# Credit Brief on Singapore SMEs
# Q4 2017

*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.*

## A. Key Highlights on Credit Risk

The NUS-CRI 1-year PD for Singapore SMEs increased from 15.42bps to 15.71bps in Q4 2017, while Singapore's Q4 GDP grew 3.1% YoY. The SBF-DP SME Index[1] increased from 50.6 to 51.2, in tandem with the rise in GDP, suggesting an improved outlook for Singapore SMEs in the next quarter.

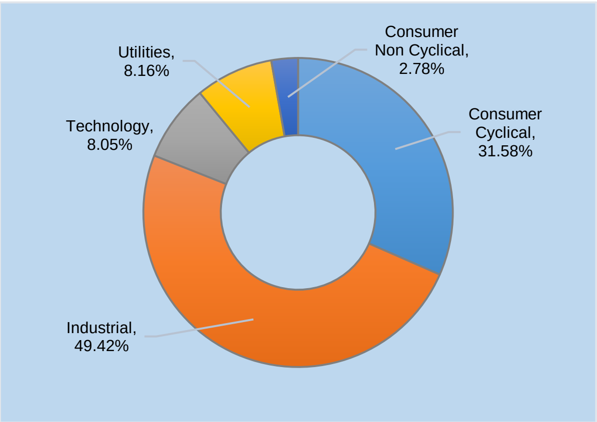
- CRI 1-year PDs for Singapore SMEs increased in Q4 2017.
- Similar to the previous quarter, Energy and Communications sectors saw the highest credit risk in Q4, while Consumer (non-cyclical) and Technology had the lowest credit risk among all industries.
- The Basic Materials sector witnessed the largest drop in default risk.
- Medium-sized firms have a lower aggregate default likelihood compared with Small or Micro firms. The Micro Communications sector had the largest increase in Q4 of 4.34bps while the Small Basic Materials sector witnessed the largest decline of 2.94bps across any size and industry group.
- The overall multiple of medium term PD (1-year) to short term PD (1-month) increased to 10.31x from 10.01x 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 these two industries. NUS-CRI insights does not indicate any adverse risk on these two industry sectors.
- Profile of loans originated through Validus platform are displayed in the charts below:

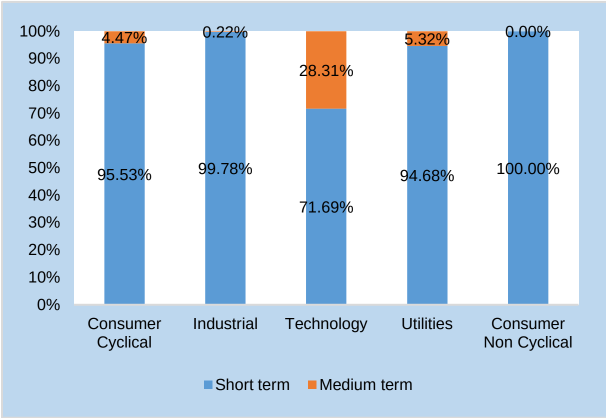
[1] SBF-DP SME Index is a six-month forward-looking business sentiment index by Singapore Business Federation and DP Information Group
[2] This report contains all loans funded through Validus

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




*Source: Validus Capital, all figures are updated as of December 31, 2017*

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

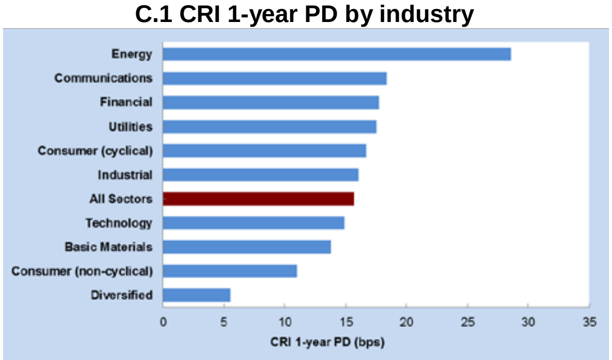



*Source: Validus Capital, all figures are updated as of December 31, 2017*

## C. Credit Risk for Singapore Industries

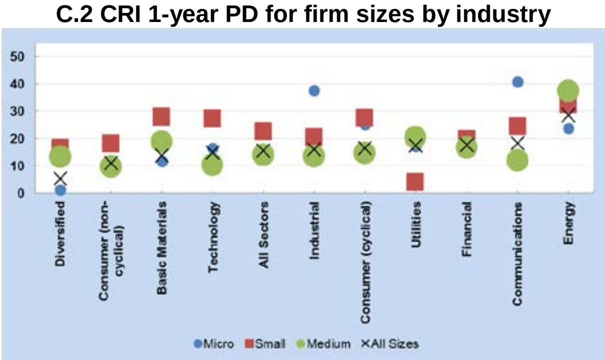
The CRI 1-year PD assesses the credit risk in the future one year. The comparison of PD trends and PD multipliers across industries gives a clear picture of the relative credit performance of each sector. The relative credit performance by firm size within each industry is also provided. By definition[3], 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, 2017*

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




*Source: CRI, all figures are updated as of December 31, 2017*

The Energy sector had the highest CRI 1-year PD among all Singapore SMEs, followed by the Communications and Financial sectors in Q4 2017. In contrast, the Consumer (non-cyclical), Basic Materials and Technology sectors delivered robust performances.

- The credit performance of most sectors worsened in Q4 2017 as the CRI 1-year PD increased over the quarter except for the Industrial and Basic Materials sectors.
- The Energy sector remained to be the most risky sector in Q4 2017. The CRI 1-year PD for the Communication sector increased gradually over the recent months, and has now become the second most risky sector in this quarter.
- The Consumer (non-cyclical) sector remained the least risky sector for three consecutive quarters.

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 Communications, Industrials and Technology.

- Small firms in the Utilities and Consumer (non-cyclical) sectors had better credit performances than All Sizes in the same sector. Small Utilities firms had the CRI 1-year PD of 4.03bps, 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. On the other hand, the sector that displayed the lowest variance is the Financial sector.
- Micro Communications firms carried the highest credit risk among every other firm of any size or sector. The CRI 1-year PD for Micro Communications firms is 40.79 bps.

[3] Defined by Validus Capital Pte. Ltd.

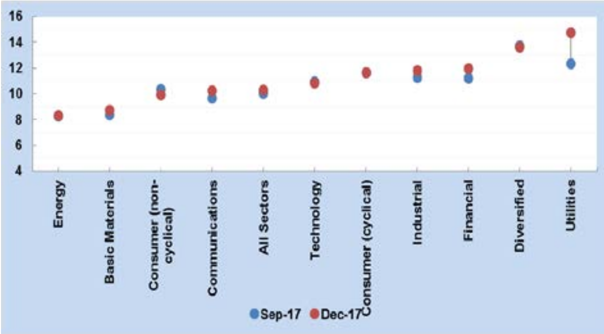
**C.3 CRI 1-year PD trend by industry**


*Source: CRI, all figures are updated as of December 31, 2017*

The credit performances for nearly all Singapore SMEs worsened in Q4 2017.

- Among the three most risky sectors, the Energy sector's CRI 1-year PD deteriorated by 0.09bps during Q4 2017. PDs for the Communications and Financial sectors deteriorated by 1.87bps and 1.36bps, respectively.
- Comparing the trends within the three least risky sectors, the CRI 1-year PDs for the Basic Materials and Technology sectors decreased by 1.33bps and increased by 1.13bps, respectively. The Consumer (non-cyclical) sector, which was the best credit performer this quarter, as its CRI 1-year PD increased slightly by 0.03bps during Q4 2017.

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




*Source: CRI, all figures are updated as of December 31, 2017*

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

- The PD multipliers showed varied changes. The PD multiplier increased for the Basic Materials, Financial, Communications, Energy, Industrial and Utilities, while the multipliers decreased for the remaining sectors. An increase in the multiplier indicates that credit risk has worsened in the medium term faster than the short term.
- The Consumer (non-cyclical) sector recorded the largest decrease in PD multiple. The CRI PD multiple for the sector decreased to 9.9X in December 2017 from 10.3X in September 2017.

## D. Conclusion

Overall, the NUS-CRI 1-year PD climbed higher in Q4 from Q3, reaching as high as 15.79bps in November from 13.58bps in July. The credit profiles of Singapore SMEs may have deteriorated in Q4 but credit performances could improve in Q1 2018. According to the SBF-DP Index, the business sentiment for the first half of 2018 increased to 51.2 from 50.6 in the previous period. Respondents to the survey said that access to funding and profits are likely to improve in the first six months of 2018. These respondents, which included more than 3,600 SMEs, said that they do not expect to hire more staff but anticipated more employee departures. The slight upbeat tone from survey respondents is largely in line with Singapore's economic growth trend, which continued its upward trajectory in the first three quarters of 2017. SMEs in the Consumer (non-cyclical) and Technology sectors are likely to report healthy credit performances in 2018 as consumer confidence and retail spending gained momentum in Q4 due to year end spending. The pickup in energy prices in the first quarter of 2018 may also help to ease some of the funding burden of Energy SMEs. Put simply, the credit outlook for this year is expected to surpass 2017 although the forecast depends on what might be offered in Budget 2018. Lawmakers may issue more grants and tax incentives for Singapore SMES but these will be announced during the Budget announcement in February.