UNRAVELLING RISKS IN THE CHINESE CREDIT MARKET

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KEY TAKEAWAYS

- As the bond market in China continues to grow, structural and informational gaps are more apparent than before
- NUS-CRI PDiR2.0 proves to be an independent and universal means of credit differentiation
- For non-listed firms, NUS-CRI has developed a representative model to sidestep the scarcity of data

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Recent media has covered extensively on the world's second-largest bond market, China. As the CNY 110tn debt universe continues to grow, the Chinese authorities looked to strengthen their imperative to regulate and streamline their capital markets. The spotlight has narrowed in on the domestic credit rating agencies as gatekeepers of the financial markets. As stakeholders raised doubts on the agencies' ability to differentiate the credit of their corporate clients, the prevailing narrative of the Chinese credit market bears a great resemblance to that of the US prior to the Great Financial Crisis of 2008. 2020 witnessed numerous high-profile default cases amongst domestically rated AAA firms. Coupled with the ongoing deleveraging, the Chinese corporate landscape saw a substantial increase in defaults of Stated Owned Enterprises (SOEs). This report highlights the potential pitfalls within the maturing Chinese credit market – conflicts of interests faced by domestic credit rating agencies and the repricing of both AAA-rated and SOE-issued bonds. The NUS-CRI Aggregate 1-year Probability of Default (Agg PD) is then utilised as an alternative, independent and transparent credit assessment tool.

Behind the supposed AAA ratings

Today, more than 50% of Chinese non-financial firms enjoy AAA ratings from domestic credit rating agencies. Moreover, 98% of the debt issuances in 2020 were supposedly backed by minimally AA-rated issuers. On top of the disproportionate amount of highly-rated issuers, the waves of credit defaults by AAA-rated corporates have deterred investors from relying on credit ratings for "true" differentiation. The operating environment faced by the credit rating firms is complicated by the familiar woes of a growing credit market.

From a supply point of view, firms that are looking to raise capital publically can only do so with a minimal AA rating. Correspondingly, institutional investors can only look to purchase debts that meet a specific rating cutoff. It was reported that a credit upgrade can lead to a more than 150bps cut in interest expense. Corporates have little to no incentive to give business to agencies for credit ratings that are less than sufficient for debt issuance. Coupled with the competitive landscape, profit-making agencies are caught in a game of prisoners' dilemma where the Nash equilibrium is to give a rating that meets the regulatory cut-off. Consequentially, there is an inflation in credit ratings. Just like the US back then, the Chinese bond market is faced with a credit rating paradox whereby the agencies' outputs are important for pricing and issuance of debt, conversely, stakeholders face growing inefficiencies such as information asymmetry and moral hazard.

In the past, globally recognised credit rating firms, such as Standard and Poor's (S&P) and Moody's, were staged behind the scenes of the Chinese credit market. Their presences are prevalent through joint ventures with domestic firms such as Dagong Global and Zhong Cheng Xin. In lieu of its growth, the Chinese market has opened up for these global firms to establish independent footholds. The firms have notified stakeholders that the Chinese credit market will enjoy a customised rating scale. While this is not uncommon, most localised frameworks done by these US agencies come with mappings to the more widely used global rating scale. Without such adjustment, stakeholders might face issues in gauging the credit quality of Chinese corporates. This is a significant barrier for investors who wish to partake in the Chinese capital market.

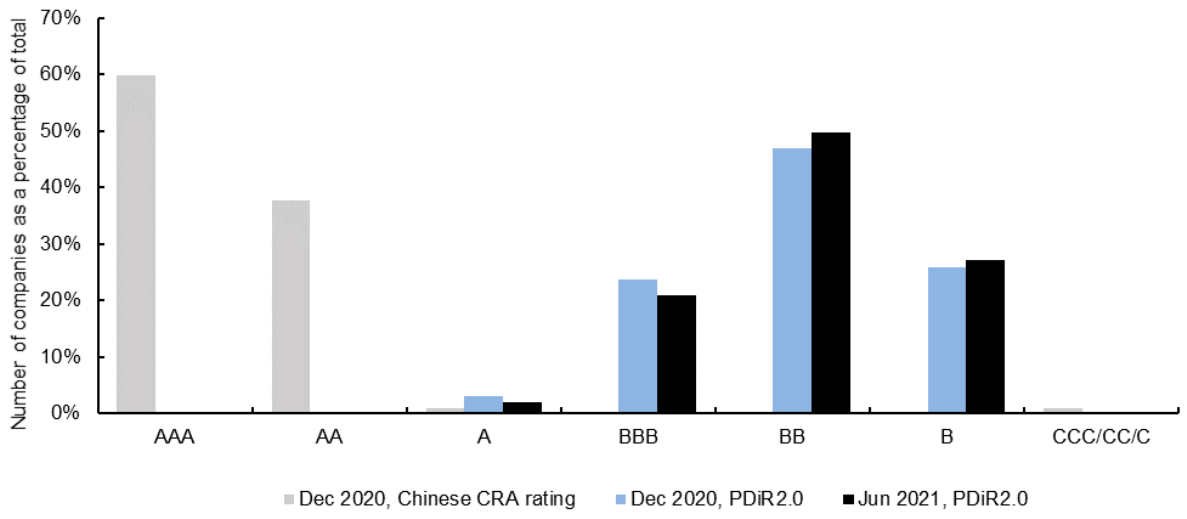

Figure 1: Chinese CRA rating and PDiR2.0 distributions of listed China domiciled corporates[1] based on different time points[2]. *Source: Wind & NUS-CRI*

Struggles of a developing credit market reiterate the value proposition of credit rating and analytics as public goods. In recognition of the aforementioned gap, NUS-CRI was brought about to build an open and independent infrastructure which complements the required reform of the global credit market[3]. The technology of the NUS-CRI Agg PD can be utilised to address various informational gaps. For instance, the NUS-CRI Probability of Default implied Rating 2.0 (PDiR2.0) is utilised to provide standardised present and future credit distributions of China domiciled corporates. The PDiR2.0 provides a more familiar interpretation by mapping the NUS-CRI 1-year PDs to the S&P's letter grading. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of solely relying on the reported default rate. In addition, the tool also enables stakeholders to sidestep possible inflation of credit ratings. According to the Wind database, the same lists of corporates are mostly found to be either AAA or AA when rated by domestic credit rating agencies. As evident in Figure 1, the PDiR2.0 distribution showed that majority of the firms are, objectively speaking, concentrated between BBB to B grades.

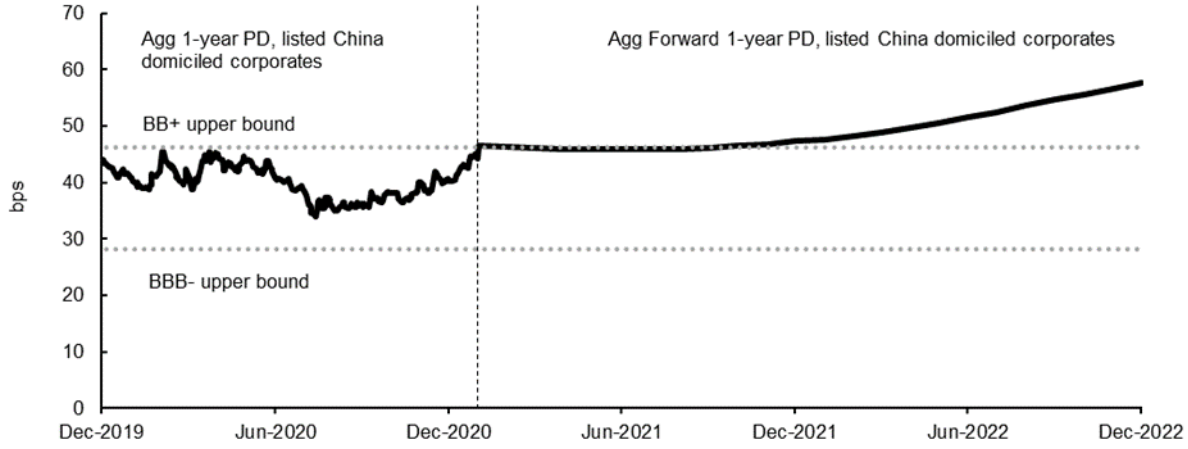

Figure 2: YTD NUS-CRI Agg 1-year PD of listed China domiciled corporates and their corresponding Agg Forward 1-Year PD based on data feed as of Dec 2020 with reference to the PDiR2.0. *Source: NUS-CRI*

Utilising the cornerstone of NUS-CRI's infrastructure, the Agg PD, Figure 2 found that the representative credit risk of China domiciled firms has crept back up to its former high by end-2020. After the 2020 fiscal stimulus, which was rolled out to mitigate the pandemic induced slowdown, the country-wide leverage stands at 270% of China's GDP. By the end of the year, domestic borrowers are required to fulfil debt obligations that ran up to CNY 3.65tn. As the general credit landscape becomes increasingly geared, the NUS-CRI Aggregate Forward 1-Year PD (Forward PD[4]) has pointed to an increasing term structure, implying a worsening credit outlook. Beijing is showing signs of expense fatigue as fiscal withdrawal is expected in 2021. As the economy begins to recover, the government is looking to address its ongoing public deficit. The deficit target rate is set lower by 0.6% for 2021. Apart from the fiscal drawback, the People's Bank of China (PBOC) is set to transit into a more reserved monetary policy stance to mitigate the substantial credit growth recorded in 2020.

The Great Deleveraging – Chinese State-Owned Enterprises

While the 2015 deleveraging campaign has exposed the credit risks faced by private enterprises, risks related to the SOEs' borrowings remained to be relatively masked partly due to the government's initial willingness to bail out troubled SOEs. Given the initial pump of subsidies, SOEs were found to be inefficient in comparison to their more profitable private counterparts. As such, an initiative was brought about to restructure the SOEs without setting off a collapse in the local credit market. As the government backstop becomes increasingly selective in where they allocate their support, the economy saw an increasing tolerance for SOE defaults which hit an all-time high in 2020. Stakeholders, especially credit rating agencies, looked to re-evaluate the creditworthiness of corporates – away from the implicit government bailouts to each firm's standalone business fundamentals. As the Chinese credit market transits away from the implicit guarantee, the strains faced by the Chinese SOEs are more apparent than ever. As such, several defaults of notable SOE names that were thought to be safe previously, such as Tsinghua Unigroup and Yongcheng Coal & Electricity Holding Group, caught investors off guard.

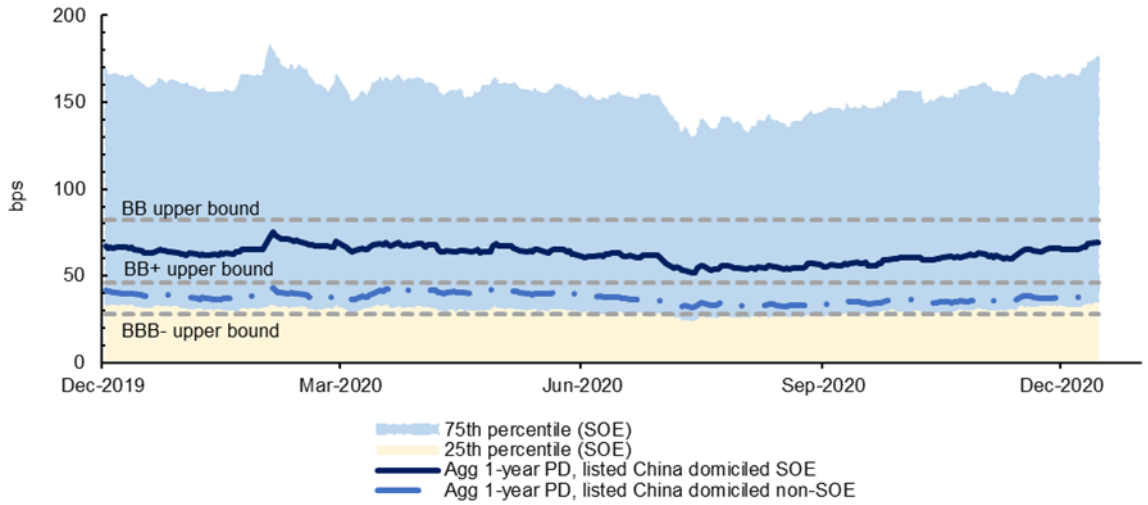

Figure 3: YTD NUS-CRI Agg 1-year PD of Chinese listed SOEs and non-SOEs. *Source: NUS-CRI*

Today, the NUS-CRI Agg PD can serve as an alternative tool to assess firms via macro-financial and accounting-based data. Figure 3 indicates that the representative Chinese SOEs (25th percentile, median and 75th percentile) are of non-investment grade as benchmarked by the PDiR2.0. Nearing late 2020, the gap between relatively weaker SOEs (75th percentile) and their more creditworthy counterparts (25th percentile) has widened partly due to the possible pullback of fiscal support. Weaker firms, in particular, are likely to face greater difficulties in financing due to reduced investor appetite. The Agg PD above exhibits that the representative credit risk for listed Chinese SOEs has been higher compared to the listed non-SOEs since the end of 2019. Given the history of extensive government subsidies, SOEs have generally been less efficient than their private counterparts. The observation reiterates the government's imperative towards selective funding and deleveraging which should reduce the moral hazard that comes with the implicit government support. All in all, building a stronger financial foundation for the growing credit market.

However, given that some of the high-profile default cases involved non-listed SOEs, there is an opportunity to better bridge the credit assessment gap within the non-listed sphere. The NUS-CRI team has been working to push out a representative model that measures the credit risks of non-listed corporates. Utilising NUS-CRI's extensive database, the developed technology is able to sidestep the lack of important data from the non-listed sample, for example, stock prices. With this complementary model, stakeholders can better reconcile the recent high-profile SOE defaults – Tsinghua Unigroup and Yongcheng Coal & Electricity Holding Group. Contrary to Tsinghua's domestic rating of AA, NUS-CRI's 1-year PD reveals that the firm's credit risk has been on an upward trend since 2019. The Agg PD renders a BB equivalent rating as proxied by PDiR2.0. For Yongcheng, which was given an AAA rating by Chengxin rating agency prior to its default, the NUS-CRI 1-year PD exhibits that Yongcheng has an elevated credit risk profile since 2019 and its Agg PD is equivalent to a B+ rating when referencing the PDiR2.0. In both cases, the NUS-CRI tools have shown that, given the standalone financial fundamentals of both firms, defaults were highly probable.

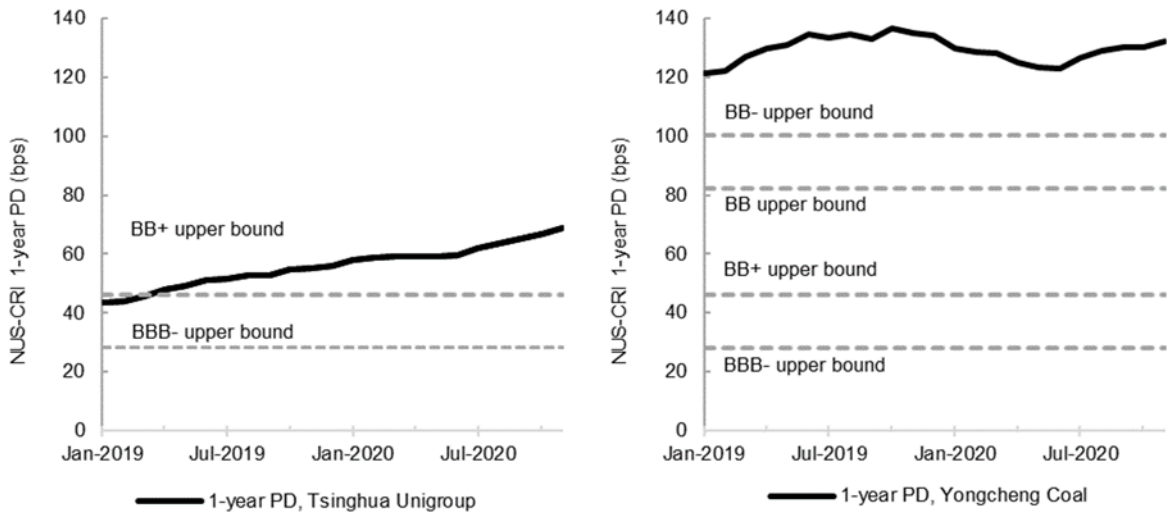

Figure 4a: NUS-CRI 1-year PD of Tsinghua Unigroup. Figure 4b: NUS-CRI 1-year PD of Yongcheng Coal. *Source: NUS-CRI*

Implications on the credit market: Repricing

Looking past the pseudo-positive credit landscape, the market has started to reprice the risks of both AAA-rated and SOE-issued bonds. The average yield on AAA-rated issuances has increased to its highest level in a year while the average coupon rate for newly issued SOE bonds has hit 5.7%, 100bps higher than the recorded rates in the first three quarters of 2020. Similarly, domestic banks are now being forced to reassess their approaches with the local credit market. Amidst the aforementioned default debacles, banks are cutting and reviewing their corporate debt positions. Highly-rated issuances are no longer available as repo trades' collaterals and the on-boarding of corporate bond investments is placed under greater executive supervision.

The blurred credit landscape and ongoing debt crunch have no doubt increased perceived credit risks and required premiums on domestic debts. Increasing credit differentiation is imperative for the maturing CNY 110tn bond market. Doing so will greatly offload the unnecessary cost of financing for quality and competitive firms. In addition, greater regulations and transparency will go a long way for the growth of the Chinese credit market. Moving forward, rating methodologies should weigh towards holding local corporates accountable for their balance sheet and cash flow management. As the Chinese debt market continues to mature, the government is seemingly doing the right thing by taking a step back from assisting struggling firms. Defaults are long overdue and necessary for the market to identify stronger and strategically valuable players amidst the mostly inflated domestic ratings. This, in turn, allows for a more independent and efficient debt capital market.

1. The sample of companies provided in the graphs cover only listed China domiciled corporates. Thus, this might partially differ from the firms that issue bonds in the Chinese market.
2. The results were produced with iRAP (intelligent Risk Analysis Platform), which is a software developed by CriAT (https://www.criat.sg/) for conducting both firm-level and portfolio-level credit analysis. iRAP utilizes the NUS-CRI Probability of Default (PD) model and links it to the live NUS-CRI database offering PDs on over 70,000 exchange-listed corporates globally.
3. To find out more about the origination and operations of NUS Credit Research Initiative, please see Duan, J.-C., E. Van Laere, 2012, A Public Good Approach to Credit Ratings - From Concept to Reality, Journal of Banking and Finance 36, 3239-3247.
4. The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similarly to the concept of forward interest rates. For example, the 6-month Forward 1-year PD is the probability of a firm defaulting during the period from 6 months onwards to 18 months, conditional on the firm's survival in the next 6 months.

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