McKinsey & Company

Metals & Mining Practice

Alternative financing in mining

Many mining companies struggle to secure financing for capital-expansion programs. Miners must pull the full range of financial levers to see a potential of some $800 billion over the next ten years.

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February 2021

Alternative financing has grown significantly over the past decade and today represents more than $8 trillion in total assets under management.[1] Mining, however, remains underpenetrated, representing less than 1 percent of total global alternative financing.[2]

Leading miners use the full range of financial levers to manage capital and returns through the cycle, including both traditional and alternative financing, within a sustainable leverage ratio.[3] By diversifying the financial portfolio, miners can better maintain long-term-investment plans, ensure stronger balance sheets, and likely see more consistent returns and valuations.

We estimate that three of the highest-potential alternative financing options could represent approximately $800 billion in financing over the next ten years for the mining industry.[4]

The current alternative financing market, and future potential

Institutional investors, looking for higher returns, have increased their allocations to alternative classes over the past decade. Globally, some $8 trillion in assets under management are now dedicated to alternative financing.[5]

Of this total, mining is a mere fraction, with alternative financing comprising $10 billion to $15 billion in annual mine financing, or less than 1 percent of the global alternative financing total. This suggests potential for mining to raise alternative financing allocations.

The success of specialized alternative investment firms suggests that there are significant benefits for these investors: for example, 13 percent annual growth in earnings before interest, taxes, depreciation, and amortization (EBITDA) for the major streamers since 2014.[6] There is also significant potential benefit for mining companies: using publicly available data, we estimate that the total alternative financing potential in mining is as much as $800 billion over the next ten years, from three prioritized structures.

The range of alternative financing options

The range of equity, debt, and hybrid financing options available to mines is broad (Exhibit 1).

We highlight three alternative financing options that may be of particular interest, especially if not structured as fixed commitments (in which case they are more likely to accrue as debt, increasing leverage). Nondebt and debt-like structures with a variable payback can reduce the stress on the balance sheet during downturns, when commodity prices fall but traditional debt obligations remain constant. In particular, we highlight the following options:

— *Streaming and net smelter returns (NSRs)*—the sale of all or part of the future production of a mine at a discounted market price, and the sale of a right to a percentage of future revenues of a mine for an up-front payment, respectively. Streaming deals are typically larger (more than $100 million) and focused on secondary production, while NSRs are generally smaller (less than $50 million) and commodity agnostic. This alternative funding option presents many advantages over traditional debt. It leaves more leeway for sellers, as they are not committed to cash but to a percentage of future sales or production. Moreover, these deals are typically structured so that the lender does not require any restriction on the use of cash obtained. Due

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1 P&I, Top Global Asset Managers' AUM, 2017.
2 Silver Wheaton, 2016; PitchBook, 2019.
3 Hybrid and debt-like financing can accrue on the balance sheet as debt, especially if structured as a fixed commitment.
4 Including streaming and net smelter returns, net profits interest, asset monetization from tolling and/or sales/joint ventures, and equipment-rental agreements.
5 P&I, Top Global Asset Managers' AUM, 2017.
6 McKinsey Corporate Performance Analytics, EBITDA values for Franco Nevada, Wheaton Precious Metals (formerly Silver Wheaton), and Royal Gold, 2014–18.

Exhibit 1

A broad range of traditional and alternative financing options are available to miners.

Examples of equity, debt, and hybrid financing models

Equity

- Issue equity

Debt and other financing

- Corporate
  - Convertibles
  - Bank loans
  - Development finance institutions
  - Corporate bonds
  - Senior facilities
  - Selling accounts receivable
  - VAT monetization
  - Strategic-partner financing
- Project/asset-linked
  - Sale and lease back
  - Fully divest/joint venture (JV)
  - Streaming and net smelter returns
  - Net profits interest
  - Asset monetization: tolling or JVs
- Operations
  - Rental agreements
  - Working-capital optimization
  - Opex[1] optimization
  - New revenue sources

Other spending

- Capex[2] optimization
- Reduction of dividends

[1]Operating expenditure.
[2]Capital expenditure.

diligence is generally quicker (two to six weeks) than in project financing, and risks are shared with the lender.

— *Net profits interest (NPI)*—the purchase of a fixed percentage of mine profits in return for an up-front payment, typically after capital costs have been paid. Although most commonly used in oil and gas (where oilfield operators pay a share of profits to exploration rights owners), this is beginning to be seen in mining. For example, a leading streaming and royalty company has recently acquired multiple NPI royalties in several countries, including Canada, Chile, and Turkey. The advantages of this option are similar to streaming and NSR.

— *Asset monetization: tolling or joint ventures (JVs)*—the sale of a portion of the value of an existing or new asset in exchange for a revenue stream (toll or dividend). Infrastructure assets show the most promise, with several examples in mining, especially in Australia's Pilbara region. In the Pilbara, investment funds have notably taken stakes in rail-freight operations, among other assets. Deals can also be constructed as an outsourcing arrangement, but these are not explored in this article. The main advantage of asset monetization is that it allows companies to obtain funds without increasing their debt ratios (net debt, EBITDA), thereby minimizing impact on market capitalization or debt covenants.

These three financing options account for approximately 15 percent of total financing for the mining industry, but this share is likely to rise as COVID-19-related risk increases corporate bond spreads, and as many mining companies (especially juniors) seek alternative financing.[7]

[7]Silver Wheaton, 2016.

Potential from three priority alternative financing structures

Taking an outside-in view, we estimate a potential in total alternative financing of up to $800 billion over the next ten years, drawing on ten-year anticipated revenues and spending, as well as potential tolls. This is equivalent to approximately 40 percent of the industry's estimated capital-investment needs over the next ten years (Exhibit 2).

Streaming/NSRs

The 12 by-products with the greatest potential for streaming could yield up to $1.4 trillion in secondary revenues over the next ten years.[8] Accounting for feasibility considerations[9] and discounting,[10] this implies a ten-year potential global by-product stream value of up to $380 billion, of which gold (approximately $175 billion), copper (approximately $90 billion), and silver (approximately $26 billion) form the lion's share.

Net profits interest

We estimate industry-wide EBITDA of approximately $7 trillion over the next ten years—approximately $5 trillion when factoring in discounting.[11] Typical NPI agreements will not exceed around 10 percent of total profits: this suggests a discounted ten-year potential mining NPI value of up to $340 billion,[12] after accounting for streaming potential (that is, deduplicated value) and accounting for the same set of commodities considered to have streaming potential.

Asset monetization via tolling or JV/sale of noncore assets

Ports, rail, and power are the most obvious assets for potential tolling in mining. Considering only those privately held assets that might qualify for nondebt financing,[13] we estimate up to $55 billion in discounted ten-year toll values from ports and rail.[14] We estimate a further $15 billion in financing potential for alternative energy projects (primarily solar power),[15] for a total of some $70 billion. This

Exhibit 2

Three alternative finance options could represent approximately $800 billion in financing for the mining industry over the next ten years.

Total 10-year discounted value by type, $ billion

Source: McKinsey Mining Model; McKinsey analysis

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[8] Including chromium, cobalt (refined), copper (refined), gold, lead, molybdenum, palladium, silver, uranium, vanadium, zinc, and zirconium. Based on McKinsey mining model projections of production, pricing, and revenues.
[9] Approximately 20 percent of potential streaming value considered highly feasible.
[10] Discounts vary by commodity but are typically 7 to 10 percent.
[11] Discounted at 8 percent per annum.
[12] Streaming potential has been removed to avoid duplication of potential value. Asset monetization has not been removed, which may affect revenue and cost impacts.
[13] That is, assets with multiple users, which might be considered "nonspecific."
[14] Discounted ten-year values, at 5 percent discount. Assumes addressable volumes of approximately 500 megatonnes iron ore, approximately 200 megatonnes seaborne coal, approximately two megatonnes copper, and approximately 700 kilotonnes zinc; and tolls of approximately $10 per tonne for iron, approximately $10 per tonne for seaborne coal, approximately $50 per tonne for copper, and approximately $30 per tonne for zinc.
[15] Assumes approximately 1,000 mines that could most credibly transition to alternative energy, and through-life project value of some $20 million per mine. Discounted ten-year value.

Alternative financing could contribute to a more diverse and stable investor base, improved valuations, stronger balance sheets, and up to $800 billion in new financing for the mining industry over the next ten years.

could represent a considerable opportunity for infrastructure investors looking for lower-risk assets in the sector.

Falling prices, as well as turbulence in the debt and public-equity markets, are endangering capital-expansion programs—for majors as well as junior miners. Alternative financing, especially if not structured as fixed commitments, has the potential to help many players maintain their investment plans during this period, thereby avoiding the boom-and-bust cycle typically seen in the industry. Using the full range of financing options, including variable-payment alternative financing, could contribute to a more diverse and stable investor base, improved valuations, stronger balance sheets, and up to $800 billion in new financing over the next ten years.

Capturing the opportunity will require work. Companies should make efforts to identify the "right" long-term investors and counterparties for them, with the right risk profile. The structuring and management of such agreements is also complex, involving sophisticated forecasting (such as predictive pricing and determining future production of a mine for streaming agreements). However, for companies that are able to take action to shore up their financing and maintain through-cycle investments, there are likely to be considerable gains.

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The authors wish to thank Madicke Embrechts, Liesbet Grégoir, Yassine Khalil, Lukasz Kowalik, Estella Langheim, Megan Lee, Verena Leinberger, and Camila Nucci for their contributions to this article.

Designed by McKinsey Global Publishing