Credit Brief on Singapore SMEs Q3 2018

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 October 04, 2018, using all available data up to September 30, 2018.

A. Key Highlights on Credit Risk

The NUS-CRI 1-year PD for Singapore SMEs increased to 19.30bps at the end of Q3 2018, in-line with a slower GDP growth of 2.6% during the quarter. The SBF-DP SME Index[1], a forward looking measure of SME sentiment worsen from 51.5 to 51.0, suggesting a less optimistic outlook for Singapore SMEs between October 2018 and March 2019.

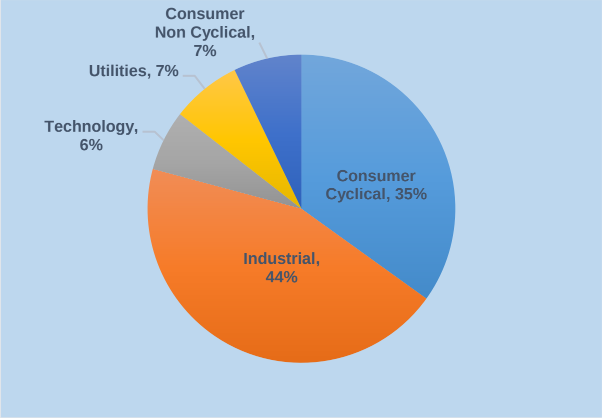
- CRI 1-year PDs for Singapore SMEs in Q3 2018 increased to its highest since the start of the year.
- The Energy and Utilities sectors had the highest credit risk in Q3, while Consumer (non-cyclical) and Financial had the lowest credit risk among all industries.
- The Technology sector witnessed the largest increase in default risk while Consumer (non-cyclical) saw the smallest increase in default risk.
- The aggregate credit quality of Medium-sized, Small and Micro firms deteriorated during the quarter. The aggregate default risk for Micro Communications firms increased the most by 6.57bps while the Micro Utilities sector witnessed the largest improvement of 13.48bps across any size and industry group.
- The overall multiple of medium term PD (1-year) to short term PD (1-month) decreased to 12.54x from 13.00x 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 Consumer Cyclical, Consumer Cyclical, Industrial, Technology and Utilities.
- 79% 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:

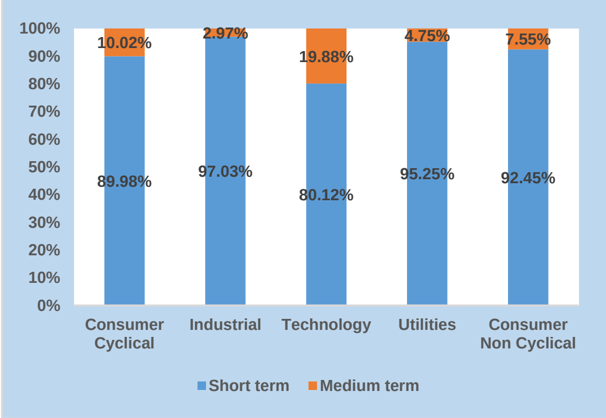
[1] SBF-DP SME Index is a six-month forward-looking business sentiment index by Singapore Business Federation and DP Information Group
[2] This report contains all loans funded through Validus

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



Source: Validus Capital, all figures are updated as of September 30, 2018

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

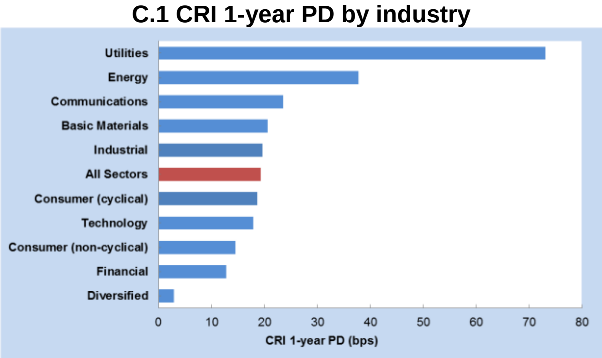


Source: Validus Capital, all figures are updated as of September 30, 2018

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

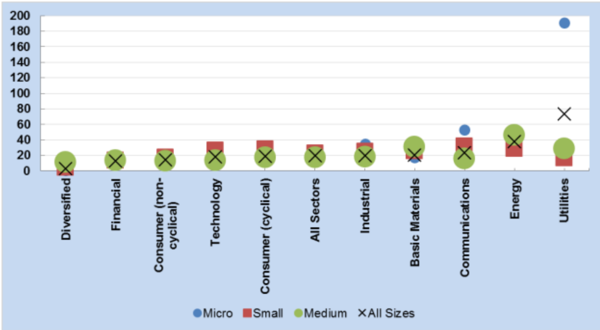


Source: CRI, all figures are updated as of September 30, 2018

The Utilities sector had the highest CRI 1-year PD among all Singapore SMEs, followed by the Energy and Communications sectors in Q3 2018. In contrast, the Technology, Consumer (non-cyclical) and Financial sectors delivered robust performances.

- The aggregate CRI 1-year PD of all sectors increased in Q3 2018 by 1.2bps from the last quarter. The credit performance of all sectors deteriorated in Q3 2018.
- The Utilities sector remained to be the most risky sector in Q3 2018.
- Despite the increase in CRI 1-year PD, the Financial sector is the least risky sector.

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



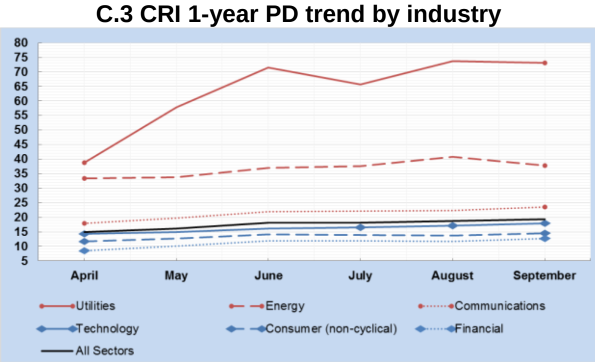
Source: CRI, all figures are updated as of September 30, 2018

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 Utilities, Communications and Energy.

- Micro firms in the Financial sector had better credit performances than All Sizes in the same sector. Micro Financial firms had the CRI 1-year PD of 9.38bps, lower than every other firm of any size or sector.
- The Utilities sector displayed the highest variance of the CRI 1-year PDs among all sectors. On the other hand, the sector that displayed the lowest variance is the Financial sector.
- Micro Utilities firms carried the highest credit risk among every other firm of any size or sector. The CRI 1-year PD for Micro Utilities firms is 191.25bps.

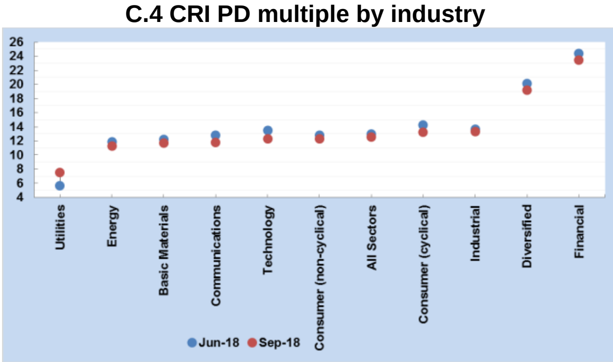
[3] Defined by Validus Capital Pte. Ltd.

C.3 CRI 1-year PD trend by industry



Source: CRI, all figures are updated as of September 30, 2018

C.4 CRI PD multiple by industry



Source: CRI, all figures are updated as of September 30, 2018

The credit performances for all Singapore SMEs worsened in Q3 2018.

- Among the three most risky sectors, the Utilities sector's CRI 1-year PD deteriorated by 1.65bps during Q3 2018. PDs for the Energy and Communications sectors deteriorated by 0.83bps and 1.61bps, respectively.
- Comparing the trends within the three least risky sectors, the CRI 1-year PDs for the Technology and Consumer (non-cyclical) sectors increased by 1.89bps and increased by 0.55bps, respectively. The Financial sector was the best credit performer this quarter even though its CRI 1-year PD increased by 0.77bps during Q3 2018.

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 except for the Utilities sector. A decrease in the multiplier indicates that credit risk has worsened in the short term faster than the medium term.
- The Technology sector recorded the largest decrease in PD multiple. The CRI PD multiple for the sector decreased to 12.27X in September 2018 from 13.53X in June 2018.

D. Conclusion

Overall, the NUS-CRI 1-year PD increased during Q3, from 18.10bps in June to 19.30bps in September. The weaker credit profile of Singapore SMEs is line with the slower than expected GDP growth at 2.6% in Q3 2018 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, Singapore SMEs show greater caution amid trade tensions. The manufacturing sector has a more pessimistic outlook compared to the other sectors due to fears of increased input costs which will have an impact on profitability. All sectors are expecting a decrease in growth outlook. To tackle the headwinds, the MTI has urged trade associations and chambers to play a greater role in helping local SMEs to grow locally and overseas. Trade associations and chambers can organize the SMEs by sector and provide support in terms of training workers and conducting post-implementation reviews. Another approach is to group SMEs together and go overseas and explore opportunities beyond the local market. Singapore's Economic Development Board also launched a new industry network to help companies accelerate the implementation of their own industry transformation programs. The network will help companies to evaluate the state of their own facilities against a national benchmark. Despite the more pessimistic outlook, SMEs in Singapore still look to expand in the near term and the assistance by associations and the government may help tackle the headwinds.