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Rising copper prices and decarbonization trends may help improve copper miners' credit outlook

by Wang Anyi

- **The NUS-CRI Agg PD illustrates copper miners' improvement in credit quality concurrent with copper prices rising to record-high levels**
- **Increasing use of copper in green energy projects may lead to a positive short-term credit outlook for copper miners**

After a major dip in the initial phase of COVID-19, the commodity market has been in a year-long boom showing little signs of cooling. Amid massive stimulus and signs of a global economic recovery, commodity prices continued to rise. Recently, prices of several raw materials including copper, lumber, and iron ore hit all-time highs. Copper price, tracked by LME copper spot prices, has increased by almost 100% from one year ago and reached a record high of USD 10,600 per metric tonne in May (Figure 1a). Concurrent with the surging copper price, copper miners' credit quality improved, as showcased by the drop in NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) to 10bps in May 2021 from 34bps one year earlier. Playing a vital role in generating renewable energy with lower carbon emissions and improved efficiency, demand for copper is expected to remain strong at least in the short term. As the NUS-CRI Aggregate (median) Forward 1-year Probability of Default (Forward PD[1]) time series indicates, copper miners also see an improvement in their short-term credit outlook (Figure 1b).

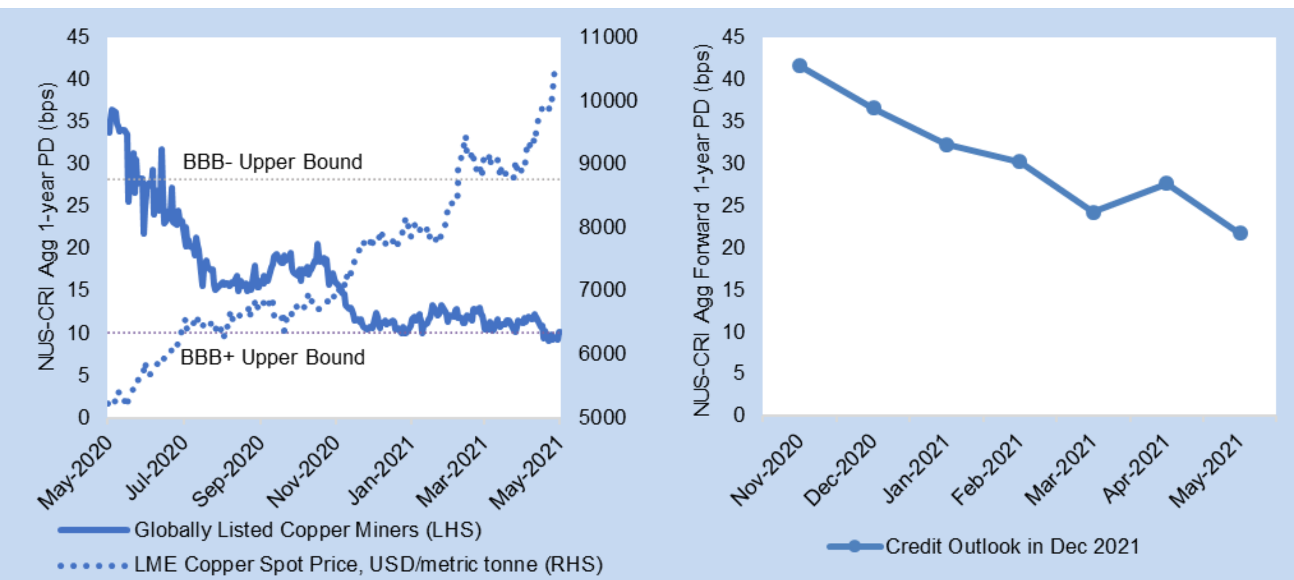

Figure 1a (LHS): NUS-CRI Agg 1-year PD for globally listed copper producers from May 2020 to May 2021 with reference to PDiR2.0[2] bound. LMCADY LME Commodity historical price. Figure 1b (RHS): NUS-CRI Agg Forward 1-year PD time series for globally listed copper miners from different historical months looking to December 2021. *Source: NUS-CRI, Bloomberg*

Amid the global quantitative easing and low interest rate environment, the commodity market attracted flocks of investors that pushed up prices. While the whole mining industry's credit profile benefited from rising prices, copper miners saw the biggest improvement in their credit profiles (see Figure 2a). This is likely due to the more compelling structural supply-demand gap faced by copper producers, which is expected to worsen. Copper has

[1] The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similarly to a forward interest rate. For example, the 6-month Forward 1-year PD is the probability that the firm defaults during the period from 6 months onwards to 18 months – this is conditional on the firm's survival in the next 6 months

[2] The Probability of Default implied rating version 2.0 (PDiR2.0) provides a more familiar interpretation through mapping the NUS-CRI 1-year PDs to the S&P letter grades. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of relying solely on the reported default rates

a tighter supply compared to its peers, as copper miners used operating cash flows to pay out dividends instead of investing in new supply in the past few years due to low price and conservative expansion.

COVID-19 has heightened the imbalance between copper supply and demand. On the demand side, construction, electric and electronic products, and transportation equipment are the top three industries that use copper as a raw material. Despite the shocks brought by COVID-19, the construction and manufacturing sectors remained relatively robust. Meanwhile, China, which consumes 40-50% of the global supply of copper ore each year, quickly recovered from the pandemic and other major industrial economies followed suit, contributing to the voracious demand witnessed in copper. On the other side, however, the pandemic resulted in supply disruptions in major copper-producing countries. For example, Chile, the largest copper producer, closed part of its production due to COVID-19, which led to a fall of 3.7% in global production in Q2 2020. Possible stoppages caused by labor negotiation may have also disrupted copper supply. In 2020, U.S. and worldwide copper mine production fell 2%. Unsurprisingly, contracted supply and robust demand led to increasing copper prices over the past months.

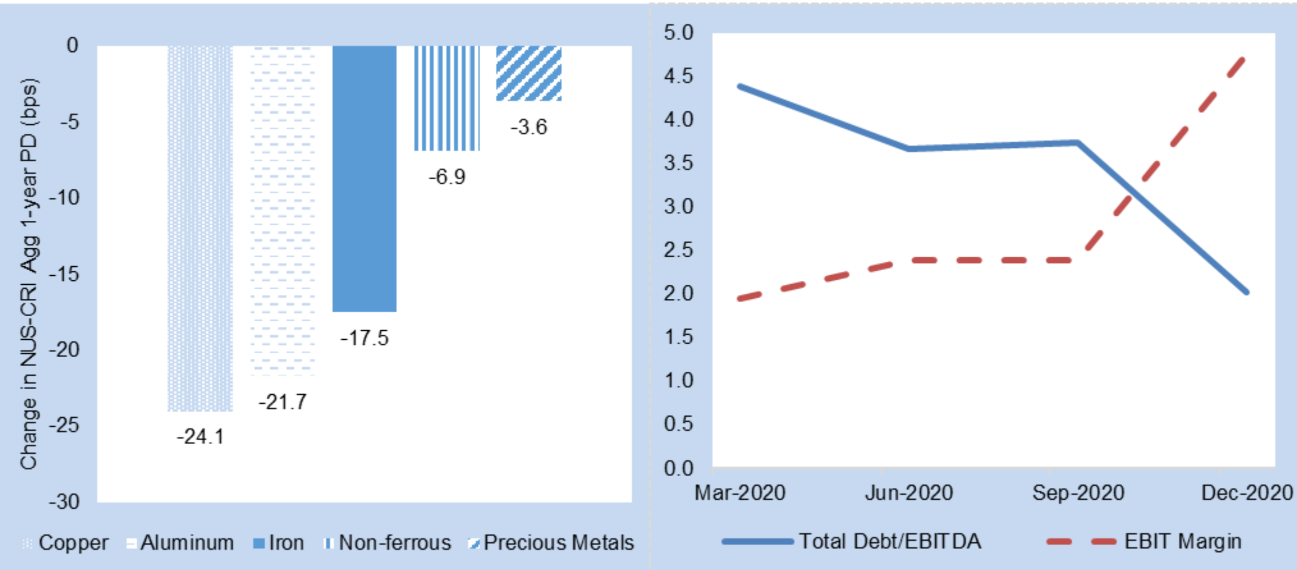

Figure 2a (LHS): Changes' in metals' NUS-CRI Agg 1-year PD from May 2020 to May 2021. Figure 2b (RHS): Copper miners' total Debt/EBITDA and EBIT margin from Mar 2020 to Dec 2020. *Source: NUS-CRI, Bloomberg*

Concurrently, copper miners' balance sheets have strengthened due to an increase in copper prices. Over the past year, copper miners' leverage position has improved as total Debt/EBITDA dropped from 4.29 in Mar 2020 to 2.02 in Dec 2020 (Figure 2b), which is even lower than pre-pandemic levels. Copper miners profited from the copper price upswing, and their EBIT margin showed a rising trend last year, with a surge in Q4 2020. The relatively stronger financial conditions would likely have contributed to an improvement in credit health. The availability of cash from soaring copper prices led to an increase in investment in new projects, with the median capital expenditure of copper miners bouncing back to near pre-pandemic levels in Q4 2020. Resultantly, the Forward PD shows an uptick in short-term credit outlook (Figure 1b). According to the Forward PD from Nov 2020 to May 2021 looking to Dec 2021, copper miners' Forward PD shows a downward trend.

Furthermore, long-term structural decarbonization trends may driving demand for copper-intensive industries in the future. Total demand for copper is expected to increase by 1% to 5.3% annually through 2025 even as demand from different sectors fluctuates. Aside from copper demand from traditional uses, the trend of decarbonization would also support copper prices. Renewable energy sources occupy about a quarter of the total power supply in the world, and copper plays an important role in making it more efficient with lower carbon dioxide emissions. This is because copper can be used in charging infrastructure, cabling, electric vehicles, wind generators, and transformers to assist the energy transition. While traditional cars only contain 18 to 48 pounds of copper, electric vehicle batteries use 183 pounds; electric vehicle production is expected to grow at an annual 29% through 2030. Overall, around 12 times more copper is being used in most renewable energy systems as compared to traditional systems**.** However, supply is expected to remain tight as new mines are hard to find, usually taking 2 to 3 years to expand production from current mines and more time to develop a new mine. Copper price could continue its spike before the looming supply crunch is solved and the rebalance of the copper market is expected in 2023 or 2024.

Despite the expectations of robust copper prices, miners should be wary of costs of production. The prospect of a potential super cycle of copper may lure copper miners into accelerating investments into new projects. Chile's

Minister of Finance, however, said that they should remain cautious despite the recent price rise. Should the Fed tighten monetary policy sooner than expected, lowering inflation rates would make commodities less attractive. Furthermore, there are worries that the green energy transformation may not emerge quickly enough to offset the potential impact of a slowdown in China's demand for copper, which was the cause of the previous commodity super cycle. To hold up against these potential uncertainties and avoid worsening credit quality, copper miners should remain cautious and further fortify the balance sheet to improve their adaptability to potential adverse changes.

Credit News

Corporate bond downgrades by China rating agencies triple

May 17. Amid Beijing's efforts to reduce credit risk, Chinese domestic rating agencies have tripled their downgrades of corporate bonds in 2021, compared to the same period in 2020. More than 80% of debt issuers in China are classified as AA rated currently. Corporates that are rated lower are unable to issue public debt. Chinese authorities have urged debt underwriters, domestic rating agencies as well as auditors to ensure that there is proper disclosure of risks for these corporate bonds. This push by authorities comes as high-profile defaults by state-owned enterprises have shocked the country's financial system. (FT)

China companies' dollar bonds hit as Beijing tightens credit

May 14. Chinese corporates defaulted on USD7.3bn of offshore debt in 2020 and USD3.3bn in 2021. Investors have to now reevaluate the support that overleveraged companies will receive from the government, especially with tightening credit conditions in the country. Chinese authorities are trying to cool off the country's debt market as it recovers from the economic repercussions of the COVID-19 pandemic. To add fuel to the fire, USD 118bn of offshore bonds and CNY 7.8tn of onshore bonds are due this year, which may add to the woes of foreign investors if local prioritized over overseas bonds. However, it is uncertain if Chinese authorities allow offshore bonds to be defaulted on, as the country still relies on foreign investors for funding. (FT)

Australian coal miners flag finance, insurance difficulties

May 13. Australia's coal industry is finding trouble accessing finance and insurance, which is negatively impacting business risks and costs. As banks and insurers come under pressure to promote stricter ESG criteria, fossil fuels mining projects are being hindered from access to necessary financing. In rebuttal, the Australian coal industry argues that domestic high-energy coal offers comparatively lower emissions and supports regional employment. With the industry contributing to the country's second-largest export, government support in the form of insurance using public funds is necessary for projects to be viable in the short term. As such, without the necessary support from the government or offshore Asian banks, the Australian coal mining industry faces a heightened risk of defaulting due to poor and unsustainable cash flows. (Reuters)

Investors rush into 'pick-your-poison' junk bonds

May 11. Junk bond sales are increasing at a rapid rate, with cheap borrowing costs, as well as loose covenants, attracting issuers. These terms resulted from a rush of capital into the high-yield market, allowing issuers to command more flexible lending conditions. CCC-rated bonds have returned 6.5% up to the end of Apr 2021, while 30-year Treasuries have declined 14% in the same timeframe. European investors are rushing into the high-yield corporate debt market as the ECB continues its purchase of corporate credit, lowering yields in the space. However, as Europe is behind the US in terms of reopening, it remains to be seen which corporates in the region will be able to rebound from the pandemic. (WSJ)

New Amazon bond rivals yield on US Treasuries in record-breaking sale

May 11. On May 10, 2021, Amazon issued USD 18.5bn bonds with eight different maturities in record-breaking yields. Amazon pays 0.1 percentage points and 0.7 percentage points bond spreads on its 2-year and 20-year corporate bonds respectively. These bond yields are very close to the risk-free US government bond rates. Even with low spreads, Amazon bonds achieve near USD 50bn investor orders. Amazon plans to spend the funds on delivery network expansion, renewable energy, clean transport, and sustainable housing. (FT)

Japanese megabanks see credit costs falling as vaccination proceeds (Reuters)

IIF: Global debt levels decline for the first time in 2-1/2 years (Reuters)

Sibur's sustainability-tied loan conducive to possible IPO – manager (Reuters)

Regulatory Updates

Libor replacement race heats up

May 13. Replacement of the London Interbank offered Rate (LIBOR) is birthing new contenders with major banks testing the use of an index created by Bloomberg. Bank of America and JPMorgan Chase exchanged USD 250mn of interest-rate swap earlier this month using the Bloomberg Short Term bank yield index. Alternatively, companies are also being called to switch to Secured Overnight Financing Rate (SOFR). Unlike other rates that are being tested in the market, the Bloomberg ST bank yield index displays similar characteristics to LIBOR, which makes transitioning to the new rate more attractive. Access to more than one benchmark rate allows for further prudence in interbank lending habits based on transactional needs. (WSJ)

AIIB touts ESG bond framework to simplify verification process

May 11. The Asian Infrastructure Investment Bank (AIIB) suggests rating the bank itself for ESG compliance rather than the bonds it issues for new green issuances. Given the lack of standards between countries for screening and monitoring ESG standards, this change aims to solve some of the issues present in ESG securities. The AIIB issued an AUD 500mn sustainable kangaroo bond last month, which will partially be used for infrastructure projects in Asia. The bank hopes that the new bond framework presented would be adopted by other institutions in the future. (FT)

China offers banks nearly USD 16bn to ensure ample liquidity (Bloomberg)

Thai central bank ready to provide more support measures as coronavirus escalates (Reuters)

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