

Article Title: ARCHIVE | Criteria | Corporates | General: A Closer Look At Industrials Ratings

Methodology Data: (EDITOR'S NOTE: —This report is the introduction to a series of articles that takes a detailed look at each of the analytical categories examined in Standard & Poor's rating process for industrials issuers. Click on the link at the end of this article to see the list of other articles included in this series. ) The rating methodology used by Standard & Poor's focuses on fundamental analysis. Not surprisingly, our conceptual model hasn't changed significantly, but there have been some shifts over time that reflect greater complexity and volatility. Clearly, a rating universe that is dominated by high-yield issuers, compared with a largely investment-grade universe 20 years ago, requires some adjustments. Today's ratings analysis, for instance, puts a lot more emphasis on cash flow and liquidity than in the past. In addition, our profitability analysis used to be part of our financial risk review, but we now consider it part of our business risk review. The logic of this adjustment was to help give us a better feel for how a company stands up against its peers, which is an important part of our competitive analysis. Using our profitability analysis in this context also helps validate some of our business risk conclusions. Over the past five or six years, a good deal more attention has been placed on accounting considerations and corporate governance. While management's risk orientation has always been a critical part of our rating decisions, a more complex corporate landscape has required us to drill down deeper into management practices and policies, including a range of issues from ownership to board independence. While it would be hard to suggest that there have been revolutionary changes to our approach to ratings over the past 10 years, our process has clearly evolved to reflect changes in the marketplace. This will be an ongoing process, and it shouldn't surprise anyone when they look at our methodology 10 years from now and see some additional fine tuning. Business Risk/Financial Risk Matrix Standard & Poor's strives for transparency around its rating process. It should be apparent, however, that the ratings process cannot be entirely reduced to a cookbook approach: Ratings incorporate many subjective judgments, and remain as much an art as a science. Our methodology organizes the analytical process according to a common framework, and it divides the task into several categories so that all salient issues are considered. The first categories involve fundamental business analysis; after them come the financial analysis categories. (Credit ratings often are identified with financial analysis--especially ratios. But it is critical to realize that ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics are rated very differently, to the extent that their business challenges and prospects differ.) Standard & Poor's developed the matrix in table 1 to make explicit the rating outcomes that are typical for various business risk/financial risk combinations. The table illustrates the relationship of business and financial risk profiles to the issuer credit rating. Table 1 Business Risk/Financial Risk Matrix

FINANCIAL RISK PROFILE		BUSINESS RISK PROFILE		MINIMAL		MODEST		INTERMEDIATE	
AGGRESSIVE	HIGHLY LEVERAGED	Excellent	AAA	AA	A	BBB	BB	Strong	AA
A	Satisfactory	BBB+	BBB	BB+	B+	Weak	BBB	BBB-	BB+
BBB+	BBB	BB+	B+	Weak	BBB	BBB-	BB+	BB-	B
BBB+	BBB	BB+	B+	Weak	BBB	BBB-	BB+	BB-	B
BBB+	BBB	BB+	B+	Weak	BBB	BBB-	BB+	BB-	B

Table 2 shows the financial risk ratios for industrial companies. Table 2 Financial Risk Indicative Ratios

FFO/TOTAL DEBT (%)	TOTAL DEBT/TOTAL CAP (%)	TOTAL DEBT/EBITDA (X)	Minimal	More than 60	Less than 25	Less than 1.5	Modest	45-60	25-35	1.5-2.0	Intermediate	30-45	35-45	2.0-3.0	Aggressive	15-30	45-55	3.0-4.5	Highly leveraged	Less than 15	More than 55	More than 4.5
FFO--Funds from operations.																						

The following example illustrates how the tables can be used to better understand our rating conclusions. The hypothetical case of Company ABC Company ABC is deemed to have a 'satisfactory' business risk profile, which is typical of an investment-grade industrial issuer. If its financial risk were 'intermediate', the expected rating outcome should be 'BBB'. ABC's ratios of cash flow to debt of 35% and debt leverage (total debt to EBITDA) of 2.5x are characteristic of 'intermediate' financial risk. In reality, of course, the assessment of financial risk is not so simplistic! It encompasses financial policies and risk tolerance, several perspectives on cash flow adequacy (including free cash flow and the degree of flexibility regarding capital expenditures), and various measures of liquidity (including coverage of short-term maturities). Company ABC can aspire to being upgraded to the 'A' category by reducing its debt burden to the point that cash flow to debt is more than 60% and debt leverage is only 1.5x. Conversely, ABC may choose to become more financially aggressive--perhaps it decides to reward shareholders by borrowing to repurchase its stock. The company can expect to be rated in the 'BB' category if its cash flow to debt ratio is 20% and debt leverage remains at 4.0x, and

there is a commitment to keeping its finances at these levels. Rating matrix is a guideline, not gospel. The rating matrix is not meant to be precise. There can always be small positives and negatives that would lead to a notch higher or lower than the typical outcome. Moreover, there will always be exceptions--cases that do not fit neatly into this analytical framework. For example, liquidity concerns or litigation could pose overarching risks. Also, the matrix does not address the lowest rungs of the credit spectrum (i.e., the 'CCC' category and lower). These ratings, by definition, reflect some impending crisis or extraordinary vulnerability, and the balanced approach that underlies the matrix framework just does not work well for such situations.

**Corporate Credit Analysis Categories**

The categories underlying Standard & Poor's business and financial risk assessments are as follows:

- Business Risk
- Country risk
- Industry factors
- Company position
- Profitability/Peer group comparisons

**Chart 1 Financial Risk**

- Accounting
- Governance/Risk tolerance/Financial policies
- Cash flow adequacy
- Capital structure/Asset protection
- Liquidity/Short-term factors

**Chart 2 Business risk considerations**

Country risk.

Sovereign-related stress can have an overwhelming impact upon company creditworthiness, both direct and indirect. Sovereign credit ratings are suggestive of general risk faced by local entities, but they may not fully capture risk applicable to the private sector. As a result, when rating corporate or infrastructure companies or projects, we look beyond the sovereign ratings to evaluate the specific economic or country risk that may impact the entity's creditworthiness. Such economic or country risk pertains to the impact of government policies upon the obligor's business and financial environment, and a company's ability to insulate itself from these risks.

**Industry factors.** Each rating analysis begins with an assessment of the given issuer's environment. The degree of operating risk facing a company depends on the dynamics of the industry in which it participates. Our industry analysis focuses on the strength of industry prospects, as well as the competitive factors affecting that industry. The many factors assessed include industry prospects for growth, stability, or decline, and the pattern of business cycles. It is critical, for example, to determine vulnerability to technological change, labor unrest, or regulatory interference. (Standard & Poor's knowledge of the investment plans of the major players in a given industry offers a unique vantage point from which to assess competitive prospects.) The industry risk assessment sets the stage for analyzing specific company risk factors/keys to success and establishing the priority of these factors in the overall evaluation. For example, if technology is a critical competitive factor, R&D; prowess is stressed. If the industry produces a commodity, cost of production is of major importance. For any particular company, one or more factors can hold special significance, even if that factor is not common to the industry. For example, the fact that a company has only one major production facility normally is regarded as an area of vulnerability. Similarly, reliance on one product creates risk, even if the product is highly successful (e.g., a pharmaceutical company with only one blockbuster drug that is subject to competition and patent expiration).

**Company position.** Competitive position represents a critical input in assessing a company's level of business risk in Standard & Poor's analysis, and can often have a significant impact on the debt rating for an issuer. To determine a given issuer's competitive position, we look at key credit factors within its specific industry. A key factor for a pharmaceutical company, for example, might be R&D; , whereas marketing would be a particularly important consideration for a consumer products company. Part of our competitive analysis may require us to consider the size and diversification of an issuer. While Standard & Poor's has no minimum size criterion for any given rating level, the size of a company can turn out to be significantly correlated to our rating on it. This is because relatively greater scale often provides a measure of diversification and/or reflects a stronger competitive position. Small companies are, almost by definition, more concentrated in terms of product, number of customers, and geography. In effect, they can lack some elements of diversification that generally benefit larger companies. To the extent that markets and regional economies change, a broader scope of business affords protection. Small companies are sometimes touted for their greater growth potential. However, fast growth often is subject to poor execution (even if the idea is well conceived) and can tempt a company into over-ambitiousness, which could subsequently lead to added risk.

**Management evaluation.** Although management evaluation is considered as part of our company position analysis in our business risk profile analysis chart, we have broken it out as a separate topic of discussion for this series of reports on ratings methodology due to management's obvious importance to an issuer's overall health and creditworthiness. Management is assessed for its role in determining operational success and also for

its risk tolerance. The first aspect is incorporated in the business risk analysis; the second is weighed as a financial policy factor. Subjective judgments help determine each aspect of management evaluation. Opinions formed during the meetings with senior management are as important as management's track record. While a track record may seem to offer a more objective basis for evaluation, it often is difficult to determine how results should be attributed to management's skills. Plans and policies are judged for their realism. How they are implemented determines the view of management consistency and credibility. Stated policies often are not followed, and a rating may reflect skepticism until management has established credibility. Credibility can become a critical issue when a company is faced with stress or restructuring, and the analyst must decide whether to rely on management to carry out plans for restoring creditworthiness. Profitability/Peer group comparisons. Profit potential is a critical determinant of credit protection. A company that generates higher operating margins and returns on capital has a greater ability to generate equity capital internally, attract capital externally, and withstand business adversity. Earnings power ultimately attests to the value of the company's assets as well. In fact, a company's profit performance offers a litmus test of its fundamental health and competitive position. Not surprisingly, comparing peer companies on key profit metrics is a useful tool in establishing a firm's position in the food chain. Moreover, conclusions about profitability also serve as a good sanity check on our assessment of business risk. Financial risk considerations. Having evaluated the issuer's competitive position and operating environment, the analysis proceeds to several financial categories. To reiterate, the company's business risk profile determines the level of financial risk appropriate for any rating category. Financial risk is portrayed largely through quantitative means, particularly by using financial ratios. Profitability benchmarks vary greatly by industry, and several analytical adjustments typically are required to calculate ratios for an individual company. Cross-border comparisons require additional care, given the differences in accounting conventions and local financial systems. Accounting characteristics and information risk. Financial statements (and related disclosures) serve as our primary source of information regarding the financial condition and financial performance of industrial and utility companies. The analysis of financial statements begins with a review of accounting characteristics. The purpose is to determine whether ratios and statistics derived from the statements can be used appropriately to measure a company's performance and position relative to both its direct peer group and the larger universe of corporate issuers. The rating process is, in part, one of comparisons, so it is important to have a common frame of reference. Analytical adjustments are made to better portray reality and to level the differences among companies. Although it is rarely possible to completely recast a company's financial statements, it is important to at least have some notion of the extent to which different financial measures are overstated or understated. Apart from their importance to the quantitative aspects of the analysis, conclusions regarding accounting characteristics and financial transparency can also influence qualitative aspects of the analysis, such as the assessment of management. Financial policy. Standard & Poor's attaches great importance to management's philosophies and policies involving financial risk. A surprising number of companies have not given this question serious thought, much less reached strong conclusions. For many others, debt leverage (calculated without any adjustment to reported figures) is the only focal point of such policy considerations. More sophisticated business managers have thoughtful policies that recognize cash flow parameters and the interplay between business and financial risk. Even those companies that have set goals may not have the wherewithal, discipline, or management commitment to achieve these objectives. Leverage goals, for example, need to be viewed in the context of an issuer's past record and the financial dynamics affecting the business. In some cases, because it can have the most direct affect on their risk profile, financial policy will be the critical factor in determining a company's rating. Cash flow adequacy. Interest or principal payments cannot be serviced out of earnings, which is just an accounting concept; payment has to be made with cash. Although there usually is a strong relationship between cash flow and profitability, many transactions and accounting entries affect one and not the other. Analysis of cash flow patterns can reveal a level of debt-servicing capability that is either stronger or weaker than might be apparent from earnings. Cash flow analysis is the single most critical aspect of all credit rating decisions. It takes on added importance for speculative-grade issuers. While companies with investment-grade ratings generally have ready access to external financing to cover temporary cash shortfalls, junk bond issuers lack this degree of

flexibility and have fewer alternatives to internally generated cash for servicing debt. Capital structure and asset protection. A review of an issuer's capital structure represents an important part of Standard & Poor's financial review. This analysis helps us determine how much financial flexibility a firm has and how leveraged it is. Of course, when we look at leverage, our analysis goes beyond reported debt on the balance sheet and includes such items as leases, pension and retiree medical liabilities, guarantees, and contingent liabilities. In addition, a company's asset mix is a critical determinant of the appropriate leverage for a given level of risk. Assets with stable cash flows or market values justify greater use of debt financing than those with clouded marketability. Accordingly, we believe it is critical to analyze each type of business and asset class in its own right. While FASB and IAS now require consolidation of nonhomogenous business units, we analyze each separately. Liquidity/short-term factors. The previously discussed financial factors and liquidity considerations are combined to arrive at an overall view of financial health. In addition, sundry considerations that do not fit in other categories are examined, including serious legal problems, lack of insurance coverage, or restrictive covenants in loan agreements that place the company at the mercy of its bankers. The potential impact of such contingencies is considered, along with the issuer's contingency plans. Access to various capital markets, affiliations with other entities, and the ability to sell assets are important factors in determining a company's options under stress. Flexibility can be jeopardized when an issuer is overly reliant on bank borrowings or commercial paper. Reliance on commercial paper without adequate backup facilities is a big negative. An unusually short maturity schedule for long-term debt and limited-life preferred stock also is a negative. As going concerns, companies should not be expected to repay debt by liquidating operations. Clearly, there is little benefit in selling natural resource properties or manufacturing facilities if they must be replaced in a few years. Nonetheless, the ability to generate cash through asset disposals enhances a company's financial flexibility. (Each of the articles in our ratings methodology series examines one or more of the aforementioned business and financial risk categories in greater detail, including examples from actual rating situations.) [Click on this link to see other articles included in "Special Report: A Closer Look At Industrial Ratings Methodology."](#) [Click this link for Special Report Archive](#)