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S&P GlobalMarket Intelligence

5 Key Credit Risk Factors to Consider When Assessing Alternative Exposures

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Overview

In our recent webinar, <u>5 Key Credit Risk Factors to Consider When Assessing Alternative Exposures</u>, we focused on non-bank financial institutions (NBFIs), small and medium enterprises (SMEs), and investment holding companies (IHCs). This article provides a summary of the webinar, describing the S&P Global Market Intelligence ("Market Intelligence") analytical frameworks for assessing credit risk in these three areas, providing a checklist to help support consistent analyses, and concluding with a section on frequently asked questions.

It should be noted that NBFI scores and Stand-Alone Credit Profile (SACP) scores¹ mentioned in this article are S&P Global Ratings Scores and Factors, which are different than the credit scores produced by Market Intelligence.² The S&P Global Ratings scores are inputs used to calculate a credit rating, whereas a credit score is the final assessment of creditworthiness.

¹ SACPs refer to S&P Global Ratings' opinion of an issue's or issuer's creditworthiness, in the absence of extraordinary intervention from its parent or affiliate or related government, and are but one component of a rating.

² S&P Global Ratings does not contribute to or participate in the creation of credit scores generated by S&P Global Market Intelligence. Lowercase nomenclature is used to differentiate S&P Global Market Intelligence scores from the credit ratings issued by S&P Global Ratings.

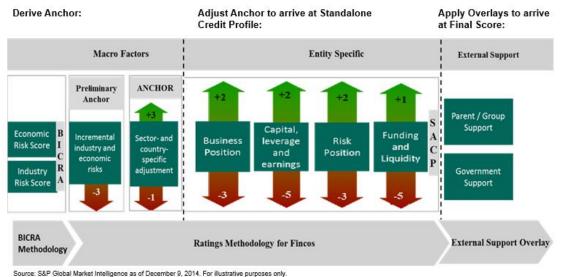
A Look at NBFIs

NBFIs include financial institutions typically not registered as banks that make loans to individuals and businesses. The Market Intelligence analytical framework for global NBFIs, described below, leverages the S&P Global Ratings Banking Industry and Country Risk Assessment (BICRA) methodology. BICRA comprises an economic risk score and an industry risk score. The economic risk score focuses on economic resilience, imbalances, and overall credit risk where the financial institution has operations. The industry risk score is centered on the institutional framework, competitive dynamics, and system-wide funding of the financial institution where it is domiciled. Combined, these scores are then used to determine a preliminary anchor, which acts as a starting point for determining the SACP for an NBFI. This essentially represents the baseline creditworthiness of banks operating in that market.

The preliminary anchor for NBFIs expresses both the general level of risk for the banking sector, as well as the additional risks levelled at non-banking participants. After considering macro factors, the framework focuses on an entity-specific assessment. Four broad risk dimensions are analysed for this: business position; capital, leverage, and earnings; risk position; and, funding and liquidity. These factors differentiate NBFIs either positively or negatively from their competitors. From an application perspective, if the anchor score (derived then adjusted from the BICRA) is a 'bb+' and the four risk dimensions are neutral, the SACP score remains 'bb+'. However, if a NBFI has a weak business position resulting in a score of -1 (a one-notch reduction), and the other risk factors are neutral, the SACP score is 'bb'. Additional adjustments can also be made to account for group and government support to determine a final score.

Global NBFIs

Analytical Framework



5 Key Drivers of Credit Risk for NBFIs

- 1. Non-Bank Industry and Country Risk Assessment. NBFIs face incremental risks relative to banks since they lack access to a central bank, which increases liquidity and funding risk. They also face strong competition from banks due to the lower cost of financing and lower barriers to entry for banks within the NBFI segment during more volatile or fragmented business conditions. In addition, NBFIs usually lack the regulatory oversight that banks have, heightening their sensitivity to changes in investor confidence. These risks typically lead to an anchor for an NBFI that is lower than that for a bank operating in the same jurisdiction.
- 2. Business Diversity and Stability. Business stability considers the predictability of continuing business volumes in the face of potential economic and market fluctuations. Specifically, we look at the business mix, revenue stability, and market position contribution of revenues generated and the resulting impact on business position. Business diversity, on the other hand, considers business line revenue diversification, geographic and industry diversification, and customer revenue concentrations.
- 3. **Capital and Profitability.** Capital and profitability measures a NBFI's ability to absorb losses. The analysis takes into account the quantity and quality of the capital base, as well as the entity's earnings capacity.
- 4. Lending and Underwriting Standards. Similar to the anchor analysis, the lending and underwriting standards for a bank in any given country are analysed before comparing that NBFI's lending and underwriting standards with what is expected in the operating environment. Key metrics at the NBFI are then reviewed, taking into account the type of lending it does. For example, household lending focuses on loan-to-value (LTV) ratios, whereas corporate lending looks into the sector concentration in cyclical or vulnerable sectors, such as real estate, construction, commodities, and shipping.
- 5. **Funding and Liquidity.** This risk dimension assesses a NBFI's capacity to support business performance through effective funding, while managing liquidity requirements both on an ongoing basis and in periods of stress.

A Look at SMEs

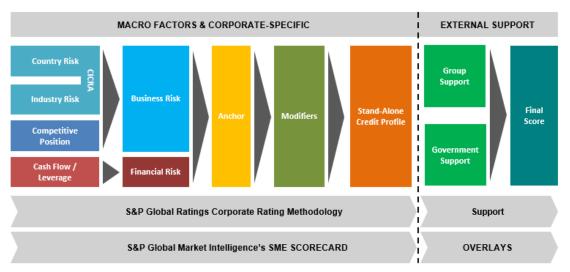
The analytical framework for SMEs follows the corporate assessment criteria, where the combination of business risk and financial risk determines the entity's anchor score.

The assessment of business and financial risk is based on an analysis of several credit risk factors. The anchor score is then adjusted upwards or downwards based on credit risk modifiers that measure management and governance, as well as liquidity and financial flexibility.

Once the SACP of the entity is derived, it is possible to factor in any explicit external support that might come from a group or government, similar to the approach in the NBFI framework.

Global SMEs

Analytical Framework



Source: S&P Global Market Intelligence as of November 13, 2013. For illustrative purposes only.

5 Key Drivers of Credit Risk for SMEs

- 1. **Customer and Supplier Relationships.** Dependencies on particular customers and suppliers can hamper a SMEs competitive advantage. Additional consideration should also be given to long-term relationships with those customers and suppliers that may impact growth and timely payments, as well as any bargaining power for favorable trading terms.
- 2. **Profitability.** This considers the level of profitability based on the respective industry and market averages in certain countries, as well as the volatility of profitability over a number of years.
- 3. Liquidity and Financial Flexibility. Since many SMEs often rely on informal sources of capital, it is important to assess both their financing needs, plans, and alternatives, as well as their flexibility to accomplish their financing program under stress without damaging creditworthiness. When looking at external funding capability to complement internal cash flow in emerging markets, the focus should be mostly on the SME's relationships with banks and the availability of bank lines of credit.
- 4. Management Quality, Depth, and Continuity. Most SMEs are family-owned businesses and tend to have less complex legal or governance structures than larger listed companies. Thus, management and governance typically focuses on key individuals in terms of their experience in the marketplace, as well as their reliability and continuity, as these individuals often have a meaningful influence on a company's management, governance, and financial policies. Such influences may be favorable or unfavorable, depending on the company's characteristics.
- 5. **Financial Reporting and Transparency.** For companies that do not have audited financial statements, which is the case for nearly all SMEs in the emerging market space, opinions on the credibility, transparency, and timeliness of the financial statements need to be considered.

A Look at IHCs

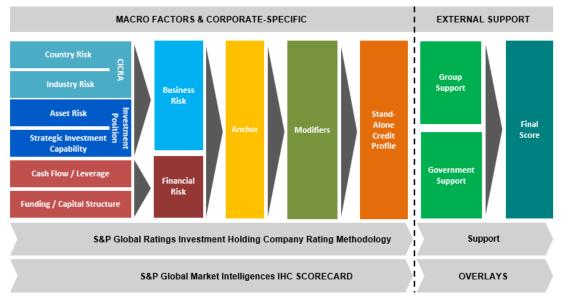
There are three criteria for understanding the scope of application for IHCs. The first is whether the company has operations in at least three industry sectors through equity participation, referred to as 'investee companies'. This diversification/portfolio effect applies to the company and focuses the analysis on the industry risk of the IHC itself, rather than the specific industry risk of the investee companies. The second criteria considers the need for IHCs to have a medium- to long-term goal of generating capital appreciation by investing in assets. The third criteria considers whether the firm has no or limited operations of its own.

The second and third criteria help distinguish between conglomerates and IHCs. The framework is not intended to be used for conglomerates, which are actively involved in an investee's business management by holding the majority of its shares, but rarely rotate its assets. Also, this framework is not intended to be used for the assessment of a fund's performance, but purely focuses on the fund's debt repayment capability.

The analytical framework for IHCs follows Ratings criteria, where the combination of business risk and financial risk determines the entity's anchor score. Once the SACP of the entity is derived, explicit external support that might come from a group or government can be factored in, similar to the approach mentioned earlier.

Global IHCs

Analytical Framework



Source: S&P Global Market Intelligence as of December 2, 2015. For illustrative purposes only.

5 Key Drivers of Credit Risk for IHCs

1. **Industry Risk.** IHC industry risk does not reflect the weighted average industry risk of investee companies, but rather reflects the risk characteristics derived from an IHC business model itself. One

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key IHC industry risk relates to that posed by using IHC debt to finance investee company equity participation, the interest costs of which are serviced by recurring dividend income from investee companies. Dividends paid by investee companies to IHCs, on the other hand, are discretionary and subordinated to all other payments that investee companies must make to maintain their own operations. Another key risk is posed by the inherent asset/liability mismatch, which exposes IHCs to refinancing risk due to weak cash flow at the IHC level. IHCs don't generate sufficient cash to repay their debt principal and, therefore, generally rely on their ability to refinance maturing debt with new debt.

- 2. **Asset Liquidity, Diversity, and Credit Quality.** Asset liquidity plays an important role in determining an IHC's risk because the ability to sell assets quickly is the ultimate source of debt repayment if an IHC cannot refinance maturing debt. The assessment reflects how quickly the IHC is expected to liquidate assets at a reasonable price.
- 3. Strategic Investment Capability (SIC). An IHC's SIC- its ability to make profitable investments, execute timely acquisitions, and divest companies on attractive economic terms is critical to its success in the industry. This concept captures an IHC's ability to create value for its stakeholders in the context of well-executed investment and risk appetite policies. To assess SIC, various aspects need to be considered, such as investment discipline, record of net asset value (NAV) development, and timely replacement and turnover of portfolio assets.
- 4. Leverage/Cash Flow. Balance sheet leverage analysis is the foundation for assessing an IHC's financial risk profile. The assessment focuses on one core financial ratio to derive the preliminary leverage assessment. Benchmarking for assessing the preliminary leverage assessment is developed by considering extreme volatility in equity markets, as a fall in asset valuation will have a pronounced negative impact for highly-leveraged IHCs. This would require the IHC to divest a bigger portion of its asset portfolio to deleverage, potentially below optimal value. Overall financial risk is then adjusted by a supplemental ratio to account for cash flow stability.
- 5. **Funding and Capital Structure.** Funding and capital structure assesses IHC refinancing risk. The assessment evaluates the degree of diversity of IHC funding sources, the tenor of the debt maturity profile, and the IHC's relationship with lenders.

Checklist for Credit Risk Assessments

The following checklist has been designed to support consistent analyses and comparisons of risk.

- 1. Employ detailed attribute-driven, criteria-based scoring guidelines to help provide consistency, stability, and robustness to credit risk assessment.
- 2. Consider sector-specific risk factors that are both qualitative and quantitative to help drive higher performance and better predict default risk.
- 3. Have a clear indication of risk factor weights, financial benchmarks, and the scoring algorithms used to generate a final probability of default (PD) outcome.
- 4. Implement a criteria-driven approach linked to default rates for low-default portfolios that tend to lack empirical data.
- 5. Provide the developmental evidence of your models by conducting a calibration and testing process.

Frequently Asked Questions

The following questions were submitted by participants during the webinar, and responses are provided below.

1. How would you assess funds outside of an IHC, such as a private equity fund, which typically are majority shareholder and are more active in the management of fewer investee companies?

The Global IHC credit risk assessment framework is a good starting point to consider the credit risk of various fund types, but further consideration needs to be given to the unique characteristic of each type. As an example, in most cases in the private investment space assets are less liquid, plus SIC should be assessed on a much longer timeframe considering the stage of the fund itself, as it can take more than 10 years to write up a performing asset after initial negative returns (commonly known as the "J curve effect"). Therefore, although we feel the framework is still relevant for funds in general, there is a need to tailor some guidelines based on the characteristic of each fund type.

2. What scope of application is applicable to assess SMEs in a non-retail credit risk framework?

Typically there are two measures to look at when it comes to scoping larger corporates versus medium-sized, smaller-sized, and even micro-sized entities.

- 1. Financial statement information: Turnover, asset size, or capital even a mixture of each in some countries.
- 2. Employment information: The number of employees, which seems to be the most common approach to measure SMEs globally.

However, the application within the credit risk scorecard has to be based on local practices, defined either internally or based on regulatory definitions. For example, in Hong Kong SAR, China³ it is a manufacturing firm with less than 100 employees but, in Malaysia, SMEs are defined on the number of employees (less than 200 employee) and turnover (less than MYR50m); Bank Negara Malaysia also has a more granular definition between medium, small, and micro SMEs.⁴ If we turn to Indonesia, the criteria used by the Ministry of Cooperatives and SMEs is both asset driven (less than IDR 10bn) and sales driven (less than IDR 50bn), again with further granularity provided on medium, small, and micro SMEs.⁵

It is also useful to consider looking at a floor, rather than just a ceiling, when scoping SMEs for the purpose of credit analysis. A more rigid framework, such as the one presented in this article, may be more relevant for medium and small SMEs, depending on the scope used country-by-country. When assessing micro SMEs, however, financial information is typically unavailable and facility credit assessments typically rely on collateral amounts and type (e.g. from shareholders), as well as on more behavioral aspects, such as payment

³ A report on support measures for SMEs, "Staying Ahead: Smart, Motivated, Enterprising", SUCCESS, Trade and Industry Department, The Government of the Hong Kong SAR, June 2001.

⁴ "Circular on New Definition of Small and Medium Enterprises (SMEs)", Development Finance and Enterprise Department, Bank Negara Malaysia, November 2013.

⁵ "SME and Entrepreneurship Policy in Indonesia 2018", OECD Studies on SMEs and Entrepreneurship, OECD, October 2018. Copyright © 2019 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved

history and credit bureau scores. This approach is more relevant for a retail SME model approach, rather than non-retail SME credit assessment scorecard.

Scoping isn't merely categorizing entities below certain thresholds, as dictated from country-to-country, but it can also be further defined based on the characteristics of even smaller entities, typically micro SMEs, which may need a more retail-focused SME credit risk assessment approach.

3. What could be a primary reason why a potential borrower would approach a NBFI rather than a bank?

Globally, banks are under increased pressure to efficiently manage their portfolios for credit, market, and operational risks. This includes undertaking necessary stress tests and applying more stringent credit risk management policies to comply with regulatory capital regulations, or to meet accounting requirements, such as International Financial Reporting Standards' accounting standard, IFRS 9 and Current Expected Credit Losses (CECL) accounting standard from the Financial Accounting Standards Board (FASB). This means that riskier borrowers (based on their ability to pay and or willingness to pay based on credit scores, payment history, etc.) tend to be less able to access bank financing, as they will fall under the minimum rating requirements set by a bank's internal policies. Therefore, some individuals have the opportunity to reach out to the non-banking space for such funding, where the regulation can be less stringent and providers are able to take on riskier portfolios.

4. Obtaining financial transparency in most of the less advanced economies in Southeast Asia is challenging. This is more problematic if you are dealing with SMEs. How can you address this problem?

In terms of financial transparency, there are two areas of counterparty risk exposure mentioned above: the ability to pay, and the willingness to pay. When financial information is either unavailable, or the quality of this information is weak, assessments of non-retail borrowers should focus on more behavioural aspects, such as payment histories and credit bureau scores at the company level, or even by looking at the directors themselves. One further approach is turning the focus from PDs to recovery prospects (Loss Given Default – LGD). Factors to consider in LGD approaches include creditors' ability to access assets that form collateral for the loan, and their ability to commence insolvency or bankruptcy procedures and then retain control over that process to enforce their securities and achieve realisations within a reasonable timeframe.

5. Would the three-notch downgrade from BICRA anchor apply to NBFIs located in countries with low-rated sovereigns?

The typical anchor adjustment for the NBFI sector is three notches below that of the banking sector in the same country. However, the differential could be narrowed when the bank anchor is non-investment grade and already reflects some of the incremental risks typically seen in the NBFI sector. Therefore, in emerging markets, where the bank anchors remain low, there could be justification to lower the differential, as those risks exist already in the banking sector. However the other reason for lowering the differential could be

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related to the country- and sector-specific attributes, such as a stronger institutional framework for the NBFI sector, stronger funding, and regulations that preserve competitive position.⁶

6. For microfinance institutions (MFIs), which are primarily funded by borrowings, liquidity ratios typically are low. How do we assess the appropriate level of liquidity for MFIs?

Funding and liquidity is absolutely a sector-wide issue, and therefore would be factored into the anchor adjustments themselves, based on the country-specific risk assessment in question. When doing the entity-specific assessment, peer analysis for the sector-wide liquidity coverage metric and net stable funding ratio should be considered. This could be expanded by looking beyond the final ratios themselves (with peer comparison), to look into the characteristics of the available stable funding and liquidity, to consider any stresses anticipated for the one-year period based on the type of funding in place.

⁶ For more information on NBFI risks reflected into anchors, please see "Global Non-Bank Financial Institutions Anchor Summary By Country", S&P Global Ratings, July 25, 2018,

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