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Credit risk outlook of Iron ore miners worsens as demand from major economies is poised to slow

by NUS-CRI Market Monitoring Team

- **NUS-CRI's Forward PD showcases an uptick in credit risk as demand from major Iron ore importers, such as China, slows**
- **Though current credit risk is relatively lower due to the industry's strong fundamentals, stress tests show vulnerability in the industry's financial profile should financing and operating environment worsen**

Somber sentiments are plaguing the global commodity markets. As the world adjusts to the new reality of sustained high inflation and increasing interest rates, investors are bracing for extended periods of diminishing growth as recession fears in the coming quarters pick up steam across the globe. Global commodities have been at the forefront of highlighting this pain as they demonstrate the effects of investors' pricing in lagging global demand, amidst ongoing supply constraints, in the real economy. Iron ore, one of the key raw materials in the production of steel, is the latest commodity to feel this rout. Singapore Exchange's Iron Ore futures slid below USD 100/MT in Sep-2022, dropping by more than 50% compared to its peak in Apr-2022(See Figure 1a) on the back of worsening production sentiments, supply constraints from key Iron exporters, and low demand creation as China, one of the key buyers of Iron ore, remains under strict zero-COVID policy rules. Therefore, the credit risk outlook of global Iron ore miners, as measured by the NUS-CRI Aggregate (median) Forward 1-year Probability of Default (Forward PD[1]) in figure 1b, shows a worsening trend over the next 12 months. NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) in Figure 1a also demonstrates how the credit risk profile of Iron ore miners has been responsive to market sentiments pertaining to the price of the underlying commodity.

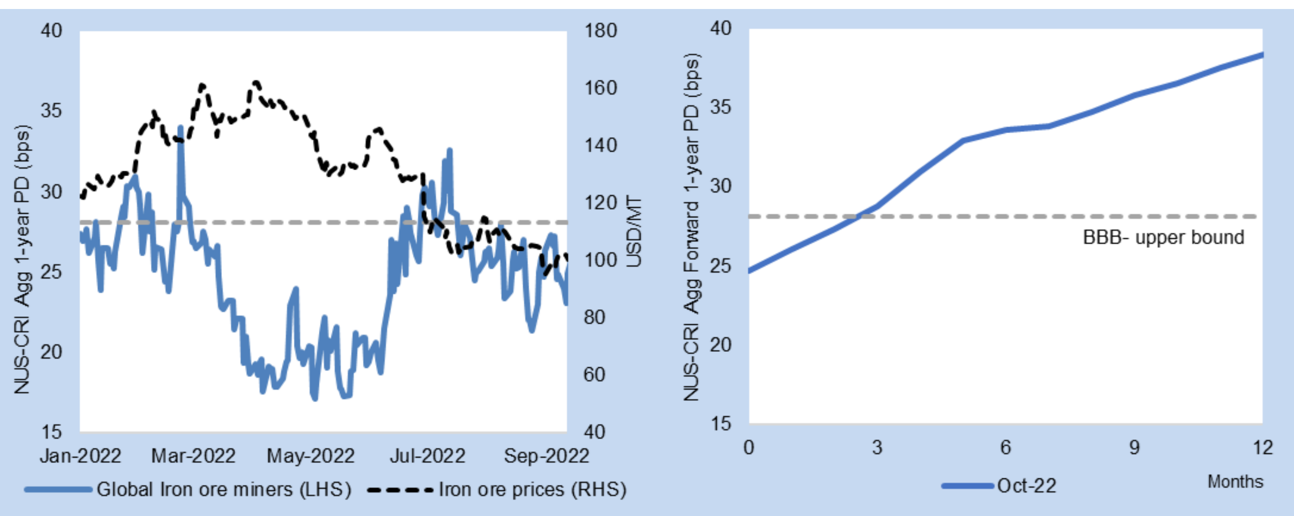

Figure 1a (LHS): NUS-CRI Agg (median) 1-year PD for Global Iron ore miners, with reference to PDiR2.0 bounds[2]; Daily closing prices for Iron ore as represented by SGX TSI generic Iron Ore Futures from Jan-2022 to Oct-2022. Figure 1b (RHS): NUS-CRI Agg (median) Forward 1-year PD for the Global Iron ore miners as of Oct-2022, with reference to PDiR2.0 bounds. *Source: NUS-CRI, Bloomberg*

As a key raw material in the production of steel, demand for Iron ore is highly dependent on the construction sector outlook in major economies. One such economy, which has been one of the world's largest net importers of Iron ore over the last decade, is China. The Chinese economy has been plagued by a property crisis for the

[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.

last two years. The lack of available financing channels, in conjunction with deteriorating household sentiment reducing new home sales, has stalled construction projects for many Chinese developers. Despite this, China has been increasing its imports of Iron ore, with imports increasing by 5.4% MoM to 96.2mn tonnes in Aug-2022. Though this has helped protect revenue levels for Iron ore miners globally so far, in a potential scenario where the property crisis continues to deepen and the fallout leads to a systemic failure in the completion of construction projects, it is possible that the industry will face a significant downturn in demand that may reduce profitability prospects moving forward, a scenario which seems to be reflected in the heightened Forward PD in figure 1b for the industry. Notwithstanding the impact of China, global demand for the use of steel in production also seems to be impacted, with the S&P Global steel users PMI index dropping by 1.7 index points to 48.4 in Sep-2022, marking the sharpest MoM fall in steel demand since the initial onset of the pandemic. The fall in demand is bound to trickle down further into the demand for raw Iron Ore, compounding the effects of China's construction slowdown further on Iron ore miners' margins.

After China, the EU is the second largest producer of steel and a major contributor to Iron ore demand. Thus, the energy crisis in Europe is expected to add further strain on the demand prospects of global Iron ore miners as Europe cuts steel output. As energy costs soar out of control, many steel producers have been forced to cut output and shut down plants. Steel producers fear that prolonged shutdowns may lead to permanent loss of demand as higher costs make them less competitive in the international market, causing customers to turn to cheaper Asian alternatives. Major steel producers in Europe, such as ArcelorMittal and Eurofer, have forecasted a decline in production in 2022, signaling the adversely impacted demand for Iron ore. As of Sep-2022, 15 European steel plants have suspended production and more are expected to follow suit as the energy crisis is expected to worsen in the coming months. With a recession in Europe seemingly inevitable, Iron ore demand is expected to take a further hit as consumers may potentially postpone discretionary purchases in the face of rising borrowing costs. A consequent demand decline in the construction and automotive sectors will simultaneously drag down demand for Iron ore.

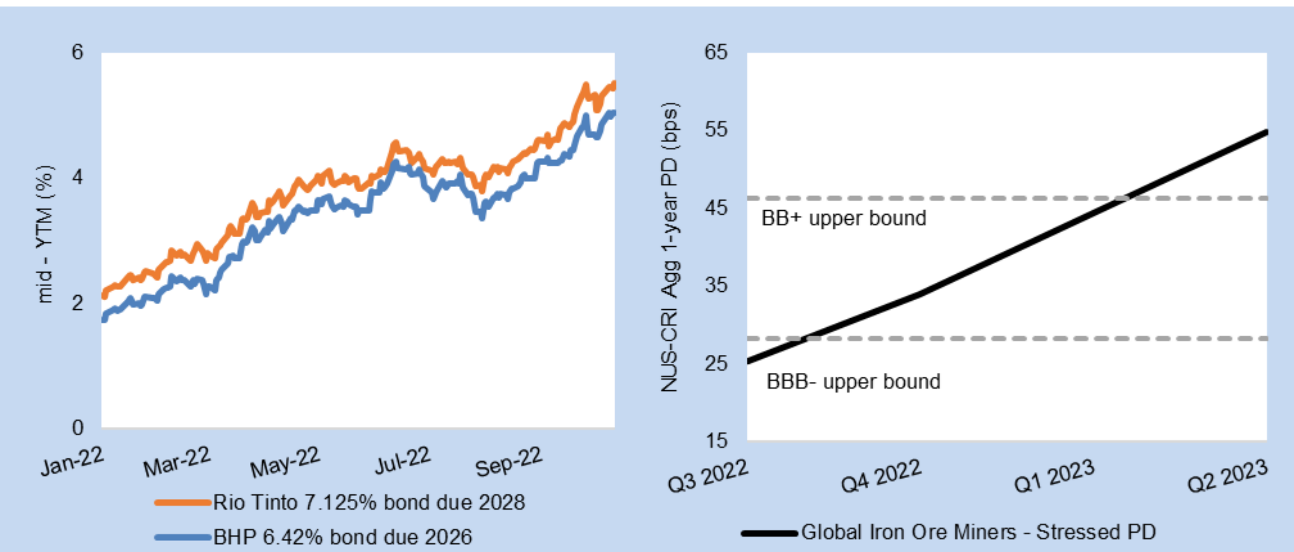

Figure 2a (LHS): mid-YTM of Rio Tinto's and BHP's USD-denominated bonds from Jan-2022 to Oct-2022. Figure 2b (RHS): Stressed NUS-CRI Agg 1-year PD of Global Iron ore miners with reference to PDiR2.0 bounds. *Source: Bloomberg, BuDA v3.5.1*

The worsening operating environment is already being priced in by investors on debt instruments issued by major Iron ore miners. For example, Rio Tinto, one of the largest metal miners in the world, has seen the yield on its 7.125% bond due in 2028 increase by close to 3 percentage points since the beginning of this year (See figure 2a[3]). If the trend continues, a lack of access to cheap financing, especially for miners that have a capital-intensive operational structure, can create significant liquidity strain moving forward. So far, however, the industry has benefitted from sufficient liquidity to meet its short-term obligations while simultaneously aiding industry players to meet their capital expenditure needs, with the median current ratio for the industry close to an average of 1.41x over the last four quarters. In addition, the industry has also benefited from a relatively low leverage level with the total debt to total capital for the industry averaging close to 22.48% over the last four quarters. However, though the current financial position of these Iron ore miners is relatively robust and has helped anchor the credit risk of these companies so far below the BBB- upper bound when referenced to PDiR2.0 bounds, a sudden, and potentially likely, drop in demand from major importers such as China and the EU will likely lead to a quick depletion of cash reserves and may drive credit risk for the industry higher. Using the NUS-

[3] Figure 2a also shows the yield of another mining giant BHP group's 6.42% bond due in 2026 also rising in tandem with that of Rio Tinto.

CRI BuDA toolkit (BuDA[4]) in figure 2b, stress tests demonstrate an uptick in the credit risk profile of Iron ore miners to a sustained decrease in the Iron ore prices, and a simultaneous increase in borrowing costs[5], mimicking the worsening demand and financing environment that the firms might witness in the coming quarters.

Iron ore miners are entering a period of extended operating risk that is going to impact their financial profile. However, given the recent uptick in the stress felt in China's property sector, the likelihood of government intervention in order to soothe market fears is increasing. Should China's construction projects rebound, Iron-ore miners can expect some reprieve as pressure lifts from the industry's top line, however, this scenario seems unlikely given the lack of significant intervention seen in the market so far. Contextualizing this to the current high-interest rate environment, companies are more likely to feel a greater burden pertaining to higher borrowing costs moving forward. To make matters worse, major companies such as Rio Tinto are continuing to increase and expand their production capabilities, which in the current climate is more likely to depress prices further. Though this production capacity expansion should reap benefits when demand rebounds, it is unlikely to do so in the near term, as suggested by the Forward PD for the industry in figure 1b.

[4]The Bottom-up Default Analysis (BuDA v3.4.2) is a credit stress testing and scenario analysis toolkit jointly developed by the Credit Research Initiative (CRI) team of National University of Singapore (NUS) and the International Monetary Fund (IMF).

[5] Iron ore prices drop to USD 79/MT in Q2 2023, while borrowing costs, proxied by the US short-term risk-free rate, increase by 10bps MoM till Q2 2023.

Credit News

Real-estate companies grapple with high interest rate hedging costs

Oct 13. Real-estate companies' costs to hedge variable debt are rising rapidly as interest rate hikes gather pace. Real-estate firms are required to hedge their exposure to floating-rate debt by holding interest-rate caps. Interest rate caps are derivative contracts sold by lenders which allow companies to protect themselves against rapid increases in rate benchmarks such as the Secured Overnight Financing Rate (SOFR) or London interbank offered rate (LIBOR). They help contain increases in borrowers' interest expenses and consequently, mitigate their risk of default. The prices on interest rate cap contracts have seen a 10-fold increase YoY and are expected to climb further as the Fed continues to raise rates. (WSJ)

Not-yet-green debt sold by polluters poised to hit USD 1.5tn

Oct 14. Transition bonds are expected to be the next big investment alternative in the sustainable debt space. With firms with high pollution levels trying to reduce emissions and transition to greener processes, green debt markets which were previously inaccessible to them now hold immense opportunity as investors show willingness to support their transition. According to the Climate Bonds Initiative, the market for transition bonds may expand to USD 1.5tn by the end of this decade. (Bloomberg)

US banks gain from Fed rate hikes while keeping deposit interest low

Oct 15. Major US banks are benefiting from Fed's rate hikes as they reprice consumer and corporate loan rates higher than deposit rates offered, thus boosting their net interest margins. JP Morgan reported a 34% YoY increase in net interest income while other banks such as Wells Fargo and Citi reported their highest net interest income since 2019. The banks have also experienced an increase in loan demand from corporates and consumers alike. (FT)

U.K. Crisis spills into U.S. junk debt

Oct 11. The fallout of the recent currency and bond crisis in the UK is affecting major wall street banks. With CLOs becoming more popular as investment vehicles for UK pension funds, a major sell-off by these pension funds to meet margin calls saw a tumble in CLO prices. The sale in CLO prices came part-in-parcel of a wider sell-off in the market that saw stocks, bonds and other securitized assets drop in value. The drop in CLO prices also has a knock-on effect on leveraged buyouts as they are used as investment vehicles for about 60% of loans backing LBO deals. Exposure to CLOs has also increased as those in the higher-rated tranches offer a higher yield while simultaneously meeting regulatory guidelines, compared to similar-rated corporate and mortgage bonds. The impact is expected to continue as a fall in CLO prices decreases the access to cheap financing for CLO managers to execute investment deals, reducing the pace and volume of deal activity in the markets. (WSJ)

Respite in volatility drives companies back to yen bonds

Oct 14. With interest rates going up globally, investors are increasingly open to increase yen-denominated exposure in their portfolio. Despite risks from yen's depreciation and global pressure on the Bank of Japan to hike rates, current opportunities in yen-denominated bonds are hard to pass up given their wider spreads. However, there is a preference to pick up these yen debts from Korean borrowers. So far in 2022, sales of yen-denominated bonds from Korean issuers have risen sixfold. (Bloomberg)

Kroger breaks M&A debt drought with second-biggest loan of 2022 (Bloomberg)

Heavy debt load chokes Africa's biggest economy (Bloomberg)

Emerging-market debt breaches 250% of GDP, making it G-20 focus (Nikkei Asia)

Regulatory Updates

Southeast Asia central banks digging into toolkit to fight risks

Oct 14. Amid tumbling exchange rates and the global energy crisis, central bankers in Southeast Asia have resorted to both conventional and unconventional instruments to strengthen rates and quell inflation. Singapore has tightened its policy bands for the fifth time since Oct 2021 while Manila has hiked borrowing costs the most, by 225 bps. More increases are expected as central banks in Thailand and Malaysia are set to review interest rates in November. (Bloomberg)

ECB policymakers put balance sheet run-off on the table

Oct 15. Two policymakers recently made the case for a cut in the ECB’s balance sheet, indicating that the next policy debate will be centered on balance sheet runoff. The leadership currently expressed the view that once the policy rate enters a neutral territory, the next step would be to consider rolling off asset purchases, as part of the monetary tightening effort essential to tame inflation which currently stands at 10% significantly above the ECB's target of 2%. (Reuters)

South Korea to scrap taxes for foreigners' income from bonds (Reuters)

China central bank rolls over policy loans to maintain liquidity, keeps rate unchanged (Reuters)

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