Credit Brief on Singapore SMEs
Q1 2020

Jointly by Credit Research Initiative Team and Validus Capital Pte. Ltd.

This brief is a jointly published quarterly article, between Validus and Credit Research Initiative at National University of Singapore (NUS-CRI), providing insights on industry-level Credit Risk of Singapore SMEs and provides a summary of how loans generated through the Validus' platform incorporates the learnings from the industry-level Credit Analysis. The Credit Risk of the industries is measured via the Probability of Default (PD) model developed by the NUS-CRI team (www.rmicri.org).This analysis is conducted across 10 industries (Bloomberg classification) and the loans funded through Validus. (www.validus.sg)

Data note: Analysis in this report is based on the sample of public SMEs. Due to the small sample size in Singapore and similar credit characteristics of public SMEs across Singapore, Australia, Hong Kong and Korea, all CRI sector PDs are calculated as an average of PDs for the public SMEs in the four economies. This methodology is in agreement with Validus Capital Pte. Ltd. and is expected to reflect the Credit Risk profile of Singapore SMEs. In this report, the PDs for each quarter were computed using model parameters that were calibrated on April 14, 2020, using all available data up to March 31, 2020.

A. Key Highlights on Credit Risk

The NUS-CRI 1-year PD for Singapore SMEs increased to 47.74bps at the end of Q1 2020 amid a yearly GDP contraction of 2.2% in this quarter. The SBF-DP SME Index[1], a forward looking measure of SME sentiment worsened from 50.4 to 48.3, suggesting a less optimistic outlook for Singapore SMEs between April 2020 and September 2020.

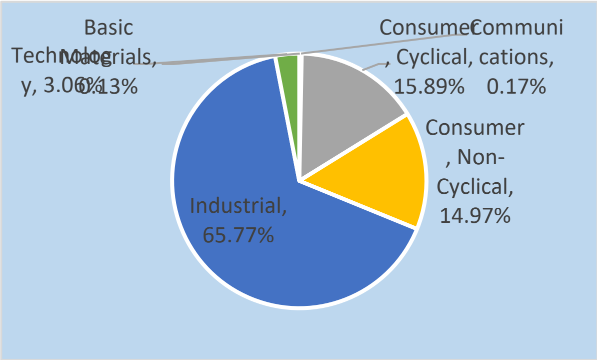
- CRI 1-year PDs for Singapore SMEs increased in Q1 2020 after declining in Q4 2019.
- The Energy and Utilities sectors had the highest credit risk in Q1 2020, while Consumer (non-cyclical) and Financial had the lowest credit risk among all industries.
- While all industries witnessed a general deterioration in credit quality, Energy saw the biggest increase in default risk.
- The aggregate credit quality of Medium-sized, Small and Micro firms worsened during the quarter. The aggregate default risk for Micro Consumer (cyclical) firms increased the most by 77.06bps while the Small Utilities sector witnessed the only improvement of 9.22bps across any size and industry group.
- The overall multiple of medium term PD (1-year) to short term PD (1-month) decreased to 9.2x from 12.84x in the previous quarter. This is an indicator denoting the extent of the behaviour of medium term PD compared to the short term PD which is further used as a benchmark for industry-level PD multiple. Any industry level PD multiple that is higher than the overall multiple indicates that medium term loans for those industry sectors are more risky than short term loans and vice versa.

B. Loans originated through Validus Platform

- Loans funded[2] through Validus include firms in Basic Materials, Communications, Consumer Cyclical, Consumer Non-Cyclical, Industrial, Technology.
- 82% of loans originated from Validus platform are to companies within the Industrial and Consumer Cyclical sectors. The loans are mostly short term in nature for all the industries. NUS-CRI insights do not indicate any adverse risk on these two industry sectors.
- Profile of loans originated through Validus platform are displayed in the charts below:

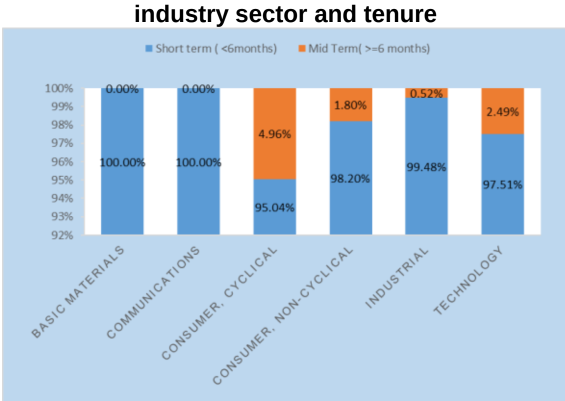
[1] SBF-DP SME Index is a six-month forward-looking business sentiment index by Singapore Business Federation and DP Information Group
[2] This report contains all loans funded through Validus

B.1 % of total loans funded through Validus Platform by industry sector



Source: Validus Capital, all figures are updated as of Feb 24, 2020

B.2 % of loans funded through Validus Platform by industry sector and tenure

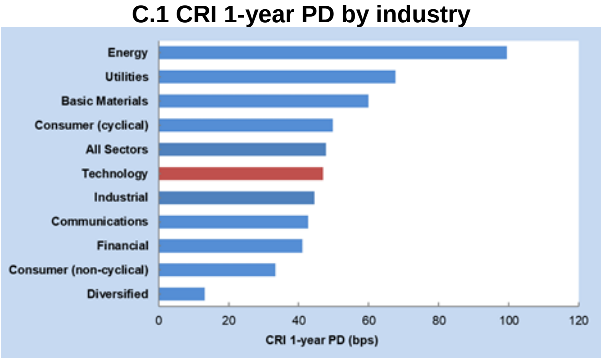


Source: Validus Capital, all figures are updated as of Feb 24, 2020

C. Credit Risk for Singapore Industries

The CRI 1-year PD assesses the credit risk in the future one year. The comparison of PD trends and PD multipliers across industries gives a clear picture of the relative credit performance of each sector. The relative credit performance by firm size within each industry is also provided. By definition[3], firms with annual turnover equal to or below USD 2mn are considered Micro Firms, between USD 2-10mn are considered Small Firms, while larger than USD 10mn and equal to or below USD 100mn are considered Medium Firms.

C.1 CRI 1-year PD by industry

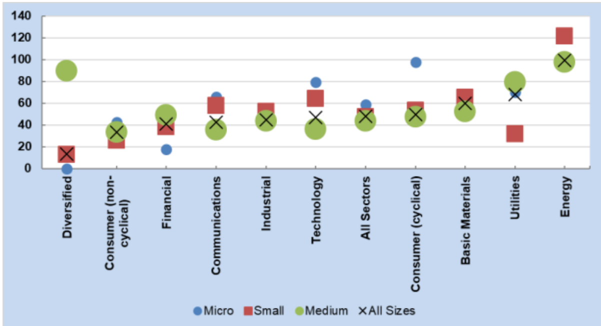


Source: CRI, all figures are updated as of Mar 31, 2020

The Energy industry had the highest CRI 1-year PD among all Singapore SMEs, followed by the Utilities and Basic Materials sector in Q1 2020. In contrast, the Communications, Financial and Consumer (non-cyclical) sectors delivered robust performances.

- The aggregate CRI 1-year PD of all sectors increased in Q1 2020 by 20.51bps from the last quarter. The credit performance of all sectors worsened in Q1 2020.
- The Energy sector remains the most risky sector in Q1 2020.
- The Consumer (non-cyclical) sector became the least risky sector in Q1 2020.

C.2 CRI 1-year PD for firm sizes by industry



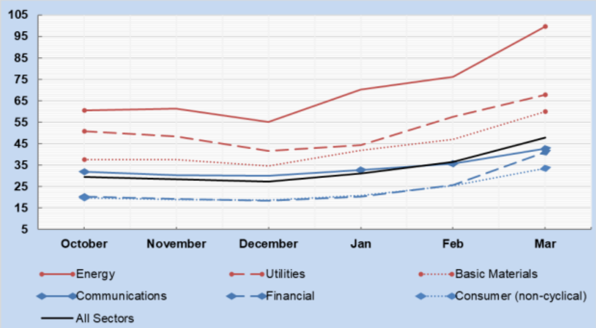
Source: CRI, all figures are updated as of Mar 31, 2020

SMEs with different firm sizes delivered variable CRI 1-year PD performances within each industry. Industries with the highest PD variance of sizes were the Consumer (cyclical), Utilities and Technology sectors.

- Micro firms in the Financial sector had better credit performances than All Sizes in the same sector. Micro Financial firms had a CRI 1-year PD of 17.82bps, lower than every other firm of any size or sector.
- The Consumer (cyclical) sector displayed the highest variance of the CRI 1-year PDs among all sectors. In contrast, the sector that displayed the lowest variance is the Industrial sector.
- Small Energy firms carried the highest credit risk among every other firm of any size or sector. The CRI 1-year PD for Small Energy firms is 121.59bps.

[3] Defined by Validus Capital Pte. Ltd.

C.3 CRI 1-year PD trend by industry

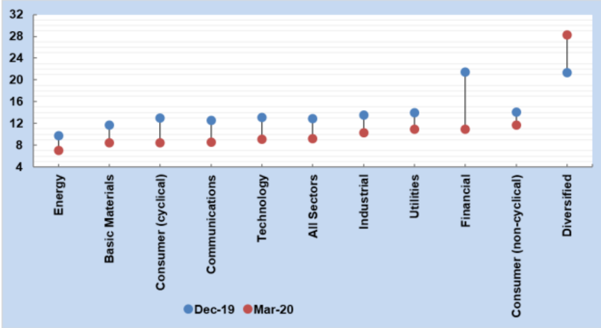


Source: CRI, all figures are updated as of Mar 31, 2020

The credit performances for all Singapore SMEs deteriorated in Q1 2020.

- Among the three most risky sectors, the Energy sector's CRI 1-year PD increased by 44.31bps during Q1 2020. PDs for the Utilities and Basic Materials sectors increased by 26.07bps and 25.37bps, respectively.
- Comparing the trends with the three least risky sectors, the CRI 1-year PDs for the Communications and Financial sectors increased by 12.55bps and 22.75bps, respectively. The Consumer (non-cyclical) sector was the best credit performer in this quarter. Its CRI 1-year PD increased by 14.8bps during Q1 2020.

C.4 CRI PD multiple by industry



Source: CRI, all figures are updated as of Mar 31, 2020

The multiples of medium term PD (1-year) to short term PD (1-month) for all industries are shown above.

- The PD multiplier decreased for all sectors. A decrease in the multiplier indicates that credit risk has worsened in the short term faster than the medium term.
- The Financial sector recorded the largest decrease in PD multiple. The CRI PD multiple for the sector decreased from 21.44X in December 2019 to 10.97X in March 2020.

D. Conclusion

Overall, the NUS-CRI 1-year PD increased during Q1 2020, from 27.23bps in December 2019 to 47.74bps in March 2020. The credit profile of Singapore SMEs deteriorated amid the GDP contraction of 2.2% in Q1 2020 based on advance estimates from the Ministry of Trade and Industry (MTI). According to the survey conducted by the Singapore Business Federation and DP Information Group, the business optimism of Singapore's SMEs has declined due to uncertainties arising from the Covid-19 outbreak. Having begun with the US-China trade war, external facing sectors continue a sustained downward trend, which is compounded in this quarter by disruptions to global supply chains as a result of Covid-19 related circumstances. Domestic facing sectors were also negatively affected by the virus outbreak with the retail/ F&B sector registering the most significant decline in turnover expectations. Since the business environment is expected to further worsen during the year, it is wise for companies to relook their business strategy and retain their workers to prepare for the eventual recovery.