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Mergers and Acquisitions in Mining: a balanced approach

Successful mining based mergers and acquisitions require a focused and balanced technical appraisal and valuation process.

Whether it is via a merge or outright purchase of another company, there are important questions to consider when a mining company decides to venture down the path of acquisition-led growth. Is the price to be paid fair and reasonable? Is the company and their underlying assets corporately and technically safe? This paper explores answers to these questions and highlights key considerations to ensure a successful accretive transaction for all parties involved.

The consolidation of mining companies or assets is generally termed *mergers and acquisitions*. This is undertaken via differing types of financial transaction structures, including mergers, acquisitions, consolidations, tender offers, asset purchases and management buyouts. The terms *merger* and *acquisition* are often used interchangeably, but in fact have very different meanings.

A merger of companies is the consolidation of two companies, usually of similar size, sometimes termed a 'merger of equals', to form a new company. Both companies surrender their shares and new shares are issued in the new company.

The terms merger and acquisition are often used interchangeably, but in fact have very different meanings.

In an acquisition, one company (the acquirer) takes over another company (the vendor) or its assets via cash and/or equity payment making the acquirer the new owner. This process may occur by mutual agreement of the two companies or alternatively under hostile conditions where the acquirer is typically far more aggressive. When the vendor company is acquired, the company ceases to exist and the acquirer integrates it into its existing business. The acquirer's shares still trade on the relevant exchange whilst the vendor's shares are delisted. If only certain assets are acquired from the vendor company – known as asset

stripping – the vendor company can potentially carry on in its own right, provided it has other assets within its portfolio, else it becomes a shell company.

A merger is generally a friendly transaction and the management of the two companies are integrated into the new entity. In contrast, an acquisition scenario can be hostile. In these circumstances, the acquirer's management team tend to continue and manage the amalgamated entity, sometimes utilising a select number of the vendor's original management team identified as contributors to the new business during the appraisal process.

Fundamental to a successful *merger or acquisition* transaction are the approval by the owners of the two companies involved, approval from the shareholders, and a smooth transition of worker representatives. Shareholders need to be satisfied that the acquirer is paying a fair price for the company/assets and that it is a corporately and technically safe transaction.

Benefits of mergers and acquisitions

Companies undertake *merger or acquisition* activities for many reasons, including the folllowing:

- **Synergy.** The increased value of the combined companies will be greater than the sum of the value of the two individual companies.
- **Diversification.** Acquisition lowers risk. Instead of relying on their existing commodities or products, acquirers expand their portfolios thus lowering the risk associated with market cycles.
- **Economy of scale.** Collectively, two companies may be able to reduce the cost of operations and thereby maximise profitability.
- **Faster Growth.** It may be quicker to grow a company through *mergers or acquisitions* as opposed to relying on organic growth.
- **Survival.** Sometimes, companies opt for *mergers or acquisitions* to survive, especially during financial or economic downturns.

Technical appraisal for mining projects

A focused and balanced independent review of an acquirer and vendor's company or assets is a crucial step in the *merger or acquisition* process. Each mining project has its own issues and risks that require an experienced team which are material. During the appraisal process, independent reviewers are provided access to a large volume of information relating to the target assets and/or the company. It is essential to remain focused on the key technical drivers supporting the transaction and to identify material areas to avoid time-wasting on non-material issues.

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Mining risks produce many areas of potential exposure including the orebody itself, secure access to the orebody, and selection of the correct mining method, equipment, and design parameters. Is there sufficient access to ore sources and is there sufficient flexibility to access other sources if required?

Several key areas of mining operations require thorough understanding prior to the transaction, including confidence in the Mineral Resource, Ore Reserve, mine plan, and schedule; ability of the process plant to extract the metal; expected economic value of the metal at each stage under the constraints of operating costs, capital expenditure, commodity and exchange fluctuations; and the presence of a market willing and able to take delivery of the product.

Consideration also needs to be given to the environmental, social, and corporate governance practices of a potential investment, which may have a material impact on the performance of the investment. The integration of these factors is used to enhance traditional financial analysis by identifying potential risks and opportunities beyond technical valuations.

Often neglected factors are whether the team managing the company or asset is suitable, the technical staff have the experience and knowledge to operate the project, and the senior management can finance, sustain, and grow the company.

Beyond the technical mining appraisal, a corporate (legal and financial) appraisal must consider whether the project owner has the appropriate rights and approvals to explore, mine, process, sell and receive the revenues. Key considerations include:

- Does the vendor have the legal right to exploit/ sell the assets? Are they the legal owners of all the vendors assets?
- Are there any financial encumbrances and/or legal liabilities?
- Are there the correct and valid permits, licenses and approvals (Environmental Impact Statement, Environmental Management Plan, etc.) to explore and mine?
- Do tenements, titles and approvals allow current operations?
- Can the project appropriately dispose of waste (rock, tailings, and water)?
- Are there any gaps and constraints on future mining or expansion plans?
- Are there any encumbrances and impacts on operating and capital budgets?
- Are there any identified social, environment, corporate and approval risks?
- What are the liability and closure estimates? How will these impact the purchase price and business case?

Once complete, this review process should provide a defensible and transparent conclusion that not only addresses the weaknesses and threats affecting the companies, but also the strengths and opportunities in order to provide a balanced overview of the technical merits of the asset or company.

Valuation methodologies

Now that any technical, financial and legal risks associated with the project have been established and understood, what is the vendor's asset worth?

The acquirer and the vendor will provide a valuation of the asset and these valuations can be vastly different. The vendor will generally value itself at the highest possible price, while the acquirer will attempt to value the vendor at the lowest possible price. Somewhere between the two is the adopted value achieved at the end of the negotiation

process.

To provide some guidance for the preparation of unbiased valuations, a set of guiding principles for competence, materiality and transparency have been developed and are known as

The *Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets*, 2015 edition (VALMIN Code). The VALMIN Code is a companion to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition (JORC Code) and 'provides guidance on matters that may be subject to Australian regulations' (p3).

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Adherence to the VALMIN Code is required for all public reporting circumstances, but also provides a set of guiding principles towards good practice for non-public or internal assessments.

Best practice for valuations is to consider several different methods for comparing the results and select a preferred value within a valuation range. This range should highlight the potential uncertainty in the data and interaction of the various assumptions inherent in the valuation.

The VALMIN Code outlines three generally accepted valuation methodologies:

- The **market approach** based primarily on the principle of substitution and is also called the comparison transactions approach. The mineral asset being valued is compared with the transaction value of similar mineral assets transacted in an open market. Methods include comparable transactions, metal transaction ratio and option or farm-in agreement terms analysis.
- The **income approach** based on the principle of anticipation of economic benefits and includes all methods based on the income or cash flow generation potential of the mineral asset. Valuation methods that follow this approach include discounted cash flow modelling, Monte Carlo analysis, option pricing and probabilistic methods.
- The **cost approach** based on the principle of contribution to value. Methods include the appraised value method and multiples of exploration expenditure, where expenditures are analysed for their contribution to the exploration tenure of the mineral asset.

The application of the various valuation approaches and methods vary depending on the stage of the project being valued; exploration, predevelopment, development or production, and hence the amount and quality of the information available on the mineral potential of the assets.

A guide to the suitability of each valuation approach for mineral assets at each project stage is outlined in the table below.

Application of valuation approaches				
Valuation approach	Exploration projects	Pre-development projects	Development projects	Production projects
Market	Yes	Yes	Yes	Yes
Income	No	In some cases	Yes	Yes
Cost	Yes	In some cases	No	No

Source: VALMIN Code, Section 8.3 (p29).

The market approach is acceptable for valuation of a production project.

An income approach, such as a discontinued cash flow model, where future cash flow are presented in today's money terms, is commonly adopted for assessing the value of a tenure containing a deposit where, an Ore Reserve has been reported following an appropriate level of technical studies and to accepted technical guidelines such as the JORC Code. This method is generally not suitable for the public reporting of deposits that are less advanced, i.e. where there is no declared Ore Reserve and related supporting technical studies.

The use of cost approaches (i.e. considering suitable multiples of exploration expenditure) is best suited to exploration properties where there are no stated Mineral Resources.

Market value is defined in the VALMIN Code in respect to a mineral asset as: 'the amount of money (or the cash equivalent) for which the mineral asset should change hands for between a willing buyer and a willing seller in an arm's length transaction after appropriate marketing wherein the parties each acted knowledgeably, prudently and without compulsion' (p38).

Technical value is defined as: 'an assessment of a mineral asset's future net economic benefit under a set of assumptions deemed most appropriate by a Practitioner, excluding any premium or discount to account for market considerations' (p39).

Choosing the right method

Valuation methods are generally subsets of valuation approaches. Some methods can be considered primary methods for valuation while others are secondary methods or rules-of-thumb that are considered suitable only to benchmark valuations completed using primary methods.

The various recognised valuation methods are designed to provide an estimate of the mineral asset or project value in each category of development. In some instances, a particular mineral asset or project may comprise assets, which logically fall under more than one predefined development categories.

The application of a valuation method is dependent on the relative maturity of assessment and the amount of suitable data supporting the project.

In preparing a project valuation, consideration of the three main approaches (income, market, and cost) and the available methodologies under each approach is required.

In the case when only a Mineral Resource has been defined and its economic viability remains to be established (i.e. where there is no Ore Reserve and appropriate technical study) typically the rule-of-thumb approach is utilised. This means allocating a dollar value, based on recent transaction history, to each Mineral Resource tonne in the ground. Where appropriate, discounts are applied to the estimated contained mineralisation to reflect the uncertainty in the estimates.

The application of a valuation method is dependent on the relative maturity of assessment and the amount of suitable data supporting the project.

Exploration targets may be valued similarly to defined Mineral Resources but typically include a significant discount that reflects the lower levels of confidence or lack of supporting data underpinning such estimates.

Where only exploration targets exist, it is typical to consider the value of a project on an area basis using similar transaction data involving projects without defined Mineral Resources. Further valuation support may be provided through the use of rating methods which rely on cost estimates, i.e. the Geoscience Rating for Valuation of Exploration Properties (Kilburn (1990)).

Finding the balance

A focused and balanced approach to technical mining appraisal and mineral asset valuation is crucial to ensuring a successful transaction that is supported by shareholders and interested affected parties. A thorough understanding of the motivations for the *merger or acquisiton,* and a thorough assessment of material areas of the company or asset both support an overview that demonstrates both the risks and opportunities.

Following best practice guidelines for conducting these activities and engaging the appropriate methodologies for the project stage of the asset in question ensures that a fair price can be established for a corporately and technically safe transaction that adds value for the acquiring entity.

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Alex is a mining engineer with over 30 years' experience in growing businesses across Africa and Australasia from start-ups and corporations to multinationals. His strategy and leadership experience spans feasibility studies, mineral asset audits and evaluations, independent technical reports, and techno-economic studies. Alex's industry experience spans open pit and underground operations, technical consulting and management within the resources sector, covering precious metals, base metals and bulk commodities.