



Credit quality of steel producers and iron ore miners benefits from rising commodity prices despite long-term structural risks

by [NUS-CRI Market Monitoring Team](#)

- **With improvements in iron ore prices, NUS-CRI Agg PD demonstrates improved credit quality for listed iron and steel companies**
- **NUS-CRI Forward PD shows short-term improvement in credit outlook for the industry, but long-term structural headwinds pertaining to overcapacity, high leverage and ESG concerns persist**

Globally listed steel producers and iron miners faced significant challenges in the wake of COVID-19 lockdowns, as subdued demand for the commodities and their related products forced producers to [rapidly cut output](#). The impact of these cuts was significant for corporates in the industry, with the NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) spiking in the first half of 2020 (see Figure 1a). With the Chinese economy rebounding quickly from the pandemic and other major economies following suit later in the year, global producers have benefitted from reinvigorated demand. However, the industry still suffers from long-term structural headwinds that may affect the credit risk of corporates going forward. These firms face overcapacity and leverage woes while having to deal with regulatory pressures to conform to stricter environmental standards. Despite the latest NUS-CRI Aggregate (median) Forward 1-year Probability of Default (Forward PD¹) in Figure 2a demonstrating an improvement in the short-term credit outlook when compared to Mar 2020, the long-term credit outlook remains relatively unchanged.

As seen from Figure 1a below, the Agg PD for the global iron and steel industry demonstrates the correlation present between the industry's credit risk and iron ore prices. With China accounting for 53% of consumption in the global steel market, recovery in important domestic manufacturing industries such as shipbuilding, automotive and household appliances in H2 2020 helped to dampen the impact of the pandemic. Increasing iron ore prices suggest a bounce-back in corporate credit quality for the industry as the Agg PD improves past pre-pandemic levels. With the price of raw material increasing, and demand for iron ore and steel-related products gaining pace recently, prospects of recovery in cash flows and earnings remain viable in the near future.²

The global mining industry's aggregate credit risk has decreased since the beginning of Q2 last year (see Figure 1b). As metal prices increase steadily from Q2 2020, the top winners in credit quality improvement are steel and copper-based companies. Both of these sub-industries have [benefitted](#) from a spur in their respective commodity prices, which was partially driven by worldwide government stimuli and easing of lockdown restrictions in economies such as China.

¹ The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similar 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 1 year plus 6 months, conditional on the firm's survival in the next 6 months.

² According to Deloitte's December 2020 [report](#), demand for steel is set to grow by 6.2% and 4.8% YoY in 2021 and 2022 respectively.

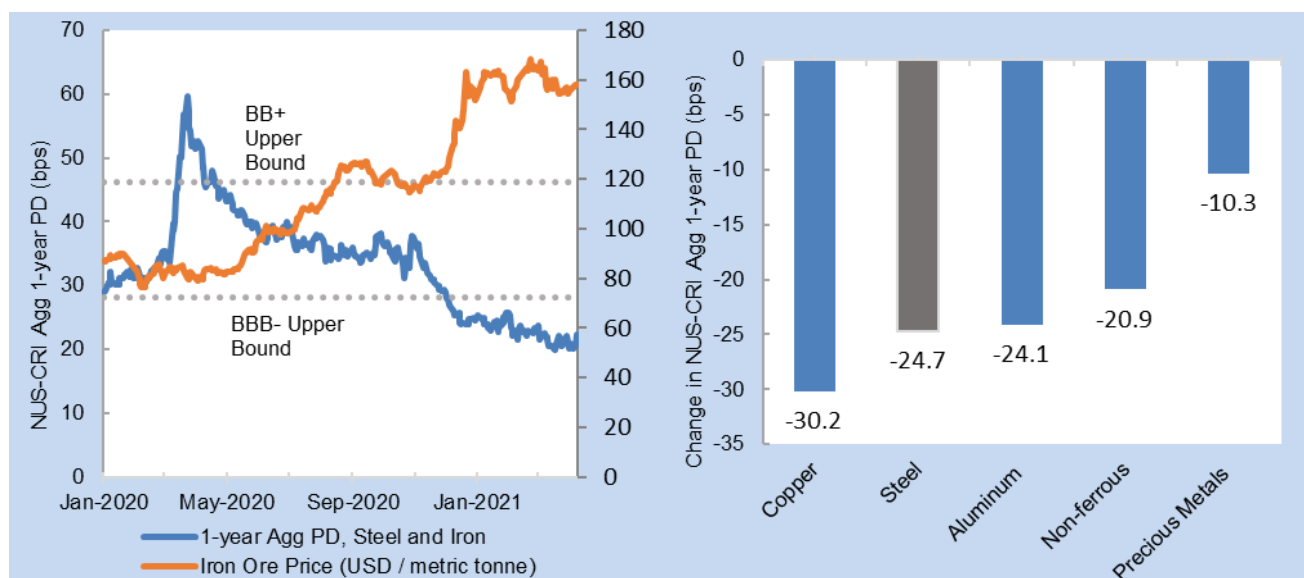


Figure 1a (LHS): NUS-CRI Agg PD for globally listed iron and steel companies with reference to PDiR2.0 bounds³. Iron ore spot price index 62% import fine ore USD / metric tonne. Figure 1b: Change in metals' NUS-CRI Agg PD from Apr 2020 to Apr 2021. Source: NUS-CRI, Bloomberg

The Forward PD in Figure 2a below demonstrates a downward shift in the near future, indicating an improved short-term credit outlook. The Forward PD 6 months ahead falls from 53bps to 31bps, while long term credit outlook remains stable at around 60bps. This may indicate that although the short-term credit outlook mostly differs due to effects of the COVID-19 pandemic, structural reasons pertaining to overcapacity, higher leverage and environmental issues may still dictate worsened credit outlook over the long term.

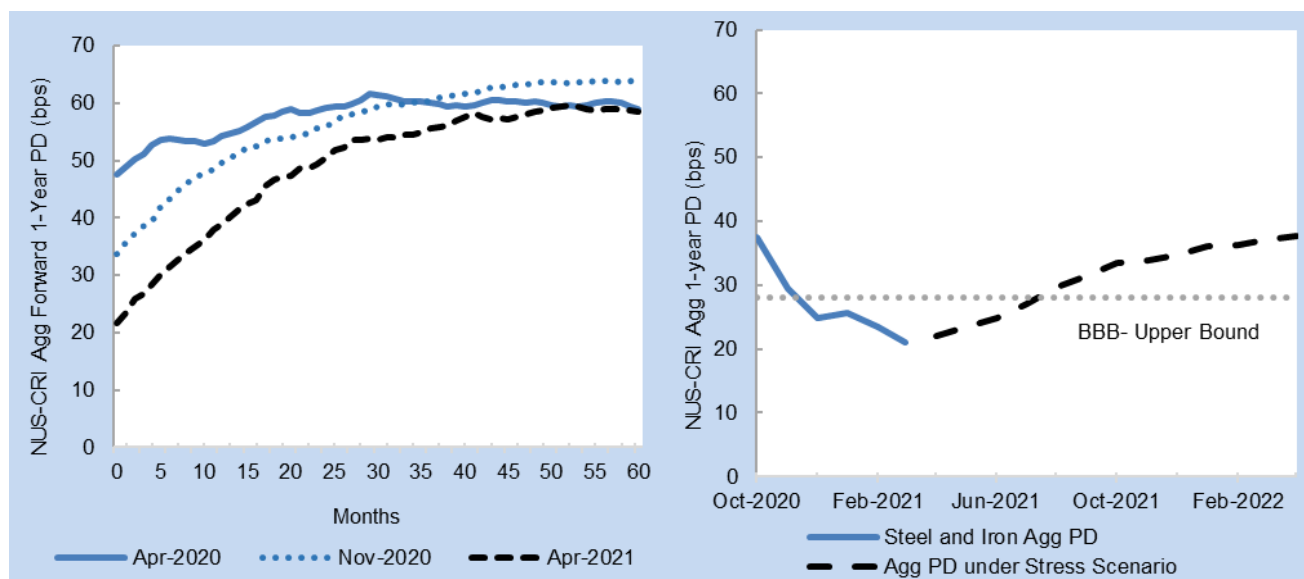


Figure 2a (LHS): NUS-CRI Agg Forward 1-year PD for globally listed iron and steel corporates based on data feed as of Apr 2020, Nov 2020, and Apr 2021. Figure 2b (RHS): Impact on NUS-CRI Agg PD when Iron Ore prices reduce gradually to pre-pandemic levels calculated using NUS-CRI Bottom Up Default Analysis. Source: NUS-CRI

Overcapacity is one of the most serious issues faced by the steel industry. The OECD [projected](#) steelmaking capacity to increase to 2.45bn tonnes/year in 2020. With the COVID-19 pandemic causing much of the world's production to slow, global steel overcapacity is forecasted to reach 700mn tonnes in 2020. Overcapacity, which

³ 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

is synonymous with low-capacity utilization, detrimentally affects profitability as it leads to higher production costs. Weak profitability could then cause the financial profile of a company to deteriorate, potentially leading to financial distress.

Furthermore, the industry's median Total Debt/EBITDA ratio increased to 4.9 in Q2 2020, before falling back down close to pre-pandemic levels of 4.3 at the end of the year. This is higher than the industry's 2018 and 2019 leverage levels of close to 3. As the corporates in the iron and steel industry are highly leveraged, they would have less financial flexibility in handling future exogenous iron-ore price volatility. We demonstrate the industry's vulnerability to such a scenario by utilizing the NUS-CRI Bottom-up Default Analysis (BuDA⁴) toolkit (see Figure 2b). The stress scenario saw iron ore prices forecasted to fall to average price levels seen before the pandemic gradually over the next 12 months. In the stress scenario, the credit profile of the industry would worsen to a non-investment grade level as proxied by PDiR2.0 bounds.

Simultaneously, steelmakers face challenges on an environmental front. With the industry considered to be within the [three largest](#) contributors to carbon dioxide emissions globally, steel producers worldwide are facing pressures to "[greenify](#)" their operations. For instance, steel producers in China have faced [regulatory backlash](#) due to their detrimental effects on the country's air quality. This, in turn, has led to governmental pressures to [suppress production](#) in order to reduce their overall emissions, which could hamper the industry's long-term profitability. Corporates that are unable to adapt to these expectations may face difficulties in gaining access to cheaper capital in the future, thereby increasing their credit risks in the long term.

⁴ The Bottom-up Default Analysis (BuDA) 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).

Credit News**Defaults fall again, aiding rally in low-rated debt**

Apr 11. Markets for junk bonds and floating-rate loans extended their rally as defaults by low-rated US companies have fallen to their lowest level in 10 months. Credit investors are investing in higher-yielding assets as the US economy continues to recover. Federal Reserve's interest rates cut and bond-buying programme, distribution of COVID-19 vaccines, and the ability for borrowers to access capital cause many to say that defaults have already peaked. Valuations, however, remain difficult to gauge given the uncertainties of exiting the global pandemic. ([WSJ](#))

Bad debt swells 22% at China's big banks despite recovery

Apr 10. China's four biggest banks were able to post improved profits in the second half of the year, as a result of the country's economic recovery. At the same time, however, non-performing debt at rose by 22% in 2020, which mainly arose from the manufacturing, wholesale, retail, and service sectors. The total amount of bad debt was recorded at CNY 999bn at the end of Dec 2020, while the average bad debt ratio rose to 1.54% in 2020, up 0.14 points from the previous year. With the worsened outlook for microbusinesses in the country, the continued deterioration of the Chinese banks' asset quality may remain a challenge moving forward. ([Nikkei Asia](#))

Foreign investors face critical legal test for USD 82bn in China bonds

Apr 8. Investors are getting cautious about how Beijing is handling the rising number of defaults in state-linked enterprises where foreign investors hold tens of billions of dollars in bonds. After the default of Peking University Founder Group's USD 1.6bn dollar-denominated notes, investors are paying close attention to how Beijing treats the restructuring process as this paves the way for similar future default events where investors have close to USD 82bn in China-issued debt. The use of keepwell deeds, which are letters of supports that offer foreign investors some level of assurance that the parent company will honor its offshore subsidiary's US dollar-denominated debt repayment, have historically helped in raising foreign investor confidence. The lack of transparency in how Beijing handles state-linked defaults, however, is wavering counter-party trust in investors. ([FT](#))

Investor appetite dwindles for blue-chip bond funds amid losses

Apr 7. Investor's interest in investment-grade (IG) bond funds is starting to wane in light of their loss-making quarters, with net outflows from these holdings expected to occur in the future. While the total inflows of these funds grew by 3% from Dec 2020 to Mar 2021, net inflows fell by 48% in the last week of Mar 2021. This could be partially attributed to the rise in long-term treasury yields and the subsequent inflows into high-yield debt funds. Furthermore, this trend could persist if treasury yields were to continue their climb, which could have a ripple effect on the debt market overall. ([WSJ](#))

Investors scoop up huge returns from companies' crisis-era bonds

Apr 6. The debt issued by corporates such as Carnival Corporation and Kohl's, which were some of the hardest hit by the pandemic, have enjoyed strong rallies. The trailing twelve-month return for US high-yield bonds hit 23% at the end of March as investors' price in economic recovery, the highest it has been since 2008. The Federal Reserve's plan to conduct open market operations has played a strong role in this recovery. As a result, over 80% of the outstanding investment-grade bonds are trading over 100 cents on the dollar. However, the drop in borrowing costs has led to an increase in overall leverage, which could then lead to issues when fiscal stimulus eases or yields rise in the future. ([FT](#))

IIF: Debt service relief extension won't impact private creditors ([Reuters](#))

TUI issues EUR 350mn bonds to bolster pandemic-hit finances ([Reuters](#))

Bank of America to deploy USD 1tn for sustainable finance by 2030 ([Reuters](#))

Regulatory Updates

Canada proposes tighter mortgage stress test as home prices surge

Apr 9. Canada's financial regulator, the Office of the Superintendent of Financial Institutions (OSFI), proposed to tighten its mortgage stress test. Specifically, the minimum qualifying rate for uninsured borrowers is proposed to be either the greater range of rates submitted by lenders plus 200bps or 5.25%. This new proposed benchmark is higher than the one in the original proposal announced in Feb 2020 and is expected to take effect on Jun 1 with a fixed rate of 5.25%. The higher rate will reduce purchasing power and help reduce the price momentum in the housing market. ([Reuters](#))

IMF, World Bank to unveil 'green debt swaps' option by November, Georgieva says

Apr 9. IMF is pledging to introduce a 'green debt swap' by November 2021 in hopes to spur climate change action in developing countries. The instrument aims to address the climate and debt crisis simultaneously. This new platform, which is created in conjunction with the World Bank, aims to advise poor countries on funding climate activities while spending on debt relief. This comes at a time where the COVID-19 pandemic has pushed budget constraints and large debt levels hamper the ability of countries to focus on climate change, wildlife protection and green infrastructure. ([Reuters](#))

IMF reserves no substitute for debt restructuring, official says ([Bloomberg](#))

Greece gains EU okay to extend 'Hercules' bad loan reductions scheme ([Reuters](#))

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