S&P Global
Ratings

Industry Top Trends 2022

Metals and Mining

A Strong Year Puts The Industry On The Cusp Of Big Changes

This report does not constitute a rating action

January 25, 2022

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What's changed?

Best credit outlook in years. Metals producers with strong balance sheets and ample cash are contemplating new investments as they trim portfolios to move away from coal, fossil fuels, and other less strategic assets.

China is decelerating. We forecast GDP growth for China of 4.9% in 2022 and 2023. China has implemented policies to improve financial discipline and channel credit from leveraged sectors such as real estate to favored high tech and renewables.

Interest rates are finally going up. That could weigh on commodity prices in two ways: slowing real demand and making interest-bearing assets more appealing to investors. Typically, precious metals prices are sensitive to interest rates.

What are the key assumptions for 2022?

Profits will remain strong. Even if we assume softer prices, profitability holds up with limited new supply for base metals and increasing demand from early-stage investments in electrification and renewable energy.

Inflation pressures margins and returns. Steel mills and other downstream metals producers are dealing with sharply elevated input costs for raw materials, labor constraints, and higher logistics costs.

Supply and financial discipline are here to stay. Miners appear cautious on output and prioritize brownfields and organic growth over riskier options. Capital allocation could favor shareholder remuneration and prompt disinvestments from the most exposed segments such as thermal coal mining.

What are the key risks around the baseline?

Disappointing global growth. Commodity prices could drop sharply amid aggressive inflation fighting or more pandemic-induced supply chain constraints.

China decelerating faster than anticipated. This would be from a tighter grip on the economy from regulators and consumer demand that doesn't pick up.

Financial policies turn more aggressive. Asset valuations and/or capital expenditure (capex) could become aggressive and expose capital to write-downs in an inevitable downturn.

Ratings trends and outlook

Global Metals and Mining

Chart 1

Ratings distribution

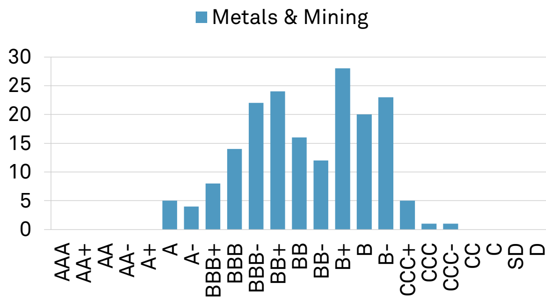


Chart 2

Ratings distribution by region

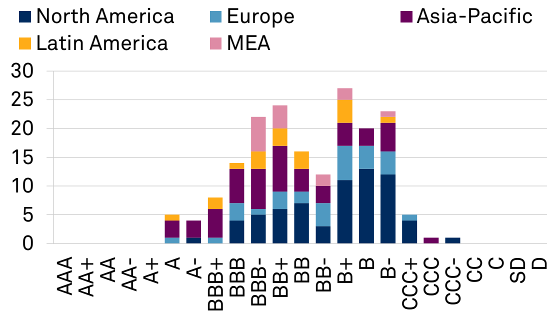


Chart 3

Ratings outlooks

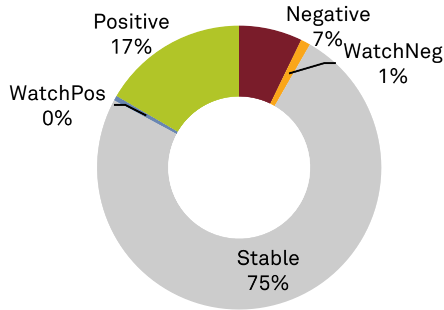


Chart 4

Ratings outlooks by region

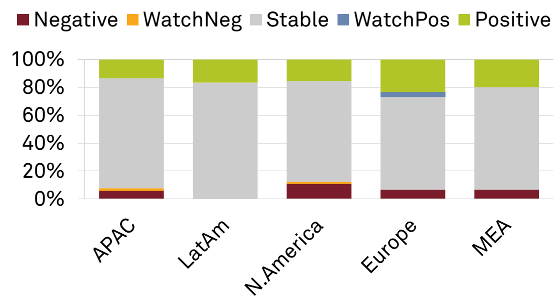


Chart 5

Ratings outlook net bias

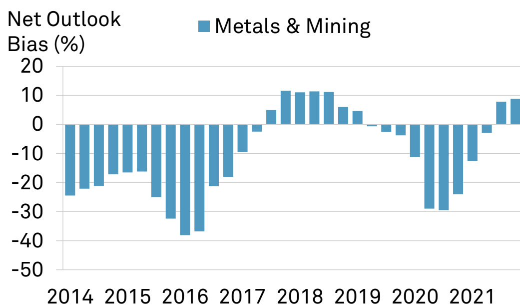
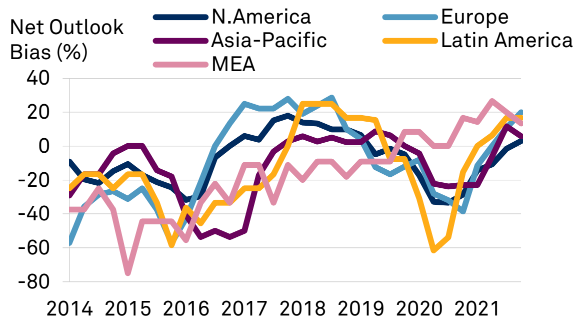


Chart 6

Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured at quarter end.

Metals and Mining

Ratings trends and outlook

A boom in metals prices and producer cash flows in 2021 is coinciding with five years of financial discipline that has companies undertaking strategic shifts, contemplating large capital uses, and potentially boosting credit quality. Environmental, social, and governance (ESG) considerations are prominent for capital deployment, which has been restrained through often difficult market conditions since 2014. Now, leverage is at a cyclical low, equity values have risen to decade highs, and companies have built cash balances. We expect increasing scrutiny of marginal capital for the industry's long-standing environmental and social exposures, particularly related to the energy transition and human health. The industry's historical cash flow volatility has made large segments unattractive to financial sponsors amid associated governance considerations around financial policies, debt usage, and shareholder remuneration.

In sharp contrast to many industrial sectors, global metals and mining issuers that we rate have lower aggregate debt today than in 2016. EBITDA is up about 50% because of a spike in metal prices, so debt to EBITDA is down to about 1.9x in 2021 from 2.6x in 2016. Our net outlook bias has turned positive for the first time since 2018, and improved credit quality in many cases hinges on financial policies that defend a buffer for inherent volatility. Capex increased about 30% since 2020. We assume low growth in 2022-2024 for maintenance capital as large projects roll off, but it indicates capex will likely remain elevated even if we assume a moderate decline in prices and revenues.

The metals industry's good financial capacity and recent restrained corporate development could give way to lumpy capital deployment for shareholder returns or new investments. Profitable cohort metals credits face the perpetual grind of high capital intensity or declining ore grades, so cyclically strong cash flows could be redeployed amid rising valuations for mergers and acquisitions (M&A) or high costs for capital projects. Recent restraint is partly a function of previous top-of-cycle M&A, which used large debt-funded premiums that turned into downgrades and asset write-downs when it turned down in 2014 (and again in 2019). With nearly a decade of balance sheet repair, the rating distribution in metals and mining is balanced across the spectrum, with clusters of well-capitalized issuers in the 'B', 'BB', and 'BBB' categories (not to mention a handful of 'A' category behemoths). This could offer opportunity for efficiency-improving or sustainability-enhancing combinations, diversifying acquisitions, or greenfield investments. By comparison, other industries such as capital goods, auto suppliers, or building materials have a large cluster of highly leveraged, sponsor-owned issuers rated 'B' or 'B-'. Many increased debt recently for distributions, acquisitions, or both.

Main assumptions about 2022 and beyond

1. Profits remain robust, even if metal prices ease

A buoyant pricing environment in 2021 left the 2020 market troughs a distant memory. The lack of new meaningful supply and limitations in ramping up volumes, should support prices in 2022. Surging demand and supply constraints led to commodities such as iron ore, copper, and coal setting highs, albeit with extraordinary volatility. Attractive funding costs, ESG mandates, and the global energy transition will likely spur further M&A.

2. China's decarbonization drive will move markets for years to come

Government-mandated production cuts at Chinese steel mills and moves to curb industrial output markedly shifted commodity market demand and prices in 2021. We believe the Chinese government is unlikely to loosen the control on steel production in 2022. Moreover, given China's goal of peak carbon emission by 2030, its crude steel production is likely to gradually fall.

3. With no end in sight, COVID-19 could still affect prices or even output

The mining sector's rapid rebound and rising demand for most mining commodities, has created robust conditions for miners and metals producers. These should persist into 2022, especially if labor and output remain tight. However, as economies continue to emerge from the COVID-19 pandemic with a view to adapting to a new norm, the potential for prolonged economic weakness remains a key source of uncertainty. This could undermine growth, weaken market sentiment, and increase commodity price volatility.

Supply constraints and limited capacity increases support prices. Market conditions in 2022 should continue to yield healthy profits and cash flows for many metals and mining companies, supporting shareholder returns, growth capex, and acquisitions. This comes after metal prices largely remained buoyant in 2021, bolstered by strong demand from the economic recovery as the mining sector benefitted from a strong rebound from height of the COVID-19 pandemic in 2020. So far, even despite record prices and profits, miners and metals producers have maintained financial discipline and restraint in significant capacity additions. The lack of the new projects and the limitations on producers to ramp up volumes to meet demand should further support prices in 2022.

Supply constraints continue, even despite our expectation that exploration and growth capex will likely pick up in 2022. Producers remain cautious on volumes, prioritizing brownfield projects and organic growth over major greenfield development. Near-term prices for commodities such as coking coal, thermal coal, and iron ore have all been boosted by market supply disruptions and trade tensions between China and Australia, resulting in a market-shift of global supply.

We expect healthy margins to continue and remain above long-term historical averages, even despite increasing cost-inflationary pressures. At the same time, margin expansion and volumes likely will be capped by inflationary cost pressures and higher logistics costs. Whereas the ability of metals producers to fully pass-on such costs is likely to be limited. After curtailing capex during the height of the pandemic during 2020 price troughs, capex budgets have since been restored, growth rising to 40% in 2021. Still, metals and mining companies have maintained discipline in their use of debt. Even though debt is generally lower than five years ago, it increased in 2021 to fund development spending and exploration activity that picked up in 2021. In turn, we also expect capex to increase further in 2022, resulting in higher leverage for the sector.

Still, the metals and mining industry's leverage remains lower than in previous cycles because of spending restraint since 2015 and a renewed focus on returns over growth.

Such restraint, particularly in mining, has resulted in a tight market that could be exacerbated in a broad demand upswing, which was evident in 2021. This could occur in 2022 if metals demand further strengthens beyond what we anticipate. Amid rising interest rates and cost pressures, this will feed into higher investment return hurdles. In addition, ESG considerations are prompting changes in business mix as global miners such as BHP Group Ltd., Rio Tinto Group, Vale S.A., and Glencore PLC continue to look to reposition their portfolios for a lower carbon future.

Lastly, the global energy transition targeting a net-zero economy will be metals-intensive. As the world pushes toward renewables and electrification, metals producers and mining companies will need to supply substantial raw materials required to facilitate the energy transition. We expect commodities such as copper, nickel, aluminum, and steel to attract rising demand as the world pivots from traditional energy sources. The capital-intensive nature of the mining sector and its long lead times on project execution provide further challenges for supply to keep up with rapid demand. This likely will heighten price volatility at times.

Decarbonization in China will move global markets. Given that China accounts for over half of global demand for raw materials, a prolonged weakness in demand or market expectations would weaken key support for prices. China's steel production very likely peaked in 2020 at 1.05 billion tons. Due to the government's "dual control"—on both energy consumption intensity and total energy consumption—China's crude steel production turned from 12% growth in the first half of 2021 to a double-digit percentage decline in the second half. It dropped 2.6% in the first 11 months of the year. Meanwhile, U.S. integrated steel producers are strategically overhauling by rationalizing old capacity, investing in modern assets, reducing emissions, and even boosting long-term profits. Steel imports to the U.S. are at a generational low, and output from China could ease to support economic and environmental targets. But decades of global overcapacity looms over an industry in transition.

Even before the pandemic, China was indicating a policy shift to domestic consumption and lower urban pollution that probably should have curtailed steel and aluminum output growth. Yet, Chinese steel capacity hit an all-time high in 2020, even after accounting for the outright demolition of 150 million tons of inefficient capacity over 2016-2018. This was replaced with 67 million tons in 2019 and 57 million tons in 2020 of state-of-the-art capacity. For context, the U.S. produced about 30 million tons of steel from blast furnaces in 2019, so China has opened and closed 5x the American steel industry's annual blast furnace output in just the last five years. We believe the Chinese government is unlikely to loosen the control on steel production in 2022 (see "Steely Resolve: Why Green Mandates May Finally Stop China's Steel Expansion", published Aug. 11, 2021). Moreover, given China's goal of peak carbon emission by 2030, China's crude steel production is likely to gradually fall. The world's largest steel company, China Baowu Steel Group Corp. Ltd., targets peak carbon emission by 2023. China's steel industry accounts for about 15% of the country's carbon emission.

The liquidity pressure of some property developers in China has cast concern on property development and therefore steel demand in 2022. Although this will create near-term difficulties, we believe the government aims to maintain a healthy property sector given its importance to China's economy. In addition, the State Council of the Chinese government has emphasized the importance of stabilizing economic growth and will speed up major infrastructure projects to support demand.

China's development of electric arc furnaces (EAF) will also affect crude steel production and demand for iron ore. The output from EAFs contributed to 9.2% of China's steel output in 2020. The target is 20% by 2025. If executed, which is not easy, it means an additional roughly 100 metric tons of steel coming out from EAFs instead of blast furnaces. The competitive positioning of coal-consuming basic oxygen furnace (BOF) steel production in North America and Western Europe has been degrading for several

decades. The sheer size of blast furnaces constructed on China's coasts in the last 20-30 years overwhelms their 50- to 100-year-old competitors elsewhere. Meanwhile, infrastructure investments in places such as Australia, Brazil, and Canada entrench bulk-commodity exports to Asia for processing into steel and aluminum at state-of-the-art mills and smelters.

China has committed to peak carbon emission by 2030. Its coal consumption has been about 4 billion tons annually in the past couple of years. We believe this will trend down at least before 2025. Moreover, China has been encouraging increased domestic coal supply to reduce reliance on imports. China imported about 300 metric tons of coal yearly. Given more countries have announced their peak carbon and carbon neutrality targets, it will be difficult for them to entirely replace that volume. Therefore, we have a more bearish view on coal prices in the longer run.

On the contrary, as China continues to push the adoption of electric vehicles, major battery manufacturers in China including Contemporary Amperex Technology Co. Ltd. have major plans in expanding battery capacity. This will support long-term demand for battery metals such as copper. Yet we see a response from supply side, and there are copper projects coming. We assume copper prices will likely stay strong.

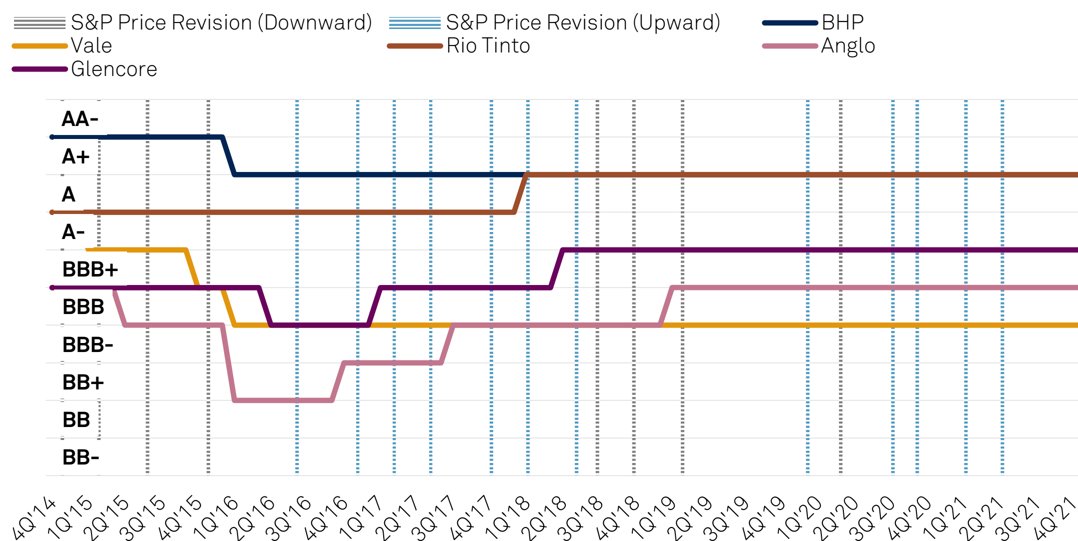
COVID-19 adds another risk to a volatile sector. Like most sectors, the mining industry is adapting to a new norm amid the COVID-19 pandemic. Its rapid rebound and rising demand for most mining commodities has created robust conditions for miners and metals producers. We expect these conditions to persist into 2022. However, as economies emerge from the pandemic and adapt to a new norm, the rise of the omicron variant threatens business prospects, with the potential for prolonged economic weakness remaining a key source of uncertainty. Further virus flare-ups will undermine growth, dampen market sentiment, and increase commodity price volatility. In addition, cost-inflationary pressures are being further exacerbated by project delays and lower output. Issues with ramping up output, reopening borders, a skills shortage, and supply chain delays are all day-to-day issues that now form part of the mining sector's operating environment.

Credit metrics and financial policy

The prudent financial policies many companies adopted in response to the last major downturn (2014-2016) were unchanged in 2021, including limits on debt, leverage, and shareholder distributions. Most large and midsize companies entered the pandemic with very healthy balance sheets, limited capex commitments, and flexible dividend policies. With elevated prices across the board and abnormal cash flows, they need not have tested these policies. Many companies found themselves with much lower debt (or were even debt free), allocating more cash to shareholders. Unlike previous years, it wasn't only the fortune of the big miners, but also smaller, less diversified miners and downstream companies. Based on our price deck, we expect no material changes in 2022 (see chart 7). Despite the abnormal prices and excess cash flows, the appetite for acquisitions or greenfield investments remained scarce. But some companies used their strength to accelerate their green journey by divesting less environment assets (coal or oil). The most significant example was BHP, which announced the demerger and spin-off of its petroleum assets, as well as some of its metallurgical coal assets. Other decisions included investing in sustainable energy sources or converting old technologies into new ones (such as the use of direct reduced iron replacing BOF).

Chart 7

Ratings Evolution Of Five Big Miners



Source: S&P Global Ratings.

Key risks or opportunities around the baseline

1. Disappointing global growth

We expect robust U.S. GDP growth of 3.9% and Europe growth of 4.4%. China will decelerate amid its own hurdles. Still, the globe's major economies are adopting corrective measures such as a potential quantitative tightening along with interest rate hikes. The impact could be more drastic, after years of loose monetary policies and soaring asset prices.

2. China decelerating faster than anticipated

Our latest forecast is 4.9% for 2022 and 2023. China has been implementing measures to address domestic risks since mid-2020 in a decisive manner and during a global pandemic, so that speaks to how important this agenda is for Beijing. These and future policies will keep shaping China's economy as it shifts from a real estate/industrial export driven growth model to a more consumer, domestic driven model. Also, China's target to be carbon-neutral by 2060 and its recent steel capacity cut at more polluting mills will likely affect near-term base metals demand.

3. Corporate governance turning more aggressive

Asset valuations and/or capex could become aggressive, putting capital at risk in the event of a downturn.

Global economic growth could be disappointing. After a strong recovery in 2021, both U.S. and Europe are fighting to keep inflation under control. In addition, the labor market in the U.S. is struggling to match workers with jobs. The omicron and delta COVID-19 variants are widespread, making daily cases hit records well above previous waves. Moreover, global trade still suffers from port congestion. The November 2021 Containership Port Congestion Index was 36.2%, compared with an average of 31% for 2019. Port congestion and global trade pick-up are responsible for soaring transport tariffs. As of December 2021, transporting goods from Shanghai to the U.S. West Coast was almost 80% more expensive than in 2020, and 100% if the destination was Europe.

These risks will interplay while we expect the U.S. economy to expand robustly at 3.9% and Europe at 4.4%, while China decelerates amid its own hurdles. But vigorous growth can't be taken for granted and especially when the globe's major economies adopt corrective measures such as a potential quantitative tightening along with interest rates hikes. The impact of such measures could be more drastic after years of loose monetary policies and soaring asset prices.

China decelerates faster than expected. Our latest GDP growth forecast is 4.9% for 2022 and 2023. China has been implementing measures to address domestic risks since mid-2020 in a decisive manner and during a global pandemic, so that speaks of how important this agenda is for Beijing. On one hand, the government is trying to tackle high corporate debt, which stands at 160% of GDP compared to the global average of 100%. This is a long-standing risk for which the government seeks to channel credit from troubled sectors such as real estate and homebuilding to more favored ones such as high tech and renewables. Also, there is less support available to local and regional governments that used to derive up to 25% of their fiscal revenues from the sale of land. Now that the real estate sector is unable to buy land at past rates, the supply of money will shrink and so will these entities' capacity to support/lend to state-owned entities.

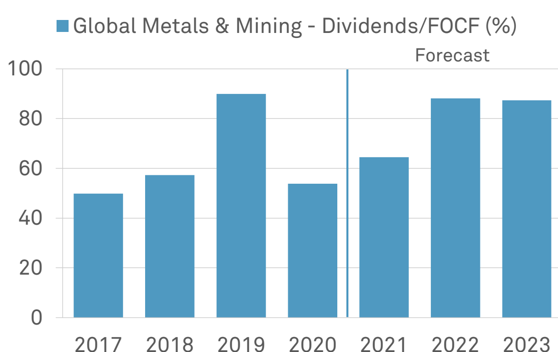
On the other hand, Beijing is implementing a set of policies under the banner of "common prosperity" to cope with social tensions developing due to diminished social mobility, wealth gaps, unaffordable home prices, and the perception that a small group of entities dominate social media. Consequently, regulators have blocked IPO listings, fined big internet companies for anticompetitive activities, and regulated overtime work. It also may introduce tax changes that would favor lower income sectors and increase the tax burden on wealthier sectors (see "China Balances Policy Risk With A Need For Reform", published Oct. 12, 2021).

These and future policies will keep shaping China's economy as it shifts from a real estate/industrial export driven growth model to a more consumer, domestic driven model. Also, China's target to be carbon-neutral by 2060 and its cut of steel capacity of more polluting mills will likely affect base metals demand.

Corporate governance is turning more aggressive. We expect miners to keep a conservative approach toward investments and growth, but also increase dividends (see chart 8). However, capital projects and acquisitions are notoriously lumpy in this capital-intensive sector. Balance sheets and cash flows strengthened significantly in 2021 so that asset valuations look aggressive, both because of the overall high price environment. Moreover, cash retention may end up being unattractive for miners amid rising interest rates. Shareholders may push for higher dividends to look for investment alternatives. In that context, M&A activity could focus on smaller tickets, greenfields, and metals with fundamentals favored by decarbonization trends, such as copper (see chart 9).

Chart 8

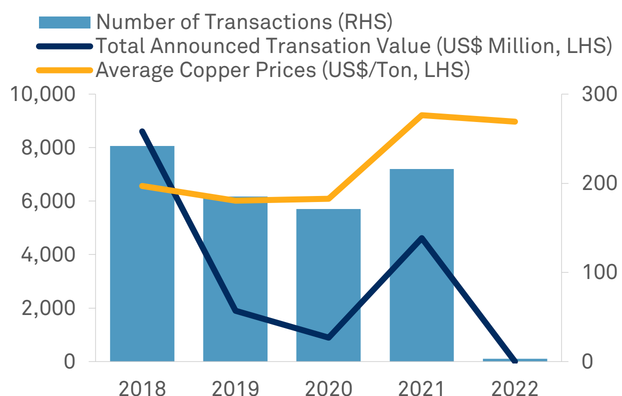
Dividends As % Of FOCF



FOCF—Free operating cash flow. Source: S&P Global Ratings.

Chart 9

M&A Activity: Copper Properties Deals



Source: S&P Global Market Intelligence.

Industry forecasts

Global metals and mining

Chart 10

Revenue Growth (local currency)

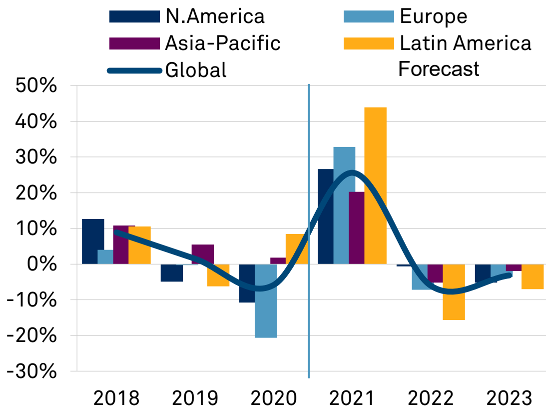


Chart 11

Capex Growth

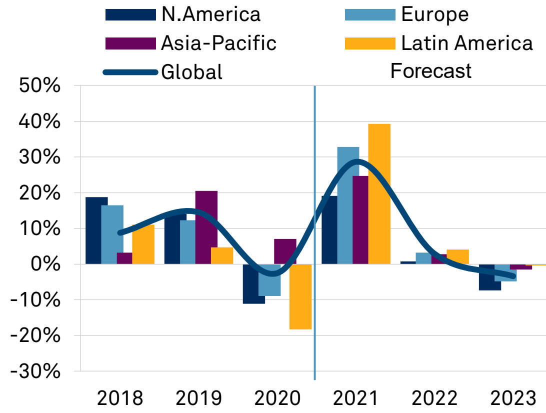


Chart 12

Debt / EBITDA (median, adjusted)

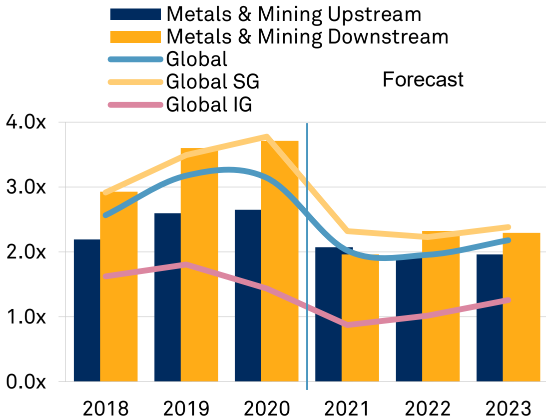
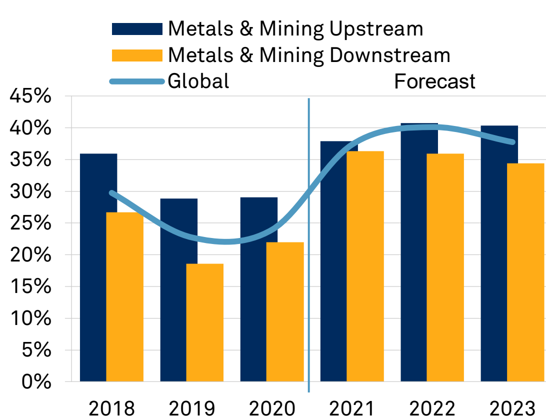


Chart 13

FFO / Debt (median, adjusted)



Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.

Cash, debt, and returns

Global metals and mining

Chart 14

Cash Flow And Primary Uses

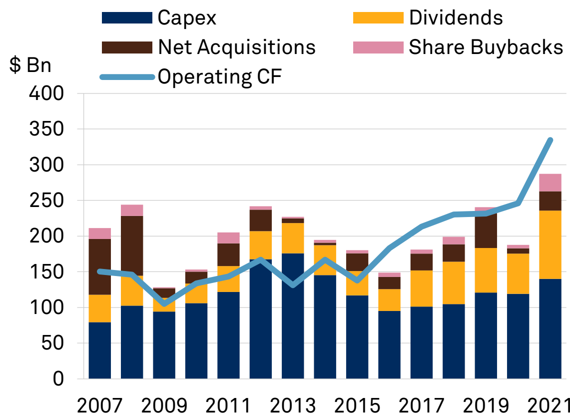


Chart 15

Return On Capital Employed

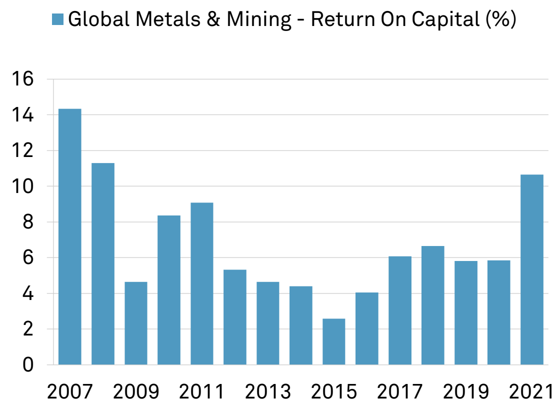


Chart 16

Fixed- Versus Variable-Rate Exposure

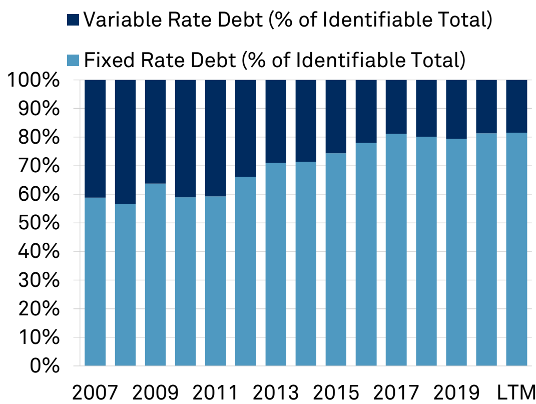


Chart 17

Long-Term Debt Term Structure

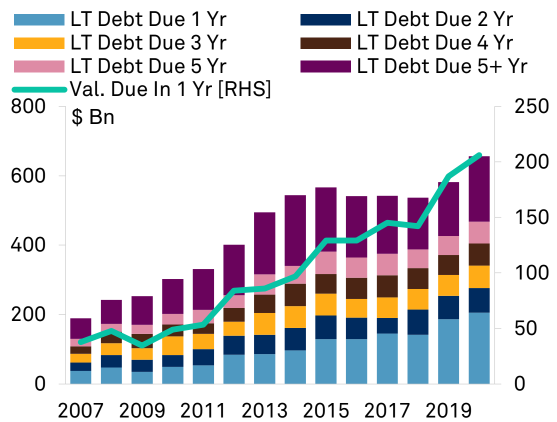


Chart 18

Cash And Equivalents / Total Assets

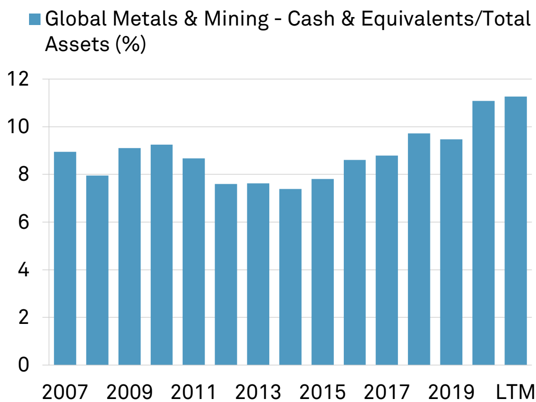
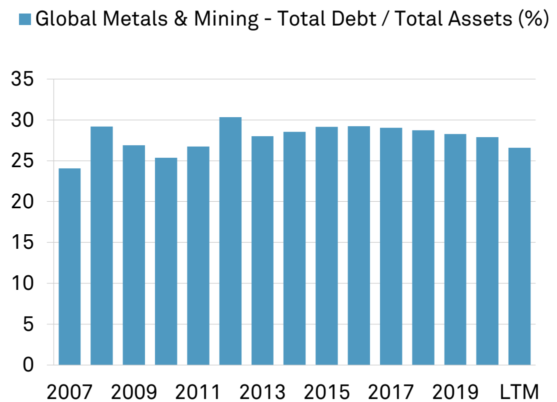


Chart 19

Total Debt / Total Assets



Source: S&P Global Market Intelligence, S&P Global Ratings calculations. Most recent (2021) figures use the last 12 months' data.

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