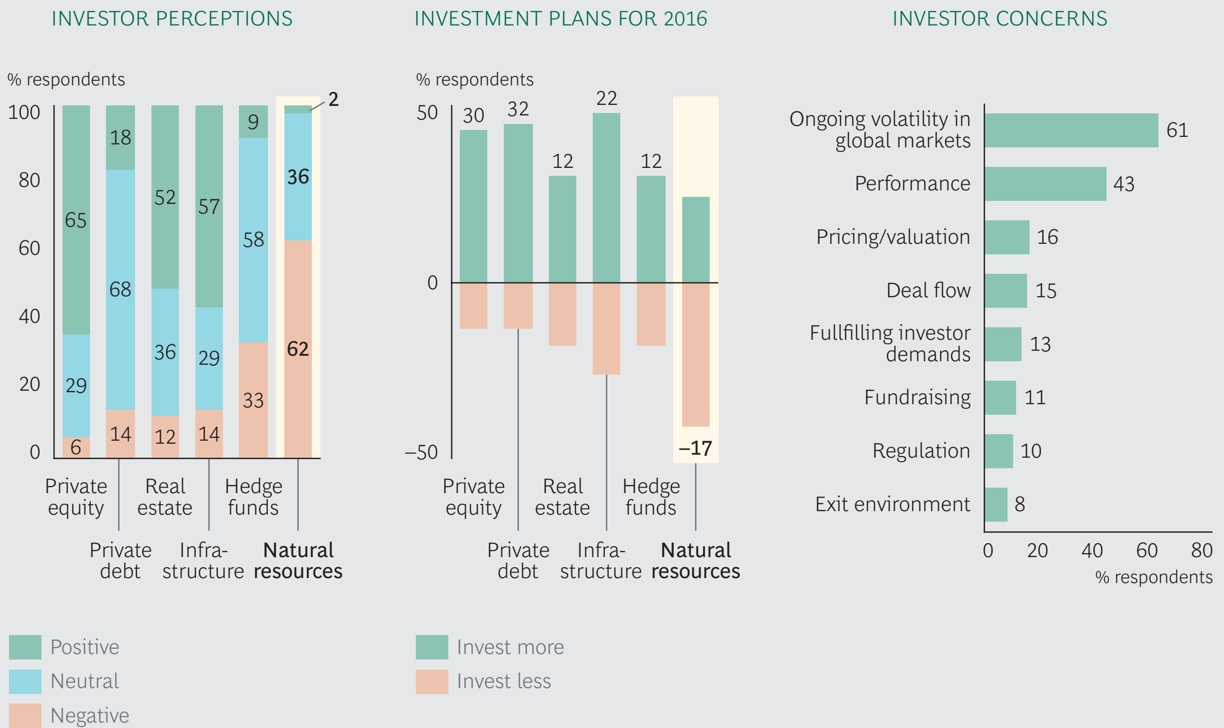
Sources: S&P Capital IQ; annual reports; BCG analysis.
Note: Sample comprised 55 leading companies with a market value greater than $3 billion at year-end 2015 and/or a market value greater than $3 billion at year-end 2005, at least 25% free float. TSR was derived from calendar-year data.

EXHIBIT 3 | ROGI Is Below Long-Term Trends



Sources: S&P Capital IQ; BCG analysis.
Note: Sample comprised the 55 companies in our sample. Not all companies have complete data prior to 2003.
[1] Return on gross investment including goodwill.

EXHIBIT 4 | Generalist Funds Are Retreating from Natural Resources



Sources: Preqin Investor Outlook: Alternative Assets (H1 2016); BCG analysis.
Note: Natural resources include energy, metals and mining, agriculture/farmland, timber, and water.

The Haves, the Stretched, and the Distressed

The loss of investor confidence in the mining sector has been a rational reaction to industry developments and performance, and it was not unexpected. Mining companies will need to work hard to win back investors. To do so, management teams must take the following steps:

1. Address balance sheet concerns.
2. Re-earn the right to grow.
3. Develop a compelling path forward and a solid investment thesis.

Each company must first determine exactly where it stands. More than in the past, mining companies today differ greatly in their starting position. Indeed, our analysis shows that the industry, owing to heavy investments made during a time of record-high commodity prices, has splintered into three groups: the haves, the stretched, and the distressed. This is markedly different from the way the landscape looked during the boom. At that time, rising commodity prices caused an industry-wide stock price rally that lifted all boats, regardless of sharp differences in asset quality and in business strategies and the ability to execute them.

Today the haves are in relatively decent shape, with low-cost operations and a fairly steady cash flow stream. Their healthy and advantaged position may be due to their superior, low-cost ore bodies and commodity exposure, or they may have already excelled at the first two steps above. These companies have more options open to them, including the opportunity to grow. In contrast, the stretched are grappling with challenging cost positions and/or debt pressures. They may be able to thrive again, *if* they can get their house in order. The distressed, meanwhile, are struggling to stay afloat after seeing prices fall below their operating costs. Often this situation is exacerbated by heavy debt loads from overly aggressive expansions into marginal projects, top-of-the-cycle acquisitions, or underfunded pension liabilities. These companies will need to address the fundamental issues that they face (including the option of financial restructuring) if they hope to survive. Both stretched and distressed companies need to concentrate on the first two steps before appealing to investors to support a progrowth agenda.

ADDRESSING BALANCE SHEET CONCERNS

Miners' balance sheet problems have weighed heavily on their equity valuations and have raised concerns among investors about the viability of certain companies in the sector. Consequently, credit ratings have deteriorated. In the US, the coal subsector has been hit particularly hard owing to competition from natural gas, which is driving coal prices down, combined with heavy acquisition-related debt loads. Indeed, as of mid-2016, three of the four largest coal players were in, or had recently exited, chapter 11 restructuring.

After 2012, mining companies often cited so-called capital discipline as a vital imperative, prompted by project- and acquisition-related write-downs. Yet many were slow to put this into practice. While capex has declined from its 2012 peak, such spending remains elevated relative to cash flow from operations. (See Exhibit 5.) This limits the cash available for distribution to shareholders.

As a result, miners' balance sheets have become increasingly strained, with market value of equity falling below 2005 levels and contributing to 2015 leverage ratios near their highest point in a decade. (See Exhibit 6.) Highly indebted companies have been most susceptible to the downturn in commodity prices and have tended to underperform their peers over the long term (for example, during 2005 to 2015), despite warning signs early in that decade. When it comes to burgeoning debt, no commodity has been left unscathed, although fertilizer companies saw their debt grow less radically than their peers in commodities such as copper, coal, and gold.

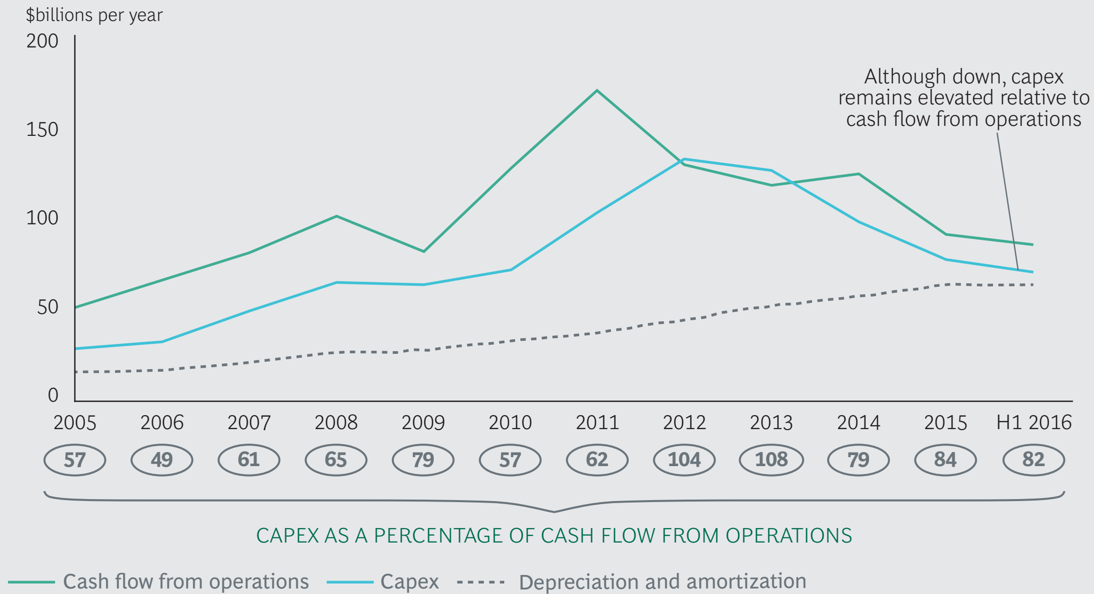
Assuaging Generalist Investors' Concerns

Generalist investors have continued their calls for capital discipline. To reassure investors that they are committed to addressing their balance sheet problems, mining companies should develop a financing plan that can withstand a range of market scenarios—including swings in commodity prices, input costs, and foreign-exchange rates. Savvy moves include the following:

- **Renegotiate financial obligations.** For instance, extend debt repayment schedules further into the future. This can reduce the immediate cash crunch, but miners will need to craft a plan to prevent it from becoming necessary again in the future.

- **Creatively monetize noncore assets.** These can be mineral assets that no longer fit with a company's strategy, nonmineral assets such as equipment, infrastructure, rights, and permits, or noncore infrastructure assets such as power stations and ports. A growing pool

EXHIBIT 5 | Capex Is Only Now Subsiding



Sources: S&P Capital IQ; BCG analysis.

EXHIBIT 6 | Miners' Strained Balance Sheets Have Investors Calling for Capital Discipline

Sources: S&P Capital IQ; annual reports; BCG analysis.
Note: Because of rounding, some numbers do not add up to the totals shown.

of capital is available for such purposes as royalty and streaming arrangements for mineral properties and sale and leaseback deals for infrastructure. For instance, minor metal products can be "streamed" to a streaming company, earning an upfront payment in exchange for discounted future production of metals such as silver. Meanwhile, noncore mines can be sold, although asset prices are currently well below their peak valuations.

Activist-fund assets under management reached $130 billion by the end of 2015.

- **Smartly reduce capex needed for growth projects and current operations.** Miners can do this by eliminating capital projects altogether (or at least delaying them) or by rethinking projects and the capital required to complete them. Companies with healthier balance sheets may also be able to inexpensively advance future growth projects through their evaluation processes, assessing deposits for eventual development or sale. However, they must take care to ensure that these projects have a real chance of being developed and are not just money pits.

- **Aggressively minimize working capital needs.** For instance, miners can renegotiate supplier and customer terms and reduce inventories throughout the value chain. This approach allowed one large zinc producer to achieve a $40 million one-time cash release and about $50 million in recurring EBITDA. The company identified cash release opportunities across its working capital and inventories, extended payment terms, optimized safety stock levels, cleaned up illiquid inventories, and added back "gray" or "satellite" stock that had not been tracked in formal inventory systems.

- **Consider downside protection.** In some cases, a targeted hedging strategy may be appropriate. While hedging goes against the trend of the past 10 to15 years, high-cost producers with significant debt or future capital outlays could benefit from appropriate hedging depending on their specific situation. Hedging might protect them against downside losses from exposure to commodity price and foreign-exchange movements, which in turn would enable them to pursue critical strategic priorities with less dependence on market conditions. But entering into hedge agreements is not a decision to be taken lightly, and companies should think carefully about the relative costs and benefits of doing so. This is especially the case in mining, where price and costs are somewhat correlated, and an inappropriate hedging strategy could increase risks instead of reducing them.

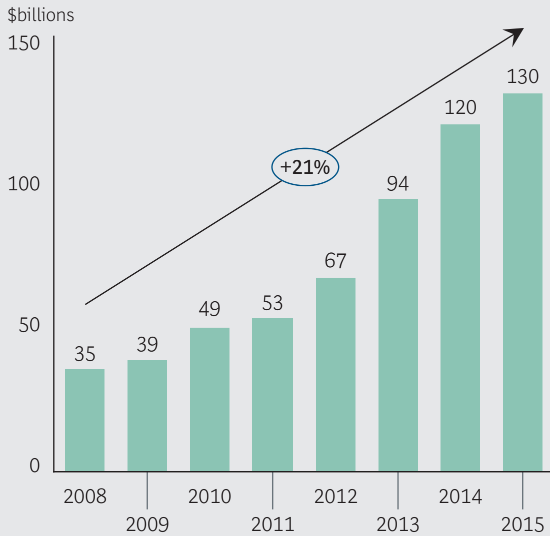
Yet developing a robust financing plan won't be enough in itself for miners seeking to address their balance sheet woes. They must also demonstrate to investors that they have put the necessary governance structures and processes in place to ensure that capital discipline isn't forgotten or doesn't become just a meaningless phrase.

Strategies for demonstrating such rigor include tracking return on capital measures (such as cash flow return on investment) and economic profit. Auditing the decision-making processes for capital allocation to identify and address weak points and risks—without adding bureaucracy—can further reassure investors that a mining company is taking a disciplined approach to capital.

Preparing for Activist Investors

Perhaps not surprisingly, activist investors have responded to miners' financial difficulties by increasingly targeting these companies for aggressive reform. This is especially true in North America, where shareholder activism is well developed. Indeed, activist firepower globally has quadrupled since 2008, with activist-fund assets under management soaring 21% to $130 billion by the end of 2015. (See Exhibit 7.) Moreover, such investors have become increasingly active—and successful—in their campaign against mining

Exhibit 7 | Activist Investors Are Increasingly Targeting Mining Companies



Sources: Hedge Fund Research; S&P Capital IQ; BCG analysis.
[1] Values are for January through August.

companies. And while many have pursued smaller companies, the threat to larger companies remains.

Miners end up in activists' crosshairs for multiple reasons. Usually, their attention is drawn to a company following a series of quantitative screens (for example, testing for cash balances and operating margins), as well as qualitative screens relating to criteria such as the quality of the company's portfolio or governance. Activists' concerns tend to center on mismatches between a company's debt levels and capital plans, a perceived focus on production volume to the detriment of shareholder value, and perceived weaknesses in corporate governance.

Overall, activists tend to target a company when they perceive underperformance in several key areas:

- **Relative Valuation and TSR.** Activists take notice when a company's valuation multiples and TSR fall below those of its peers. In their view, underperforming TSR signals poor strategic direction, while lower valuations offer them a higher potential upside.
- **Operations.** When a mining company exhibits poor operating performance (such as low margins) despite having an intact business model and favorable mineral deposits and geology, activists may suspect inefficiency. Inefficiency may further point to suboptimal corporate governance or an unclear or ill-informed business strategy.
- **Financial Policies.** Activists look for symptoms of suboptimal use of cash or debt—including a high cash balance—or a history of unprofitable investments instead of share buybacks. They also watch for companies that they consider to be inappropriately leveraged relative to competitors.
- **Business Portfolio.** Activists go on alert when they see that a company's business portfolio is not aligned with its strategic goals or with macroeconomic trends. Underperforming assets or divisions may signal such misalignment. And from activists' perspective, an overly diversified corporate structure may be hiding value and distracting management teams from the real engines of value creation.

- **Management Credibility.** Activists start questioning an executive team's credibility if they see a long-serving board that lacks independence and relevant experience or if executive compensation is not pegged to shareholder value creation.

An effective way for miners to defend themselves against activist investors is to proactively perform a do-it-yourself "health check," even in markets not yet characterized by intensive shareholder activism. Such an assessment requires that they scrutinize themselves through the eyes of an activist, considering the kinds of actions that activists might take to unlock value at their company. (See "Do-It-Yourself Activism," BCG article, February 2014.) Asking these questions can help:

- **Have we developed an analytics-based investment thesis?** Activists focus less on top-line growth, earnings per share, and profitability than on value per share and a company's balance sheet. They dispassionately challenge the logic of owning noncore operations and consider all structural alternatives. Management must do the same.

- **Do we use our balance sheet wisely?** Like any other business, a mining company must actively manage the tradeoff between reinvesting cash to drive profitable growth and distributing it to shareholders. Companies will have different value creation priorities, and the way they manage this tradeoff—investing heavily to drive advantaged growth in the core business versus creating value through restructuring or asset liquidation, for example—has implications for their capital requirements. But one thing is certain: failure to manage the tradeoff effectively attracts activist attention.

- **Have we acknowledged and closed significant performance gaps?** Miners need to understand and address shortfalls in the quantitative metrics that activists use to identify potential targets—valuation discounts, historical TSR, cash and operating margins, and balance sheet profiles—as well as industry-specific operating metrics and qualitative performance measures.

- **Do we engage with our owners openly and candidly?** Mining companies' senior executives need to meet with top investors on a regular basis to determine what they see as the company's important value creation opportunities. Activists are less likely to intervene and succeed if they lack the support of major institutional shareholders.

- **Have we built an ownership culture and a value-adding board?** The right performance metrics, transparent performance assessment methods, and rewards tied to value creation in both the short and long term will help miners make good on their investment thesis, further discouraging activists from targeting the company.

RE-EARNING THE RIGHT TO GROW

Despite cost-cutting efforts, returns on capital for many companies are near or below their cost of capital. Reported reductions in operating costs are to be applauded, but these have generally proved insufficient to halt continued margin compression. (See Exhibit 8.) Until this spread widens and miners can show that their cost reductions are sustainable, investors will remain bearish relative to previous years.

Premature Claims of Victory

In general, miners have seen their operating costs decline since the peak of 2012 through 2014. But despite this progress, no company can yet claim victory on the cost front. Progress has been aided by substantial tailwinds from falling oil prices and falling local-exchange rates (against the US dollar), which have reduced the operating costs of mines not linked to the dollar. But these effects are neither permanent nor attributable to the strategic choices of individual companies. Indeed, after stripping these effects out of our analysis, we found that adjusted cost reductions were less impressive than at first appeared—and we question whether they are sustainable in the long term. (See Exhibit 9.)

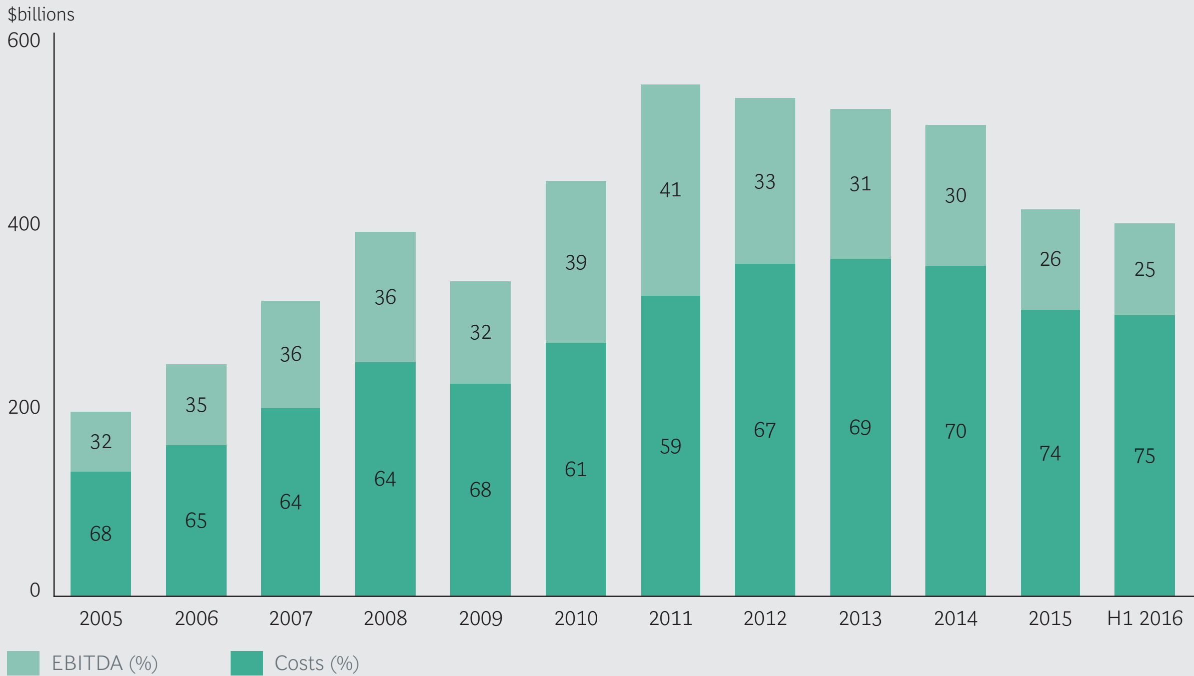
Action Steps for Miners

To re-earn the right to grow and to build on any successes they've achieved in addressing balance sheet concerns, miners must supplement existing initiatives with efforts aimed at pursuing the next level of productivity improvements. After delivering much-needed gains, many traditional programs have run their course, with additional improvements increasingly elusive. However, there are some actions that miners can take to improve the odds of achieving their productivity goals.

Take a holistic approach to optimizing the full value chain. Many improvement efforts take a siloed approach to boosting value, identifying separate opportunities in areas of the business such as mining, maintenance, and processes. By taking an integrated view of the value chain and making real-time adjustments to different parts of it—such as resources, customers, contractors, overhead, and support functions—miners can unlock significant additional potential. For example, they can use profitability analysis that includes throughput and cost baselining to uncover opportunities to remove bottlenecks. And they can rebalance the asset production mix to enhance ore grade and reduce costs by automating control systems.

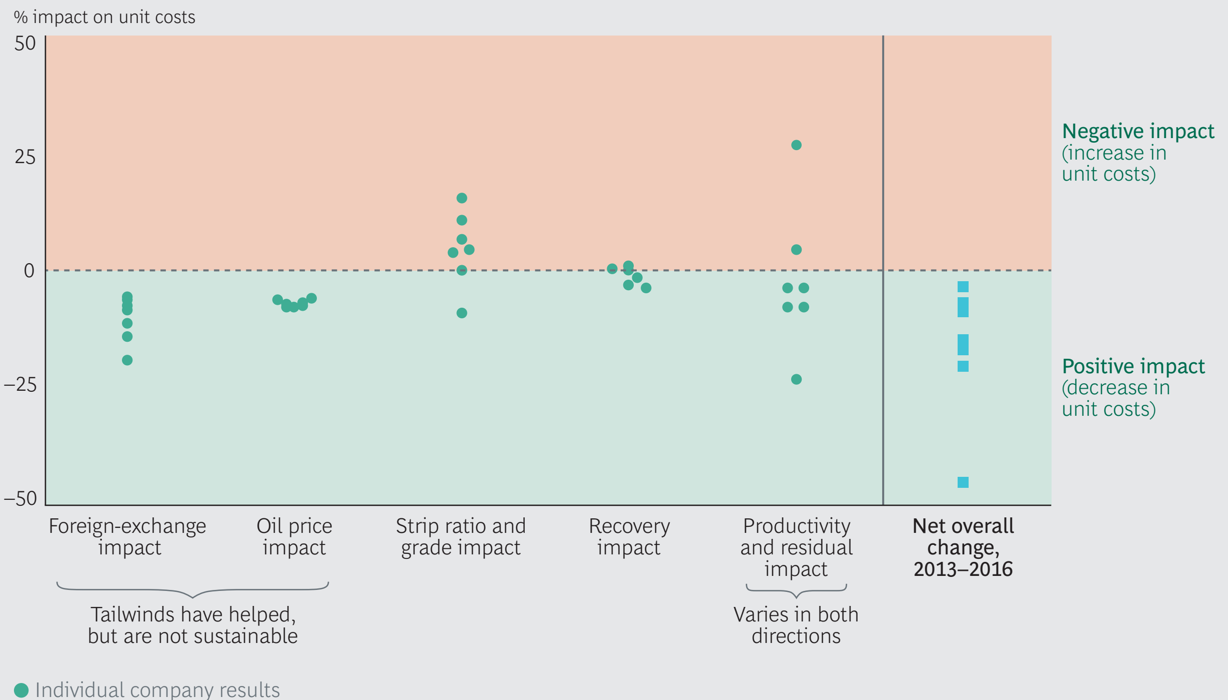
Optimize mine plans for value creation. Miners must test and optimize major tradeoffs in their mine plans, such as cutoff grades versus mine lifetime, to ensure that their sites are pursuing a path toward optimal value. They should also test the sensitivity of their plans

EXHIBIT 8 | Miners' Margins Are at Their Lowest in Ten Years



Sources: S&P Capital IQ; annual reports; BCG analysis.
Note: Sample comprised 55 leading companies with a market value greater than $3 billion at year-end 2015 and/or a market value greater than $3 billion at year-end 2005, at least 25% free float. TSR was derived from calendar-year data.

EXHIBIT 9 | Companies Have Benefited from Falling Foreign-Exchange Rates and Oil Prices



Sources: Company 10K and 10Q filings and annual reports; S&P Capital IQ; BCG analysis.

to variables such as recovery, foreign-exchange rates, and assumed discount rates. These measures will allow them to make more informed decisions about where to operate (for instance, how much volume to draw from specific mines), when to operate (for example, whether campaigning versus continuous operation is preferable and what level of buffer stock is ideal), and how to operate (for instance, whether an owner operation or a contractor model is best).

To extract actionable insights from huge data volumes, miners must invest in technology.

Improve productivity continuously and persistently. Productivity improvement as an ongoing, disciplined process delivers far more value than bursts of disconnected initiatives that eventually fall by the wayside. Companies that excel at continuous productivity improvement do so by articulating clear objectives that are driven by top leadership, defining new ways of working that motivate the desired behaviors, conveying a sense of urgency, and excelling at execution.

Many mining companies struggle with continuous-improvement initiatives. One challenge is cultural: mining companies tend to have difficulty establishing a disciplined process for detecting problems, conducting root-cause analysis, and arriving at optimal solutions—capabilities that are common in industries such as automotive. Many also have difficulty fostering the cross-unit collaboration needed to develop new insights into challenges and to drive change.

How to overcome obstacles to implementing major change programs is a large topic that is beyond the scope of this report. But miners can position themselves to overcome these challenges by observing and learning from sectors such as manufacturing. There, leading companies encourage managers to look beyond benchmarks, set ambitious targets, and find innovative ways to meet and even exceed targets.

Aggressively commit to applying technology. The volume of data produced by many mining companies exceeds their ability to process, understand, and use it to inform business decisions. The oil and gas industry is in a similar quandary and provides an apt example. Thanks to new digital technologies—such as geoseismic and satellite imaging; flow, pressure, and temperature sensors; 4D visualization and modeling; and remote density and porosity readings—data volumes generated from oilfields have grown exponentially. Yet companies' ability to analyze this data has not kept pace. In a report published by Oracle, 74% of the oil and gas executives surveyed said that their company is collecting and managing more business data than it did two years ago. Yet only 13% gave their company an A grade on its preparedness to manage that data.[1]

Deployed effectively, data generated by a company's many processes and operations offers tremendous potential in critical business decision making and in the identification of cost reduction and productivity improvement opportunities. For instance, predictive analytics and structured and unstructured data from multiple databases can be used to generate statistics on work orders (such as execution efficiency and preventive versus corrective measures), identify the root causes of production losses, determine the optimal frequency of preventive maintenance by equipment type, and calculate the number of crews and crew movements needed to minimize production losses. Dynamic simulation modeling can be an especially powerful tool, allowing miners to pressure test, de-risk, and quantify the potential impacts of improvement initiatives—such as the debottlenecking of existing or planned operations. By exploring different ideas in a simulated environment, miners can preempt unintended consequences at very low cost.

But to extract actionable insights from huge volumes of data, miners need to invest in technology. That may seem counterintuitive at a time when margins are being squeezed. Nevertheless, our experience suggests that if such investments are set up correctly, the results can prove impressive. For instance, an underground gold operation used dynamic

simulation modeling to identify and test a number of improvement levers, ultimately reducing operating costs by about 20%. A major copper producer provides another example; it identified $40 million in capital savings by using data analytics to pinpoint the key drivers of system productivity. Finally, an iron ore producer dynamically modeled its value chain from crusher to port (including the potential impact of different product configurations, seasonal production and weather constraints, and various configurations of rail and shipping infrastructure) to optimize the system and avoid hundreds of millions of dollars in unnecessary costs.

To achieve the greatest gains, miners should look outside their industry for useful technology solutions. For example, the agriculture industry is developing innovative approaches to end-to-end integration along the value chain, including the use of land and weather data and new growing technologies and equipment. The airline and aerospace industries are developing leading-edge predictive maintenance capabilities. One mining company collaborated with major telecommunications and automotive companies on a broad-ranging mine automation program that included underground Wi-Fi points, VoIP communications, and automated machine logging for maintenance.

Deliver near-term results. The measurable business results that a change effort delivers in the near term can enable companies to generate the resources needed to drive additional improvements in the medium and long terms. Key questions to ask during this stage include, Where do we have performance gaps? and Which quick wins should we target to close those gaps?

NOTE

1. "From Overload to Impact: An Industry Scorecard on Big Data Business Challenges," Oracle, July 17, 2012.

DEVELOPING A COMPELLING PATH FORWARD

INVESTORS MUST HAVE CONFIDENCE in the value of existing mining businesses, but they also need to see that mining companies have defined a compelling path toward future value. And they need to see that miners have a solid investment thesis—one that clearly describes how their plan for value creation goes beyond a reliance on recovering commodity prices.

For companies that have addressed their balance sheet issues and re-earned the right to grow (or have maintained resiliency despite the down cycle), now is the time to think about how to create new value in the future. Indeed, in the current environment, it's not enough to be a so-called great company by occupying a leadership position in the industry or enjoying the advantage of strong assets. Miners must also strive to be a great stock—that is, capable of delivering sustainable and attractive value creation in the form of rising TSR.

Meeting the Great-Company/ Great-Stock Imperative

Many companies focus too much on being a great company, viewing TSR as simply the end result of their strategic efforts. They craft a great-company business strategy, including a growth agenda, a portfolio strategy, and risk management efforts. They then align the financial strategy, including their capital structure and requirements and financial policies, with the business strategy. Finally, they pitch the plan to investors with the expectation that successful TSR results will follow.

> To be a great company and a great stock requires a cohesive value creation strategy.

To be both a great company and a great stock, miners need a more explicit and cohesive value creation strategy. Formulating such a strategy starts with defining sensible TSR targets that take into account the profitability of a miner's assets through the commodity cycle and the expected range of commodity prices. Moreover, the value creation strategy should connect the TSR target with three other strategies:

- Business strategy, including how much to focus on growth versus yield plays
- Financial strategy, such as how to fund existing operations while also creating funding options for future growth
- Investor strategy, including who the company's ideal investors are and how it plans to attract and retain them

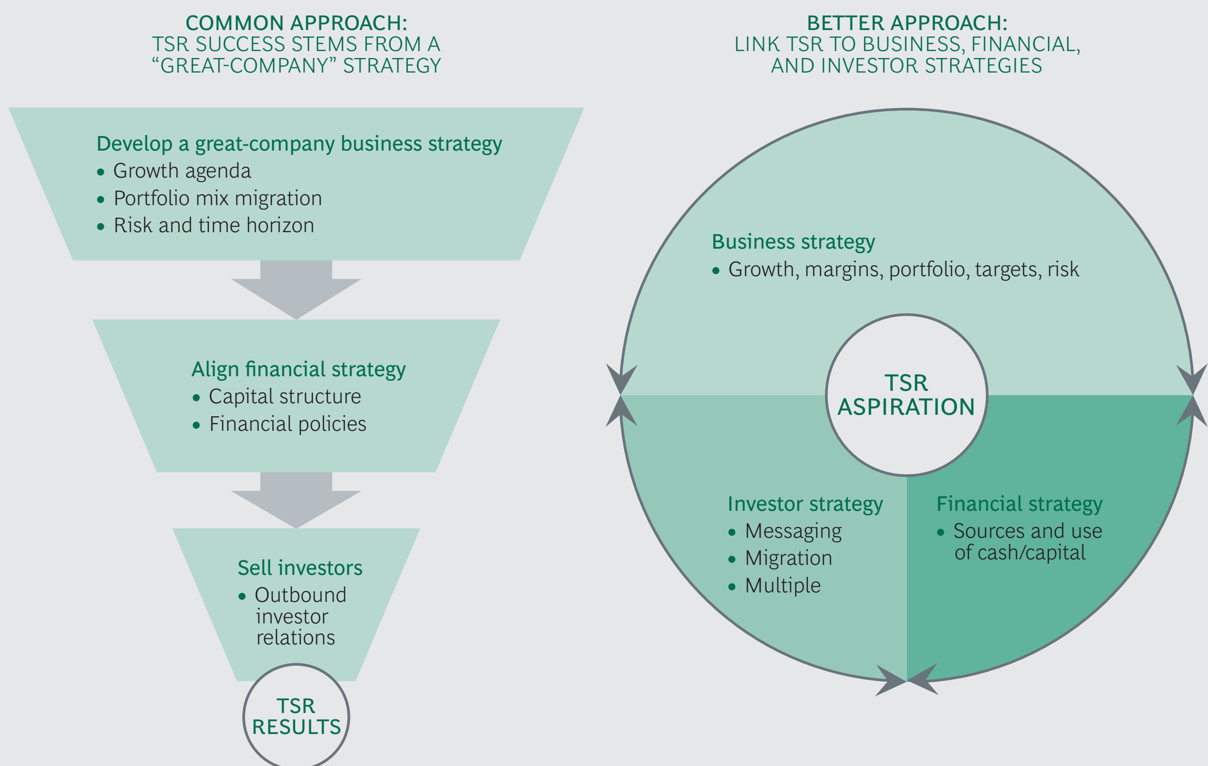
In BCG's 2015 Investor Survey, as many as 61% of respondents said that their company's corporate strategy, financial strategy, and investor strategy were not well aligned. By achieving this alignment through tight integration with TSR targets and by positioning rising TSR as their main aspiration, miners stand a better chance of optimizing all three strategies and thus becoming both a great company and a great stock. (See Exhibit 10 and the sidebar "How Your Investment Thesis Guides Your Strategy and Investment Choices.")

Using TSR to Evaluate Strategic Opportunities

Integrating their business, financial, and investor strategies with their TSR aspirations will allow miners to more easily evaluate the various strategic opportunities open to them. They can also test their assumptions about their base-case business plan and the impact of different strategic moves on their share price. The resulting insights can help them focus on the moves that will best help them reach their desired TSR.

For example, suppose a mining company's base case assumes 3% revenue growth and a 500-basis-point improvement in margins. The company has a range of strategic options at its disposal, from pursuing exploration, acquisitions, production volume increases, and cost reductions to changing the proportion of cash flow that is reinvested rather than paid out to investors. The company assesses the effect on share price of each option compared with the effect of the base-case business plan. This approach differs markedly from the one that many companies use in that it provides a common yardstick—TSR—for assessing all the strategic opportunities open to a company. TSR is the ultimate measure of how the market evaluates a company's performance. By putting the potential impact on TSR at the center of its evaluation of potential strategic moves, a company incorporates the viewpoint of investors into its strategic thinking.

EXHIBIT 10 | An Effective Corporate Strategy Puts TSR at the Center



Source: BCG analysis.

HOW YOUR INVESTMENT THESIS GUIDES YOUR STRATEGY AND INVESTMENT CHOICES

An investment thesis is not the same as an equity story, which describes how an organization's leaders would like outsiders to view the opportunities on offer by the company. Rather, it's a clear and focused summary of how the company will create value over time, grounded in the granular realities of its competitive situation, opportunities, and risks.

In contrast to the typical strategic plan's lengthy list of actions and ambitions, a good investment thesis highlights three to six critical actions that are required to achieve attractive performance over a specific time horizon (usually three to five years). A company's opportunity set for driving value at any point in time is likely constrained by just a few factors, and a good thesis focuses managerial energy.

Finally, a good investment thesis explicitly considers enterprise risks and embraces contrarian viewpoints. After all, from an owner's standpoint, one shouldn't invest in a company unless one can describe why the consensus view driving today's valuation is too conservative and where the short seller's logic is misguided.

Acting Countercyclically

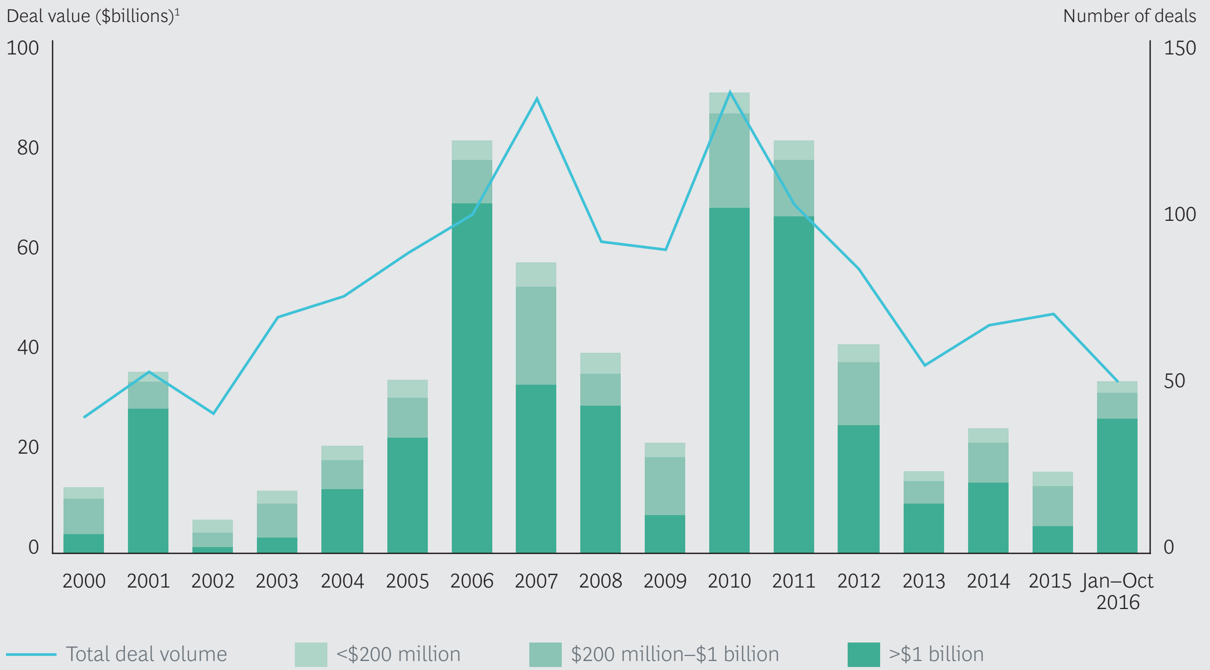
Miners that use this approach stand a better chance of building up healthy supplies of capital and cash, as well as enhancing their strategic and financial flexibility. As a result, they can position themselves to act countercyclically by taking advantage of depressed prices for assets, equipment, and talent at a time when buyers are scarce.

For example, well-positioned companies can use current conditions to replenish their growth pipeline, both organically and through savvy M&A. The next sustained upward commodity-price cycle may still be several years away. But given the long lead times from discovery to production, companies would do well to move ahead of any price recovery. Assets remain "on sale," and M&A activity among metals and mining companies has been subdued since 2010. (See Exhibit 11.)

Why hasn't the sector seen brisker activity? From the perspective of buyers, there is a lack of confidence that the sector has hit bottom in terms of asset prices, along with a lack of deal financing. From the perspective of sellers, there are many poor assets for sale, and they want to hold onto their company's most valuable assets. Many sellers also have unrealistic expectations about what they could get for assets that they divest. Moreover, they don't view the sector as sufficiently distressed to require the forced selling of good assets. These conditions present acquisition opportunities for companies that are in a relatively strong position financially.

A company that decides to act countercyclically might also move to upgrade its pool of managerial and technical talent. As a consequence of the downturn in the industry, which halved exploration funding globally between 2010 and 2015, many companies have lost or shed experienced talent. This offers an opportunity for companies to upgrade their workforces.

Exhibit 11 | M&A Activity Remains Subdued



Sources: Capital IQ; BCG analysis.
Note: Includes M&A transactions with $5 million in total transaction value for the companies in our sample from 2000 through the first ten months of 2016 (including pending deals).
[1] Values include the net debt of targets

CONCLUSION

In an environment of shrinking TSR and eroding market value, mining companies cannot let themselves be distracted or deceived by the uptick in commodity prices that sparked optimism for some in the first half of 2016. The price recovery masked persistent challenges still facing the sector, as investors' continued rechanneling of vast volumes of capital away from mining confirms.

To survive, miners will need to put the restoration of investor confidence at the top of their strategic agendas. For those already in good shape financially, developing a compelling path forward and a solid investment thesis should be the focus of their transformation efforts. This can help miners show investors that they have a plan for creating value in the future and that they intend to do more than just rely on recovering commodity prices. For example, some mining companies may plan to take advantage of the current environment to grow, while others may aim to create options for driving fresh growth in the future.

For miners in not-so-good shape, addressing balance sheet issues and re-earning the right to grow must come first. Only then will they be able to build the credibility and momentum needed to develop a compelling path forward and a solid investment thesis. With balance sheets increasingly strained, market value of equity plummeting, and leverage ratios soaring, miners will have to commit to assuaging generalist investors' most pressing concerns and, in some cases, defending themselves against activist investors. Those concentrating on re-earning the right to grow will need to view their value chain, mining plans, productivity improvement approaches, and use of technology through new lenses.

But regardless of where they focus first, mining executives will need to rethink major elements of their enterprise—including how they craft corporate strategy and what their business model looks like. Hard work, yes—but essential for surviving (at least) and thriving (at best) in today's challenging environment.

NINE KEY QUESTIONS FOR MINING EXECUTIVES

Below, we offer nine key questions that mining company executives should consider as they seek ways to boost value creation.

Assessing Your Company's Performance

1. How has your company performed relative to its peers? Relative to investors' expectations?

Restoring Your Balance Sheet

2. Is your balance sheet a source of concern for investors? Has there been turnover in your share registry as a result?

3. Over the past 10 to 20 years, where have your capital allocation and governance processes worked well? Where have they exposed you to unnecessary or costly risks? Are your systems today sufficiently robust to anticipate the next crisis?

Re-earning the Right to Grow

4. How does your performance improve once you remove from the analysis the benefits of oil prices, foreign-exchange rates, and other exogenous factors?

5. Has your company earned the right to grow? If not, what is needed to do so?

6. How aggressively is your company committed to technology and performance improvement? Who is winning in your industry today—incrementalists or step changers?

Developing a Compelling Path Forward

7. Can you confidently articulate the reasons why investors should invest in your company instead of in any other? Do investors—both current and potential—agree with your investment thesis?

8. How far out does your growth pipeline stretch? By when do you need to make value-adding additions to your portfolio?

9. Do you have the best talent in the world—either from the mining industry or from outside? Where in your organization would such talent create the most value? What could your company do to attract such people and keep them onboard?

APPENDIX

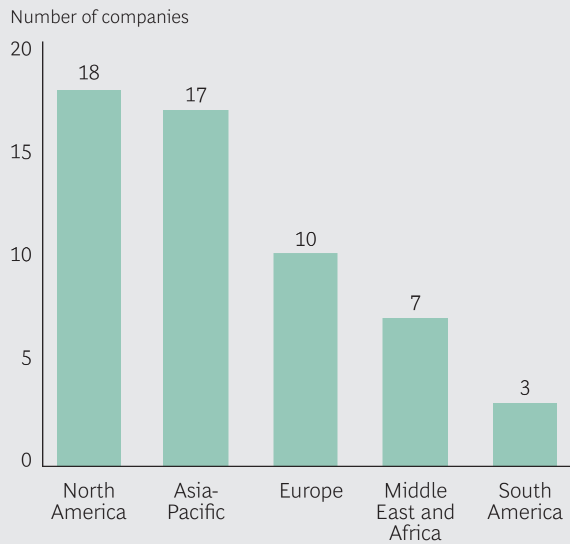
COMPANIES ANALYZED

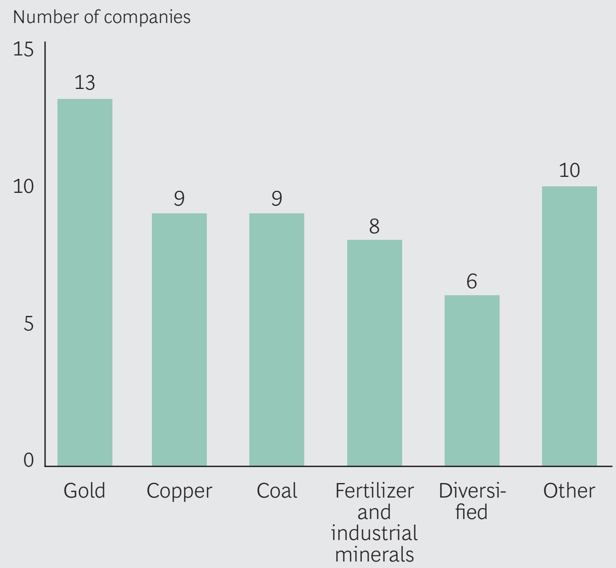
The exhibits that follow provide information on the 55 mining companies we analyzed for the Value Creation in Mining 2016 report. The first lists the names of the companies; the second shows the locations of their primary listings around the world and the primary minerals they produce.

The Study Sample Consisted of 55 Mining Companies

- Agnico Eagle Mines
- Agrium
- Anglo American
- AngloGold Ashanti
- Antofagasta
- Arch Coal
- Barrick Gold
- BHP Billiton
- Boliden
- Cameco
- China Shenhua Energy
- Compañía de Minas Buenaventura
- Consol Energy
- Exxaro Resources
- Fortescue Metals Group
- Freeport-McMoRan
- Goldcorp
- Gold Fields
- Grupo México
- Harmony Gold Mining
- Imerys
- Impala Platinum
- Industrias Peñoles
- Israel Chemicals
- Jilin Jien Nickel Industry
- K+S
- KAZ Minerals
- KGHM Polska Miedź
- Kinross Gold
- Lonmin
- The Mosaic Company
- Newcrest Mining
- Newmont Mining
- Peabody Energy
- Potash Corporation of Saskatchewan
- Qinghai Salt Lake Industry
- Randgold Resources
- Rio Tinto
- Semirara Mining and Power
- Shenzhen Zhongjin Lingnan Nonfemet Co.
- Silver Wheaton
- SQM
- Teck Resources
- Tongling Nonferrous Metals Group
- Turquoise Hill Resources
- Vale
- Vedanta Resources
- Washington H. Soul Pattinson
- Wintime Energy
- Yanzhou Coal Mining
- Yara International
- Yunnan Copper
- Yunnan Tin
- Zhongjin Gold
- Zijin Mining

The Study Sample Covered All Major Regions and Commodities





Sources: S&P Capital IQ; BCG analysis.

FOR FURTHER READING

The Boston Consulting Group publishes many reports and articles that may be of interest to mining management teams. Recent examples include the publications listed here.

Creating Value Through Active Portfolio Management
2016 BCG Value Creators report, October 2016

Masters of the Corporate Portfolio: The 2016 M&A Report
A report by The Boston Consulting Group, August 2016

Sustainable Answers: BCG Looks at Three Ways to Manage Sustainability for the Long Term
An article by The Boston Consulting Group, July 2016

In a Tough Market, Investors Seek New Ways to Create Value
An article by The Boston Consulting Group, May 2016

Shaping the Future of Construction: A Breakthrough in Mindset and Technology
A report by The Boston Consulting Group and the World Economic Forum, May 2016

Metals Manufacturing: Four Rules for Managing Inventory Better
An article by The Boston Consulting Group, March 2016

Value Creation in Mining 2015: Beyond Basic Productivity
A report by The Boston Consulting Group, August 2015

Winning Moves in the Age of Shareholder Activism
A Focus by The Boston Consulting Group, August 2015

Mining and Metals in a Sustainable World 2015
An article by The Boston Consulting Group, September 2015

The CEO as Investor
An article by The Boston Consulting Group, April 2012

NOTE TO THE READER

About the Authors

Gustavo Nieponice is a partner and managing director in the Santiago office of The Boston Consulting Group and the firm's regional leader for metals and mining in Western Europe and South America. **Thomas Vogt** is an associate director in BCG's Chicago office and a member of the metals and mining sector. **Alexander Koch** is a partner and managing director in the firm's Perth office.

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For Further Contact

This report was sponsored by BCG's Industrial Goods practice, which works with clients to deliver solutions to the challenges discussed in this report. These clients include some of the world's largest and most successful mining companies in both developed and emerging economies. If you would like to discuss the insights in this report or learn more about the firm's capabilities in the mining industry, please contact the authors.

Gustavo Nieponice
Partner and Managing Director
BCG Santiago
+56 2 2338 9600
nieponice.gustavo@bcg.com

Thomas Vogt
Associate Director
BCG Chicago
+1 312 993 3300
vogt.thomas@bcg.com

Alexander Koch
Partner and Managing Director
BCG Perth
+61 8 6364 4300
koch.alexander@bcg.com

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