

ARCHIVE | Criteria | Corporates | Industrials:

Key Credit Factors For The Capital Goods Industry

November 19, 2013

(Editor's Note: This article is no longer current.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

1. This article describes S&P Global Ratings' methodology and assumptions for the capital goods industry. This article aims to help market participants better understand these key credit factors, and is related to our corporate criteria (see "Corporate Methodology," published Nov. 19, 2013) and to our criteria article "Principles Of Credit Ratings," which we published on Feb. 16, 2011.
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SCOPE OF THE CRITERIA

3. This article presents S&P Global Ratings' criteria for the global capital goods industry. We define "capital goods companies" as those issuers that derive a majority of their revenues from manufacturing and/or servicing industrial equipment. This includes manufacturers of heavy and light industrial equipment, machinery, industrial components, and systems, as well as providers of related services, such as construction equipment rental companies or industrial distributors. These criteria do not cover engineering and construction companies. In addition, we may evaluate manufacturers whose business prospects are primarily tied to a specific industry (for instance, medical equipment, auto/truck, aerospace, or oil and gas equipment suppliers) under that industry's specific criteria.

SUMMARY OF THE CRITERIA

4. S&P Global Ratings is updating its criteria for analyzing capital goods companies by applying S&P Global Ratings' corporate criteria. We view capital goods as an "intermediate risk" industry under our criteria, given its "intermediate" cyclical risk and "intermediate" degree of competitive risk and growth. In assessing a capital goods issuer's competitive position, we particularly emphasize the market position and growth prospects of its market segments; product differentiation; capital intensity; the cyclical risk of its end-markets and the level of diversity; operating efficiency, including cost-base flexibility; exposure to project risk; and sensitivity to raw material prices. In our assessment of the financial risk profile, we consider segment- or company-specific fixed and working capital characteristics (including seasonality, outflows/inflows over the course of the business cycle, assets and liabilities related to contract completion, and advance payment patterns), as well as their effect on cash flow coverage ratios.
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METHODOLOGY

Part I: Business Risk Analysis

A. Industry Risk

7. Within the framework of S&P Global Ratings' corporate criteria for assessing industry risk, we view capital goods as an "intermediate risk" industry (category 3). We derive this assessment from our view of the industry's intermediate (3) cyclicality and our opinion that the industry warrants an intermediate risk (3) competitive risk and growth assessment.
8. Key drivers of cyclicality in the capital goods industry include economic growth and business confidence, industrial production, capacity utilization and capital spending, and infrastructure and construction spending. However, the overall intermediate cyclicality of business volumes reflects significant disparity across various industry segments. This is because most capital goods are subject to derived demand and serve end-markets and industries with different cyclicality profiles, including some tied closely to the general economy and others that may move independently of the underlying general economy. Cyclicality also varies by product type. Manufacturers of heavy equipment can experience significantly higher-than-industry-average peak-to-trough (PTT) declines in new equipment sales (such as power generation, mining, construction, and rail). Conversely, manufacturers that primarily serve maintenance and repair applications or provide aftermarket products and services in addition to original equipment typically experience lower-than-industry-average PTT declines in demand.
9. Pricing competition is moderate overall, but can vary across segments. In segments of the industry where products are highly engineered, customized for specific applications, or where the cost of product failure is high, competition is based primarily on product and service quality, which often results in less-intense pricing competition and pricing cyclicality. Conversely, in segments where products are more commoditized and/or subject to competitive global supply dynamics, cyclical imbalances between supply and demand typically result in greater pricing cyclicality.

1. Cyclicality

10. We assess cyclicality for the capital goods industry as "intermediate risk" (3). Relative to other industries, capital goods has demonstrated moderate cyclicality in both revenue and profitability--two key measures we use to derive an industry's cyclicality assessment (see "Methodology: Industry Risk," published Nov. 19, 2013). Based on our analysis of global Compustat data, capital goods companies experienced an average PTT decline in revenues of about 8% during recessions since 1952. In addition, in three of the recessions, the revenue declines were equal to or greater than 10%, with the steepest decline (a 22% drop in revenues) occurring during the most recent downturn (2007-2009). Over the same period, capital goods companies experienced an average PTT decline in EBITDA margin of about 11% during recessions, with PTT EBITDA margin declines materially exceeding the average in four of the six periods. The largest PTT drop in profitability was 22% and also occurred in the most recent recession (2007-2009).
11. With an average drop in revenues of 8% and an average profitability decline of 11%, capital goods'

cyclicality assessment calibrates to (3) "intermediate risk." We generally consider that the more an industry's profitability is cyclical, the higher the credit risk of the 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 competition and growth.

2. Competitive risk and growth

12. We view capital goods as warranting an intermediate (3) competitive risk and growth assessment. To determine competitive risk and growth, we review the following four subfactors as low, medium, or high risk:
- 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.

a) Effectiveness of the capital goods industry's barriers to entry – medium risk

13. Barriers to entry in the capital goods industry are moderate overall. Factors such as manufacturing know-how, product technology, customer relationships, access to distribution channels, capital intensity, and ability to service an installed base are typically the most prevalent barriers to entry in the industry. Less frequently, transportation costs, regulations, or certification requirements may also constitute barriers to entry. Where they exist, these barriers can be significant differentiators in protecting existing market participants from new competition. The prevalence of these factors is not homogenous across the industry, however, resulting in our assessment of overall medium risk. Some segments, for instance, have a near-oligopolistic supply structure dominated by few global participants where well-established distribution networks (for instance, agricultural equipment) or extensive design, research and development (R&D), and certification requirements act as highly effective barriers to entry. Conversely, other segments (for instance, fire protection and security products and services, and industrial distribution) are fragmented and often comprise both large participants and many small, local operators with limited capital or technological requirements, resulting in low protection against new entrants.

b) Level and trend of the capital goods industry's profit margins – medium risk

14. Since the last global economic downturn, capital goods companies have generally managed to improve their profit margins by successfully increasing productivity, broadly applying lean manufacturing techniques, restructuring, maintaining rational pricing strategies, and taking advantage of a period of generally benign input cost inflation. Although companies could maintain these benefits, at least partly, their profit levels will continue to vary with both demand and segment-specific competition. Demand for original equipment should remain highly cyclical. Demand declines or corrections in the inventory buildup and liquidation cycle typically decrease product prices, and lower production volumes can significantly weaken a company's ability to absorb fixed costs, and lead to lower profit margins. Conversely, aftermarket and service typically provide more stable and higher-margin revenue streams. In some cases, the increasing competition from local players in high-growth markets or from exports into mature markets (often

resulting from emerging market manufacturers' improving quality, technology, and distribution capabilities, especially from China) presents a growing potential risk to existing industry participants' profit margins.

15. Capital goods companies are exposed to changes in input costs, including raw materials (often steel and other metals and resins), components, and labor costs. Capital goods companies' ability to offset the impact of higher input costs by raising product prices varies depending on such factors as contractual provisions, market structure, flexibility of the footprint and workforce profile, and the intensity of the competition; where this ability is limited, capital goods companies need to offset cost increases through productivity gains and other cost savings. The degree of vertical integration and outsourcing also affects trends in the industry's profit margins. Manufacturers integrated into material processing or component manufacturing typically have higher fixed costs, a higher capital spending profile, and are often subject to greater swings in profit margins over the business cycle than those focused on product design and assembly. Working capital requirements are typically moderate but may be somewhat seasonal. Advance payments for products with long production lead-times or a change in project-related liabilities can result in significant swings in working capital during periods of backlog buildup and depletion, and the recognition of contract expenses or losses can affect profit margins.

c) Risk of secular change and substitution by products, services, and technologies— low risk

16. Product substitution risk is generally limited for capital goods issuers because capital goods products are often used in specific applications with limited alternatives for the customer to achieve the same desired output. Nonetheless, customers often have a variety of options from industry participants as far as available technology, quality, service, and price range. The pace of technological change in capital goods is generally relatively slow and technological displacement is typically not a major risk factor, although some industry segments or products are prone to higher-than-average technological risk (for example, utility metering systems, engines and related emission compliance requirements, or power generation equipment for solar energy). Government mandates and subsidies--for instance, global or country-specific energy or environmental policies--can bolster demand for certain types of equipment (power generation and electrical equipment, or farming equipment), but changes to or the expiration of those programs can severely disrupt market demand. Other potentially relevant threats for capital goods suppliers may include in-sourcing (customers bringing production or component manufacturing in-house versus outsourcing), decontenting (using less components in the manufacturing process through simplification), and low-cost sourcing.

d) Risk in the capital goods industry's growth trends – medium risk

17. Growth trends in the capital goods industry are generally tied to economic conditions prevalent in both mature low-growth markets and newer faster-growing markets. Demand for capital goods tends to grow faster than GDP during periods of economic expansion, slower than GDP when growth is subdued, and contract more than GDP during recessions. As such, ongoing economic contraction or subdued growth in mature markets and slowing growth in emerging markets represent significant near-term risk to growth for the capital goods industry. In addition, demand for certain types of equipment is largely tied to commodity prices (oil, metals, crops), resulting in inherently volatile demand patterns. Conversely, a portion of demand is often tied to product replacement (in the form of aftermarket parts; maintenance, repair, and overhaul products; or construction renovation), which provides some stability.

18. Factors that generally support long-term demand for capital goods and industry growth include the need for businesses to continuously improve their productivity and lower production costs, which supports demand for new industrial equipment; the use of equipment and consumables in the production process, which supports demand for repair and parts; the infrastructure buildup in developing markets and infrastructure replacement in developed markets; energy production; energy efficiency; safety and regulation in emerging markets; and demographic trends (e.g., population growth and urbanization).
19. Although many capital goods products are used in global markets, business conditions may vary significantly among regions and countries. This reflects differences in the countries' economic, industrial, infrastructure, and construction environments, as well as the relative maturity of their industrial and infrastructure base and differences in their manufacturing and production costs. The most direct indicators in assessing market conditions for capital goods companies are economic growth, as measured by GDP; business confidence; industrial production and capacity utilization; purchasing manager indices of manufacturing activity, including trends in new orders, inventory, and pricing; private and public nonresidential and residential construction spending; government spending on infrastructure; commodity prices, where influenced by specific government price-support programs; country-specific regulations; and the extent to which governments seek to stimulate or protect domestic manufacturing or capital spending (for instance, through accelerated depreciation tax benefits, energy-efficiency tax credits and rebates, subsidized equipment financing programs, import tariffs, etc.).

B. Country Risk

20. Country risk plays a critical role in determining the ratings for companies in a given country. Country-related risk factors can have a substantial effect on a company's creditworthiness, both directly and indirectly. While our sovereign credit ratings suggest the general risk local entities face, they may not fully capture the risk applicable to the private sector. We look beyond the sovereign rating to evaluate the specific economic, demographic, and other country risks that may affect the entity's creditworthiness. In assessing country risk for a capital goods company, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology").
21. We generally determine exposure to country risk using revenues because this information is consistently available. However, this may not capture country risks beyond those affecting demand potential. Therefore, if country exposure by EBITDA or assets is available and indicates a materially different country exposure profile, we may use EBITDA or assets to capture weak-link risk. This could be the case, for instance, if a company's production footprint is in countries with a higher risk profile than where it derives its revenue from, and if those assets are not easily movable.

C. Competitive Position (Including Profitability)

22. Under our corporate criteria, we assess a company's competitive position as (1) excellent, (2) strong, (3) satisfactory, (4) fair, (5) weak, or (6) vulnerable. For capital goods issuers, we review an individual company's:
 - Competitive advantage;
 - Scale, scope, and diversity;
 - Operating efficiency; and

- Profitability.
23. The first three components are independently assessed as (1) strong, (2) strong/adequate, (3) adequate, (4) adequate/weak, or (5) weak. Profitability is assessed by combining two subcomponents: the level of profitability and the volatility of profitability.
 24. After separately evaluating 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). The CPGP assigned to most capital goods issuers that we rate is "capital or asset focus," whereby we weight the first three components of competitive position as follows: competitive advantage (30%); scale, scope, and diversity (30%); and operating efficiency (40%). Many capital goods companies manufacture products that are at least somewhat technically different and that require moderate capital investments to sustain their market position. However, exposure to cyclical demand patterns often makes operating efficiency the most significant determinant of competitiveness. We may assign the "service and product focus" CPGP to capital goods companies that have a consistently lower-than-industry-average fixed capital intensity (i.e., they sustain a capital expenditures [capex] to sales ratio of less than 2%), have a highly identifiable brand and competitive standing in their market segment, or generate a significant portion of sales (more than one-third) from service revenues. The component weighting for companies assigned the "services and product focus" CPGP is as follows: competitive advantage (45%); scale, scope, and diversity (30%); and operating efficiency (25%).
 25. Some diversified capital goods companies have business lines that fall outside of the capital goods industry; where applicable, we assess the competitive position of these businesses independently by following the key credit factors relevant for those industries.

1. Competitive advantage

26. In assessing a capital goods company's competitive advantage, we consider:
 - Its business strategy and market position;
 - Its product or service profile, including differentiation attributes and bundling characteristics;
 - The effectiveness of its distribution strategy; and
 - If applicable, its track record of execution on project work and the characteristics of its business backlog.
27. In reviewing strategic positioning, we consider a company's relative success, or lack thereof, at establishing leadership positions in the markets in which it competes and at protecting or profitably growing market shares. Capital goods companies that are able to adjust their strategy to evolving market conditions and are successful at defending or growing already-leading market shares may enjoy some pricing advantage and maintain better revenue performance amid adverse market environments. We consider a company's positioning in the context of the industry segments in which it operates, including the growth prospects, barriers to entry, capital intensity, and supply-demand balance profile of those markets. Generally, revenue or margin trends that are at odds with prevalent industry conditions or that of other competitors can indicate an improving or deteriorating competitive advantage. For capital goods companies with long production lead-times, we also consider trends in book-to-bill ratios and backlog levels relative to industry peers as important indicators.
28. In reviewing a capital goods company's product or service profile and differentiation and bundling characteristics, we consider the degree of product uniqueness, customization, or specification in

the company's portfolio, as well as its technology and engineering expertise, including product development and innovation capabilities or manufacturing know-how. Brand name recognition in the capital goods industry is often associated with product quality or technical leadership. Capital goods companies that are able to offer differentiated products or services or capitalize on a strong brand name will generally benefit from greater pricing power and often greater customer loyalty and retention than those offering more commoditized products. The ability to sell both new equipment and aftermarket parts (especially if proprietary) and servicing contracts will also often enhance a competitive position by increasing customer switching costs and providing a more stable, typically higher-margin income stream.

29. In reviewing the effectiveness of a capital goods company's distribution strategy, we consider the characteristics of its sales force, distributor, and/or dealership network, including the ability to support technical product sales and cross-sell company products, timeliness in responding to customer demand, and footprint and exclusivity characteristics. Strong distribution channels often act as effective barriers to entry. In certain segments of the industry, the ability to provide financing to customers can be a differentiating competitive advantage by effectively supporting product sales.
30. For capital goods companies that are involved in engineering projects, a demonstrated strong track record of good project execution will, in addition to technical competencies, often be a key advantage in securing new contracts and customer loyalty and will enhance pricing power. Conversely, a subpar track record of project execution, in addition to hurting profitability, will often hinder a company's ability to win new contracts and may limit pricing power. To a degree, execution on project work influences our assessment of both competitive advantage and operating efficiency.
31. A capital goods company with a "strong" or "strong/adequate" competitive advantage assessment typically has a combination of the following characteristics:
 - Successful strategic positioning, demonstrated by an ability to profitably protect or grow leading market shares in the key industry segments in which it competes;
 - Participation in industry segment(s) with favorable medium- and long-term growth prospects and/or supply-demand balance;
 - A high degree of product technology, quality, or service differentiation that commands name/brand recognition and pricing power/leadership;
 - Some degree of leverage with customers and some evidence of customer retention, achieved, for instance, through long-term supply contracts, long-standing relationships, product specification into customers' end-products, an extensive/exclusive distribution network, proprietary aftermarket parts, servicing contracts, or a combination thereof;
 - Some degree of leverage with suppliers; and
 - A strong track record of project execution, if applicable.
32. A capital goods company with a "weak" or "adequate/weak" assessment of its competitive advantage typically has a combination of the following characteristics:
 - Absence of a clear strategic advantage, reflected, for instance, by a lack of leadership or near-leadership market positions or eroding market positions;
 - Participation in industry segment(s) with unfavorable medium- or long-term growth prospects and/or supply-demand balance;
 - A lack of differentiated brands or products that command pricing power/leadership;

- A lack of customer stickiness compared to the industry or peers (e.g., low customer retention and contract renewal rates, high backlog cancellation rates, or a lack of aftermarket/service revenues and ease of switching);
- A lack of leverage with key vendors and suppliers; and
- A lack of a track record or a subpar track record on project and contract execution.

2. Scale, scope, and diversity

33. In assessing a capital goods company's scale, scope, and diversity, we consider:
- The relative size of its revenue base and that of its target markets;
 - The depth and breadth of its product offering;
 - The degree of its end-markets' diversity;
 - The geographic balance of its sales, its profits and manufacturing footprint; and
 - The degree of its customer and supplier concentration.
34. We generally assume that participation in a variety of attractive markets will allow for a more stable financial performance in market downturns, although some downturns are so extreme that all markets are severely affected. The relative attractiveness of a capital goods company's markets (in terms of size, expected growth, cyclicalities, barriers to entry, intensity of competition, etc.) and how that company is positioned in those markets influence our assessments of scale, scope, and diversity and competitive advantage.
35. Demand for capital goods companies' products can often be characterized as early, mid, or late cycle, depending on how demand for those products correlates to the general economic cycle. In addition, product production cycles in the industry range from short (days) to long (months or years). Capital goods companies that have a balanced market and product profile typically have more stable revenues and profits than those focused on a more concentrated product portfolio.
36. A capital goods company that warrants a "strong" or "strong/adequate" assessment of scale, scope, and diversity typically has a combination of the following characteristics:
- A large revenue base and target markets relative to that of other participants in the industry, typically supported by significant product breadth and diverse business segments, revenue mix, and profit sources;
 - Participation in a variety of industrial end-markets that have generally favorable long-term growth prospects and are not closely correlated;
 - A good balance of new equipment and replacement, aftermarket, and service revenues;
 - A geographically diversified revenue base and production footprint; and
 - No significant unmitigated customer or supplier concentration.
37. A capital goods company warranting a "weak" or "adequate/weak" assessment of scale, scope, and diversity typically has a combination of the following characteristics:
- A limited revenue base and/or target markets relative to other participants in the capital goods industry, or a lack of diversity in product mix, revenue, and profit sources;
 - Participation in only a few markets, markets that have limited growth prospects, or markets that are closely correlated;

- Limited geographic diversification (especially for capital goods companies operating in segments of the industry where competition is global) or a concentrated production footprint; and
- An elevated degree of customer or supplier concentration (for instance, the largest customer accounts for 10% or more of sales or operating profit or the 10 largest customers account for 25% or more of sales or operating profits) that is not mitigated by the customer's or supplier base's characteristics.

3. Operating efficiency

38. In assessing operating efficiency for a capital goods company, we consider:
 - Its relative cost position versus industry peers;
 - The flexibility of its cost structure in absorbing demand declines or input cost pressures; and
 - Its cost management and working capital characteristics.
39. To the extent a capital goods company's operations are efficient, it should be able to generate better profit margins than peers that compete in the same markets, whatever the prevailing market conditions.
40. In reviewing a capital goods company's relative cost position 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 expenses (SG&A) to sales; and capex to sales ratios. A company's overall cost and margin profile, as well as that of its various reporting segments, are important in our analysis.
41. In reviewing the flexibility of a company's cost structure, we consider its ability to limit margin deterioration in a downcycle by reducing costs and to pass on increases in input costs. Indicators of cost flexibility may include the proportion of fixed and variable costs, the degree of operating leverage, the degree of vertical integration and outsourcing, labor cost characteristics (including a company's unionized/nonunionized workforce profile and pension cost considerations), its exposure to raw material or component costs, and its related pass-through profile.
42. We consider a company's cost management by reviewing its track record of reducing costs during good and bad times, the effectiveness of its restructuring programs and, where applicable, lean manufacturing programs, its track record at successfully integrating acquisitions, and its working capital management metrics. Companies exposed to significant seasonality, long production lead-times, or engineering contracts may exhibit a different working capital profile than other capital goods companies. For companies that typically carry a backlog of orders or project work, we also consider production lead-time versus their peers, the margin profile of projects in backlog, and the degree of project risks to which companies are exposed. This is relevant, for instance, for power equipment, rail infrastructure, or other companies that undertake engineering procurement and construction contracts.
43. A capital goods company with a "strong" or "strong/adequate" operating efficiency assessment typically has a combination of the following characteristics:
 - Profitability, as measured primarily by EBITDA margins, that is consistently higher than its peers (after taking into account differences in sales mix that also affect profit margins);
 - Evidence of a sustainable cost advantage, possibly achieved from economies of scale, production efficiencies, a low-cost footprint or sourcing, automation, customer proximity, vertical integration benefits, effective quality controls, overhead costs at competitive levels, or

a combination thereof;

- A relatively flexible cost structure, often evidenced by lower operating leverage compared to its peers, a good ability to adjust labor costs in a downcycle or to limit labor cost inflation, or limited profit sensitivity to fluctuations in raw material prices;
- A track record of ongoing cost structure improvements, such as structural labor cost reductions, low-cost sourcing, footprint reduction, and debottlenecking, achieved during bad and good times; and
- Favorable cost management metrics compared to its peers over the business cycle, including in areas of working capital management, asset utilization (for instance, plant capacity or rental fleet), supply chain management, acquisition integration, or, where applicable, project work.

44. A capital goods company with a "weak" or "adequate/weak" assessment of its operating efficiency typically has a combination of the following characteristics:

- Profitability, as measured primarily by EBITDA margins, that is below its peer group (after taking into account differences in sales mix that also affect profit margins);
- Some evidence of cost disadvantage, possibly from structural overcapacity; higher-than-average input costs for labor, components, and material; or noncompetitive levels of SG&A;
- A cost structure that's less flexible than average, for instance due to a high fixed or semi-fixed cost structure, labor inflexibilities, an outdated asset base or production technologies versus its peers, an inefficient degree of vertical integration; or high profit and margin sensitivity to fluctuations in raw material costs;
- A history of restructuring actions without tangible savings benefits or of operational missteps (for instance, quality or lead-time issues); and
- Unfavorable cost management metrics compared to its peers, including in areas of working capital, asset utilization, supply chain, acquisition integration, or, where applicable, project work.

4. Profitability

45. 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. We combine these two components into the final profitability assessment using a matrix (see the corporate criteria).

a) Level of profitability

46. We assess the level of profitability on a three-point scale: "above average," "average," and "below average."
47. We use the EBITDA margin as the primary indicator of a capital goods company's level of profitability, based on the thresholds identified in table 1 below. We use return on capital (ROC) as a supplementary indicator to refine our assessment when the EBITDA margin is close to the threshold for "below average" or "above average" (see the ROC thresholds in table 2 below). For instance, if a company's EBITDA margin is at the high end of the defined range for "average" but its ROC is comfortably in the "above-average" range, we may assess its level of profitability as "above

average." In accordance with the corporate criteria, for this assessment we typically determine the five-year average EBITDA margin and ROC using the last two years of historical data and our forecasts for the current year and for the following two years. We may particularly emphasize the forecasted years if historical data are not deemed representative or to account for deteriorating or improving profiles where prospective ratios meaningfully differ from average ratios. In some cases, the application of local accounting rules (for companies that don't report using U.S. generally accepted accounting principles or international financial reporting standards) may warrant different thresholds to account for financial reporting differences.

Table 1

EBITDA Margins

EBITDA margin	Below average	Average	Above average
Manufacturers	<11%	11%-18%	>18%
Equipment rental providers	<30%	30%-40%	>40%
Industrial distributors	<5%	5%-9%	>9%

Table 2

Return On Capital

Return on capital	Below average	Average	Above average
All companies	<10%	10%-18%	>18%

- 48. We use different EBITDA margin thresholds to differentiate among the vast majority of capital goods companies whose primary business is manufacturing goods, as well as those with limited or no manufacturing operations. Of the capital goods companies we currently rate, these primarily include construction equipment rental companies and industrial distributors. The higher thresholds for equipment rental companies reflect their typically higher-than-industry-average EBITDA margin profiles but capex and depreciation-heavy business models. The lower thresholds for industrial distributors reflect their typically lower-than-industry-average EBITDA margin profiles but capex and depreciation-light business models. We use the same ROC thresholds for all capital goods companies because ROC is based on a measure of operating earnings after depreciation and, therefore, captures the above-mentioned differences in depreciation (and to some degree capex) profiles.

b) Volatility of profitability

- 49. We assess the volatility of profitability on a six-point scale from "1" (lowest volatility) to "6" (highest volatility).
- 50. In accordance with our corporate criteria, we generally determine the volatility of profitability assessment using the standard error of regression (SER), provided we have at least seven years of historical annual data. We generally use nominal EBITDA as the metric to determine the SER for capital goods companies, but we may also use the EBITDA margin or ROC (if, for instance, we believe that underlying earnings volatility is being distorted by currency fluctuations, acquisitions, or divestiture activity). In accordance with the corporate criteria, we may--provided certain conditions are 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 corporate criteria guidelines to determine the volatility of profitability assessment.

Part II: Financial Risk Analysis

D. Accounting And Analytical Adjustments

51. In assessing capital goods companies' accounting characteristics, the analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology"). Our analysis of a company's financial statements begins with a review of its accounting to determine whether the statements accurately measure the 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 better align a company's reported figures with our view of underlying economic conditions. Moreover, they allow for a more accurate portrayal of a company's ongoing business. Adjustments that pertain broadly to all corporate sectors, including capital goods, are discussed in "Corporate Methodology: Ratios And Adjustments," published April 1, 2019.

E. Cash Flow/Leverage Analysis

52. In assessing a capital goods issuer's cash flow and leverage, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology"). We assess cash flow/leverage on a six-point scale--ranging from (1) minimal to (6) highly leveraged--by aggregating the assessments of a range of predominantly cash flow-based credit ratios, which complement each other by focusing attention on the different levels of a company's cash flow in relation to its obligations.

1. Core ratios

53. For each company, we determine two core debt payback ratios, funds from operations (FFO)/debt and debt/EBITDA, in accordance with S&P Global Ratings' ratios and adjustment criteria.

2. 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 refine our cash flow analysis in accordance with the corporate criteria. We generally use the following supplemental ratios for capital goods companies:
- Free operating cash flow (FOCF)/debt as the preferred supplemental ratio. Working capital and capex cycles can significantly shape capital goods companies' cash flow generation patterns. In the early stages of a downturn, capital released from liquidating inventories and trade receivables has historically helped companies achieve FOCF/debt ratios that are stronger than FFO/debt, and we may adjust the cash flow and leverage assessment accordingly. Asymmetrically, during a business upturn, funding needs for working capital can often depress the FOCF/debt ratio, pointing to a lower cash flow and leverage assessment than the core ratios. However, if the core ratios are improving, we may choose not to use the supplementary ratio negative adjustment. For equipment rental companies, we also frequently adjust the cash flow and leverage assessment in the direction of the FOCF/debt ratio. These companies typically incur significant capex in an upturn to maintain and rejuvenate the rental fleet, but let

the fleet age and often cut back capex spending to minimal levels in a downturn.

- We may alternatively use debt service coverage ratios (FFO plus interest/cash interest, or EBITDA/interest) when the cash flow and leverage assessment indicated by the core ratios is significant or weaker.
- For companies that return more than half of their FOCF to shareholders through dividends, we may consider discretionary cash flow (DCF)/debt as the most relevant supplemental ratio.

Part III: Rating Modifiers

F. Diversification/Portfolio Effect

55. In assessing the diversification/portfolio effect on a capital goods company, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology") in that we reserve the potential diversification benefit for companies whose portfolio spans different industries as defined by our industry classification. Many capital goods issuers are well-diversified by products and report several large business segments that serve different end-markets, yet often remain, in nature, capital goods businesses. Only a small number of capital goods companies, generally large industrial conglomerates, operate business lines outside of the capital goods industry.

G. Capital Structure

56. In assessing a capital goods company's capital structure, our analysis uses the same general methodology as with other corporate issuers (see "Corporate Methodology").

H. Liquidity

57. In assessing a capital goods company's liquidity, our analysis uses the same general methodology as with other corporate issuers (see "Corporate Methodology").
58. Certain capital goods companies may have sizable advanced payments (often related to large orders with a long production lead-time) or contract-related liabilities tied to engineering projects. We consider the potential for working capital swings associated with these liabilities in our liquidity assessment.

I. Financial Policy

59. In assessing a capital goods company's financial policy, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology").

J. Management And Governance

60. In assessing a capital goods company's management and governance, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology").

K. Comparable Ratings Analysis

61. In assessing the comparable ratings analysis for a capital goods company, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology").

REVISIONS AND UPDATES

This article was originally published on Nov. 19, 2013. These criteria became effective on Nov. 19, 2013, and superseded "Key Credit Factors: Criteria For Rating The Global Capital Goods Industry," published April 28, 2011.

Changes introduced after original publication:

- Following our periodic review completed on March 29, 2016, we updated the contact information and criteria references. We also deleted paragraphs 2, 5, and 6, which were related to the initial publication of our criteria and no longer relevant.
- Following our periodic review completed on March 27, 2017, we updated the contact information.
- Following our periodic review completed on March 22, 2018, we updated the contact information and criteria references and renamed the "Revision History" section to "Revisions And Updates."
- On May 15, 2019, we republished this criteria article to make nonmaterial changes to the contact information and criteria references.

RELATED CRITERIA AND RESEARCH

Related Criteria

- Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Reflecting Subordination Risk In Corporate Issue Ratings, March 8, 2018
- Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- Methodology: Jurisdiction Ranking Assessments, Jan. 21, 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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