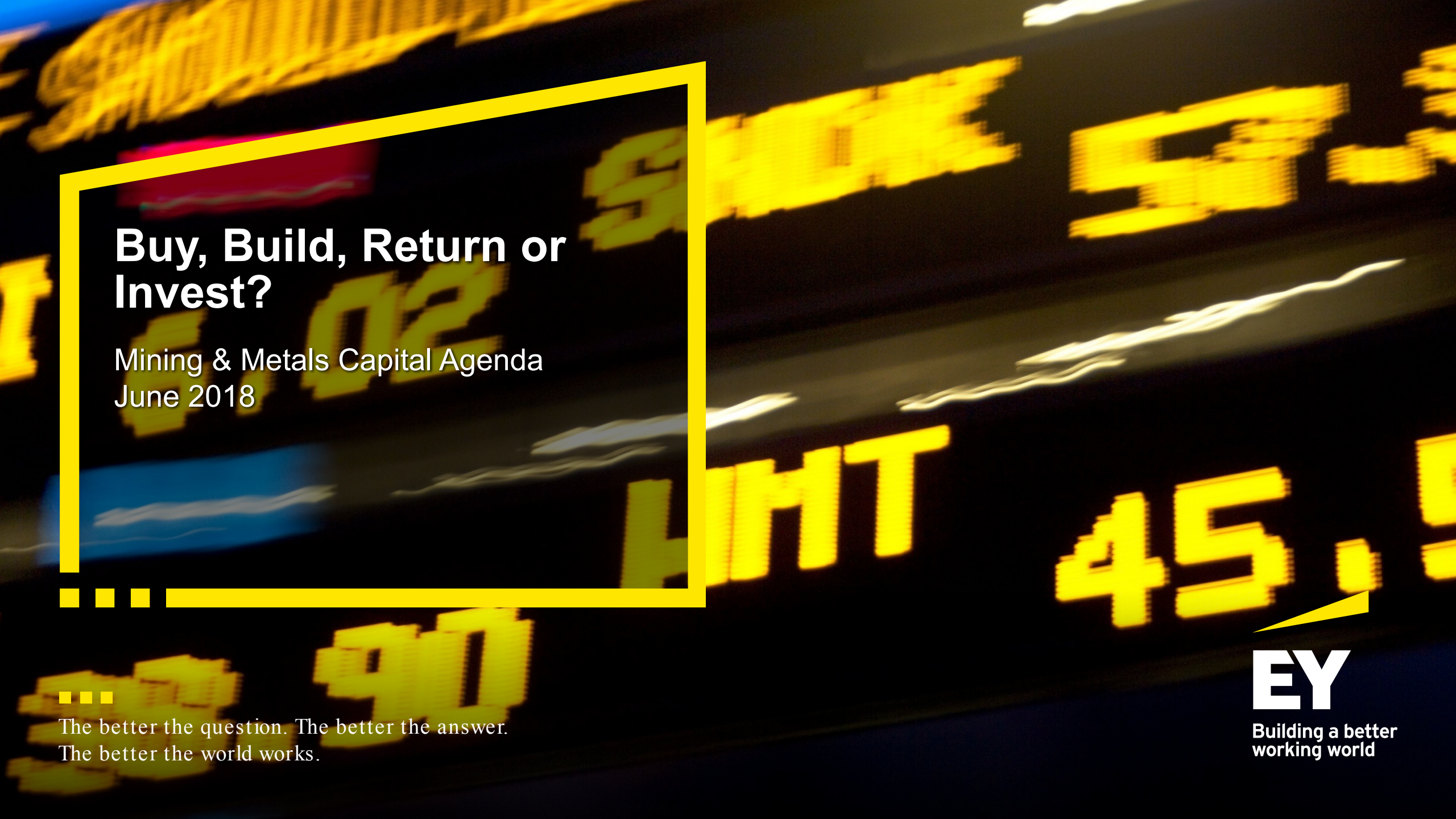
Buy, Build, Return or Invest?

Mining & Metals Capital Agenda
June 2018



The better the question. The better the answer.
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Agenda

1. Introduction/Overview
2. Growth: M&A and Capex
3. Shareholder Returns
4. Invest – The Fourth Leg
5. Portfolio Optimisation
6. Discussion/Q&A

About the report

- The data is primarily sourced from CapIQ and ThomsonONE, except where stated
- Unless otherwise stated, all values are in US dollars

Foreword on the basis for analysis:

- This analysis is based on selected 25 Top mining companies in the world by market capitalisation and excludes aluminium and steel companies, including backward integrated metals producers with significant mining assets.
- For consistency, calendar years have been used across all companies.
- The definitions and treatment of the financial data are as per Capital IQ and may differ from other information sources. However, in this analysis the overall trends are more important than the absolute numbers and any interpretation should be treated as such.
- The companies include BHP, Rio Tinto, China Shenhua Energy Company, Vale, Coal India, Norilsk Nickel, Southern Copper Corporation, Grupo México, Anglo American, Freeport-McMoRan, Barrick Gold, Newmont Mining, Hindustan Zinc, Fortescue Metals, Goldcorp, Teck Resources, Newcrest Mining, Shandong Gold Mining, China Coal Energy, Vedanta, Antofagasta, Korea Zinc Co, Fresnillo, Boliden, Yanzhou Coal

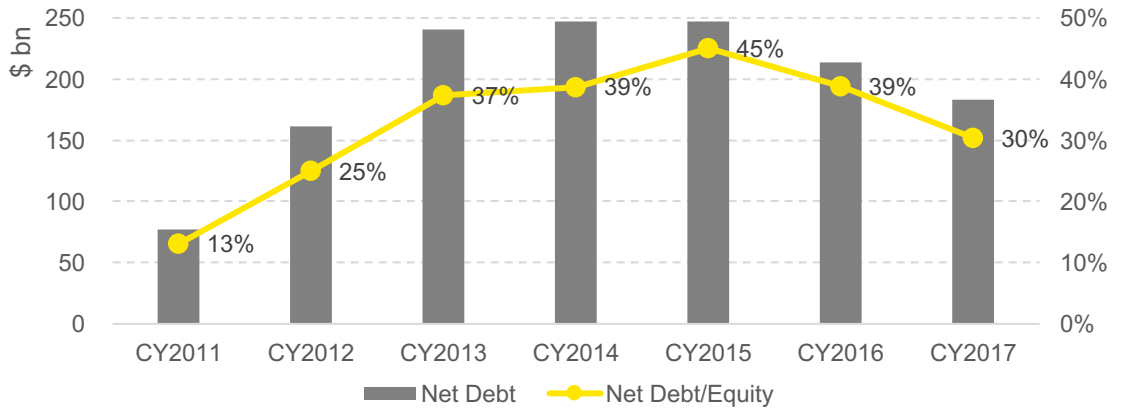
Notes on M&A

- Only completed deals are included
- The acquirer country is based on the ultimate owner's geographic headquarters. The target country is determined by where the primary targeted asset or company is located.
- The data does not capture the value of transactions where the deal value is not publicly available.
- **Notes on capital allocation**
- Capex data for companies is taken from ThomsonOne, CapitalIQ and Annual reports. Growth capex is calculated based on certain assumptions made unless available in publicly available information.

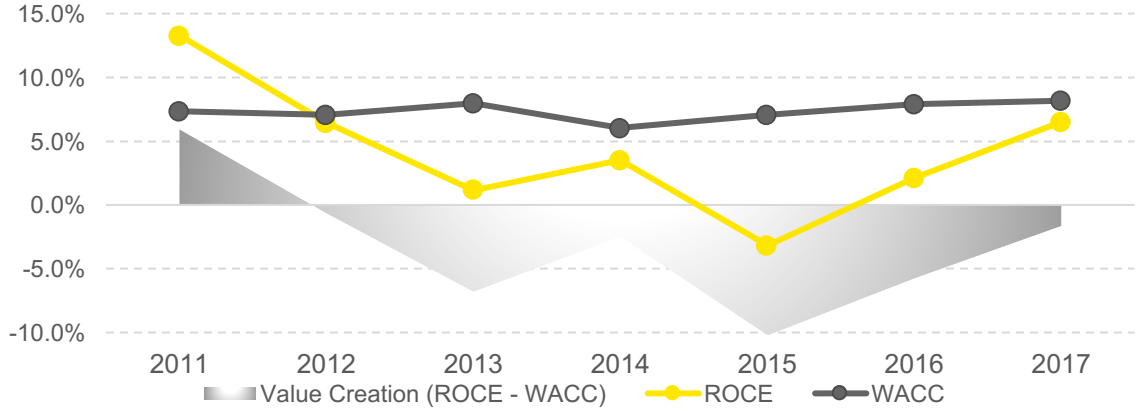
Capital Agenda: Build, Buy, Return and/or Invest/Spend

- Balance sheets deleveraged and now flexible for credit expansion as the 'Return to Growth' gathers momentum
- Indeed, capital discipline will be balanced with growth and shareholder expectations
- Stronger valuations to also support use of equity as currency
- Industry participants will be looking at divergent capital strategies to create value: Build, Buy, Return, Invest/Spend

Leverage across the Mining Sector

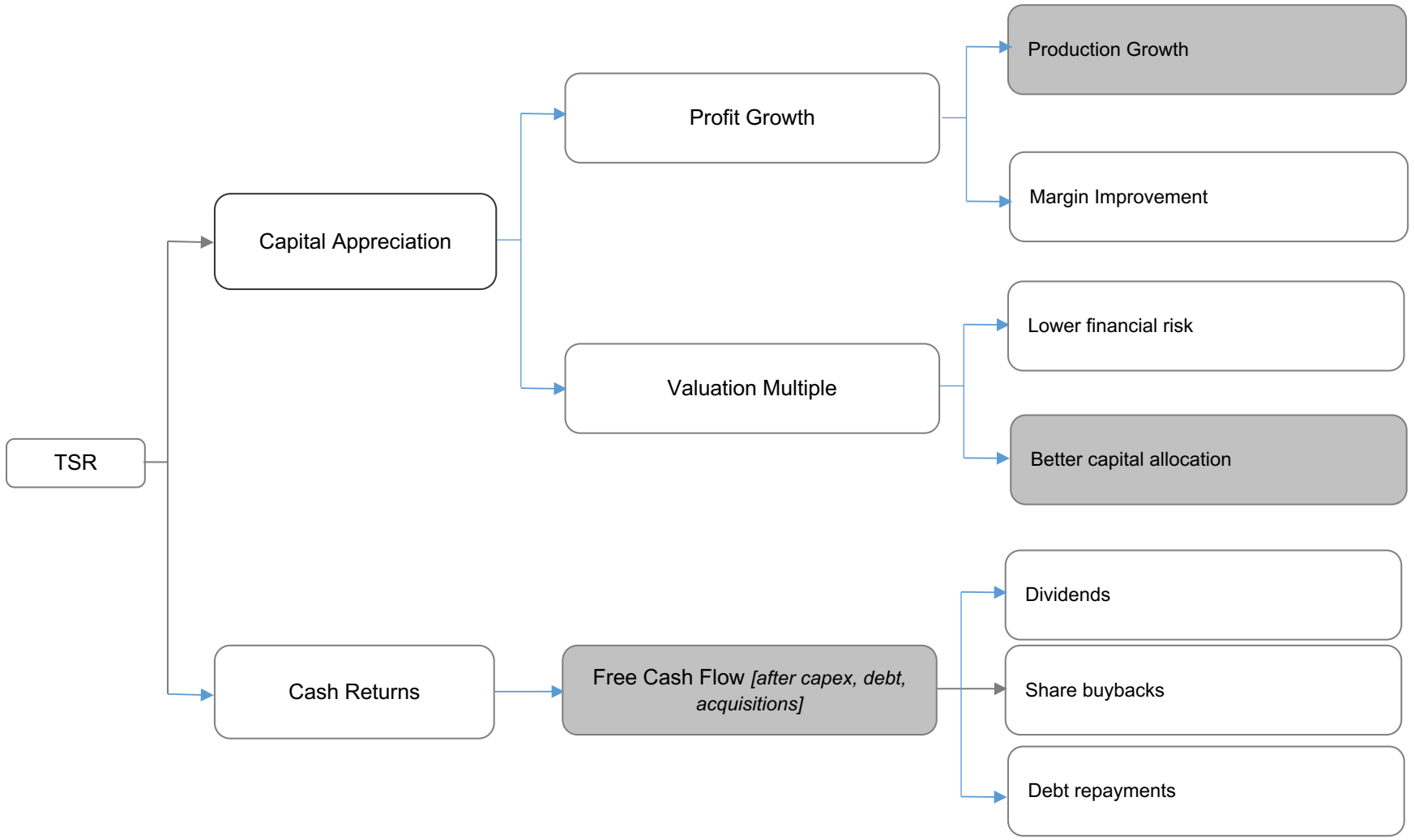


Shareholder Value Creation



1. Buy: Growth - M&A	2. Build: Growth - Capex	3. Return: Dividends/Buybacks	4. Invest: Productivity/Cost reduction [*Digital*]

Capital allocation strategies are ultimately geared towards maximising Total Shareholder Returns (TSR)

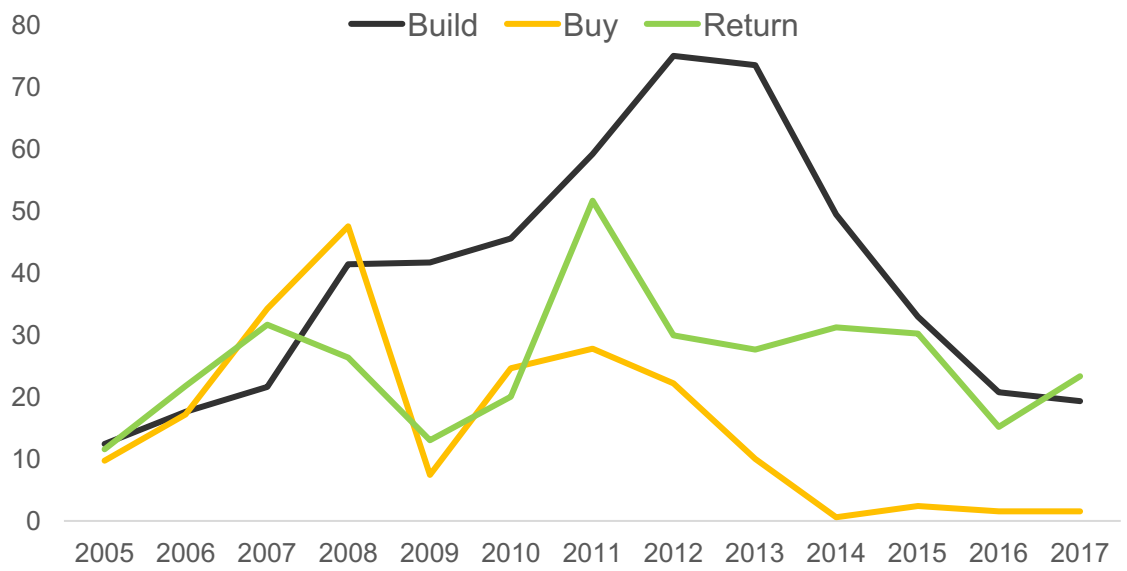


The sector has seen a prolonged period of no re-investment

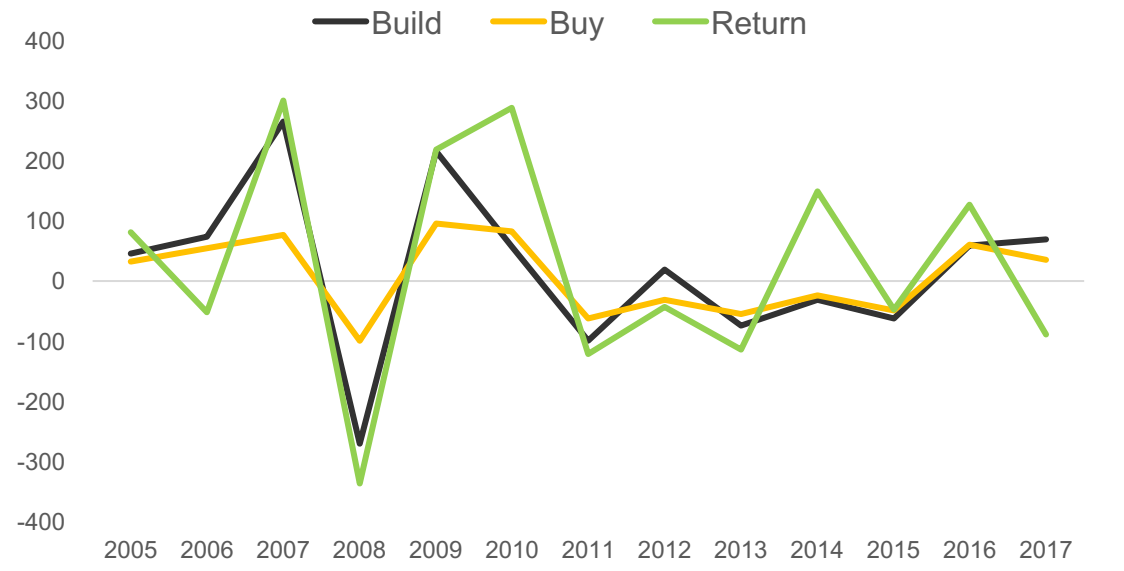
… capital allocation strategies are impacted by cyclicality and there is no clear route to success

- Capital discipline forced many players to adopt curtail growth ambitions post the super cycle
- Balance sheets have strengthened but many players have opted to return cash to shareholders
- Acquisitive growth has suffered but the focus on value creation expected to reignite consolidative and strategic transactions

Capital allocation strategies, US$bn, 2005-2017



Relative Total Shareholder Returns by Strategy*, 2005-2017



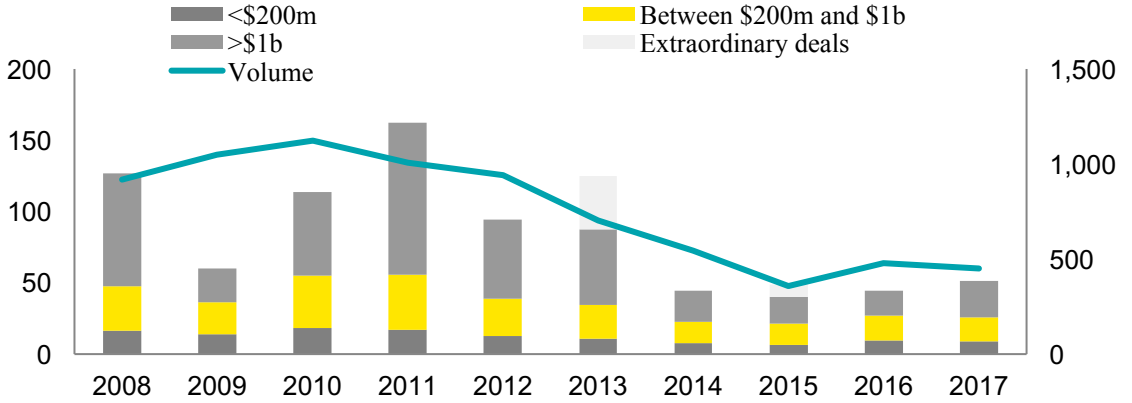
Source: S&P Capital IQ
Note: * - TSR by preferred strategy of 25 top mining companies

Acquisitive growth bottomed but now set to rebound

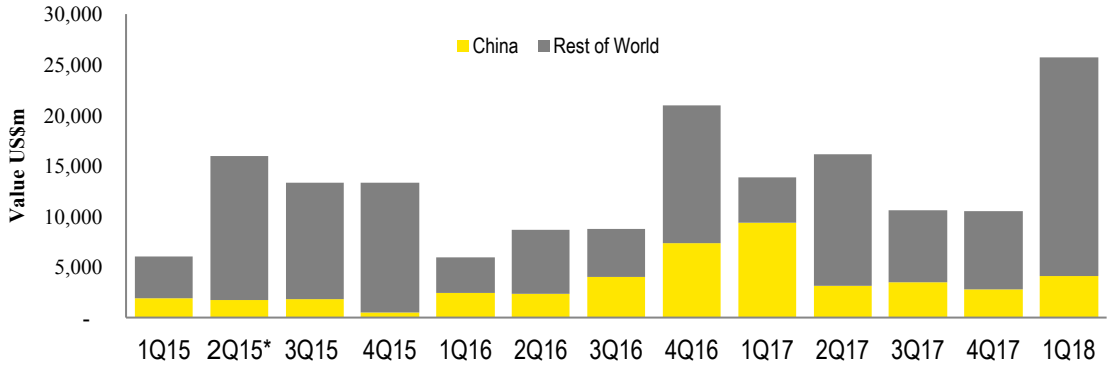
… low return on capital employed fueled divestments of underperforming and non-core assets

- Capital discipline was the key theme with focus on reducing debt and providing shareholder returns
- Shift towards strategic deals as reduced exploration spend has depleted pipeline of projects
- New world commodities may encourage synergistic consolidation and hunt for exploration assets

M&A Value (US$bn) and Volume (RHS), 2008-2017



Share of Deal Value by Region



Highlights

- **The largest deal in 2017 was the US$4.2b merger of Wuhan and Baoshan** Iron and steel company, to create Baowu Steel, the second largest steel producer in the world.
- **China continued to be the key driver of activity**, leading deals by value both as an acquirer (US$18.7b,36.6%) and as a target (US$13.6b,26.6%). These were mainly domestic steel and aluminium mergers aimed at industry consolidation.
- **Coal and steel were the main drivers of deal value** with coal acquisitions up 156% y-o-y to US$8.5b and steel acquisitions up 101% y-o-y to US$13.4b

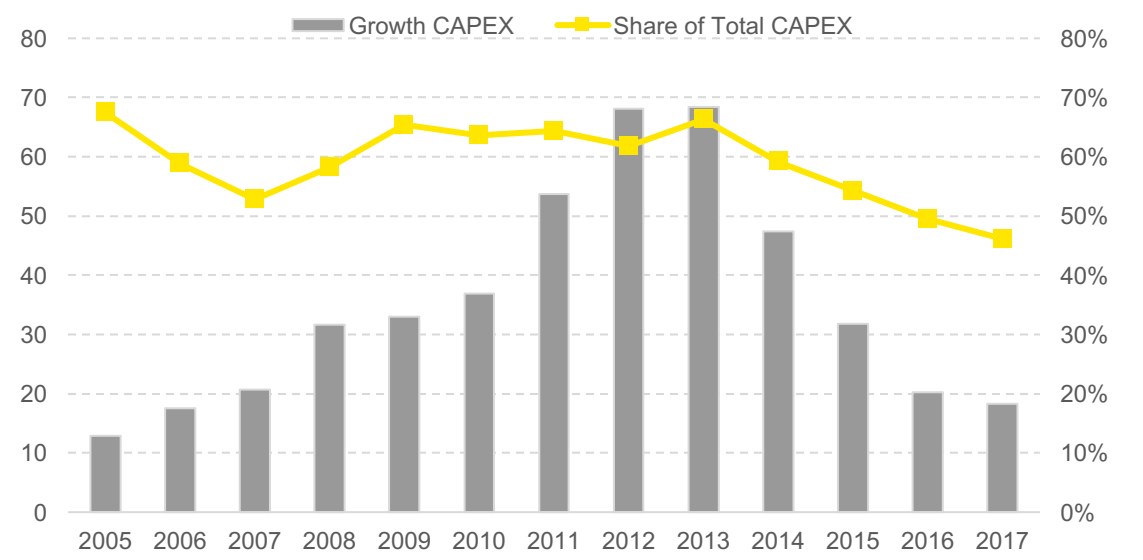
Source: EY, ThomsonONE

Organic growth projects were also curtailed

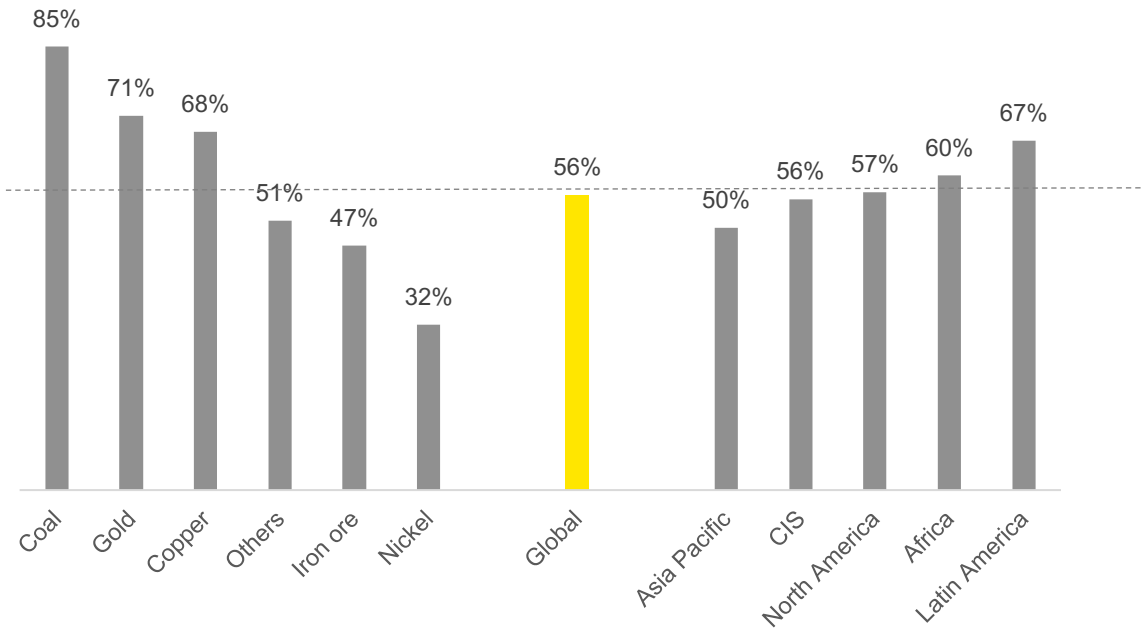
… focus was on improving productivity in existing projects

- Capex cuts and efforts to improve cash flows were at their maximum in late 2015/early 2016
- Cost overruns resulted in higher leverage and lower NPVs, with assets hitting market during period of over-supply
- With balance sheets now largely repaired, capex expected to increase as miners catch up on the underinvestment over the past 5 years

Growth Capex (US$bn) and Share of Total Capex, %



Proportion of major projects facing cost/time overruns, 2017



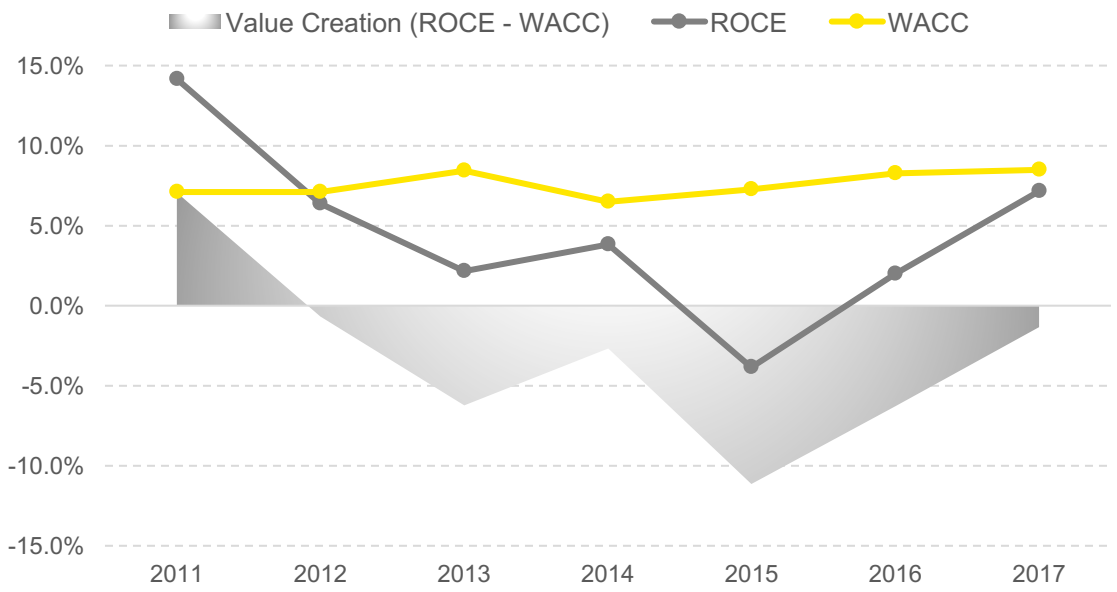
Source: SNL, EY Analysis

Dividends and buybacks restored amid stronger cash flows

… companies sought to heal old wounds with returns

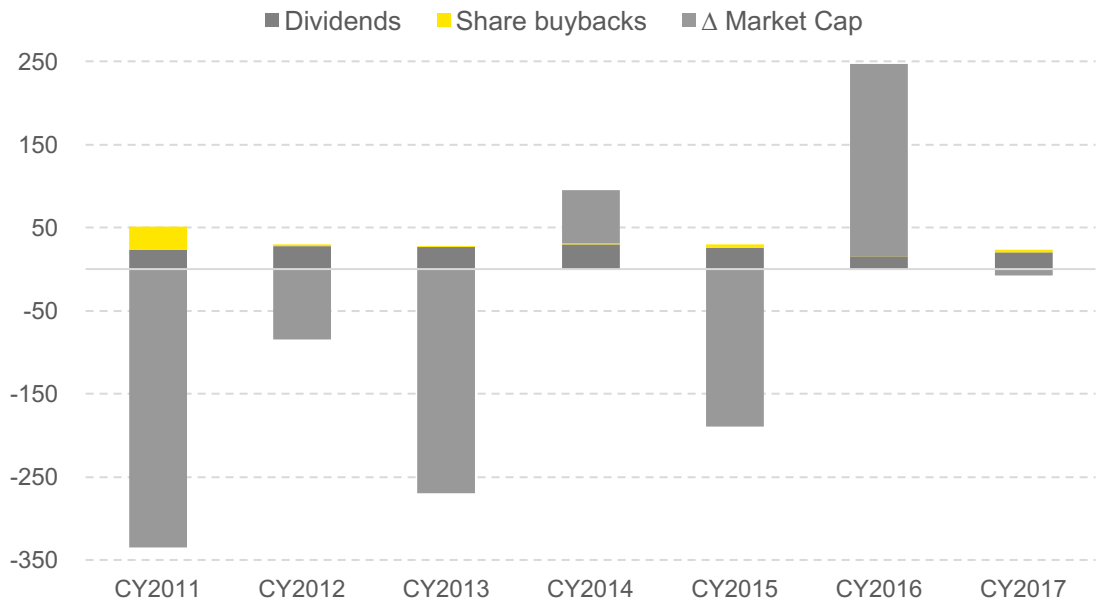
- Dividend prioritized and linked to earnings and cash flows
- Corporates have suffered severe value erosion since the end of the super-cycle in 2011
- Corporate strategies to shift away from herd mentality seen during super-cycle period

Shareholder value creation – Economic Value Added (EVA)



Source: S&P Capital IQ

Total Shareholder Returns (TSR), US$bn



Major players re-investing to enhance productivity

… Digital enables mining companies to achieve a Manufacturing approach to Productivity improvement

- Global miners are using digital and innovation to transform competitive advantage
- Some headway in using digital effectively to improve productivity
- Market leadership can quickly be lost if dominant players respond slowly, or ineffectively, to industry disruption and external changes

Investment into Digital & Innovation

RioTinto

- Announced annual potential from digital asset management of 1–2% ($2bn)
- Heavy investment in real time operations, 3D visualisation and analytics
- Automation of haulage, drilling and rail
- Focus on commercial innovation

bhpbilliton

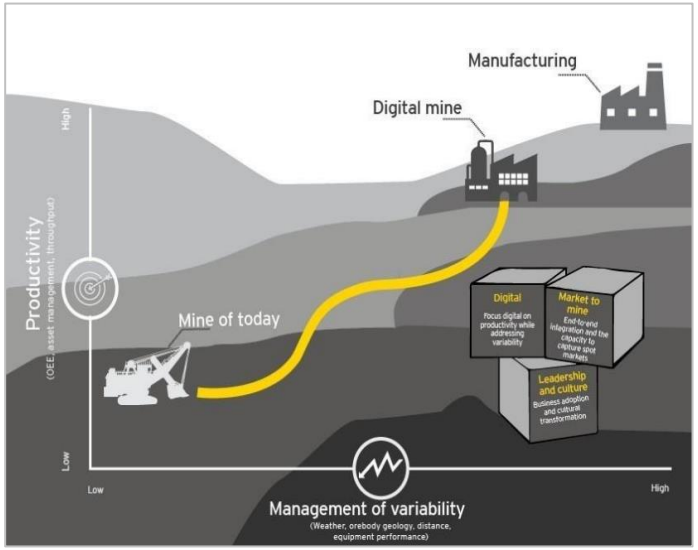
- Estimates capital returns on investment in digital technology 2x other portfolio options
- Using algorithms to better manage traffic flow in mines
- Investment in predictive maintenance estimated to reduce costs by 20%

The Digital Mine; Focus on Digital Investments to enhance Productivity

Improving a miners ability to address variability issues

Enable move from scheduled to predictive maintenance

Support loss elimination



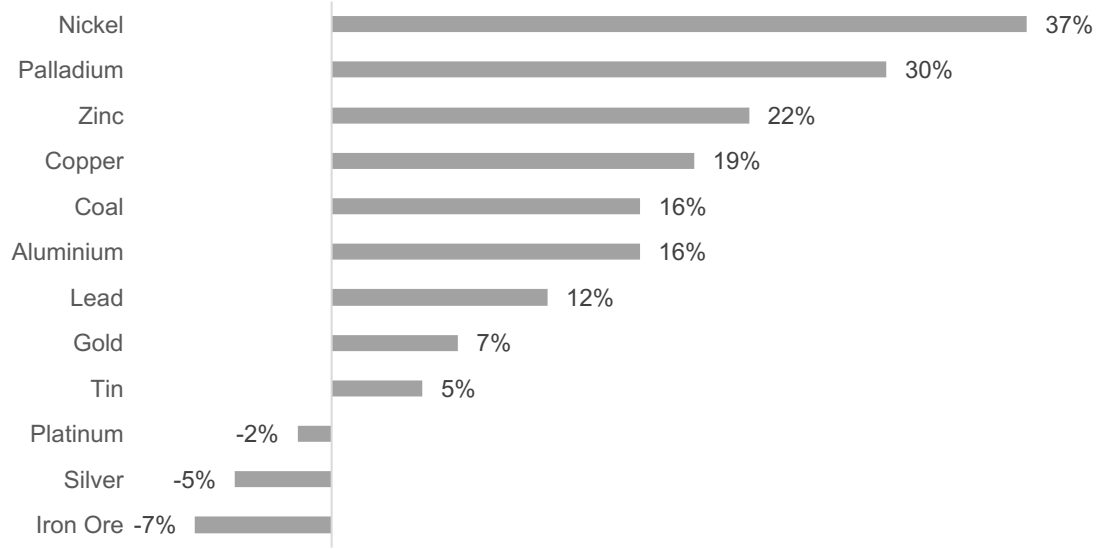
Source: EY analysis, company reports

Focus on portfolio optimisation remains key

… as well as achieving a balanced capital agenda

- Portfolio realignment reflecting changes in strategy and commodities outlook
- Critical and structured evaluation of asset competitiveness and fit with overall strategy
- Major mining companies also showing interest in 4G minerals – battery metals

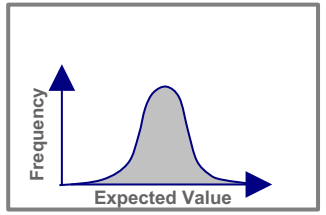
Commodity price changes, June 2018 YTD, year-on-year change

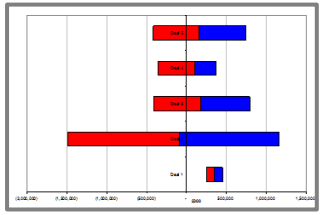


Source: S&P Capital IQ

Portfolio management requires well-designed, flexible tools

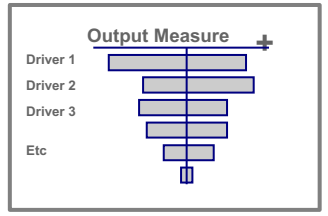
Stochastic approach

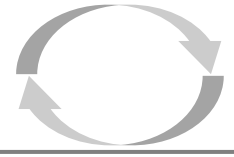


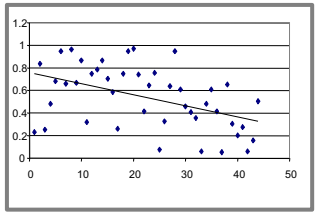


Simulation

Tornado analysis

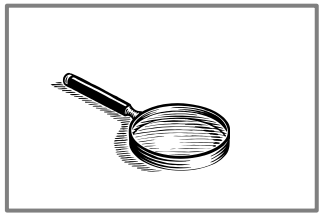


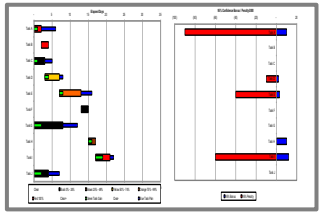




Correlation & regression

Due Diligence





Dynamic scheduling analysis

What will companies prioritize in 2018?

Our call to action is for mining and metals companies is to pick the right reinvestment strategies as they optimize their portfolios for growth and shareholder value creation

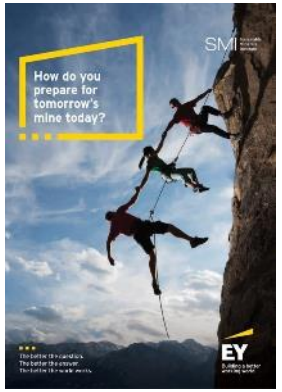
1. Balance capital agenda; dividends, debt, capex
2. Reinvestment for growth
3. Productivity enhancement
4. Future of demand and portfolio review

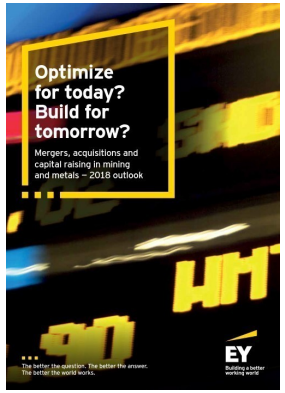
Q&A

Mining & Metals insights

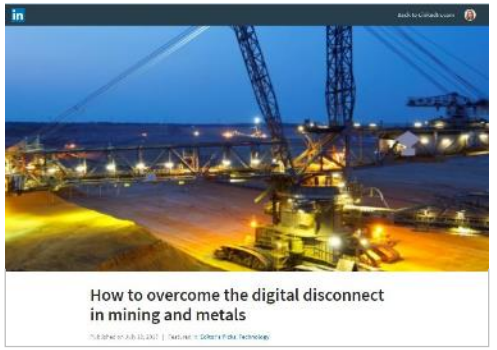
Video insights

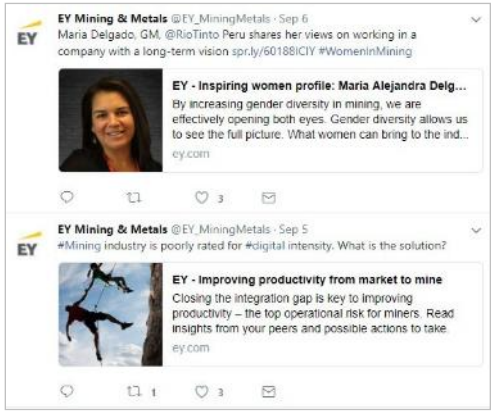
White papers





Blogs and Tweets





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EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

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How EY's Global Mining & Metals Network can help your business
With increasingly positive sentiment in the sector, miners are focused on restoring balance sheet strength and liquidity in preparation for growth. The sector's key opportunity is still productivity. Although many have made productivity improvements, the critical next wave of gains needs a strong focus on loss elimination, with digital being a key enabler.

EY has significant experience in assisting companies to evaluate and implement strategic initiatives, with deep sector knowledge to support you on finance initiatives, such as portfolio optimization and capital planning, and through to operational improvement programs, such as productivity and digital enablement.

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