

# Mining

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## 1. Introduction

Recent years have been challenging times for mining companies seeking to raise finance. Lower commodity prices have put equity values under pressure and consequently some of the traditional sources of funding for the mining sector are constrained, forcing mining companies to consider a broad range of alternative funding methods and combinations of different sources to satisfy their funding needs.

Traditional bank debt and capital market bond issues are still vitally important and will remain so. However, farm-ins, strategic partnerships and joint ventures, royalty financing, streaming and offtake financing have become more common as sponsors find it difficult to raise traditional debt on favourable terms and are either unable or unwilling to raise equity at prices they see as substantially dilutive to their existing shareholders. Junior miners and explorers have been particularly hard hit due to their traditionally heavy reliance on equity markets to undertake small capital raisings to fund their drilling and development programmes. Majors are also feeling the pressure as evidenced by the spate of full or partial divestments and even withdrawals from projects in an attempt to reduce costs and improve shareholder returns.

In this chapter, we provide a summary of most of these various forms of financing, both the traditional and the less common. However, mining finance is a broad and sometimes arcane area of law and practice, and it is therefore beyond the scope of this chapter to provide an exhaustive analysis of all types of mining finance. So what follows is necessarily descriptive; it does not address all the possible means of raising capital or the many complexities and nuances which are a feature of all the different forms. Many of the funding methods adopted in the mining sector are not unique to the sector. However, there are some unique or noteworthy features to the approaches employed in financing the mining sector and we will touch on some of these in this chapter.

## 2. Financing and the mining project life cycle

Some of the financing techniques discussed in this chapter can be, and routinely are, adopted across the various stages in the life of a mining project, while others tend to be restricted to only parts of the cycle. This is represented diagrammatically in Figure 1 on the following page.

**Figure 1: Financing and the mining project life cycle**

Project stage	Exploration	Preliminary studies	BFS	Construction	Production	
Financing alternatives	Asset sales (eg, farm-ins, joint ventures and disposal of non-core assets)					
	IPO					
	Secondary equity					
				Convertible bond		
				Revenue stream financing		
				Project financing		
				ECA financing		
					High Yield Bond	
						Corporate debt/bond

**3. Mergers and acquisitions as a source of financing**

The sale of an interest in a mining project is a common mechanism for raising funds and reducing the costs and risks to the sponsors of development. The exploration phase of a mining project can be expensive and is necessarily speculative, but it is only the beginning. The costs of completing a drilling programme, undertaking a preliminary economic assessment and then a bankable feasibility study (BFS), plus converting exploration permits into mining leases or concessions and obtaining other necessary approvals, all require substantial capital, to say nothing of the costs of achieving full development and production. Consequently, many junior explorers decide to sell down an interest in their projects to form strategic alliances or joint ventures in order to unlock the necessary funding. Indeed, in times of low commodity prices this may be the only feasible option for the juniors. The farm-in agreement entered into by Rio Tinto with Antipa Minerals Ltd is an example of a junior miner selling down an interest in a project. Under that agreement, entered into in 2015, Rio Tinto has the right to earn up to a 75% interest in Antipa Mineral Ltd’s Citadel gold project in Western Australia by funding A\$60 million in exploration expenditure over 10½ years.

Selling down interests in projects is not limited to junior miners. Many mid-tier miners and even the majors are divesting interests in their mining assets to reduce costs, spread risk and raise funding. Larger mining companies will permit other miners to farm-in to non-core assets as a means of maintaining an exposure to exploration while minimising the high risks inherent in funding exploration. In

2011 Chinalco Yunnan Copper Resources Ltd entered into farm-in agreements to acquire up to a 60% interest in three Rio Tinto copper exploration projects in Chile by incurring up to US\$71 million in exploration expenditure. For larger projects that have reached the decision to mine and are facing the significant costs associated with the development phase, mining companies of all sizes may look to sell down an interest to one or more other miners or mining investors to share the costs and associated risks of development. In 2012 Roy Hill Pty Ltd sold interests in its multi-billion dollar iron ore mine and port and rail infrastructure project which led to three investors, namely China Steel Corporation, Marubeni Corporation and POSCO, holding a 30% interest between them. Also in 2012 Rio Tinto completed the sale to Chalco (a listed subsidiary of the Aluminium Corporation of China (Chinalco)) of a 47% interest in the Rio Tinto subsidiary that holds the interest in the undeveloped Simandou iron ore project in the Republic of Guinea, Africa.

### 3.1 Investors

The range of participants providing funding through the acquisition of a full or partial interest in a mining project includes:

- major mining companies, to take advantage of the exploration work undertaken by juniors before the real value uplift;
- major and mid-tier companies seeking to diversify their geographical exposure or to move beyond a single commodity or a limited number of commodities;
- financial investors such as private equity funds, hedge funds, sovereign funds and new corporates backed by such funds, typically by acquiring minority stakes without operatorship;
- commodity traders, often by acquiring a minority interest as a means of obtaining insight into a project, to secure supply or – increasingly – to move their businesses ‘upstream’;
- state-owned enterprises (SOEs) which are mining companies looking for security of supply for the benefit of the state; and
- other state-owned or privately owned enterprises (such as steel producers and power generators) looking to secure long-term offtake arrangements.

Generally, the typical investor will require either some level of de-risking such as completion of drilling programmes or a BFS to establish a resource base, and possibly the current owners having reached a decision to develop and mine, or they may require a high level of control over the project, often disproportionate to the investment.

### 3.2 Structures

A divestment of an interest in the project can be structured in various ways, including, but by no means limited to:

- an outright sale of all of the assets comprising the project;
- the sale of all of the shares in the project company;
- a placement of shares in the parent company (particularly if it is listed);
- the sale of some of the shares in the project company and the formation of

an incorporated joint venture (typically the approach in Indonesia and many other jurisdictions);

- the sale of a partial undivided interest in the assets and the creation of an unincorporated joint venture (often, but not exclusively, the approach in Australia and Africa); or
- the sale of a partial interest in the project and the formation of a partnership (typically in North America).

### 3.3 Farm-ins

The sale of a partial interest is often structured as a 'farm-in'. These are in most, if not all, jurisdictions almost entirely creatures of contract and so there is infinite scope for variation, but there are some basic principles which are common to many farm-ins. It is also important to note that the common practice – to the extent that there is one – can vary considerably from one jurisdiction to another. A conventional farm-in will typically incorporate at least some of the following elements:

- the acquirer agrees to fund a fixed amount;
- the funding is often in stages in accordance with an approved programme and budget;
- the funding is over an agreed term;
- the funds are applied towards project exploration and/or development costs to advance the project to an agreed stage;
- often the investor assumes responsibility for the work, effectively taking on the operatorship;
- in exchange for funding, the investor earns an agreed percentage interest in the project (or in the share in the project company);
- sometimes, the investor is obliged to make milestone payments as well as bearing the cost of the work required to 'earn in';
- usually, upon completion of at least the initial stage of funding (but sometimes over several stages), the investor will have a right to exercise an option to have the earned interest vest, or to withdraw and walk away from the project;
- in the case of a farm-in at the development phase, the cost for earning the interest is generally higher than at the pure exploration stage, reflecting the fact that some de-risking has occurred through the exploration and preliminary economic assessment; and
- staging the investment usually results in the cost to the acquirer being higher than an outright purchase up front.

In a farm-in arrangement, the acquirer's funds are invested directly into the project as opposed to being paid to the owner for their own use.

As noted above, farm-in arrangements can be structured so that the party earning the interest has flexibility to withdraw from the arrangement, generally at certain agreed stages. In 2013, Vale International Holdings exercised its right to withdraw from a farm-in agreement with Goldminex Resources Ltd relating to exploration tenements in Papua New Guinea. Under the farm-in agreement relating to the

Citadel gold project referred to above, Rio Tinto has the option to withdraw following an initial 18-month programme requiring it to sole fund A\$3 million of exploration expenditure.

### 3.4 Advantages

Some of the advantages of a farm-in are as follows:

- From an existing owner's perspective, a farm-in will enable it to minimise costs through the earn-in period.
- The owner may also have flexibility to dilute to a minimal interest or to exchange its residual interest for a royalty interest.
- Farm-in agreements avoid the need to deal with volatile equity markets or incur debt on unfavourable terms.
- Farm-in agreements can be a particularly attractive option for a company which considers that the market is undervaluing its shares. Entry into a farm-in agreement on favourable terms can be seen as external validation of the project and have the effect of re-rating the company.
- For a major selling down an interest in a project, a farm-in can send the message to the market that the company is streamlining and re-focusing its business.
- Given that a farm-in is a contractual arrangement, it is structured through direct negotiations between the parties, so the parties are free to tailor arrangements to suit the specific assets and their specific circumstances.
- Unlike debt funding there is no requirement to maintain minimum cash flows or credit ratings.
- A farm-in can be less dilutive than an equity raising.
- A farm-in can allow companies to take advantage of each other's strengths. For example, a junior miner can benefit from the knowledge base, cash reserves and specialised staff and technology of larger, more established mining companies, whereas larger mining companies can benefit from the junior's ability to take on higher levels of risk and their greater knowledge of local exploration assets.
- Larger strategic partners can often assist with obtaining bank debt for the development of the project. One of the key terms of the 50:50 joint venture announced in 2006 between Anshan Iron and Steel Group Corporation (Ansteel), one of China's largest steel producers, and Gindalbie Metals Ltd, a junior Australian mining company, was the provision of assistance by Ansteel to Gindalbie to obtain both debt and equity funding for the development of their Karara iron ore project.
- Subject to the laws of the jurisdiction where the project is located, it may be possible to structure the farm-in arrangement so that the costs funded by the acquirer are 100% tax deductible.

### 3.5 Issues to consider

At the time of negotiating the farm-in agreement, it is appropriate and prudent for the parties to agree the terms of the associated joint venture or partnership

agreement. Issues to be considered by the parties negotiating those agreements include:

- when the interest will vest (eg, at commencement, progressively against agreed milestones or at the end of the earn-in period);
- how long the earn-in period should be (ie, the acquirer may seek a longer period to contribute its funding and the owner may seek a shorter period);
- whether the farm-in is to all minerals which may be discovered in or produced from the relevant tenements, or limited to a single mineral (both being quite common);
- the control over spending during the earn-in phase – ideally this will be in accordance with an agreed programme and budget, but the acquirer may seek a level of flexibility if it is sole funding;
- whether it is to be an incorporated or unincorporated joint venture;
- valuation issues – given the early stage of the project, these can be complex, presenting challenges in agreeing the amount required to be paid and the percentage interest to be earned;
- the decision-making regime and reserved matters requiring approval of both parties (or of parties holding a relatively high percentage interest in the project);
- deadlock breaking mechanisms, which may range from quite complex ‘Russian Roulette’ clauses, forced trade sale or auctions, put and call options, expert determinations or mediation, to the relevant decision simply not being passed;
- transfer and pre-emption rights;
- dilution and whether there is a right to elect to dilute or whether it is a consequence of failing to meet a cash call;
- dispute resolution processes (ie, arbitration versus litigation);
- exit mechanisms; and
- the sharing of risk, responsibility and liability.

Special care needs to be taken where the interests of the parties may not be aligned. The objectives of a junior explorer may (and often do) differ from those of a major mining company, with the risk that the junior may be outspent and diluted out of the project.

Almost without exception, an acquirer will consider it essential to conduct technical, financial, environmental and legal due diligence reviews. These can be complex, time-consuming and expensive as the acquirer will need to be comfortable with all aspects of the project. Often government approval will be required for the transfer of an interest in the underlying tenements. In addition, as the parties are forming a partnership or an incorporated or unincorporated joint venture, they need carefully to consider the financial and technical status, the cultural fit and reputation of the other party.

The flexibility and potential complexity of farm-in arrangements, together with the inherent requirement that the parties work together and achieve certain synergies, gives rise to a potentially higher execution risk than would be the case for

a traditional capital raising. Consideration also needs to be given to the possible impact on future funding, including by building in mechanisms to permit participants to grant security interests over their respective project interests in favour of future financiers – or collateral agents and security trustees – and agreeing intercreditor principles to the extent that the participants have granted each other cross-security.

*This is an extract from the chapter 'Mining' by Barry Irwin and Peter Wilkes in Energy and Resources Financing: A Practical Handbook, published by Globe Law and Business.*

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