

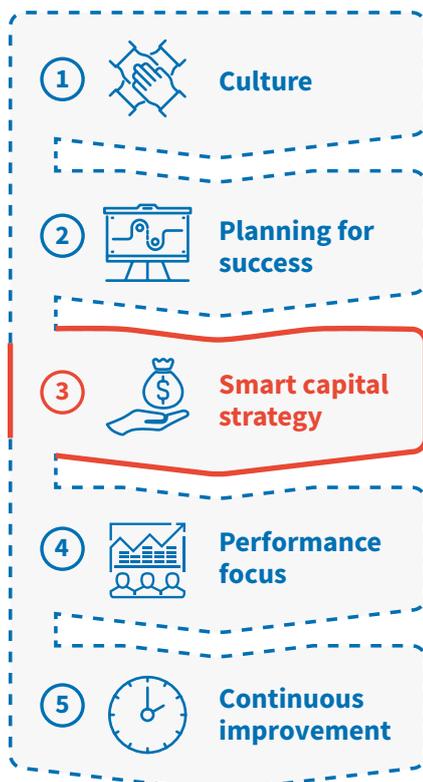


ARTICLE

# Precious mettle

## The value of high-grade mining CFOs – Part 3: Smart capital strategy

Our five-part blog series, *Precious mettle – The value of high-grade mining CFOs*, looks at the qualities proactive mining CFOs deploy to drive greater business returns. This series shares observations from more than 75 years' combined experience in senior mining finance roles, across multiple commodities, by Andrew Bantock, Steven Michael and Martin Nicholson of FTI Consulting's Australian Mining Advisory Practice.



Arguably the most valuable contribution a finance leader can make to any business is arranging a smart capital structure that:

- (i) delivers an outstanding return on equity when times are good; and
- (ii) has enough flex to protect all financial stakeholder interests when times are tough.

More easily said than done in the mining space, especially given the time required to progress from exploration to mine development and then production, in volatile commodity markets.

Leading mining CFOs develop bespoke capital solutions that respond to these challenges. In this third instalment of our *Precious mettle* series, we discuss some of the smart capital management strategies these finance leaders employ.

### 1. MANAGING COMMODITY PRICE VOLATILITY

Effective mining CFOs understand that commodity prices are cyclical, requiring strategies which allow their business to “bank” the benefits of peaks but also allow them to ride out the troughs. A well-executed risk management strategy will enhance the bankability of a mining project, ultimately providing a more robust capital structure for the business.

The two charts below demonstrate the potential to add value to a mining project by understanding and managing the relationships between:

- (i) commodity prices and currencies (i.e., revenue protection); and
- (ii) commodities as costs (i.e., cost protection).

Figure 1 shows the relationship between the metals and minerals price index and the Australian dollar (“A\$”). These exhibit a strong correlation (with a correlation coefficient of +0.81), which means the A\$ can provide a natural hedge against base metal price volatility.

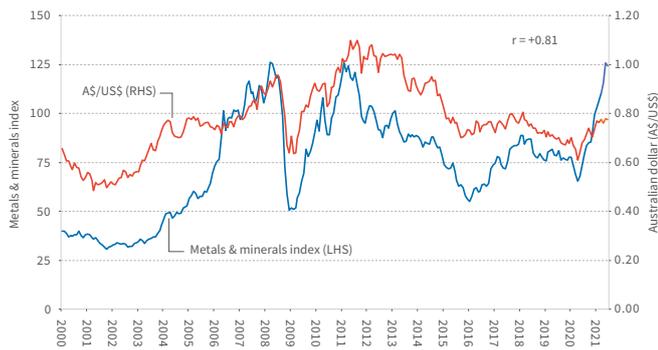


Figure 1 – Metals and minerals index vs Australian dollar, 2000–2020

CFOs can build this knowledge into their debt and hedging strategies, understanding that the A\$ can cushion falling base metal prices, but may also act as a headwind in times of rising commodity prices.

Another example lies in the relationship of gold to oil pricing. Figure 2 shows the gold to oil price ratio, which could be used to measure one of the major input costs for gold mining (diesel fuel) in terms of equivalent gold production value. The chart shows the ratio is currently above historic norms, following all-time highs in 2019.



Figure 2 – Gold to oil ratio, 2000–2020

With this knowledge, an astute gold mining CFO could lock in the cost of the businesses’ long-term energy requirements, through the commitment of a relatively low level of gold production. A simple application of this approach would be to execute gold forward sales at the same time as an equivalent value of oil forward purchases (as a proxy for the diesel price), thereby covering the risk of increase to the annual diesel cost, applying gold sales pricing gains.

## 2. THE “FRONT END” NATURE OF MINE CAPITAL DEVELOPMENT

A common area of difference between mining and industrial projects is the relationship between the level of up-front versus ongoing capital investment.

Industrial projects often benefit from a measured ramp-up of capital investment over time. For example, a trucking company may start with a small fleet of trucks and add new trucks as the business grows. In this case, the incremental cost of each vehicle will trend lower due to improved financing arrangements as the business matures and also due to the ability to spread fixed costs over a larger fleet.

Conversely, most mine developments require nearly all project capital to be invested up-front, in assembling the mining fleet, pre-stripping or underground development, and setting up the processing plant, tailings storage and ancillary infrastructure.

Ongoing, sustaining capital for a mine typically runs at around 5% to 7.5% per annum of the up-front capital costs. Therefore, the typical mining project requires its greatest level of financing before a single tonne, ounce or carat is produced – when the project is at its riskiest.

Consequently, mining projects can end up being underfunded, as the cost of equity for a pre-development,

pre-production and pre-profit asset can appear very high – raising that extra \$20 million of equity can seem too expensive.

### 3. MINING EQUITY RISK AND RETURN PROFILE

Mining is an estimation game. Ultimately, it is impossible to know exactly how much metal is in an orebody until it’s mined, processed and turned into its end product. Even then, conjecture may well remain about how much was left in the ground and how much was missed in the production process.

Everything prior to final production involves estimation based on: limited sampling (e.g. assaying of drill core), extrapolation (e.g. geological modelling that “joins the dots” between drill results) and interpretation (e.g. applying limited trial mining or metallurgical test results). Beyond the orebody, other “calls” are made on factors such as future input costs, statutory operating frameworks and environmental constraints.

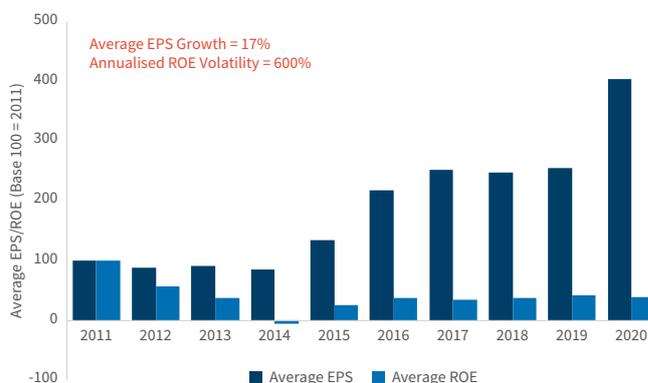
The process of completing a feasibility study before a decision to mine is made seeks to cost-effectively strike an acceptable balance of risk across these and other development factors, but the underlying risk remains.

Figure 3 shows earnings per share (EPS) and return on equity (ROE) over the past 10 years of four ASX 100 industrial companies from different sectors (Brambles, Ramsay Health Care, REA Group and Westpac Banking - the “Industrial Cohort”) and four major resources companies (BHP, Fortescue Metals, OZ Minerals and Northern Star Resources - the “Mining Cohort”) with a spread of underlying commodity exposures.

Mining companies typically demonstrate considerably higher volatility in EPS and ROE growth compared to industrial companies. Average ROE volatility for the four resources companies over 10 years is approximately 600 per cent – approximately 17 times higher than the industrial cohort.



#### Mining Cohort - 10-Year Average EPS & ROE



#### Industrial Cohort - 10-Year Average EPS & ROE

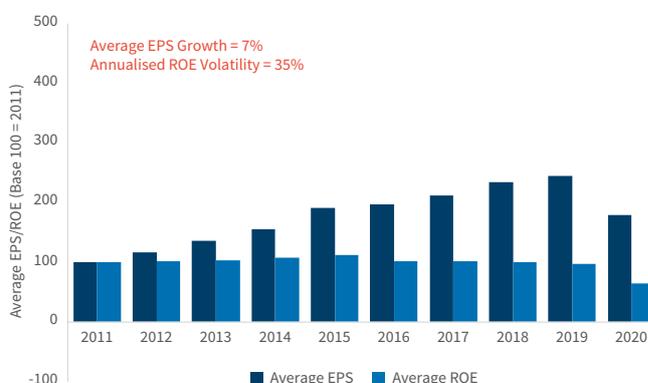


Figure 3 – 10-year EPS and ROE for selected ASX 100 industrial and resources companies  
Source: Capital IQ, FTI analysis

Typically, the maximum financial risk of a mining project occurs in the first two years of production – orebody reconciliations will have just commenced, metallurgical characteristics are being refined, costs are being optimised and the product is still being evaluated by customers. However, it is often during this period that a mining company carries its largest level of debt.

It is not surprising therefore that most mining company collapses or “near-death experiences” occur within the first 18 months of commencing mining. These events typically involve a series of deeply discounted capital raisings at progressively lower prices – does that extra \$20 million up-front seem expensive now?

So, understanding what is already “baked into” the Base Case and stress testing the financial model by considering various downside scenarios are key components of the mining CFO’s toolbox. Monte Carlo and other financial simulations are great tools for graphically expressing the potential range of outcomes and identifying possible

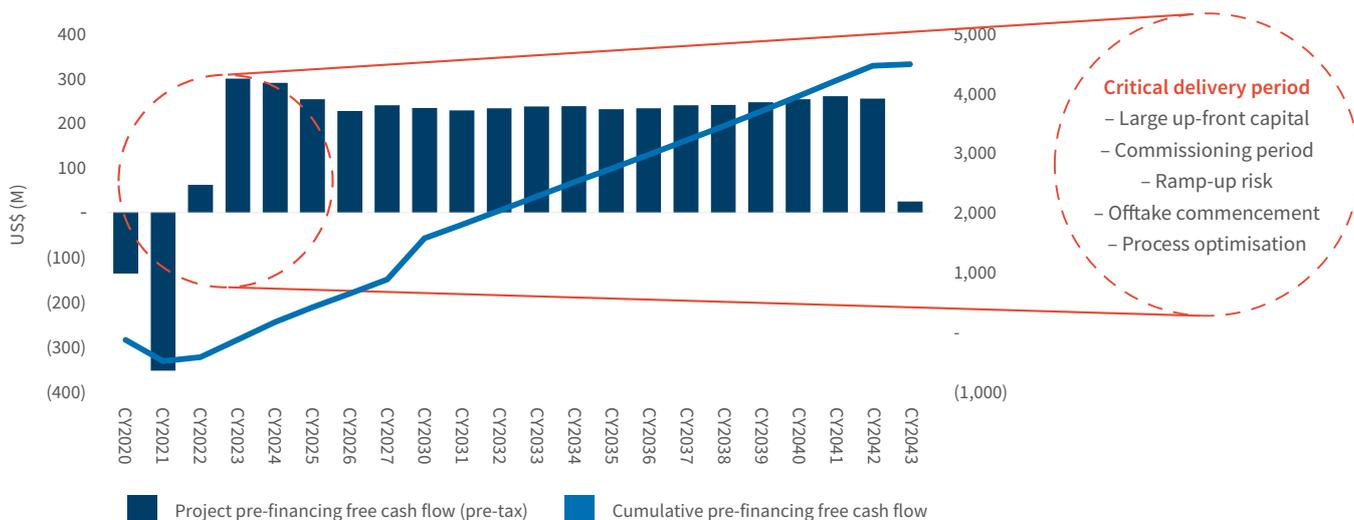


Figure 6 – Cash flow risk changes through the life of a typical mining project

triggers of financial distress.

It’s during times of potentially heightened financial risk that the CFO’s strategic financial leadership can make a significant difference. By delivering a funding strategy that accommodates unpredicted operational challenges and seeks to match revenue, costs and debt obligations, the CFO allows operating and technical teams to focus on safe, sustainable mining, secure in the knowledge that financial risks are being actively managed.

Mining companies are often led by technical people from various mining disciplines. Against this backdrop, and in their important capacity of leading the accounting and administrative functions, mining CFOs might be seen by these colleagues as “uncreative” or unable to “see the big picture”.

In our collective experience the right CFO can transform this perception. Delivering a winning capital strategy can add huge value as an “enabler” to exploration, development and a successful transition into production; ultimately contributing to the growth of the business.

### HOW FTI CONSULTING CAN HELP

At FTI Consulting we work alongside senior mining leaders during important times, including in preparation for capital raisings and other transformative events. We apply our experience, insights and networks to provide capability and “bandwidth”, with a clear appreciation of what drives success.

#### NEXT BLOG ARTICLE

The fourth article in our series on the key characteristics of effective mining CFOs will look at – “Performance focus”.



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