# Credit Brief on Singapore SMEs
# Q4 2019

*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 January 31, 2020, using all available data up to December 31, 2019.*

## A. Key Highlights on Credit Risk

The NUS-CRI 1-year PD for Singapore SMEs decreased to 27.23bps at the end of Q4 2019 amid a sluggish yearly GDP growth of 0.8% in this quarter. The SBF-DP SME Index[1], a forward looking measure of SME sentiment worsen from 50.6 to 50.4, suggesting a less optimistic outlook for Singapore SMEs between January 2020 and June 2020.

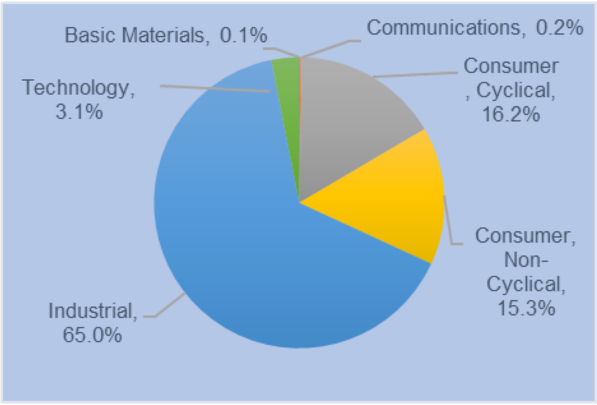
- CRI 1-year PDs for Singapore SMEs in Q4 2019 decreased after reaching a high in Q3 2019.
- The Energy and Utilities sectors had the highest credit risk in Q4, while Consumer (non-cyclical) and Financial had the lowest credit risk among all industries.
- While all industries witnessed a general improvement in credit quality, Utilities saw the biggest decrease in default risk.
- The aggregate credit quality of Medium-sized, Small and Micro firms improved during the quarter. The aggregate default risk for Small Utilities firms increased the most by 10.17bps while the Medium Utilities sector witnessed the largest improvement of 16bps across any size and industry group.
- The overall multiple of medium term PD (1-year) to short term PD (1-month) increased to 14.03x from 12.45x 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.
- 81% 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:

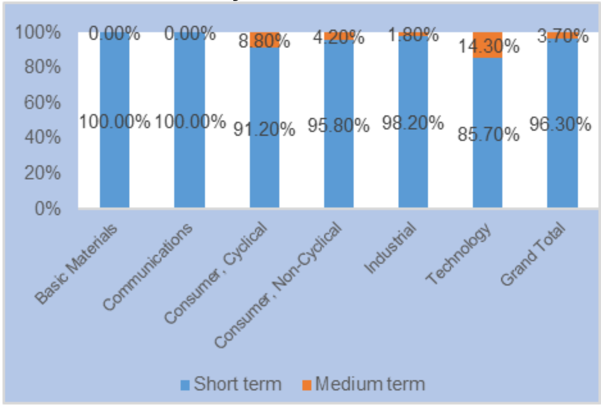
[1] SBF-DP SME Index is a six-month forward-looking business sentiment index by Singapore Business Federation and DP Information Group
[2] This report contains all loans funded through Validus

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




*Source: Validus Capital, all figures are updated as of December 31, 2019*

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

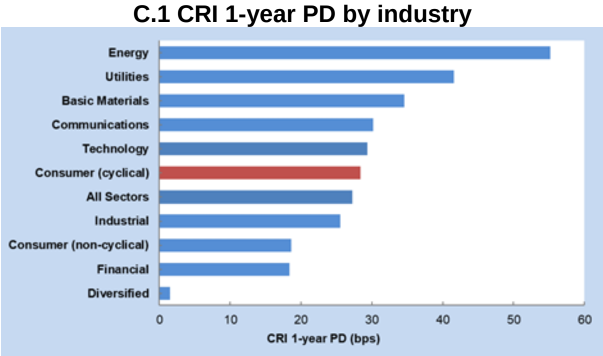



*Source: Validus Capital, all figures are updated as of December 31, 2019*

## 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**

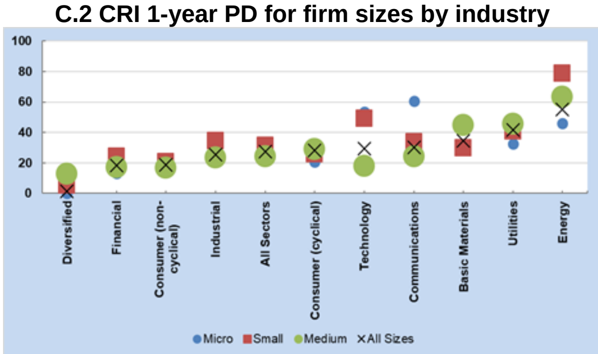



*Source: CRI, all figures are updated as of December 31, 2019*

The Energy industry had the highest CRI 1-year PD among all Singapore SMEs, followed by the Utilities and Basic Materials sector in Q4 2019. In contrast, the Industrial, Consumer (non-cyclical) and Financial sectors delivered robust performances.

- The aggregate CRI 1-year PD of all sectors decreased in Q4 2019 by 3.31bps from the last quarter. The credit performance of all sectors improved in Q4 2019.
- The Energy sector is the most risky sector in Q4 2019.
- The Financial sector remained to be the least risky sector in Q4 2019.

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



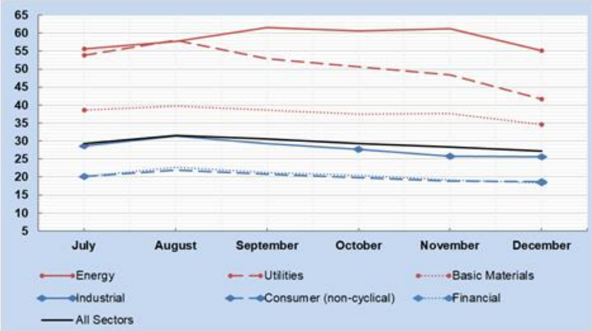

*Source: CRI, all figures are updated as of December 31, 2019*

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 Technology, Communications, Energy.

- 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 13.28bps, lower than every other firm of any size or sector.
- The Communications 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 Consumer (non-cyclical) sector.
- Small Energy firms carried the highest credit risk among every other firm of any size or sector. The CRI 1-year PD for Medium Utilities firms is 78.72bps.

[3] Defined by Validus Capital Pte. Ltd.

**C.3 CRI 1-year PD trend by industry**

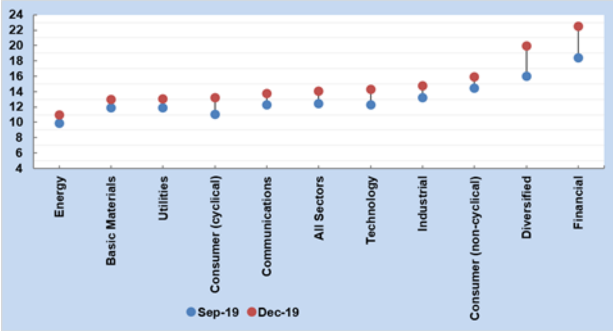



*Source: CRI, all figures are updated as of December 31, 2019*

The credit performances for all Singapore SMEs improved in Q4 2019.

- Among the three most risky sectors, the Energy sector's CRI 1-year PD decreased by 6.34bps during Q4 2019. PDs for the Utilities and Basic Materials sectors decreased by 11.29bps and 4.06bps, respectively.
- Comparing the trends with the three least risky sectors, the CRI 1-year PDs for the Industrial and Consumer (non-cyclical) sectors decreased by 3.8bps and 2.2bps, respectively. The Financial sector was the best credit performer this quarter. Its CRI 1-year PD decreased by 2.87bps during Q4 2019.

**C.4 CRI PD multiple by industry**




*Source: CRI, all figures are updated as of December 31, 2019*

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

- The PD multiplier increased for all sectors. An increase in the multiplier indicates that credit risk has improved in the short term faster than the medium term.
- The Financial sector recorded the largest increase in PD multiple. The CRI PD multiple for the sector increased from 18.38X in September 2019 to 22.47X in December 2019.

## D. Conclusion

Overall, the NUS-CRI 1-year PD decreased during Q4, from 30.51bps in September to 27.23bps in December. The credit profile of Singapore SMEs improved despite the sluggish GDP growth at 0.8% in Q4 2019 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 softened their business expectations amid the protracted US-China trade war. External facing sectors continued to face business challenges amid an uncertain global economy, with the outlook among commerce/ trading SMEs reaching the lowest since Q1 2017. Domestic facing sectors were also negatively affected by the trade war with the retail/ F&B sector registering the most significant decline in turnover expectations. Since the business environment in the first half of this year might continue to stay depressed, it is wise for companies to take a watch-and-wait approach. Lastly, with economic uncertainties and global headwinds now the new normal, SMEs need to continue to explore new markets which are now accessible with new Free Trade Agreements (FTA) in place such as the EU-Singapore FTA and continue to invest in business transformation efforts to strengthen their capabilities so they can be ready to ride on the recovery.