MOODY'S

RATING METHODOLOGY

23 September 2022

TABLE OF CONTENTS

Scope	1
Rating approach	2
Soft beverages scorecard	3
Sector overview	5
Discussion of the scorecard factors	5
Notching factor	9
Other considerations	12
Using the scorecard to arrive at a scorecard-indicated outcome	13
Assigning issuer-level and instrument-level ratings	15
Key rating assumptions	15
Limitations	15
Moody's related publications	16

Analyst Contacts

Charles O'Shea +1.212.553.3722 VP-Sr Credit Officer

Sandra Beltran +52.55.1253.5718

VP-Senior Analyst sandra.beltran@moodys.com

charles.o'shea@moodys.com

Ernesto Bisagno, CFA +39.02.9148.1120 VP-Sr Credit Officer

ernesto.bisagno@moodys.com

Dean Enjo +81.3.5408.4234

VP-Senior Analyst dean.enjo@moodys.com

» Analyst Contacts continued on last page

CLIENT SERVICES

Americas 1-212-553-1653 Asia Pacific 852-3551-3077 Japan 81-3-5408-4100 EMEA 44-20-7772-5454

Rating Methodology

Soft Beverages

This rating methodology replaces the *Global Soft Beverage Industry* methodology published in January 2017. We have reordered and have made editorial updates to various sections of the methodology, and we have changed the presentation of the scorecard. We have removed outdated information. These updates do not change our methodological approach.

Scope

This methodology applies to companies globally that are primarily* engaged in the production, distribution, marketing and sale of non-alcoholic beverage products. These companies include producers and distributors, many of which are independent bottlers, of carbonated soft drinks, waters, juices, teas, coffee, flavored still beverages and energy drinks, among others. The methodology applies to soft beverage companies that combine the function of a concentrate producer and a bottler; concentrate producers (aggregated with their bottlers); and bottlers in integrated systems or fragmented networks.

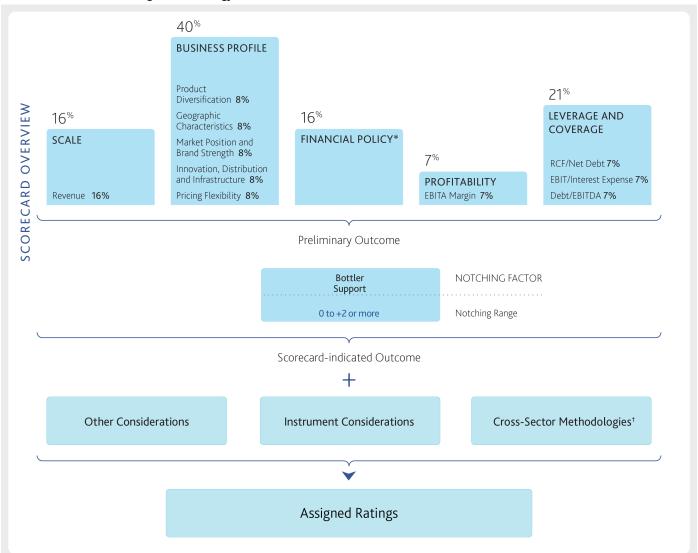
^{*}The determination of a company's primary business is generally based on the preponderance of the company's business risks, which are usually proportionate to the company's revenues, earnings and cash flows.

Rating approach

In this rating methodology, we explain our general approach to assessing credit risk of issuers in the soft beverage industry globally, including the qualitative and quantitative factors that are likely to affect rating outcomes in this sector. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

The following schematic illustrates our general framework for the analysis of soft beverage companies, which includes the use of a scorecard. The scorecard-indicated outcome is not expected to match the actual rating for each company. For more information, see the "Other considerations" and "Limitations" sections.

Exhibit 1 Illustration of the soft beverages methodology framework



^{*} This factor has no sub-factors.

[†] Some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

Source: Moody's Investors Service

Soft beverages scorecard

For general information about how we use the scorecard and for a discussion of scorecard mechanics, please see the "Using the scorecard to arrive at a scorecard-indicated outcome" section. The scorecard does not include or address every factor that a rating committee may consider in assigning ratings in this sector. Please see the "Other considerations" and "Limitations" sections.

Exhibit 2 **Soft beverages scorecard**

		ALE 6%)			BUSINESS PROFILE (40%)			FINANCIAL POLICY (16%)	PROFITABILITY (7%)	LEVER	AGE AND COVE (21%)	RAGE
	(USD E	venue Billion) 6%)	Product Diversification (8%)	Geographic Characteristics (8%)	Market Position and Brand Strength (8%)	Innovation, Distribution and Infrastructure (8%)	Pricing Flexibility (8%)	Financial Policy (16%)	EBITA Margin (7%)	RCF / Net Debt ^[1] (7%)	EBIT / Interest Expense ^[2] (7%)	Debt / EBITDA ^[3] (7%)
	Aaa ≥\$	\$70	Expected to have excellent diversification of product and sectors; present in all major segments in a sector and/or present in multiple categories. Brand ownership.	Worldwide; well diversified with no material concentrations.	Excellent domestic and worldwide market shares which are expected to remain stable over time; number one brands in most products and markets globally.	Expected to sustain high investment in brands with excellent pipeline of new products; infrastructure or route to consumer is a clear barrier to entry in almost all markets globally.	Absolute pricing flexibility - able to increase price in all products and channels without hurting volume; always a price leader.		≥ 25%	≥ 70%	≥ 16x	< 0.5x
	Aa \$30 -	- \$70	Expected to have very good diversification of products and sectors in multiple categories. Brand ownership.	Worldwide; moderate degree of focus in some regions.	Expected to maintain leading market shares in most all markets in broadly defined categories; number one or two brands in most products and markets globally.	Expected to sustain high investment in brands and strong pipeline of new products; infrastructure or route to consumer is a solid competitive advantage in mos markets globally.	Generally good pricing flexibility - usually able to increase price in most markets and channels without hurting volume; generally a price leader.	Expected to have very stable and conservative financial policies; very stable metrics; minimal event risk that would cause a rating transition; public commitment to very strong credit profile over the long term.	20% - 25%	50% - 70%	11x - 16x	0.5x - 1.3x
	A \$10 -	- \$30	Expected to be well diversified by product, possibly in more focused sectors. Brand ownership.	Worldwide presence with a degree of concentration; may include some concentration in riskier soft beverage markets.	Expected to maintain very strong market shares globally; number one or two brands in many products.	Expected to sustain strong investment in brands and good pipeline of new products; infrastructure or route to consumer is a competitive advantage in many markets globally.	Good pricing flexibility: can pass cost increases through to customers; often a price leader.	Expected to have predictable financial policies that preserve creditor interests. Although modest event risk exists, the effect on leverage is likely to be small and temporary; strong commitment to a solid credit profile.	15% - 20%	35% - 50%	6x - 11x	1.3x - 2.3x
	Baa \$4 -	- \$10	Expected to be well diversified by product, possibly in more focused sectors.	Broad Continental presence (Americas, Europe, Asia), possibly with some added regions; may be more concentrated in riskier soft beverage markets.	Expected to maintain very strong market shares in designated territories; number one or two brands in most products.	Expected to sustain good level of investment in brands and ability to develop new products; infrastructure or route to consumer is a solid competitive advantage in core markets.		Expected to have financial policies that balance the interest of creditors and shareholders; some risk that debt funded acquisitions or shareholder distributions could lead to a weaker credit profile.	10% - 15%	20% - 35%	3.5x - 6x	2.3x - 3.3x
_	Ba \$2 -	- \$4	Expected to have wide product offering, possibly more focused by sector.	Continental presence (Americas, Europe, Asia) and/or more than 50% from riskier soft beverage markets.	Expected to maintain good market shares. Some brands may lag behind leaders in the category OR leader in narrow niche categories.	Expected to sustain adequate investment in brands to rejuvenate product pipeline; defensible infrastructure or route to consumer in some markets.	Price follower; volumes may suffer if prices rise.	Expected to have financial policies that tend to favor shareholders over creditors; above average financial risk resulting from shareholder distributions, acquisitions or other significant capital structure changes.	7% - 10%	15% - 20%	2x - 3.5x	3.3x - 4.3x

23 September 2022

CORPORATES

	SCALE (16%)			BUSINESS PROFILE (40%)				FINANCIAL POLICY (16%)	PROFITABILITY (7%)	LEVER	RAGE AND COVE (21%)	RAGE
	Revenue (USD Billion) (16%)	Product Diversification (8%)	Geographic Characteristics (8%)	Market Position and Brand Strength (8%)	Innovation, Distribut Infrastructure (8%)		Pricing Flexibility (8%)	Financial Policy (16%)	EBITA Margin (7%)	RCF / Net Debt ^[1] (7%)	EBIT / Interest Expense ^[2] (7%)	Debt / EBITDA ^[3] (7%)
В	\$0.5 - \$2	Expected to have more focused operations; may rely heavily on few sectors or products.	Single major country super regional within continent and/or mor than 75% exposed to riskier soft beverage markets.	a Market shares may be smale or declining OR leader in	Uneven levels of investigation brands, possible gaps product pipeline, and/s competitive infrastruct to consumer.	in or less	Price follower; little ability to increase prices enough to cover cost increases.	Expected to have financial policies that favor shareholder over creditors; high financial risk resulting from shareholder distributions, acquisitions or other significant capital structure changes.		8% - 15%	1x - 2x	4.3x - 6.3x
Caa	\$0.25 - \$0.5	Lacks diversity; reliance on one or two products, or multiple products in a niche category.	Regional player AND Only present in riskie soft beverage marke	attractive or cyclical,	Limited ability to devel products and brands, efficient or under-inve- infrastructure/route to consumer.	less	Price follower; unable to cover cost increases through pricing.	Expected to have financial policies that create elevated riof debt restructuring in varied economic environments.	sk 1% - 4%	0% - 8%	0.5x - 1x	6.3x - 10x
Ca	< \$0.25	Small product portfolio; reliance mostly on one product.	Regional or local pla and/or only present i riskier soft beverage markets.		Brand/product pipeline concern, inefficient infrastructure/route to consumer.	e is a	Secular decline, highly cyclical or commodity-like; no pricing power.	Expected to have financial policies that create elevated rid of debt restructuring even in healthy economic environments.	sk < 1%	< 0%	< 0.5x	≥ 10x
Notchi	ng Factor: Bo	ttler Support										
Kov C	onsiderations	•	No	lif+		One n	Notche	es of Lift	Two or more notche			
Ney Co	Jiisidel alioni	•	140	III.								
Conce	ntrate produce	ers' ability to provide sup	pport Lov	ver rated concentrate producers	(Baa or lower)		ntrate producer has strong s above standalone credi	g credit ratings; at least two t profile of bottler	Concentrate produce notches above stand		0 ,	least three
reputat	ion risk, impo	ithin system, degree of in rtance of beverage busin y and alignment	ness to	k of track record of support of b	ottlers of similar size	Good t	rack record of support for port	bottlers, evidence	Excellent track record incidents of bottler de			own
Bottler	size and impo	ortance	Bot	tler is small, not an anchor or ke	ey bottler		is a key or Anchor bottler bottlers in system	but may be smaller than	Bottler is an anchor; a system	among the mo	st important bo	ttlers in the
Size ar	nd importance	of a bottler's market to s	system	rket is small, not critical to franc	hise value, not a key	Market	(s) important to the overa	Il franchise	Market(s) among the	most importa	nt to the overall	franchise
Alterna	tive for gettin	g product to market		ssibility to find alternate distribut rd-party distributors, beer compa	,	Would the pro		rnative to distribute	Would be virtually im	possible to rep	place distributio	n system

^[1] When net debt is negative and RCF is positive, the score is Aaa. When net debt is negative and RCF is negative, the score is Ca. [2] When debt is zero, the score is Aaa. When debt is positive and EBITDA is negative, the score is Ca. Source: Moody's Investors Service

MOODY'S INVESTORS SERVICE

Sector overview

Some soft beverage companies produce concentrate that is sold to bottlers, some companies combine the function of a concentrate producer and a bottler, and others are soft beverage bottlers in integrated systems or fragmented networks.

The industry comprises several large companies along with other smaller companies, and a large number of bottlers package and distribute for the larger companies under exclusive agreements.

The important relationship between concentrate producers and bottlers

To understand the credit quality of a global beverage company, it is critical to understand the relationship between the concentrate producer, which owns the brand, and its bottlers, in systems where these functions are separate.

The concentrate producer owns the trademark and promotes brand advertising directed to the end- consumer, but maintains little to no distribution capability of its own in certain markets and generally little ability to get its product to market without its large bottlers.

The bottlers maintain the physical bottling and distribution infrastructures. These are often sizable and may incorporate significant investment from the concentrate providers. Equally important, bottlers typically retain significant critical local market intelligence and cultivate long-term relationships with retailers that are not easily replaced or replicated. The bottlers benefit from the exclusivity arrangements that set out, contractually, the minimum standards the bottler is expected to fulfill.

These agreements also provide them with the sole right to use the trademark and brand name in a particular territory, giving them a sometimes formidable advantage over an independent non-branded bottler/distributor. Further, the bottlers benefit from marketing and other types of cash and non-cash support from the concentrate producer, as it tries to help the bottlers grow demand for its products.

The business and financial connections between the concentrate providers and the bottlers are substantial. The success of the concentrate producer – and the global beverage business as a whole – is tied largely to the presence of bottlers that understand the local markets/cultures and that are adept in navigating the local business environment. In international markets, a local bottler is often the primary source of market intelligence and responsible for maintaining relationships with various points of sale to promote and distribute product in a given franchise territory. A concentrate producer's distribution network is, thus, only as good as its bottlers' network. A weak or inefficient bottler – or one that fails to achieve the correct balance of marketing, advertising and pricing – can cause a loss of share for the system in that market. For bottlers, the exclusivity arrangements and other forms of support are a critical competitive advantage. Given the very strong business linkage between the concentrate producer and its larger bottlers in an integrated system, it is likely to be in the economic interest of the concentrate producer to provide some support to some of its bottlers in some circumstances. This is why we focus on aggregated system credit metrics in assigning the rating of a concentrate producer in an integrated system.

Discussion of the scorecard factors

In this section, we explain our general approach for scoring each scorecard factor or sub-factor, and we describe why they are meaningful as credit indicators.

The scorecard contains five weighted factors. In assessing a concentrate producer in an integrated system, we focus on aggregated system credit metrics. In the case of a bottling company in a concentrate system that is not (i) an integrated beverage company or (ii) a concentrate company, we apply the Bottler Support notching factor (please see the "Notching factor" section).

Factor: Scale (16% weight)

Why it matters

Scale is an important indicator of the overall depth of a company's business and its success in attracting a variety of customers, as well as its resistance to shocks, such as sudden shifts in demand or rapid cost increases. Larger companies have more resources and tend to be more broadly diversified, which can reduce volatility and credit risk.

Larger scale allows companies to leverage costs, including those associated with manufacturing, sales force and marketing, distribution and R&D, and gives them more clout with purchasing organizations, customers and suppliers. Scale can provide insight into a number of credit considerations, including position with customers, global market presence and franchise strength. Scale provides more

resources and could also reduce exposure to operational and regulatory risks, including problems associated with one manufacturing facility.

How we assess it for the scorecard

REVENUE:

Scale is measured (or estimated in the case of forward-looking expectations) using total reported revenue in billions of US dollars.

Factor: Business Profile (40% weight)

Why it matters

The business profile of a soft beverage company is important because it greatly influences its ability to generate sustainable earnings and operating cash flows. Core aspects of a soft beverage company's business profile are its product and geographic diversity, brand strength as well as global and local market positions, and company-specific and sector-wide variables that can influence prospects for sales growth and market share shifts, including a company's execution capabilities and price elasticity of its products. This factor provides an indication of the likely stability and sustainability of the company's cash flows.

This factor comprises five sub-factors:

Product Diversification

Diversity of product offering is important because a more diverse offering allows for separate and balancing streams of cash flows, often from a variety of demographic groups.

Geographic Characteristics

Geographic diversity may smooth volatility by balancing slower and higher growth markets, regional economic swings, natural disasters, and seasonal or weather-related fluctuations in cash flows. Concentration in one or few markets may increase risk, especially if the concentration occurs in riskier or more volatile beverage markets.

Market Position and Brand Strength

A strong franchise leads to the consistent, sustainable cash flows necessary to service debt over the long term. Strong brands and a leading market position in a stable or growing business are key credit strengths.

Innovation, Distribution and Infrastructure

For a beverage company, innovation in the areas of product and packaging as well as marketing is important because of heavy competition and ever-changing consumer preferences. Success depends as much on the ability to execute well in maintaining consumer awareness of the product through marketing, packaging, and other types of innovation, and in delivering it through various channels, as it does on the ability to create new products aimed at changing consumer tastes.

Innovation helps to keep products at the top of consumers' minds and address changing consumer tastes to avoid missing major industry shifts, such as the move to healthier beverage alternatives.

At the same time, the ability to execute and deliver the product are important considerations. The largest soft beverage systems, together with their bottlers, have competitive advantages in many markets and are able to produce products in a vast array of packages, materials and sizes and deliver these products to virtually all types of outlets and channels. Others have more limited production and distribution power. Companies with strong execution capability globally typically receive higher scores for this subfactor than those that have advantages in only a handful of markets.

Pricing Flexibility

Maintaining a balance between price increases and volume growth is critical to sustaining overall growth in the soft beverage sector. Companies have been able to raise prices successfully, to some extent through package and channel innovation. The "cold drink" single serve channel, for example, has commanded higher prices than large format grocery channels where private label and smaller B brand competitors have muted pricing flexibility. Innovation does not always increase pricing power, however, because higher prices can deter

interest in new products after a trial period, and because competitors are usually quick to follow a new idea. The ability to segment markets carefully through technology-enabled tracking can also allow for selective, market or channel-specific price increases.

How we assess it for the scorecard

Scoring for this factor is based on five sub-factors: Product Diversification; Geographic Characteristics; Market Position and Brand Strength; Innovation, Distribution and Infrastructure; and Pricing Flexibility.

PRODUCT DIVERSIFICATION:

Within a large beverage system, there may be few, if any, distinctions among bottlers for this sub-factor because they all have access to the broad portfolio of the concentrate company. However, there is value to being the brand owner so there is a distinction between the bottlers and brand owner in the scorecard scoring. There may be significant differences in product diversity between systems. In considering product diversity, we also take into account the extent to which a company generates cash flow from products other than beverages. For example, a beverage system or company within the system may receive a higher score for this sub-factor relative to other beverage systems or companies because of an array of food product offerings.

GEOGRAPHIC CHARACTERISTICS:

We assess the level of concentration of a company's operations and distribution in any one region (examples include the US and Canada; Latin America; Western Europe; Eastern Europe; Asia-Pacific; and Africa). Companies that have broad global diversification typically receive higher scores for this sub-factor. We also consider the percentage of revenue derived from riskier beverage markets. Greater concentration on any one region and/or exposure to riskier beverage markets typically results in a lower score for this sub-factor.

This sub-factor contains two considerations; we typically assign a score that matches the weaker of the two. For instance, we would view positively that a company generates no more than 20% of its revenue in any region, but this would be offset if its business is concentrated in riskier beverage markets, or markets that are prone to operating inefficiencies, economic instability or unpredictable government actions.

In assessing market diversity, the absolute number of countries of operation, while useful, is not the only consideration because certain countries may have many distinct markets within their borders. Rather, we view markets as being countries where characteristics such as the economy, weather, route to market and consumer tastes are somewhat homogeneous, or as being regions within a large country where the characteristics (due to weather, economy or culture) may be quite varied (such as the US or Russia).

MARKET POSITION AND BRAND STRENGTH:

Companies with number one or two brands in most products across most of their markets typically receive higher scores for this factor than those with brands that lag behind the leaders in their categories.

Bottlers in large, strong soft beverage systems benefit from the strong brand recognition and market penetration of the system overall, but the advantage may be more localized. Companies that have strong market shares globally typically score higher for this sub-factor. There are also differences between systems, as well as between companies that are part of a larger system and those that are not.

Reputation and image, which are key to brand value, can be damaged by unforeseeable developments such as product-related health scares, employee-relations concerns, environmental problems, rising sentiment against large multi-national corporations, inappropriate advertising for local cultures, and differing regulatory or governmental developments, including taxes that could hinder growth. For this reason, our analysis of market position and brand strength also typically includes consideration of related issues such as overall quality control, regulation, sustainability initiatives, tax environment, labor-related risks, regional risks, supply risks and the importance of packaged soft beverages within each market.

INNOVATION, DISTRIBUTION AND INFRASTRUCTURE:

In assessing this sub-factor, we consider the level of investment in brands and the strength of a company's product pipeline. Soft beverage companies with strong track records of innovation are likely to have stronger growth and typically receive higher scores for

this sub-factor than those that do not. Innovation takes many forms, encompassing new products, product extensions, new packaging and labels, and even innovative advertising and promotion.

We consider whether a company's or system's infrastructure or route to consumer provides a competitive advantage or disadvantage.

PRICING FLEXIBILITY:

We consider the extent to which a company can increase price without hurting volume and whether the company is a price leader or a price follower.

Factor: Financial Policy (16% weight)

Why it matters

Our assessment of management and board tolerance for financial risk is a key rating determinant because it directly affects future debt levels, credit quality, and the risk of adverse changes in financing and capital structures.

Our assessment of financial policies includes the perceived tolerance of a company's governing board and management for financial risk and the future direction for the company's capital structure.

Considerations include a company's public commitments in this area, its track record for adhering to commitments, and our views on the company's ability to achieve its targets.

Financial risk tolerance serves as a guidepost to investment and capital allocation. An expectation that management will be committed to sustaining an improved credit profile is often necessary to support an upgrade. For example, we may not upgrade a company that has built flexibility within its rating category if we believe the company will use that flexibility to fund a strategic acquisition, cash distributions to shareholders, spin-offs, or other leveraging transaction. Conversely, a company's credit rating may be better able to withstand a moderate leveraging event if it appears that management places a high priority on returning credit metrics to pretransaction levels and has consistently demonstrated the commitment to do so through prior actions.

How we assess it for the scorecard

We assess the issuer's desired capital structure or targeted credit profile, history of prior actions, and adherence to its commitments. Attention is paid to management's operating performance and use of cash flow through different phases of economic cycles. Also of interest is the way in which management responds to key events, such as changes in the credit market and liquidity environment, legal actions, competitive challenges, and regulatory pressures.

Management's appetite for M&A activity is assessed with a focus on the type of transactions (i.e., core competency or new business) and funding decisions. Frequency and materiality of acquisitions and previous financing choices are evaluated. A history of debt-financed or credit-transforming acquisitions will generally result in a lower score for this factor.

We also consider a company and its owners' past record of balancing shareholder returns and debtholders' interests. We are likely to view negatively a track record of favoring shareholder returns at the expense of debtholders in scoring this factor.

Factor: Profitability (7% weight)

Why it matters

Profits matter because they are needed to generate sustainable cash flow and maintain a competitive position.

How we assess it for the scorecard

EBITA MARGIN:

The numerator is earnings before interest, taxes and amortization (EBITA), and the denominator is revenue. Our assessment for this factor considers the company's track record in maintaining and/or improving its operating margins year-on-year and its relative profitability, measured against other companies operating in the same segment of the industry.

Factor: Leverage and Coverage (21% weight)

Why it matters

Leverage and coverage measures are indicators of a company's financial flexibility and long-term viability. Financial flexibility is critical to respond to changing consumer preferences, regulatory changes, competitive challenges, and unexpected challenges or costs. Soft

beverage companies need resources to invest in innovation, product development, marketing, distribution efficiencies and customer service technologies as well as to make strategic acquisitions that diversify product lines or expand into new geographic regions.

This factor comprises three sub-factors:

RCF / Net Debt

The ratio of retained cash flow to net debt (RCF/Net Debt) is an indicator of a company's cash generation (before working capital movements and capital expenditures, and after dividend payments) relative to its net debt (total debt minus cash and cash equivalents).

EBIT / Interest Expense

The ratio of earnings before interest and taxes to interest expense (EBIT/Interest Expense) is an indicator of a company's ability to meet its interest obligations.

Debt / EBITDA

The ratio of total debt to earnings before interest, taxes, depreciation and amortization (Debt/EBITDA) is an indicator of debt serviceability and financial leverage. The ratio is commonly used in this sector as a proxy for comparative financial strength.

How we assess it for the scorecard

RCF / NET DEBT:

The numerator is retained cash flow, and the denominator is net debt (total debt minus cash and cash equivalents).

EBIT / INTEREST EXPENSE:

The numerator is EBIT, and the denominator is interest expense.

DEBT / EBITDA:

The numerator is total debt, and the denominator is EBITDA.

Notching factor

The five weighted scorecard factors are used to produce a scorecard-indicated outcome for a concentrate producer (aggregated with its bottlers) and a beverage company that combines the function of a concentrate producer and a bottler. The five weighted scorecard factors are also used to arrive at a preliminary outcome for a bottler in an integrated system or a fragmented network.

For a bottler, we then assess whether the preliminary outcome from the first five weighted scorecard factors should be notched up based on the likelihood of support from the concentrate producer in the event of the bottler encountering significant challenges. In this section, we explain the role of external support and the number of upward notches that may be assigned.

In aggregate, the Bottler Support notching factor can result in one or more upward notches from the preliminary outcome to arrive at the scorecard-indicated outcome.

Bottler Support

Why it matters

External support, where it exists, is considered in the context of the bottler receiving support from the concentrate producer. This can result in a scorecard-indicated outcome that is higher than the bottler's preliminary outcome.

To the extent that large bottlers in an integrated system are weak and therefore more likely to require support, and to the extent that the concentrate producer is likely to provide support, a degree of ratings drag may apply to the concentrate producer, which is why we focus on aggregated system credit metrics in assigning the rating of a concentrate producer. Given the very strong business linkage between the concentrate producer and its larger bottlers in an integrated system, there is a high probability that the concentrate producer will provide some support to some of its bottlers in some circumstances. This linkage exists for the following reasons:

The concentrate producer needs its major bottlers to get its product to market

Concentrate companies that do not own their own distribution systems or have independent third-party distribution arrangements rely on dedicated bottlers to go to market. These bottlers typically distribute products of the concentrate producer under exclusivity contracts that ensure that they do not carry competing products and that they have exclusive distribution rights in certain markets. The larger the bottler, the more difficult it would be to replace it, given its existing infrastructure, customer relationships and distribution channels. While it would not be impossible for a bottler that had filed for bankruptcy to continue to get its product to market, the financial and operating impacts would very likely harm the longer-term market position and operating strength of the system. The franchise and long-term health of a concentrate producer and its largest bottlers are hence closely intertwined.

In addition to physical distribution infrastructure, independent bottlers possess a significant degree of market intelligence and long-term relationships with the trade that could not be easily replaced. The concentrate producer owns the trademark, and promotes brand advertising directed to the end consumer, but the bottler/distributor owns and cultivates the relationships with most of the retailers. This is especially the case for bottlers in foreign markets.

The success of the global beverage companies is largely tied to the presence of a bottler that understands the local market and its culture and that has strong local contacts

In international markets with varying cultures, a local bottler has the market intelligence and relationships with various points of sale to effectively promote and distribute the product in a given franchise territory. The separation of the concentrate maker from the bottler has kept these large global businesses locally relevant. A bottler that does not do a good job promoting its product in its market could face pressure to make management changes or could even lose part of its territory. However, given the significant embedded infrastructure, the concentrate producer would still be more likely to seek a resolution rather than an outright termination of the bottling agreement. Often, past resolutions have involved the concentrate producer brokering an acquisition of the weaker or more successful bottler (or certain of its territories) by a stronger one.

Concentrate producers' investments in bottlers can be sizable

There are a variety of financial flows that tie the concentrate producer and its bottlers. First, many of the large bottlers are partially owned by the concentrate producer. This means that the concentrate producer has a financial investment to protect based on its view of the value of its share of expected future earnings and cash flows from that business.

Cash flows between companies can be sizable and may represent material components of the revenues or expenses of each party. The concentrate producer's investment in a particular bottler grows over time through marketing and infrastructure payments made to support the bottler in its markets. The ongoing investments by the concentrate companies represent investments in the future of their core businesses. Thus, the size and percentage of ownership is only one consideration among several in our assessment of the likelihood of support and ratings lift. Board representation also allows the concentrate producer to exercise influence over its minority-owned bottlers. The largest bottlers may have one, two or three very senior executives from its concentrate producer on their boards.

Cash flows between companies

The substantial economic flows make the bottler the largest customer for the concentrate producer and the concentrate producer the largest supplier to each bottler. Furthermore, given the capital intensity of the bottling business, the marketing and infrastructure support from the concentrate producer helps to keep the full array of companies within a system aligned in implementing one coherent strategy that considers the health of the system overall. Bottlers that comprise a substantial portion of the concentrate company's cash flows are likely to be among the most important bottlers in the system and are more likely to benefit from lift.

How we assess it for the scorecard

Our assessment of bottler support incorporates the following main considerations, which are shown in Exhibit 3. While the summary is not intended to incorporate all nuances that can affect our assessment, in general for a bottler to receive ratings uplift, most, if not all, of the criteria shown for that number of notches would apply. The first two considerations are typically the most important in our assessment. In addition, if there has ever been a bottler default in the system, we tend to be more conservative in assigning ratings uplift.

Concentrate Producers' Ability to Provide Support

The concentrate producer needs to be financially stronger than the bottler to be in a position to provide support. For a bottler, we generally consider one notch of uplift only where the concentrate producer is rated at least two notches higher than our assessment of the bottler's preliminary outcome before support. For example, if a bottler had a preliminary outcome of A3 and the concentrate company were rated A2, the bottler would be unlikely to receive ratings uplift to the A2 level unless its debt were guaranteed.

Considering that support is not certain without a guarantee, for a bottler to receive two notches of ratings uplift, the concentrate producer's rating would typically need to be at least three notches higher than the bottler's preliminary outcome. Where the gap in credit quality is more than three notches, higher lift is possible but given the nature of these businesses, it is unlikely that a bottler would reach the same rating level as the concentrate producer (absent a guarantee). However, the rating of a critical bottler with strong fundamentals may be more than two notches higher than the preliminary outcome and within one notch of the concentrate producer's rating.

History of Support within System / Motivation for Continued Support

We consider the track record of each bottling system in assessing the willingness of a concentrate producer to provide support, and we also assess the motivation for continued support. We consider how important the beverage business is to the system overall, and the concentrate company's interest in protecting its reputation. We assess the degree of alignment within the system – in other words, the extent to which the bottler and the concentrate producer are cooperating to achieve the same ultimate goals. This is demonstrated through marketing support agreements and shared management of pricing/volume issues.

Bottler Size and Importance

The more important the bottler, the more likely it is that the concentrate producer will provide support. Importance to the system is not just a reflection of absolute size, but also of the bottler's ability to help the concentrate producer to access an individual market. Some markets are served by a number of different bottlers, lessening somewhat the importance of any one within a given market.

In assessing the importance of a bottler in the system, we consider the following:

- » Size and geographic diversity
- » Ability (including financial resources) to sustain long-term investments
- » Managerial resources
- » Commonality of strategic goals and commitment to the system
- » Equity participation in the bottler by the concentrate producer
- » Concentrate producer representation on bottler's board

Size and Importance of a Bottler's Market to System

Bottlers operating in markets that are important to the overall system or that constitute a large portion of a system's sales are more likely to be candidates for some degree of support. Bottlers operating in fewer, smaller markets, or less important ones, may be less likely to see material uplift in their ratings.

Alternative for Getting the Product to Market

In some markets it would be extremely difficult if not virtually impossible to replace a bottler due to its level of penetration and sheer size. Embedded infrastructure and relationships are so broad that independent third parties may not exist that could take on the distribution, and any attempt to change would result in serious disruption and loss of market share. In such cases, the bottler is likely to be a candidate for greater rating uplift. However, in some markets or for smaller bottlers, creating an alternate distribution system could be less difficult. This could be the case in markets where the system's bottlers are still highly fragmented, or where other

beverage companies (for example, a local beer company) could distribute through an already established system. In these cases, the case for rating uplift may be weaker.

Exhibit 3

Notching Factor: Bottler Support

		Notches of Lift	
Key Considerations	No Lift	One notch of lift	Two or more notches
Concentrate producers' ability to provide support	Lower rated concentrate producers (Baa or lower)	Concentrate producer has strong credit ratings; at least two notches above standalone credit profile of bottler	Concentrate producer has strong credit ratings; at least three notches above standalone credit profile of bottler
History of support within system, degree of importance of reputation risk, importance of beverage business to concentrate company and alignment	Lack of track record of support of bottlers of similar size or in similar markets	Good track record of support for bottlers, evidence of support	Excellent track record of support of bottlers; no known incidents of bottler default in system
Bottler size and importance	Bottler is small, not an anchor or key bottler	Bottler is a key or Anchor bottler but may be smaller than largest bottlers in system	Bottler is an anchor; among the most important bottlers in the system
Size and importance of a bottler's market to system	Market is small, not critical to franchise value, not a key market	Market(s) important to the overall franchise	Market(s) among the most important to the overall franchise
Alternative for getting product to market	Possibility to find alternate distribution methods may exist (third-party distributors, beer companies, etc.)	Would be difficult to find an alternative to distribute the product	Would be virtually impossible to replace distribution system

Source: Moody's Investors Service

Other considerations

Ratings may reflect consideration of additional factors that are not in the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. Such factors include financial controls and the quality of financial reporting; corporate legal structure; our assessment of the quality and experience of management; assessments of corporate governance as well as environmental and social considerations; exposure to uncertain licensing regimes; and possible government interference in some countries. Regulatory, litigation, liquidity, technology and reputational risk as well as changes to consumer and business spending patterns, competitor strategies and macroeconomic trends also affect ratings.

Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from scorecard-indicated outcomes

Management Strategy

12

The quality of management is an important factor supporting a company's credit strength. Assessing the execution of business plans over time can be helpful in assessing management's business strategies, policies, and philosophies and in evaluating management performance relative to performance of competitors and our projections. Management's track record of adhering to stated plans, commitments and guidelines provides insight into management's likely future performance, including in stressed situations.

Environmental, Social and Governance Considerations

Environmental, social and governance (ESG) considerations may affect the ratings of issuers in the soft beverage sector. For information about our approach to assessing ESG issues, please see our methodology that describes our general principles for assessing these risks.²

Reputation and image, which are key to brand value, can be damaged by unforeseeable developments such as product-related health scares, employee-relations concerns, environmental problems, rising sentiment against large multi-national corporations, inappropriate advertising for local cultures, and differing regulatory or governmental developments including taxes that could hinder growth.

Among the areas of focus in corporate governance, for example, are audit committee financial expertise, the incentives created by executive compensation packages, related party transactions, interactions with outside auditors, and ownership structure.

Investment and Acquisition Strategy

Acquisitions can strengthen a company's business. Our assessment of a company's tolerance for acquisition at a given rating level takes into consideration (i) management's risk appetite, including the likelihood of further acquisitions over the medium term; (ii) share buy-back activity; (iii) the company's commitment to specific leverage targets; and (iv) the volatility of the underlying businesses, as well as that of the business acquired. In general, ratings can hold after acquisitions even if leverage temporarily climbs above normally acceptable ranges. However, this depends on (i) the strategic fit; (ii) pro forma capitalization/leverage following an acquisition; (iii) integration risk; and (iv) our confidence that credit metrics will be restored in a relatively short time frame.

Financial Controls

We rely on the accuracy of audited financial statements to assign and monitor ratings in this sector. The quality of financial statements may be influenced by internal controls, including the proper tone at the top, centralized operations, and consistency in accounting policies and procedures. Auditors' reports on the effectiveness of internal controls, auditors' comments in financial reports and unusual restatements of financial statements or delays in regulatory filings may indicate weaknesses in internal controls.

Liquidity

Liquidity is an important rating consideration for all soft beverage companies, although it may not have a substantial impact in discriminating between two issuers with a similar credit profile. Liquidity can be particularly important for non-investment grade soft beverage companies, which typically have less operating and financial flexibility, and ratings can be heavily affected by extremely weak liquidity. We form an opinion on likely near-term liquidity requirements from the perspective of both sources and uses of cash. We may also monitor bank covenants and compliance cushion to assess whether the company is likely to require covenant relief in the event of even a modest industry downturn or an issuer-specific decline in performance. For more details on our approach, please see our liquidity cross-sector methodology.³

Event Risk

We also recognize the possibility that an unexpected event could cause a sudden and sharp decline in an issuer's fundamental creditworthiness, which may cause actual ratings to be lower than the scorecard-indicated outcome. Event risks — which are varied and can range from leveraged recapitalizations to sudden regulatory changes or liabilities from an accident — can overwhelm even a stable, well-capitalized firm. Some other types of event risks include M&A, asset sales, spin-offs, capital restructuring programs, product recalls, shareholder distributions, litigation, pandemics, significant cyber-crime events and geopolitical conflicts.

Using the scorecard to arrive at a scorecard-indicated outcome

1. Measurement or estimation of factors in the scorecard

In the "Discussion of the scorecard factors" section, we explain our analytical approach for scoring each scorecard factor or sub-factor,⁴ and we describe why they are meaningful as credit indicators.

The information used in assessing the sub-factors is generally found in or calculated from information in the company's financial statements or regulatory filings, derived from other observations or estimated by Moody's analysts. We may also incorporate non-public information.

Our ratings are forward-looking and reflect our expectations for future financial and operating performance. However, historical results are helpful in understanding patterns and trends of a company's performance as well as for peer comparisons. Financial metrics, unless otherwise indicated, are typically calculated based on an annual or 12-month period. However, the factors in the scorecard can be assessed using various time periods. For example, rating committees may find it analytically useful to examine both historical and expected future performance for periods of several years or more.

In certain cases, where we believe that concentrate companies would support independent bottlers, we use figures that aggregate concentrate company financials with those of its rated bottlers to analyze the system as a whole.

All of the quantitative credit metrics incorporate our standard adjustments⁵ to income statement, cash flow statement and balance sheet amounts for items such as underfunded pension obligations and operating leases. We may also make other analytical adjustments that are specific to a particular company.

2. Mapping scorecard factors to a numeric score

After estimating or calculating each factor or sub-factor, each outcome is mapped to a broad Moody's rating category (Aaa, Aa, A, Baa, Ba, Ba, Caa, or Ca, also called alpha categories) and to a numeric score.

Qualitative factors are scored based on the description by broad rating category in the scorecard. The numeric value of each alpha score is based on the scale below.

Exhibit 4

Aaa	Aa	Α	Baa	Ва	В	Caa	Ca
1	3	6	9	12	15	18	20

Source: Moody's Investors Service

3. Determining the overall scorecard-indicated outcome

The numeric score for each sub-factor (or each factor, when the factor has no sub-factors) is multiplied by the weight for that sub-factor (or factor) with the results then summed to produce an aggregate numeric score before notching factors (the preliminary outcome). We then consider whether the preliminary outcome that results from the five weighted factors should be notched upward in order to arrive at an aggregate numeric score after notching factors, based on the Bottler Support notching factor.

The aggregate numeric score before and after the notching factor is mapped to an alphanumeric. For example, an issuer with an aggregate numeric score before notching factors of 11.7 would have a Ba2 preliminary outcome, based on the ranges in the table below. If the combined notching factors totaled two upward notches, the aggregate numeric score after notching factors would be 9.7, which would map to a Baa3 scorecard-indicated outcome.

Exhibit 5
Scorecard-indicated outcome

Scorecard-indicated outcome	Aggregate numeric score
Aaa	x < 1.5
Aa1	1.5 ≤ x < 2.5
Aa2	2.5 ≤ x < 3.5
Aa3	3.5 ≤ x < 4.5
A1	4.5 ≤ x < 5.5
A2	5.5 ≤ x < 6.5
A3	6.5 ≤ x < 7.5
Baa1	7.5 ≤ x < 8.5
Baa2	8.5 ≤ x < 9.5
Baa3	9.5 ≤ x < 10.5
Ba1	10.5 ≤ x < 11.5
Ba2	11.5 ≤ x < 12.5
Ва3	12.5 ≤ x < 13.5
B1	13.5 ≤ x < 14.5
B2	14.5 ≤ x < 15.5
B3	15.5 ≤ x < 16.5
Caa1	16.5 ≤ x < 17.5
Caa2	17.5 ≤ x < 18.5
Caa3	18.5 ≤ x < 19.5
Ca	x ≥ 19.5

Source: Moody's Investors Service

In general, the scorecard-indicated outcome is oriented to the corporate family rating (CFR) for speculative-grade issuers and to the senior unsecured rating for investment-grade issuers. For issuers that benefit from rating uplift from parental support, government ownership or other institutional support, we consider the underlying credit strength or Baseline Credit Assessment for comparison to

the scorecard-indicated outcome. For an explanation of the Baseline Credit Assessment, please refer to *Rating Symbols and Definitions* and to our cross-sector methodology for government-related issuers.⁸

Assigning issuer-level and instrument-level ratings

After considering the scorecard-indicated outcome, other considerations and relevant cross-sector methodologies, we typically assign a CFR to speculative-grade issuers or a senior unsecured rating for investment-grade issuers. For issuers that benefit from rating uplift from government ownership, we may assign a Baseline Credit Assessment.⁹

Individual debt instrument ratings may be notched up or down from the CFR or the senior unsecured rating to reflect our assessment of differences in expected loss related to an instrument's seniority level and collateral. The documents that provide broad guidance for such notching decisions are the rating methodology on loss given default for speculative-grade non-financial companies, the methodology for notching corporate instrument ratings based on differences in security and priority of claim, and the methodology for assigning short-term ratings.¹⁰

Key rating assumptions

For information about key rating assumptions that apply to methodologies generally, please see Rating Symbols and Definitions.11

Limitations

In the preceding sections, we have discussed the scorecard factors and many of the other considerations that may be important in assigning ratings. In this section, we discuss limitations that pertain to the scorecard and to the overall rating methodology.

Limitations of the scorecard

There are various reasons why scorecard-indicated outcomes may not map closely to actual ratings.

The scorecard in this rating methodology is a relatively simple reference tool that can be used in most cases to approximate credit profiles of companies in this sector and to explain, in summary form, many of the factors that are generally most important in assigning ratings to these companies. Credit loss and recovery considerations, which are typically more important as an issuer gets closer to default, may not be fully captured in the scorecard. The scorecard is also limited by its upper and lower bounds, causing scorecard-indicated outcomes to be less likely to align with ratings for issuers at the upper and lower ends of the rating scale.

The weights for each factor and sub-factor in the scorecard represent an approximation of their importance for rating decisions across the sector, but the actual importance of a particular factor may vary substantially based on an individual company's circumstances.

Factors that are outside the scorecard, including those discussed above in the "Other considerations" section, may be important for ratings, and their relative importance may also vary from company to company. In addition, certain broad methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector. Examples of such considerations include the following: how sovereign credit quality affects non-sovereign issuers, the assessment of credit support from other entities, the relative ranking of different classes of debt and hybrid securities, and the assignment of short-term ratings.

We may use the scorecard over various historical or forward-looking time periods. Furthermore, in our ratings we often incorporate directional views of risks and mitigants in a qualitative way.

General limitations of the methodology

This methodology document does not include an exhaustive description of all factors that we may consider in assigning ratings in this sector. Companies in the sector may face new risks or new combinations of risks, and they may develop new strategies to mitigate risk. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

Ratings reflect our expectations for an issuer's future performance; however, as the forward horizon lengthens, uncertainty increases and the utility of precise estimates, as scorecard inputs or in other considerations, typically diminishes. Our forward-looking opinions are based on assumptions that may prove, in hindsight, to have been incorrect. Reasons for this could include unanticipated changes in any of the following: the macroeconomic environment, general financial market conditions, industry competition, disruptive technology, or regulatory and legal actions. In any case, predicting the future is subject to substantial uncertainty.

Moody's related publications

16

Credit ratings are primarily determined through the application of sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. A list of sector and cross-sector credit rating methodologies can be found here">html/>here.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to Rating Symbols and Definitions, which is available here.

Moody's Basic Definitions for Credit Statistics (User's Guide) can be found here.

Authors:

Linda Montag

Dilara Sukhov, CFA

Bill Hunter

Endnotes

18

- 1 In our methodologies and research, the terms "scorecard" and "grid" are used interchangeably.
- 2 A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.
- 3 A link to a list of our cross-sector methodologies can be found in the "Moody's related publications" section.
- 4 When a factor comprises sub-factors, we score at the sub-factor level. Some factors do not have sub-factors, in which case we score at the factor level.
- 5 For definitions of our most common metrics, please see *Moody's Basic Definitions for Credit Statistics (User's Guide*). A link can be found in the "Moody's related publications" section.
- 6 For an explanation of our standard adjustments, please see the cross-sector methodology that describes our financial statement adjustments in the analysis of non-financial corporations.
- 7 Numerically, an upward notch subtracts 1 from the score.
- 8 A link to a list of our sector and cross-sector methodologies and a link to Rating Symbols and Definitions can be found in the "Moody's related publications" section.
- 9 For an explanation of the Baseline Credit Assessment, please refer to *Rating Symbols and Definitions* and to our cross-sector methodology for government-related issuers. A link to a list of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's related publications" section.
- 10 A link to a list of our sector and cross-sector rating methodologies can be found in the "Moody's related publications" section.
- 11 A link to Rating Symbols and Definitions can be found in the "Moody's related publications" section.
- 12 A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

REPORT NUMBER 1285031

Analyst Contacts

Mihoko Manabe, CFA Associate Managing Director mihoko.manabe@moodys.com

+81.3.5408.4033 John E. Puchalla, CFA Associate Managing

Director

john.puchalla@moodys.com

+1.212.553.4026



20