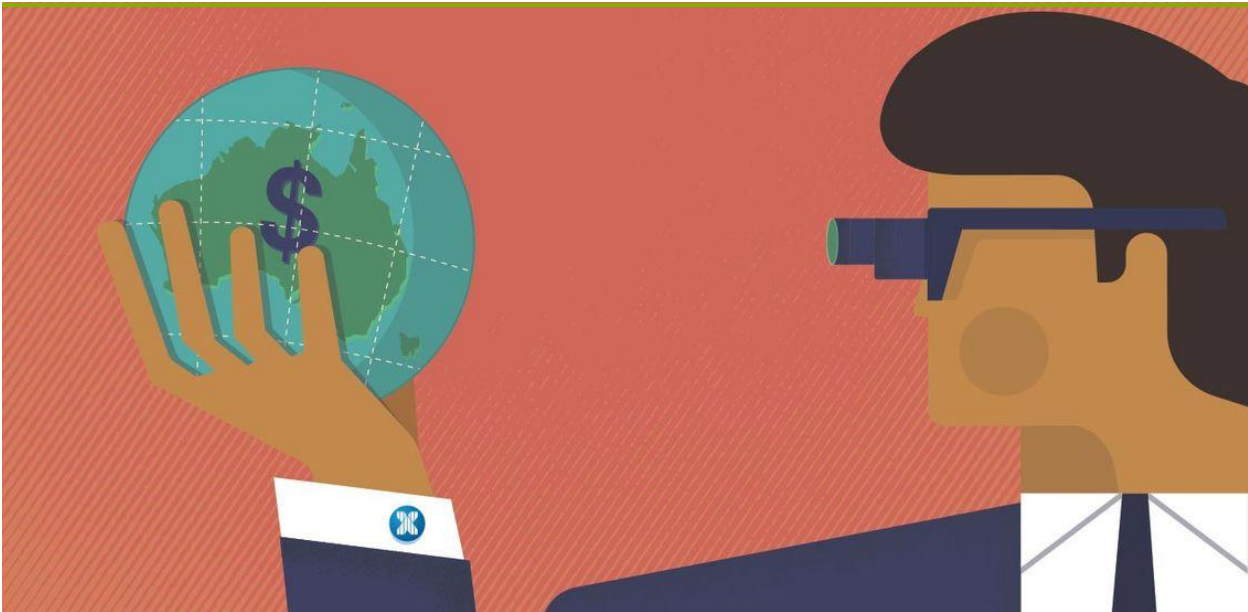


COVID-19 threatens feasibility study validity

The promise of hefty net present values and ostensibly attractive rates of return should guarantee project development unless, of course, investors don't believe the numbers.

John Robertson*



7 May 2020

A company should develop any project with a positive net present value and as many of them as it is lucky enough to source. As long as a project's internal rate of return exceeds the prevailing cost of capital, investors should be keen to provide funding.

That is the theory. In reality, mining projects are often stuck in an investment no man's land in which companies have defined a resource but are unable to start development, despite feasibility studies emphatically proclaiming strong investment returns.

What economists refer to as asymmetric information may offer a partial explanation for the investment logjam. Those on the board should have a clearer understanding of the commercial opportunities than outside investors. Until company managers can persuade investors of the merits of what they are trying to do, development will be stalled.

Information asymmetry is a potentially surmountable problem. More intractably, the valuations contained in feasibility studies almost always duck the questions of greatest importance to investors.

Implicitly, mining feasibility studies address what a project is worth in the event execution is completed flawlessly. Investors, on the other hand, know that the perfection implied in feasibility studies is rarely achieved. They are grappling with how to value less skilled managers, tougher market conditions and more protracted starts than feasibility studies are prepared to admit.

The difference between how company directors portray project values and how

investors view the value of likely outcomes is a measure of execution scepticism.

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Persistent failure to meet expectations bedevils the industry. For sector newcomers, it ensures early disappointment and a reticence to support other projects. For the more experienced, every failure cements judgements about the unworthiness of the sector. The scepticism gap is more than simply the bid and offer spread in markets.

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The coronavirus pandemic raises new doubts about the feasibility of industry development projects. Nothing about the pandemic is likely to improve the outlook. Future growth in demand, commodity prices and capital availability are being damaged.

Sensibly, one would expect existing feasibility studies to be revisited. New studies should include at least some basic acknowledgement of the risks posed by the pandemic, even if a thoroughgoing analysis is eschewed.

On 21 April 2020, well into the COVID-19 economic collapse and with the threat of economic depression hovering, AVZ Minerals released a summary of a feasibility study for its proposed Manono lithium-tin mine in the Democratic Republic of Congo.

In line with convention, the project was described as "economically robust" with "outstanding project metrics", "strong financial metrics" and "a highly positive outlook".

A search over 163 pages of the disclosure document lodged with ASX throws up no references to 'coronavirus' and just two mentions of 'COVID-19' and 'pandemic'. Both citations are contained in brief footnotes 44 pages into the document where directors advise that no account has been taken of the COVID-19 pandemic in producing the proposed project timeline.

The reported "very favourable" base case economic results suggest that Manono would generate after tax cash flows of US\$4,324 million over 20 years of production for an upfront investment of US\$545 million. The estimated cash flows translate into a positive net present value of US\$616 million for the company's 60% share of the project, some six times its current market value. The assessed internal rate of return is 33%.

The document formally recognises that the study is based on assumptions about the availability of funding. Nonetheless, consistent with the approaches of its industry peers, AVZ presents no evidence about its access to capital or its cost, other than to say that discussions are occurring.

How the evolving macro picture might be influencing the cost and availability of funding goes unaddressed. If the changing circumstances have been taken into account, directors are keeping the nature of the analysis to themselves.

The report contains one stark sign that little effort has been put into getting close to a realistic capital cost estimate. The 10% funding cost assumption underpinning the April 2020 valuation is the same as the assumption the company made in October 2018 when it completed a Manono scoping study.

During 2018, global economic growth risks appeared to diminish, market optimism was high and the cost of high risk debt was historically low. Today's circumstances are the polar opposite. Evidently, macroeconomic conditions do not affect funding outcomes in the AVZ world.

In February 2020, Altura Mining announced details of a A\$305 million funding package for its Pilgangoora lithium project in Western Australia. If anything, expectations about the economic consequences of the coronavirus pandemic have since worsened.

The base rate on Altura's debt component was 15% but the total cost of the package included fees,

grants of capital and options over new shares. All up, Altura's marginal cost of capital on facilities with a life of three years came to around 18%. Presumably, the market cost of equity should be set at a premium of several percentage points to this.

Altura offers real life evidence of funding costs. The size of the gap between the wishful thinking often displayed in feasibility studies and what is needed to get a deal goes some way to explaining why even the most robust, outstanding and strong feasibility study outcomes may fail to give birth to viable projects.

The difference between the AVZ assumed funding cost and the funding cost inferred from the Altura experience could easily strip US\$300 million from any valuation of AVZ.

AVZ directors might be able to do better than Altura. Superior networking, sounder experience, Chinese strategic interest in African production and possibly propitious timing, in the event of a near term economic rebound, might make a difference.

We will have to wait and see if AVZ directors can validate their assumptions about the level and variability of funding costs. All of which rather contradicts the characterisation of the study as being 'definitive'.

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