

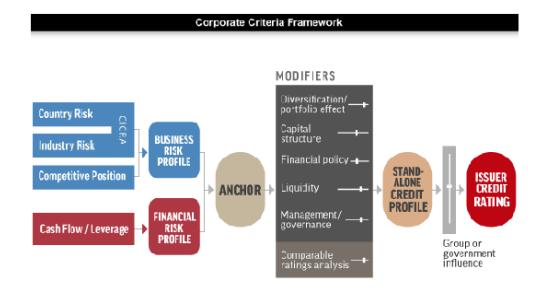
#### February 19, 2021

(Editor's Note: On Feb. 19, 2021, we republished this article, originally published on April 10, 2019, to update related criteria

This article provides a summary of the analytical framework we apply to determine the issuer credit rating (ICR) for corporate industrial companies and utilities, as established in our "Corporate Methodology," published Nov. 19, 2013.

# **Corporate Rating Framework**

Our corporate methodology organizes the analytical process in several steps to ensure we consider all significant risks. The analysis starts with a company's business risk profile, followed by an evaluation of its financial risk profile, which we combine to determine an issuer's anchor assessment. We then analyze six factors that could potentially modify our anchor conclusion and arrive at a stand-alone credit profile (SACP). Finally, if applicable, we consider group or government influence to determine an ICR. Importantly, throughout the process, we apply certain analytical adjustments to reported financials to allow for greater global consistency and comparability of financial data.



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## **Business Risk Profile (BRP)**

The risk/return potential for a company in the markets in which it participates define the business risk profile (BRP). A company's strengths and weaknesses in the market place determine its capacity to generate cash flow in order to service its obligations in a timely fashion and, as such, the BRP affects the amount of financial risk that a company can bear at a given SACP. Our analysis of the BRP combines our assessment, within those markets, of the country risks, the competitive climate (its industry risk), and the competitive advantages and disadvantages the company offers (its competitive position). Under our methodology, BRP assessments range from "excellent" (highest) to "vulnerable" (lowest).

#### Country risk

Country risk captures the broad range of factors that can affect credit quality, which arise from doing business from or within a specific country. Country risks include economic risk, institutional and governance effectiveness risk, financial system risk, and rule of law/payment culture risk.

Sovereign ratings have often been used externally as a proxy for country risks. However, the sovereign rating focuses on the likelihood that a sovereign obligor will pay its debt on time and in full and, as such, may understate or overstate the set of country-specific risks that are relevant for nonsovereign credit analysis. Hence, the country risk score captures those country-specific risks. Generally, corporate entities operating within a single country will receive the country risk assessment of that jurisdiction; for companies with exposure to more than one country, the country risk assessment reflects the weighted average exposure to those countries' country risk. Under our methodology, country risk assessments range from 1 (lowest risk) to 6 (highest risk). For more details on S&P Global Ratings' view of country risks, see our "Country Risk Assessment Methodology And Assumptions."

#### **Industry risk**

The analysis of industry risk enhances the comparability and transparency of ratings among sectors by comparing and scoring inter-industry risk. The methodology addresses the major factors that we believe affect the risks that companies face in their respective industries. The criteria use two factors for determining a global industry risk assessment:

- Cyclicality; and
- Competitive risk and growth environment (barriers to entry; level and trend of industry profit margins; risk of secular change and substitution; and growth trends.)

Under our methodology, we score industry risk from 1 (lowest risk) through 6 (highest risk). If a company operates in different industries, we use the weighted average of the industry risk assessments (subject to materiality), to determine its industry risk assessment. For more details on S&P Global Ratings' view of industry risk, see our "Methodology: Industry Risk."

#### CICRA

We combine our assessment for country risk and industry risk to determine the issuer's Corporate Industry and Country Risk Assessment (CICRA). Under our methodology, we also rank CICRA from 1 (lowest risk) through 6 (highest risk).

#### Competitive position

Then, we combine the CICRA with a company's competitive position assessment in order to complete the assessment of the issuer's BRP. Competitive position encompasses the combination of company-specific business features and operating attributes that add to or mitigate its industry risk and country risk. The methodology groups these features into four components:

- Competitive advantage;
- Scale, scope, and diversity;
- Operating efficiency; and
- Profitability.

The company's strengths and weaknesses with respect to each of the first three of these components shape its competitiveness in the marketplace, the sustainability and volatility of its revenues and profits, and by extension, the strength of its BRP. Ultimately, to demonstrate a strong competitive position, a company should produce superior profitability to that of its peers, while companies with weaker competitive positions would show profitability metrics that underperform its peers'. Therefore, the profitability assessment will either confirm the initial assessment of competitive position or modify that assessment positively or negatively. A stronger-than-industry-average set of competitive position characteristics will strengthen a company's BRP. Conversely, a weaker-than-industry-average set of competitive position characteristics will weaken a company's BRP. Based on the above factors, an issuer's competitive position ranges from 1 (excellent) to 6 (vulnerable).

# Financial Risk Profile (FRP)

The FRP is the outcome of decisions that management makes in the context of its BRP and its financial risk tolerances. This includes decisions about the manner in which the company is funded and how its balance sheet is constructed. It also reflects the relationship of the cash flows the organization can achieve, given its BRP, relative to its financial obligations. Cash flow/leverage analysis is used to determine a corporate issuer's FRP assessment. Under our methodology, FRP assessments range from "minimal" (least financial risk) to "highly leveraged" (greatest financial risk).

#### Cash flow/leverage

The pattern of cash flow generation, current and future, in relation to cash obligations is often the best indicator of a company's financial risk. The criteria guide analysts to assess a range of credit ratios, predominately cash-flow based, which complement each other by focusing attention on the different levels of a company's cash flow waterfall in relation to its obligations (for example, before and after changes in working capital, before and after capital expenditures, before and after dividend payments), to develop a thorough perspective. Moreover, the criteria guide analysts to those ratios that are most relevant in measuring a company's credit risk according to its individual characteristics and business cycle. For those companies operating in especially low risk industries and countries, we may use less stringent thresholds to evaluate their financial risk. Conversely, for those companies that we consider volatile or highly volatile, we may adjust the cash flow/leverage assessment to a weaker category.

For each company, we calculate two core credit ratios, funds from operations (FFO) to debt and debt to EBITDA. These two payback ratios are used as the initial ratios to determine the relative ranking of the financial risk of companies. This preliminary assessment may then be adjusted through additional ratio analysis.

In addition to our analysis of a company's core ratios, we also consider five standard supplemental ratios, although the relevant industry Key Credit Factors article or "Guidance: Corporate Methodology" may introduce additional supplemental ratios or focus attention on one or more of the standard supplemental ratios based on an industry's characteristics. We consider three standard supplemental ratios (cash from operations [CFO] to debt, free operating cash flow [FOCF] to debt, and discretionary cash flow [DCF] to debt) that are payback ratios, and two standard supplemental ratios ([FFO+ interest] to cash interest and EBITDA to interest) that are coverage ratios. If supplemental ratios point to an FRP assessment that is different from the preliminary assessment, we may adjust the financial risk assessment.

#### **Anchor**

We then combine the company's BRP score and its FRP score to determine its anchor. The analysis weights BRP more heavily for an investment-grade anchor, while the FRP carries more weight for a speculative-grade anchor. Anchor assessments are expressed in a lower case version of S&P Global Ratings' credit ratings. Our analysts use the matrix below to combine the business risk profile and financial risk profile assessments.

Table 1 Combining The Business And Financial Risk Profiles To Determine The Anchor

Business risk profile	Financial risk profile					
	1 (minimal)	2 (modest)	3 (intermediate)	4 (significant)	5 (aggressive)	6 (highly leveraged)
1 (excellent)	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
2 (strong)	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
3 (satisfactory)	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
4 (fair)	bbb/bbb-	bbb-	bb+	bb	bb-	b
5 (weak)	bb+	bb+	bb	bb-	b+	b/b-
6 (vulnerable)	bb-	bb-	bb-/b+	b+	b	b-

# Stand-Alone Credit Profile (SACP)

After determining the anchor, additional rating factors can modify the outcome. The assessment of each factor can raise or lower the anchor by one or more notches--or have no effect in some cases. We express these conclusions using specific assessments and descriptors, which in turn, determine the number of notches to apply to the anchor to determine the SACP. The SACP derived from this framework can range from 'aaa' to 'b-' (the SACP may be lower if the issuer meets the conditions for assigning 'CCC+', 'CCC', 'CCC-', and 'CC' ratings). The relevant modifiers are diversification/portfolio effect, capital structure, financial policy, liquidity, management/governance, and comparable ratings analysis.

#### Diversification/portfolio effect

The diversification/portfolio effect analysis applies to companies we consider conglomerates. It aims to capture the benefits of diversification or the portfolio effect for a company that has multiple business lines. While the benefits of diversity within individual lines of business is assessed within competitive position, diversification/portfolio effect could modify the anchor depending on how meaningful we think the diversification is, and on the degree of correlation we find in each business line's sensitivity to economic cycles. Diversification can positively modify the anchor by up to two notches.

#### Capital structure

The assessment of a company's capital structure captures risks that may not arise in the standard analysis of cash flow adequacy and leverage. These risks may exist because of debt maturity dates or currency mismatches between a company's sources of financing and its assets or cash flows and can be compounded by external factors such as volatile interest rates or currencies.

We analyze the following four factors within this category:

- Currency risk of debt;
- Debt maturity profile;
- Interest rate risk of debt; and
- Investments.

Any of these factors can influence a firm's capital structure assessment, although some carry greater weight than others. The tier one factors, currency risk of debt and debt maturity profile, can have significant impact on the capital structure assessment because, in our view, they carry the greatest risks, in isolation or combined with other subfactors. The capital structure assessment can modify the anchor positively or negatively by two or more notches.

#### Financial policy

Financial policy serves to refine the view of a company's risks beyond the conclusions arising from the standard assumptions in the cash flow/leverage assessment. Those assumptions do not always reflect or adequately capture the short- to medium-term event risks or the longer-term risks stemming from an issuer's financial policy. The cash flow/leverage score, in particular, will typically factor in operating and cash flows metrics observed during the past two years and their anticipated trends for the current year and the following two years based on operating assumptions and predictable financial policy elements, such as ordinary dividend payments or recurring acquisition spending. However, over that period and, generally, over a longer time horizon, the firm's financial policies can change its risk profile based on management's appetite for incremental financial risk or, conversely, its plans to reduce leverage.

The financial policy adjustment is therefore a measure of the influence (negative, positive, or neutral) that, in our view, management is likely to exert on an issuer's FRP beyond what is implied by recent credit metrics or what we have already built into our cash flow and leverage forecasts. The impact of the financial policy modifier ranges from plus one notch to minus three notches, except for entities owned by financial sponsors. In that case, the financial policy assessment will cap the financial risk profile at certain predetermined levels.

## Liquidity

Liquidity is an important component of credit risk across the entire rating spectrum. Unlike most other rating factors within an issuer's risk profile, a lack of liquidity could precipitate the default of an otherwise healthy entity. Accordingly, liquidity is an independent characteristic of a company, measured on an absolute basis, and the assessment is not relative to industry peers or other companies in the same rating category. The quantitative analysis of liquidity focuses on the monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis also assesses the potential for a company to breach covenant tests related to declines in EBITDA. The methodology incorporates a qualitative analysis that addresses such factors as the ability to absorb high-impact, low-probability events, the nature of bank relationships, the level of standing in credit markets, and the degree of prudence of the company's financial risk management. A liquidity assessment of "less than adequate" or "weak" will cap the SACP at certain predetermined levels.

## Management and governance

The evaluation of management and governance encompasses the broad range of oversight and direction conducted by an enterprise's owners, board representatives, executives, and functional managers. Their strategic competence, operational effectiveness, and ability to manage risks shape an enterprise's competitiveness in the marketplace and credit profile. If an enterprise has the ability to manage important strategic and operating risks, then its management plays a positive role in determining its operational success. Alternatively, weak management with a flawed operating strategy or an inability to execute its business plan effectively is likely to substantially weaken an enterprise's credit profile.

The analysis of management and governance is one of the most qualitative aspects of our rating methodology. However, the analysis is evidence-based. The impact of management and governance analysis ranges from plus one notch to minus two or more notches.

## Comparable ratings analysis

The comparable ratings analysis is our last step in determining a SACP on a company. This involves taking a holistic review of a company's stand-alone credit risk profile, in which we evaluate an issuer's credit characteristics in aggregate.

The application of comparable ratings analysis reflects the need to "fine-tune" rating outcomes, even after the use of each of the other modifiers: We consider our assessments of each of the underlying subfactors to be points within a possible range. Consequently, each of these assessments that ultimately generate the SACP can be at the upper or lower end, or at the mid-point, of such a range:

- A company receives a positive assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the higher end of the range;
- A company receives a negative assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be at the lower end of the range; and
- A company receives a neutral assessment if we believe, in aggregate, its relative ranking across the subfactors typically to be in line with the middle of the range.

The application of the comparable ratings analysis can lead us to confirm, or raise or lower, our final assessment of the SACP by one notch.

## **Group or government influence**

Finally, the group rating methodology (GRM) and the government related entities (GRE) methodology explain how our assessment of likely extraordinary group or government support (or conversely, negative intervention) factors into the ICR on an entity that is a member of a group or is a government-related entity.

We use GRM to identify the members of the group, determine a group credit profile, assess the status of an entity within the group and the resulting likelihood of support, and combine the entities' SACP with the support conclusion. The criteria define five categories of group status: "core," "highly strategic," "strategically important," "moderately strategic," and "nonstrategic." Each category indicates a different view of the likelihood that an entity will receive support from the group and is used to determine the entity's potential long-term ICR. The ultimate outcome of group influence analysis can be anything from no change to the SACP up to equalization with the group credit profile.

We apply a modified approach when a member is assessed as insulated from the rest of the group, and when determining the interaction of group and government support. For a more comprehensive overview of the impact of external support, see "Group Rating Methodology," published July 1, 2019, and "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015.

# Ratings Below 'B-'

If we view an issuer's capital structure as unsustainable or if its obligations are currently vulnerable to nonpayment, and if the obligor is dependent upon favorable business, financial, and economic conditions to meet its commitments on its obligations, then we will determine the issuer's SACP using "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1.2012.

# **Ratios And Adjustments**

An entity's financial statements and data are core inputs to our cash flow/leverage and competitive position analysis described above. We may make analytical adjustments to the reported financial statements to calculate adjusted credit ratios in order to:

- Better align an entity's reported financial data with our view of the underlying economics of specific transactions, as well as continuing operations.
- Improve the global comparability of financial data between companies and across industries and geographies. For example, we may adjust reported financial figures when credit ratios are affected by different applicable accounting principles, measurements, and recognition or disclosure practices.
- Adjust the consolidation approach embedded in reported financials to best reflect our opinion of an entity's business, economic, and financial ties to other members of the group including subsidiaries, holding companies, and affiliates.

We organize our ratios and adjustments methodological framework around key adjustment

principles applied in the calculation of adjusted debt, earnings, cash flow, and interest, and three categories of adjustments that are consistent with these principles.

The three categories of adjustments are:

- "Routine" adjustments generally made to all entities, where applicable. These include: accessible cash and liquid investments; leases; postretirement employee benefits and deferred compensation; asset-retirement obligations; capitalized development costs; securitization; sale and factoring of receivables and other assets; hybrid capital instruments; capitalized interest; financial guarantees and earn outs and deferred consideration for business acquisitions.
- "Situational" adjustments expected to be applied only in rare circumstances and only if we believe that they will significantly affect a company's credit metrics and are not factored elsewhere in our rating analysis. Examples of these adjustments include litigation and other contingent claims/liabilities; workers compensation and self-insurance liabilities, multi-employer pension plans; debt at fair value and foreign currency hedges of debt principal.
- "Sector-specific" adjustments pertain only to particular sectors to reflect the impact of unique industry characteristics on the adjusted financial metrics for a company. These sector-specific adjustments are consistent with our four adjustment principles and are made where applicable and material.

We calculate the credit ratios used in our cash flow/leverage assessment based on adjusted financial metrics.

For a more detailed explanation of our adjustments, see our "Corporate Methodology: Ratios And Adjustments."

#### **Related Criteria**

- Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Corporate Methodology, Nov. 19, 2013

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