Credit Brief on Singapore SMEs
Q4 2016

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

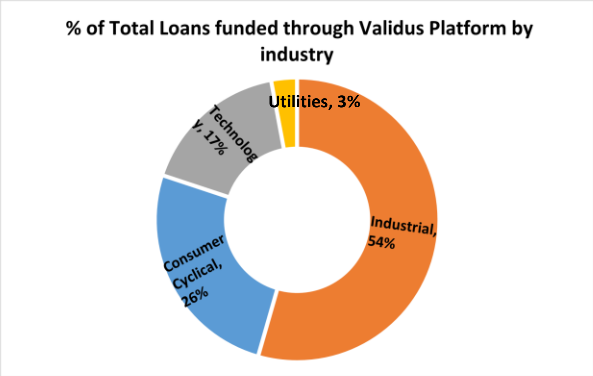
The NUS-CRI 1-year PD for Singapore SMEs decreased from 18bps to 17.5bps in Q4 2016 coinciding with the improvement in economic growth during the quarter. Although the Ministry of Trade and Industry expects Singapore's GDP to remain sluggish in 2017 and the SBF-DP SME Index[1]had declined from 50.2 to 49.8, the NUS-CRI 1-year PD shows that overall credit risk had improved for Singapore SMEs in Q4.

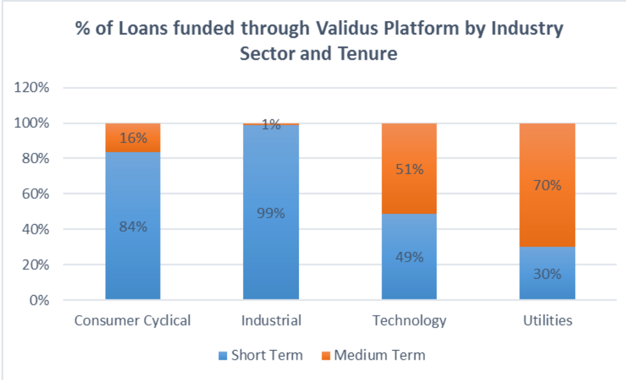
- CRI 1-year PDs for Singapore SMEs slightly improved in both Q3 and Q4.
- Energy and Industrial sectors saw the highest credit risk in Q4, while Utilities, Consumer Non-Cyclical and Basic Materials delivered the best credit performance among all industries.
- Utilities sector improved from one of the worst three credit performers in Q3 to one of the best three performers in Q4.
- Small Firms performed much better than All Sizes in the Utilities industry, while reversely for most of the other industries.
- The overall multiple of medium term PD (1-year) to short term PD (1-month) is 7.3x as compared to 7.9x from 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, Industrial, Technology and Utilities.
- Loans to companies within the industrial sector (mainly comprises of construction service related companies) are almost all short term.
- For companies in Technology and Utilities, the loan tenure is medium term in nature and in line with the Credit Risk insights.
- 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

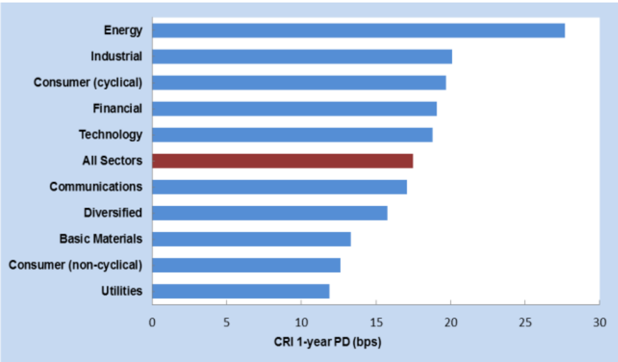




C. Credit Risk for Singapore Industries

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

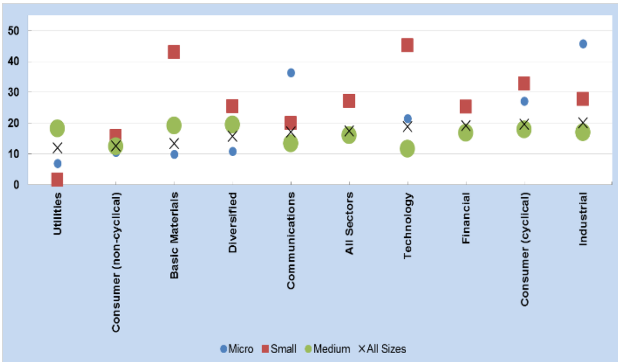


Source: CRI, all figures are updated as of December 31, 2016

Among all Singapore SMEs, the CRI 1-year PD for the Energy sector performed worst, followed by the Industrial and Consumer Cyclical sectors. In contrast, the Utilities, Consumer Non-Cyclical and Basic Materials sectors delivered robust performances.

- The credit performance of the Utilities sector improved significantly from being the second worst performer in Q3 to become the best performer in Q4.
- Energy, the riskiest sector in Q3, remained the sector with the highest credit risk in Q4
- The Consumer Non-Cyclical sector maintained its position as among the least risk sectors heading from Q3 into Q4.

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



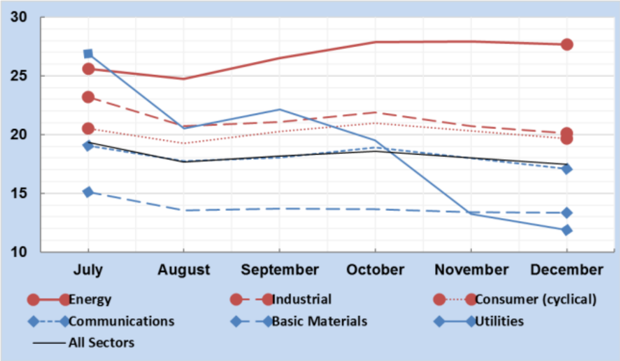
Source: CRI, all figures are updated as of December 31, 2016

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 Industrial, Technology and Basic Materials sectors.

- The small firms in the Utilities sector performed better than All Sizes in the same sector. Small Utilities firms also performed much better than small sized firms across the other seven sectors. Small Utilities firms had a 1-year PD of 1.56bps, lower than every other firm of any size or sector.
- Although the Utilities industry ranked as the least risky of all industries, medium sized Utilities firms carried the fourth highest credit risk.
- Industrial sector companies displayed the highest variance of 1-year PDs among all sectors. Small Technology firms were the second most risky, slightly less risky than micro-sized Industrial companies.

[3] Defined by Validus Capital Pte. Ltd.

C.3 CRI 1-year PD trend by industry

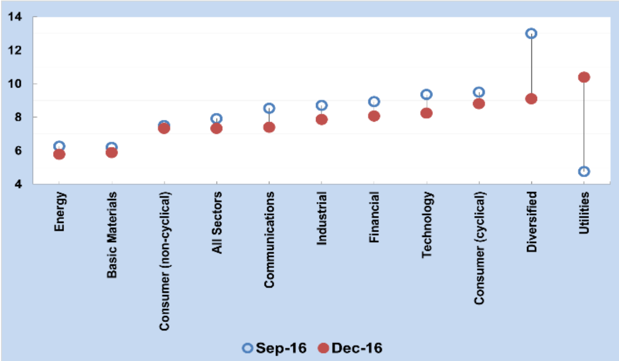


Source: CRI, all figures are updated as of December 31, 2016

The credit performances for all Singapore SMEs had slightly improved in Q4.

- Among the three most risky sectors, the Energy sector's CRI 1-year PD worsened by 1.17bps during Q4. The Industrial and Consumer Cyclical sectors improved slightly by 0.99bps and 0.59bps, respectively.
- Comparing the trends within the three least risky sectors, the CRI 1-year PDs for the Basic Materials and Consumer Non-Cyclical sectors improved by 0.37bps and 2.50bps respectively. The 1-year PD for the Utilities sector improved significantly by 10.24bps.

C.4 CRI PD multiple by industry



Source: CRI, all figures are updated as of December 31, 2016

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

- The PD multipliers decreased in nearly all sectors, with the exception of the Utilities industry. This is due to a sharper increase in the credit risk in the short term compared with the medium term.
- As shown in the figure above, the Diversified sector recorded the largest drop in PD multiple. The CRI PD multiple for the sector dropped to 9.1X in December from 13X in September.

D. Conclusion

Singapore's economy expanded at a faster than expected pace during Q4 as the manufacturing and services sectors recorded higher outputs. Singapore SMEs however continue to face headwinds with many firms struggling with high rental and labor costs. The Singapore Business Federation – DP Info SME Index, a measure of business sentiment among SMEs declined to the lowest level in seven years. The Singapore Business Federation asked the Government to review the regulatory costs for small local firms ahead of the 2017 Budget announcement in February. The SBF Committee asked regulators to delay a planned increase in foreign worker levies for another 3 years and called the government to improve the tenancy framework. Despite a lower 6-month forward-looking business sentiment measure, CRI PDs suggest that credit quality of SMEs have improved in Q4. If regulators lower fiscal and compliance costs for SMEs in the Budget 2017, credit profiles of SMEs may continue to strengthen.