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Chinese steel producers face heightened credit risk driven by weakening downstream demand

by Wang Nan

- **Declining downstream demand has contributed to the jump in credit risk for Chinese steel producers since Sep-2021**
- **Going forward, the NUS-CRI Agg Forward PD shows that the credit outlook for Chinese steel producers remains elevated as demand from key sectors is expected to remain muted while costs to reduce carbon emissions increase**

China's steel prices have experienced a roller coaster ride in 2021 (see Figure 1a), casting a spotlight on the operational and credit risk of China-domiciled steel producers (Chinese steel producers). Due to administrative production cuts[1] and demand-side recovery[2], China's domestic steel prices increased in H1 2021, contributing to an improvement in Chinese steel producers' profitability. However, as the property crisis intensified and the economy experienced a slowdown in Q4 2021, Chinese steel producers' downstream demand declined, causing increased stress in steel producers' profitability and revenue-generating capability. Resultantly, the NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) of Chinese steel producers in Figure 1a shows worsening after Sep-2021, with the industry's Agg PD reaching levels close to the BB upper bound when referenced to PDiR2.0 bounds. Chinese steel producers' credit risk outlook has also worsened as shown by the elevation in NUS-CRI Aggregate (median) Forward 1-year PD (Forward PD[3]) in Feb-2022 compared to Sep-2021, amidst continued weakened downstream demand.

[1] At the beginning of 2021, aiming to achieve China's carbon neutrality goal, the Chinese government pledged to ensure crude steel output falls in 2021, raising expectations of a supply-side shortage. For example, Tangshan, which accounts for close to 15% of China's total crude, steel output, shut blast furnaces in Mar-2021 in order to improve air quality.

[2] Improved demand from downstream manufacturers who started to replenish steel inventory and robust steel exports caused the rally in steel prices to gain more steam.

[3] 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 18 months, conditional on the firm's survival in the next 6 months.

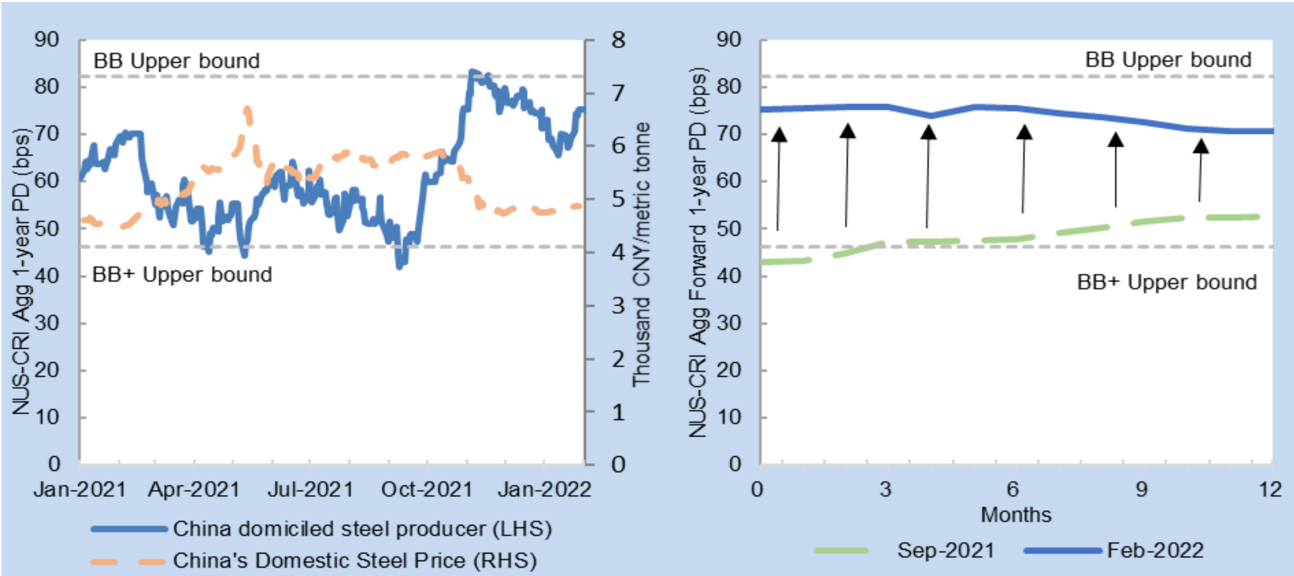

Figure 1a (LHS): NUS-CRI Agg 1-year PD for China-domiciled steel producers from Jan-2021 to Jan-2022 with reference to PDiR2.0 bounds[4] and China Domestic Hot Rolled Steel Spot Average Price from Jan-2021 to Jan-2022. Figure 1b (RHS): NUS-CRI Forward PD for China domiciled steel producers as of Sep-2021 and Feb-2022 with reference to PDiR2.0 bounds. *Source: NUS-CRI, Bloomberg*

Benefiting from rising steel prices, the Agg PD of Chinese steel producers improved on the back of a recovery in the industry's operating conditions and cash-flow generation ability during the first three quarters of 2021 (See Table 1), which has positively impacted the industry's profitability and its debt-servicing ability. Concurrently, the industry benefited from a relatively stable capital structure over the same time period, indicating holistic efforts across the industry to not increase its leverage levels.

	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Profit Margin	2.75%	4.79%	6.46%	6.17%
Median Net Cash Generated from Operation (in CNY 100mn)	3.38	1.03	7.16	8.03
Debt to Total Capital	52.71%	52.96%	54.10%	53.18%
EBIT to Interest Expense	3.67	8.94	12.76	14.29

Table 1: Key financial metrics for Chinese steel producers. *Source: WIND*

However, since Q3 2021, steel prices have dropped due to sluggish downstream demand from core industries, especially as China went into the depths of its property sector crisis. Shrinking demand due to a slowdown in construction-related and other manufacturing, property, and infrastructure activity, which account for more than 70% of China's steel consumption, continues to drive operational woes for the industry. The continuous decline in housing construction suggests dented demand for steel. Although currently the property sector has been given some breathing room as financing conditions for the sector are eased in the near term, the planned introduction of property tax still poses a long-term headwind for the country's property development, and thus puts downward pressure on steel demand, and revenue-generating capabilities for steel producers moving forward.

In tandem, infrastructure construction, which struggled in 2021 due to funding shortages, is not expected to increase steel demand significantly in the short term. Firstly, after years of investments in the construction industry, the growth potential of conventional infrastructure is limited compared to that witnessed by the industry in the past. Secondly, local government debt, the main financing channel used by local governments to fund infrastructure construction, could hamper the renewed infrastructure push. Given that local governments have already been saddled with mountains of debt, China has vowed to take policy actions in an effort to curb local government debt, leaving less room for local governments to finance infrastructure construction. Furthermore, the manufacturing[5] sector, another major source of downstream demand for steel producers, weakened, as evidenced by the manufacturing Purchasing Managers' Index (PMI) which continued to decline in H2 2021 and dropped below 50 in Sep and Oct-2021. Overseas manufacturing demand was a key component of steel

[4] 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.
[5] Refers to 31 divisions of the manufacturing industry in the Industrial Classification for National Economic Activities (GB/T4754-2017), including automotive manufacturing, equipment manufacturing, etc.

consumption in 2021, causing China's net exports of semi-finished and finished steel to jump by 155% in 2021. However, the growth of overseas demand is expected to dampen, with factory operations in overseas markets gradually returning to normal as global lockdown restrictions continue to ease. Therefore, a worsening demand outlook may hinder Chinese steel producers' revenue generation capability and could contribute to the deteriorating credit risk outlook of the steel production industry between Feb-2022 and Sep-2021 (See Figure 1b).

Despite the current policy stimulus that aims to mitigate downward economic pressure, the decreasing trend of overall steel demand is unlikely to change in 2022. Firstly, while China's commitment to stabilizing industrial growth in 2022 may support the sector to some extent, the worldwide chip shortage continues to constrain manufacturing in key industries and may weigh down overall steel demand. In a move to limit contagion stemming from the property crisis, the government eased restrictions regarding property development financing from late 2021. Despite these efforts, they may not succeed in stimulating steel demand growth. Additionally, although infrastructure construction backed by government policy support is expected to speed up in 2022, conventional infrastructure is not the main focus, and deleveraging local governments' debt levels may hinder provincial construction projects. Therefore, only limited upward momentum can be expected for steel-intensive infrastructure projects. As such, China's overall steel demand is still set to dip in 2022.

Another challenge faced by Chinese steel producers is the increasing carbon emissions cost. With the launch of the carbon emission quota trading mechanism in 2021, carbon emissions cost is likely to continue rising in the long run. Consequently, smaller producers with poor environmental standards will be gradually phased out by increasing costs, while capital expenditures can be expected to increase as companies develop low-carbon iron-making technologies. Should downward pressure from revenue sources persist in the medium-to-long term, Chinese steel producers may need to take on more debt to finance capital expenditures and working capital needs. This elevated credit risk is reflected by the Forward PD of Chinese steel producers remaining high (See Figure 1b).

Credit News

Corporate bonds in Europe suffer biggest fall since pandemic began

Feb 10. Reacting to the sudden hawkish pivot by the ECB, European corporate bonds took their biggest fall since 2020 over last week. Euro-denominated IG and HY bonds saw declines of 1.9% and 2% respectively, indicating that borrowing costs are set to increase as the era of easy money comes to an end. The shift in tone by the ECB had a heavy impact on corporate and government bonds alike, with bonds of debt-laden companies and weaker Southern European economies taking the most severe hit, hampering the pace of their recovery. Bankers estimate that the borrowing cost of high yield companies had increased by at least a percentage point due to the shift in ECB's stance. (WSJ)

China bad-debt managers move to support stressed developers

Feb 10. China's largest bad-debt managers, also known as AMCs, are moving to support cash-strapped real estate developers at the behest of the government, adding to official efforts to contain the fallout from a string of defaults witnessed in the sector. AMCs' main priorities include accelerating asset disposals by developers struggling to find buyers and participating in complicated debt restructuring. Regulators have given the AMCs the green light to pay above-market prices for developer debt and are at the early stages of considering ways to amplify AMCs' buying power with additional funding support. Cash infusions from AMCs will be prioritized for the completion of unfinished property projects, though how much is left over for creditors will depend on the prices AMCs are willing to pay for developer assets. While AMCs currently have ample funding, their ability to provide large-scale aid to developers could be constrained by their liquidity and capital requirements. (Bloomberg)

ECB warns eurozone lenders over leveraged loan risk

Feb 10. The chair of supervision at the ECB has warned top European banks that are heavily active in extending leveraged loans that tend to finance companies with high debt levels and poor credit ratings. The warning comes as the supervisory board at the ECB feels that European banks are taking excessive risks with the extension of such credit products. Low-interest rates have fueled the market, which now sees the average debt levels in the European credit market rise to five and a half times earnings, close to the six times guideline issued by the ECB in 2017. The worry stems from uncertainty in growth, or a rise in borrowing costs, which make servicing such leveraged loans unmanageable, leading to widespread defaults and bank losses. One such risk seems to be the imminent rise in interest rates which, although beneficial for banks as they can increase profit margins, may cause sudden shocks in their loan portfolio, especially for borrowers of low credit quality. (FT)

Investors rush to US oil and gas bonds as energy prices boost finances

Feb 13. Investor interest in bonds of US oil and gas companies has soared, buoyed by the sharp rise in energy prices. Oil prices have rallied to USD 90 per barrel, the highest level seen in the last seven years. This rally has helped feed investor appetite as the high energy prices vastly improve the cash generation abilities of oil and gas companies. Oil and gas companies are also benefiting from increased access to financing and lower borrowing costs. For example, Range Resources, a shale gas producer, recently received double the level of investor demand for its debt offering, which also helped reduce its cost of debt by almost half. (FT)

Watchdog sounds alarm on financial risks of Europe's property boom

Feb 11. Europe's financial regulators are warning the region's housing market has "decoupled" from the rest of the economy since the pandemic hit, increasing risks for banks due to soaring property prices, loosening lending standards, and rising household debt levels. Fueled by low-interest rates, EU residential property prices rose 9.2 percent in the year to Sep-2021. As the ECB prepares to tighten monetary policy, borrowing costs are set to rise for house buyers, which could depress prices and make it harder for some to keep up with payments on variable-rate mortgages. The European Systemic Risk Board has called on seven countries to take action to curb the risks created by surging house prices. Such actions include capping borrowers' debt at a set multiple of their income and forcing lenders to have more capital. (FT)

Rate Risk creeps up on bond investors betting on southeast Asia (Bloomberg)

Investors pull USD 1.5bn from bond ETFs in January on inflation fears (FT)

Gas Companies eye green debt after EU rulebook inclusion (Bloomberg)

Regulatory Updates

Russia raises interest rate as threat of sanctions looms

Feb 11. Russia's central bank Friday raised its key interest rate from 8.5% to 9.5% in a bid to tackle stubbornly high inflation, which rose to 8.7% in Jan-2022, as the threat of Western sanctions in response to a possible invasion of Ukraine looms over the country's economy. Should the West impose sanctions, there is a risk of a weaker ruble, which may push inflation higher, and raise the ruble cost of repaying debts denominated in U.S. dollars or euros. Potential sanctions could target several of Russia's largest government-owned banks and include the banning of all trade in new issues of Russian sovereign debt. Off the table, for now, are sanctions on oil and natural-gas exports or disconnecting Russia from Swift, but that could change depending on Russian actions. (WSJ)

India sticks to dovish policy path as world turns hawkish

Feb 10. Diverging from the hawkish stance taken by its global peers, India's central bank chose to adopt a more dovish stance in its recent monetary policy meeting. Citing lagging private consumption and expectations of moderate price increases, the RBI governor, Shaktikanta Das, stressed the need to keep borrowing costs low. Private consumption, which contributes to 60% of the country's GDP, has remained below its pre-pandemic levels pushing the government to take a softer stance. Increases in international commodity prices, supply chain issues, and financial market volatility further add to the uncertainty in the outlook. (Bloomberg)

ECB capital relief expire as bank watchdogs tighten reins (Bloomberg)

UK regulators warn banks on use of AI in loan applications (FT)

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