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Key Credit Factors For The Environmental Services Industry

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(***Editor's Note:*** *This article is no longer current. We have included relevant content in "Guidance: Corporate Methodology," published on July 1, 2019.)*

1. These criteria present S&P Global Ratings' methodology and assumptions for its Key Credit Factors For The Environmental Services Industry.

SCOPE OF THE CRITERIA

2. These criteria apply to ratings on issuers in the environmental services industry. By environmental services companies, we mean issuers that derive a majority of their revenue from the collection, treatment, transportation, and disposal of various waste streams. These criteria exclude companies involved in environmental consulting, along with producers of air pollution control equipment.

SUMMARY OF THE CRITERIA

3. S&P Global Ratings is publishing its criteria for analyzing environmental services companies, applying our global corporate criteria.

4. We view environmental services as a "low risk" industry under our criteria, given its "low risk" cyclicality risk and "low risk" degree of competitive risk and growth. In assessing the competitive position of an environmental services company, we put particular emphasis on market position, geographic footprint, vertical integration, and operating efficiency. In our assessment of the financial risk profile, we consider industry or company specific working capital and fixed capital spending needs and their effect on cash flow coverage ratios.

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METHODOLOGY

Part I--Business Risk Analysis

Industry risk

7. Within the framework of S&P Global Ratings' global corporate criteria for assessing industry risk, we view environmental services as a "low-risk" industry (category 2). Our industry risk assessment for environmental services is derived from our view of the segment's low (2) cyclicality, and our perspective that the industry warrants a low-risk (2) competitive risk and growth assessment.

8. In our view, demand for environmental services is relatively stable, being a function of such key drivers as GDP growth, household formation, business formation, and consumer spending. We view the industry as recession-resistant, as evidenced by an average revenue decline in the low- to mid-single-digit range over the last six recessions. Waste disposal is an essential service, and the magnitude of volume declines for residential and commercial waste during recessions is less than in many other industries. For environmental services companies whose sales are more dependent on the industrial sector, cyclical shifts in activity can be more pronounced.

9. Pricing also is relatively stable, with most companies able to continue to increase prices (albeit at lower rates, given increased intensity of competition) during periods of economic stagnancy. Price competition can be significant in some markets, with companies offering discounts to retain volumes; however, on the whole, industry-wide pricing is fairly rational.

Cyclicality

10. We assess cyclicality for environmental services as low risk (2). The industry has demonstrated low cyclicality--relative to other industries--in both revenue and profitability, which are two key measures used to derive an industry's cyclicality assessment (see "Methodology: Industry Risk"). Based on our analysis of global Compustat data, environmental services companies experienced an average peak-to-trough (PTT) decline in revenues of about 2.3% during recessionary periods since 1972. In addition, the largest decline during the 2000-2002 recession, was relatively benign at 6.9%. During the most recent downturn, the decline was 4.5%. On the profitability side, environmental services companies faced an average PTT decline in EBITDA margin of 6% during recessionary periods from 1959, exhibiting the sixth-most stable performance out of the 38 industries studied. The largest PTT drop in profitability totaled 11% from 1968-1971, though the contraction in profitability during the most recent downturn (2007-2009) was close at almost 10%.

11. With an average drop in revenues of 2% and an average profitability decline of 6%, environmental services' cyclicality assessment calibrates to low risk (2). We generally consider that the level of profitability cyclicality in an industry correlates to the higher credit risk of entities operating in that industry. However, the overall effect of cyclicality on an industry's risk profile may be mitigated or exacerbated by an industry's competitive risk and growth environment.

Competitive risk and growth

12. We view environmental services as warranting a low (2) competitive risk and growth assessment. To determine competitive risk and growth, we assess four sub-factors as low, medium, or high risk. These sub-factors are:

- Effectiveness of industry barriers to entry;
- Level and trend of industry profit margins;

- Risk of secular change and substitution by products, services, and technologies; and
- Risk in growth trends.

Effectiveness of environmental services industry's barriers to entry--low risk

13. Barriers to entry are relatively high; industry participants must comply with a variety of local, state, and federal regulations. While much of the industry is made up of small, local operators who may be able to enter into the collection side of the business without great difficulty, success in the industry is tied to disposal, and disposal assets like landfills, recycling plants, and incinerators are difficult to obtain. It is a complex process to clear the regulatory hurdles to add additional airspace to a landfill, let alone to build a greenfield development. Acquiring a landfill can be costly, provided that one is even available for sale. During difficult market conditions, access to capital can be an important differentiator, favoring larger players.

Level and trend of environmental services industry profit margins--low risk

14. Given the necessity of services, profit margins tend to remain relatively stable. For solid waste participants, as more of the waste stream transitions to recycling and beneficial reuse in lieu of traditional disposal, EBITDA margins may exhibit a slightly declining trend, as recycling plants operate at lower margins than landfills. However, despite this, we expect profitability to remain solid. Moreover, return on capital may improve because recycling plants are less capital-intensive than landfills. Seasonality related to weather conditions affects demand to only a modest degree, and is not expected to have a significant effect on sales levels over the long term. Environmental services companies may at times be subject to increases in the costs of labor, oil prices, and recycled commodities prices; however, many rated environmental services companies are able to maintain profitability by reducing costs, improving efficiency, and passing these cost increases along to customers via higher selling prices in many cases. To the extent that companies have been able to reign in overhead costs and prudently manage debt maturity structures, some have demonstrated the ability to weather a protracted downturn.

Risk of secular change and substitution of services and technologies--low risk

15. The business of collecting and disposing of waste is highly necessary and is less susceptible to substitution risk than many other services. Whether the waste is disposed of in a landfill or incinerator, recycled, or converted into energy, environmental services companies continue to invest in technologies to ensure that substitution risk from other industries is low. However, within the industry, smaller and less-capitalized firms specializing in the collection and disposal of specific, niche waste segments continually face the risk that larger and better-funded companies can invest more into research, development, and acquisitions to gain a strong foothold or overtake in these areas.

Risk in environmental services industry growth trends--medium risk

16. We view the environmental services industry as a stable, mature, and slow-growth industry. We would expect revenue growth to generally meet or exceed GDP during periods of positive economic growth. In addition to GDP, population growth, household formation, and business formation rates are also factors that tend to drive consistent demand for services, supporting operating

performance. However, because organic growth rates are in the low-single-digits, companies must also develop growth from acquisitions and service differentiation. There are also the trends of corporate customers establishing "zero-waste" goals, and the calls for more beneficial reuse. However, the industry is well established and we believe long-range demographic trends will remain supportive of the environmental services industry; yet among alternative methods of waste disposal, some will likely prove more successful to industry participants than others.

Country risk

17. Country risk plays a critical role in determining all ratings on companies in a given country, which is particularly true in the case of environmental services companies. Country-related risk factors can have a substantial effect on company creditworthiness, both directly and indirectly. In assessing country risk for an environmental services company, our analysis uses the same methodology as with other corporate issuers (see global corporate criteria). A key factor in our business risk analysis for corporate issuers is the country risk assessment, which includes the broad range of economic, institutional, financial market, and legal risks that arise from doing business in a specific country.

18. We generally determine exposure to country risk using revenues, as this information is consistently available. Environmental services and waste collection revenues are typically generated from an asset base located in the same country, so analyzing where a firm's assets are deployed would not, in most cases, provide significantly greater insight into its country risk exposure than its revenues would. In infrequent cases, we may use assets or EBITDA if those measures suggest an important difference in country risk exposure than revenues.

Competitive position (including profitability)

19. Under our global corporate criteria, a company's competitive position is assessed as (1) excellent, (2) strong, (3) satisfactory, (4) fair, (5) weak or (6) vulnerable. In assessing the competitive position for environmental services companies we review an individual company's:

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

20. The first three components are independently assessed as either (1) strong, (2) strong/adequate, (3) adequate, (4) adequate/weak, or (5) weak. Profitability is assessed through the combination of two subcomponents, the level of profitability and the volatility of profitability.

21. After evaluating separately competitive advantage, scale, scope, and diversity, and operating efficiency, we determine the preliminary competitive position assessment by ascribing a specific weight to each component. The applicable weightings will depend on the company's Competitive Position Group Profile (CPGP).

22. The CPGP assigned to most environmental services companies that we rate is "Services and Product Focus," as differentiation may be achieved through service capabilities and technology innovation when competing in the marketplace. Under the "Services and Product Focus" CPGP, we weigh the competitive position component as follows: competitive advantage (45%); scale, scope, and diversity (30%); and operating efficiency (25%).

23. In some cases, particularly for solid waste services companies, we may use a CPGP of "Capital Or

Asset Focus" if the particular company requires sizable capital investments and asset outlays in order to sustain its market position in the industry. Under the "Capital Or Asset Focus" CPGP, we weigh the competitive position component as follows: competitive advantage (30%); scale, scope, and diversity (30%); and operating efficiency (40%).

24. Some diversified environmental services companies may have business lines that fall outside of the environmental services industry; where applicable, we assess the competitive position of those businesses independently, by incorporating the Key Credit Factors relevant for those industries.

Competitive advantage

25. In assessing the competitive advantage of an environmental services company we consider its:

- Market position;
- Quality of service; and
- Asset base.

26. Market position can be a significant aspect of an environmental services company's competitive advantage, because companies with sizable market shares relative to their peers may garner some pricing advantages and can maintain better sales performance amid adverse market environments. The assessment of an environmental services company's market position includes the size of its revenue base and its market share in the key markets and regions in which it competes. An effective marketing strategy and sales force can support good market position.

27. In analyzing the market position of the company, we also consider the degree of competition in the market. All else equal, we would view a high degree of exposure to price-competitive markets as being less favorable relative to that of specialized markets, which may be contractually protected, resulting in greater pricing power and a more stable customer base for the environmental services provider.

28. We also consider the companies' ability to generate sales based on demonstrably better service quality as measured by on-time service and few missed pick-ups. High contract renewal rates, a good reputation, and high brand recognition in the marketplace tend to indicate good service quality.

29. A company's access to key fixed assets such as landfills, incinerators, or other waste stream disposal sites can also provide a competitive advantage, as these important and highly profitable assets benefit from high entry barriers. It is difficult to secure the government support and permits necessary to construct some of these facilities, and the construction or acquisition (if even available) could require significant commitments of capital and time. We view vertically integrated environmental services companies as being more likely to sustain solid profitability than other companies who only control one aspect of the process.

30. An environmental services company with a strong or strong/adequate competitive advantage assessment typically is characterized by a combination of:

- Leading market share positions in the markets in which it competes;
- Participation in favorable markets, such as those that are contractually protected instead of those that are subject to greater price competition;
- High quality of services provided, measured by contract renewal rates, timeliness of collection, ease of billing, favorable brand recognition, and other factors; and

- Vertical integration benefits and control of multiple aspects of the value chain, supported by the possession of (or cost-effective access to) key fixed assets such as landfills, incinerators, or other plant and equipment with ample capacity and high entry barriers.

31. An environmental services company with a weak or adequate/weak assessment of its competitive advantage typically is characterized by a combination of:

- Lack of leadership or near-leadership positions in the markets in which it participates;
- Participation in unfavorable and competitive markets in which pricing gains are difficult to achieve;
- Unexceptional or poor service quality; and
- A lack of vertically integrated operations, perhaps stemming from the inability to obtain (or cost-prohibitive expense of obtaining) proprietary disposal sites or other fixed assets, which exposes the company to supplier costs.

Scale, scope, and diversity

32. In assessing the scale, scope, and diversity of an environmental services company, we evaluate:

- Its geographic footprint, i.e., the location and diversity of markets in which it operates;
- The characteristics of those markets in terms of supply/demand and service spectrum; and
- Its customer and supplier concentration.

33. We generally assume that participation in a variety of attractive markets will make for greater stability of financial performance in market downturns, although some downturns are so extreme that all markets are severely affected.

34. We also consider the relative attractiveness of the markets (in terms of size, demographics, expected growth, intensity of competition, etc.) in which the environmental services company participates; the diversity of those markets; how the company is positioned in those markets with respect to pricing, service offerings; and its customer and supplier relationships and concentration, all of which are key determinants of its profit potential and exposure to downside risks.

35. An environmental services company that warrants a strong or strong/adequate assessment of scale, scope, and diversity typically is characterized by a combination of:

- Participation in a variety of markets with favorable supply/demand fundamentals, and those markets are not closely correlated;
- Multiple types of service offerings; and
- Broad diversity of customers and/or suppliers.

36. An environmental services company warranting a weak or weak/adequate assessment of scale, scope, and diversity typically is characterized by a combination of:

- Participation in only a few markets, markets that have limited growth prospects, markets that are characterized by intense competition, and/or markets that are closely correlated to one another;
- A narrow focus on a particular customer segment or type of waste stream, especially a down-scale, more competitive segment; and

- High concentration of customers and/or suppliers.

Operating efficiency

37. In assessing the operating efficiency of an environmental services company, we consider:

- Its relative cost position versus peers and scale economies;
- The relative flexibility of its cost structure;
- The efficiency of its route network and related productivity; and
- Its workforce characteristics.

38. Operating efficiency is an important aspect of an environmental services company's competitive position. To the extent an environmental services company has a high degree of operating efficiency, it should be able to generate better profit margins than peers that compete in the same markets, whatever the nature of the prevailing market conditions.

39. Environmental services companies that achieve these advantages typically produce better operating margins than their peers because they can command better pricing and operating leverage through scale. Scale and operating efficiency are interrelated. While scale may afford only a limited amount of demonstrable pricing power among environmental services companies in small local markets, it can contribute to operating efficiency, in that larger-scale environmental services companies are better able to:

- Compete for national account contracts with commercial customers.
- Obtain better prices from fleet and equipment suppliers, leveraging centralized purchasing functions.
- Negotiate lower interest rates and insurance costs.
- Invest in up-to-date information systems, routing software, and other new technologies.

40. We also consider its relative cost position versus industry peers; the flexibility of its cost structure in absorbing declines in demand; the ability of the company to withstand input cost pressures including those pertaining to labor, fuel, and commodities; and its working capital management characteristics.

41. In reviewing the relative cost position of an environmental services company compared to that of its peers, we primarily consider its EBITDA margin profile, supplemented by various indicators of cost efficiency and capital intensity such as gross margin; selling, general, and administrative (SG&A) costs to sales; and capital expenditures to sales ratios. Both the overall cost and margin profile of the company and that of its various reporting segments are important in our analysis.

42. In reviewing cost structure flexibility, we consider an environmental services company's ability to limit margin deterioration in a downcycle through cost reduction, and to pass on increases in input costs. Indicators of cost flexibility may include: proportion of fixed and variable costs, degree of operating leverage, degree of vertical integration and outsourcing, labor cost characteristics including unionized/nonunionized workforce profile and pension cost considerations, fuel or third-party disposal cost exposure, and related pass through profile.

43. Route efficiency is important for transportation-intensive services such as solid waste collection. Advantaged companies take care to ensure that their collection routes are optimized with regard to route length, the number of customers served, the types of waste collected, the time it takes to service a given route, and other productivity factors.

44. An environmental services company with a strong or strong/adequate operating efficiency assessment typically is characterized by a combination of:

- Good economies of scale and other efficiencies that over time lead to consistently better profit margins (as measured by gross margin and EBITDA margin) than peers.
- Demonstrated ability to maintain overhead costs at competitive levels (shown by SG&A costs as a percent of revenues), while maintaining effective staff functions.
- Highly efficient routing execution and continuous monitoring of route efficiency in order to improve productivity.
- Good relations with its labor force, which may include organized labor.

45. An environmental services company with a weak or adequate/weak assessment of its operating efficiency typically is characterized by a combination of:

- Consistently weak profitability, as measured primarily by EBITDA margin, relative to its peer group.
- The inability to maintain overhead costs at competitive levels (shown by SG&A costs as a percent of revenues), while maintaining effective staff functions.
- A poor record of timely and efficient waste collection, which may be indicative of sub-optimal route efficiency and inadequate planning.
- A history of workforce disruptions and delays in negotiating amenable bargaining agreements with organized labor.

Profitability

46. The profitability assessment can confirm or modify the preliminary competitive position assessment. The profitability assessment consists of two components: (1) the level of profitability, and (2) the volatility of profitability. The two components are combined into the final profitability assessment using a matrix (see global corporate criteria).

Level of profitability

47. The level of profitability is determined using a three-point scale: "above average," "average," and "below average."

48. We use EBITDA margin as the primary indicator of an environmental services company's level of profitability, based on thresholds identified in table 1 below. We use return on capital (ROC) as a supplementary indicator to refine our assessment when EBITDA margin is close to the thresholds for "below average" or "above average" (see ROC thresholds in table 2). For instance, if a company's EBITDA margin is at the high end of the defined range for "average" but its return on capital is comfortably in the "above average" range, we may assess its level of profitability "above average". In accordance with the global corporate criteria, for this assessment we typically determine the five-year average EBITDA margin and ROC by using the last two years of historical and our forecasts for the current and following two years; we may put more emphasis on forecast years if historical data is not deemed representative, or to take into account deteriorating or improving profiles where prospective ratios meaningfully differ from average ratios.

Table 1

EBITDA Margin Thresholds

	Below average	Average	Above average
All companies	<12%	12%-24%	>24%

Table 2

Return On Capital Thresholds

	Below average	Average	Above average
All companies	<6%	6%-10%	>10%

Volatility of profitability

49. The volatility of profitability is measured on a six-point scale, from '1' (least volatile) to '6' (most volatile).

50. In accordance with our global corporate criteria, we generally determine the volatility of profitability assessment by using the standard error of regression (SER), subject to having at least seven years of historical annual data. We typically use historical EBITDA to determine the SER for environmental services companies, but may use historical EBITDA margin in specific cases where event-driven changes would warrant the use of that measure. For example, in cases where companies engage in large discretionary acquisitions or divestitures, their absolute level of EBITDA may change significantly following the transaction, but their EBITDA margin could remain stable. Using EBITDA margin in these cases would provide a more accurate measure of the SER. In accordance with the global corporate criteria, we may--subject to certain conditions being met--adjust the SER assessment by up to two categories better (less volatile) or worse (more volatile). If we do not have sufficient historical information to determine the SER, we follow the global corporate criteria guidelines to determine the volatility of profitability assessment.

Part II-Financial Risk Analysis

Accounting and analytical adjustments

51. In assessing the accounting characteristics of environmental services companies, the analysis uses the same methodology as with other corporate issuers (see global corporate criteria). Our analysis of a company's financial statements begins with a review of the accounting to determine whether the statements accurately measure a company's performance and position relative to its peers and the larger universe of corporate entities. To allow for globally consistent and comparable financial analyses, our rating analysis may include quantitative adjustments to a company's reported results. These adjustments also enable better alignment of a company's reported figures with our view of underlying economic conditions. Moreover, they allow a more accurate portrayal of a company's ongoing business. Adjustments that pertain broadly to all corporate sectors, including this sector, are discussed in "Corporate Methodology: Ratios And Adjustments," published on Nov. 19, 2013.

Cash flow/leverage analysis

52. In assessing the cash flow adequacy of an environmental services company, our analysis uses the same methodology as with other corporate issuers (see global corporate criteria). Cash flow/leverage analysis is assessed on a six-point scale ranging from (1) minimal to (6) highly leveraged. These assessments are determined by aggregating the assessments of a range of credit ratios, predominantly cash flow based, which complement each other by focusing attention on the different levels of a company's cash flows in relation to its obligations.

Core ratios

53. For each company, we determine, in accordance with S&P Global Ratings' Ratios and Adjustment criteria, two core credit ratios: funds from operations (FFO) to debt and debt to EBITDA.

Supplemental ratios

54. In addition to our analysis of a company's core ratios, we also consider supplemental ratios in order to develop a fuller understanding of a company's credit risk profile and fine tune our cash flow analysis. We generally use for environmental services companies:

- Free operating cash flow to debt as the preferred supplemental ratio. This statistic includes the effects from working capital and capital expenditure cycles, which can significantly shape environmental services companies' cash flow generation patterns.
- We may alternatively use debt service coverage ratios (FFO plus interest to cash interest, or EBITDA to interest), when the cash flow and leverage assessment indicated by the core ratios is significant or weaker

Volatility tables

55. The relevant benchmark table for assessing cash flow to leverage for a given company is based on our assessment of the company's Corporate Industry and Country Risk Assessment (CICRA). Because of our industry risk assessment of '2' for the environmental services industry, we expect most companies in the industry will have a CICRA assessment of '2' or worse (see global corporate criteria).

56. For most companies, we use the "standard" volatility table, which serves as the relevant benchmark table for companies with a CICRA of '2' or worse. We will also always use it for any company with a CICRA of '1' or '2' and whose competitive position is assessed '5' or '6'.

57. We will infrequently use the "medial" or "low" volatility tables in certain circumstances.

58. We apply the "low" volatility table to an environmental services company when it meets all of the following conditions:

- Its CICRA is '2' ("low") or better;
- A majority of its revenues or EBITDA are derived from its participation in certain segments of the industry that we view as less cyclical and not particularly exposed to volatility in commodities prices, such as franchise-protected markets in municipal waste or medical waste;
- Its preliminary competitive position assessment is '2' ("strong") or better, and;

- It has demonstrated a historical track record of very low volatility of profitability, characterized by a comparative SER (see paragraph 50) ranking in the lowest volatility percentile (SER resulting in a volatility of assessment of '1') compared to the overall environmental services industry group (see global corporate criteria), and we expect such very low volatility to continue.

59. We apply the "medial" volatility table to an environmental services company when it doesn't meet all the requirements for "low" volatility, but meets the following conditions:

- It meets the first two conditions listed in paragraph 58;
- Its preliminary competitive position assessment is '3' ("satisfactory") or better; and
- It has demonstrated a historical track record of low volatility of profitability, characterized by a comparative SER (see paragraph 50) ranking in the first or second-lowest volatility percentiles (SER resulting in a volatility assessment of '1' or '2') compared to the overall environmental services industry group (see global corporate criteria), and we expect such low volatility to continue.

Part III-Rating Modifiers

Diversification/portfolio effect

60. In assessing the diversification/portfolio effect on an environmental services company, our analysis uses the same methodology as with other corporate issuers (see global corporate criteria). Few of the environmental services companies that we rate operate additional business lines outside of environmental services. Those that do are primarily engaged in related activities such as waste-to-energy production or landfill gas-to-energy production, both of which leverage off of the core environmental services business, and thus would not be afforded a benefit from diversification.

Capital structure

61. In assessing an environmental services company's capital structure, our analysis uses the same general methodology as with other corporate issuers (see global corporate criteria).

Financial policy

62. In assessing financial policy on an environmental services company, our analysis uses the same methodology as with other corporate issuers (see global corporate criteria).

Liquidity

63. In assessing the liquidity of an environmental services company, our analysis uses the same general methodology as with other corporate issuers (see "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers").

Management and governance

64. In assessing management and governance on an environmental services company, our analysis

uses the same methodology as with other corporate issuers (see "Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012").

Comparable ratings analysis

65. In assessing the comparable ratings analysis on an environmental services company, our analysis uses the same methodology as with other corporate issuers (see global corporate criteria).

REVISIONS AND UPDATES

This article was originally published on Feb. 12, 2014. These criteria became effective on the date of publication.

Changes introduced after original publication:

- Following our periodic review completed on July 22, 2016, we updated the contact information and criteria references. We also deleted paragraphs 5 and 6, which were related to the initial publication of our criteria and no longer relevant.
- Following our periodic review completed on July 17, 2017, we renamed "Appendix 1: Summary of Historic Changes to the Article" to "Revisions And Updates."
- Following our periodic review completed on July 13, 2018, we updated the contact information and criteria references.
- On Sept. 4, 2019, we republished this criteria article to make nonmaterial changes to criteria references.

RELATED CRITERIA AND RESEARCH

Related Criteria

- Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- Methodology: Jurisdiction Ranking Assessments, Jan. 20, 2016
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Corporate Methodology, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Methodology: Industry Risk, Nov. 19, 2013
- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Principles Of Credit Ratings, Feb. 16, 2011

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