

### **CREDIT OPINION**

20 May 2020

# **Update**



#### RATINGS

#### Coca-Cola HBC AG

Domicile	Switzerland
Long Term Rating	Not Available
Туре	Not Available
Outlook	Not Available

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

#### Contacts

Ernesto Bisagno, CFA +39.02.9148.1120 VP-Sr Credit Officer ernesto.bisagno@moodys.com

Gleb Sharunin +39.02.9148.1136 Associate Analyst gleb.sharunin@moodys.com

Ivan Palacios +34.91.768.8229 Associate Managing Director ivan.palacios@moodys.com

### **CLIENT SERVICES**

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

# Coca-Cola HBC AG

Update following 2019 results

# **Summary**

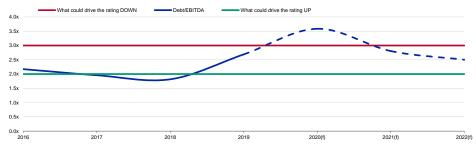
The rating of <u>Coca-Cola HBC Finance B.V.</u> (Baa1 stable) benefits from a one-notch rating uplift, reflecting the implied support from <u>The Coca-Cola Company</u> ("TCCC" A1 stable).

The standalone credit profile of Coca-Cola HBC Finance B.V., a fully owned subsidiary of Coca-Cola HBC AG (CCH), reflects the company's strong business profile and the resilient fundamentals of the beverage industry in times of economic stress, the key mitigating factors for the expected decline in profit in 2020 and the weakening of CCH's credit metrics.

Despite the expected weakening in credit metrics in 2020, the Baa1 rating reflects the company's strong brand portfolio and market share as one of the key bottlers for TCCC, and its balanced financial policy, with a medium-term net debt/comparable EBITDA target ratio of 1.5x-2.0x.

CCH's rating is constrained by its exposure to the low-growth environment across Europe and the volatility in emerging markets.

Exhibit 1
We expect CCH's leverage to return within the rating guidance by 2022
Moody's-adjusted gross leverage evolution



 $Sources: Moody's \ Financial \ Metrics \\ ^{\text{\scriptsize IM}} \ and \ Moody's \ Investors \ Service \ estimates$ 

# **Credit strengths**

- » Strong brand portfolio
- » Leading bottler of the brands of TCCC
- » Steady profit growth and cash flow generation
- » Balanced financial policy, with a medium-term net debt/comparable EBITDA target of 1.5x-2.0x

# **Credit challenges**

- » Weakened economic conditions because of the coronavirus outbreak
- » Expectation of increased leverage in 2020 due to Coronavirus
- » Exposure to the low-growth environment across Europe and demand volatility in emerging markets

# **Rating outlook**

Despite the weakening of credit metrics in 2020, the stable outlook reflects our expectation that the company's credit metrics will return within the rating guidance in 2021.

# Factors that could lead to an upgrade

Upward pressure on the rating is unlikely in the current environment but could materialise if the company's operating performance remains strong and credit metrics improve, such as Moody's-adjusted debt/EBITDA declining below 2.0x on a sustained basis, with management's commitment to keep leverage below that level.

# Factors that could lead to a downgrade

CCH's rating could be strained if its operating performance does not show signs of improvement in 2021, more specifically if profitability deteriorates, with its EBITA margin below 6%; retained cash flow/net debt falls below 20%; or Moody's-adjusted debt/EBITDA rises above 3.0x on a sustained basis.

The rating could also be affected in the event of material market share erosion in CCH's key established markets, a multi-notch downgrade of TCCC's A1 (stable) long-term rating or a change in the existing relationship or bottling agreements with TCCC.

### **Key indicators**

Exhibit 2
Coca-Cola HBC AG

EUR Millions	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20 (f)	Dec-21 (f)	Dec-22 (f)
Revenue	6,219	6,522	6,657	7,026	5,929	6,723	7,059
EBITA Margin %	8.7%	9.5%	10.0%	10.4%	7.7%	9.8%	10.5%
RCF / Net Debt	41.7%	54.3%	55.7%	-3.5%	15.6%	28.5%	30.6%
EBIT / Interest Expense	6.5x	10.9x	11.2x	9.6x	6.6x	10.8x	12.2x
Debt / EBITDA	2.2x	2.0x	1.8x	2.7x	3.6x	2.8x	2.5x

All figures and ratios are calculated using Moody's estimates and standard adjustments. Moody's Forecasts (f) or Projections (proj.) are Moody's opinion and do not represent the views of the issuer. Periods are financial year-end unless indicated.

2019 leverage is pro forma for the Bond maturing in June 2020 refinanced in 2019.

Sources: Moody's Financial Metrics™ and Moody's Investors Service estimates

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

#### **Profile**

Headquartered in Switzerland, CCH produces and distributes a wide range of nonalcoholic, ready-to-drink beverages, with a strong and diversified brand portfolio. The company's product portfolio includes leading brands of TCCC such as Coca-Cola, Coca-Cola Light, Coca-Cola Zero, Sprite, Fanta, Bonaqua and Cappy, along with other juices, water, energy drinks, iced teas, coffee and other ready-to-drink beverages.

In 2019, the group produced 2,265 million unit cases (up by 3.3% from 2018), which were distributed across 28 countries, mainly in Central and Eastern Europe, and generated €7.0 billion in revenue and €1.2 billion comparable adjusted EBITDA.

This performance positioned the group as one of the leading bottlers in TCCC's system, both by volume and net sales. The principal shareholders of CCH are Kar-Tess Holding (a Luxembourg-based company owned by the David-Leventis family), which holds around 23% of ordinary shares, and TCCC, which indirectly holds around 23%.

### **Detailed credit considerations**

### Outlook for the beverage industry lowered to stable

In March 2020, we lowered the outlook for the beverage industry to stable from positive. Although profit for the European companies will decline in 2020, the fundamentals of the beverage industry over the medium term will be resilient and, therefore, profit growth for the industry will recover in 2021, driven by a combination of modest volume increase, positive product mix and contribution from efficiency programmes.

This is based on the expectation that the global efforts to arrest the spread of coronavirus will be successful. However, the longer the current situation lasts, with countries implementing partial or total lockdowns, the higher the impact on beverage consumption, supply chains and logistics, and the long-term negative impact on the broader macroeconomic environment.

### Implicit support as a key bottler for TCCC

CCH is a key Coke bottler, with sales of €7 billion and comparable adjusted EBITDA of about €1.2 billion in 2019. CCH's ratings reflect the company's strategic importance to the overall Coke system, which, under our methodology, provides a one-notch rating uplift to the company's standalone credit profile.

We do not expect any changes to this condition because TCCC is one of CCH's principal shareholders and there is a long history of collaboration between the two companies from strategic and operational standpoints, including joint acquisitions. While agreements with TCCC do not include a guarantee of Coca-Cola HBC's financial obligations, TCCC is likely to provide the necessary support, as it did in the past for other bottlers (for example, the control of profit and loss agreement with Coca-Cola Erfrischungsgetränke AG in 2003), to help maintain CCH's adequate liquidity.

In addition, CCH's extensive manufacturing and distribution network would make it expensive for TCCC to find an alternative way of producing and marketing its products in the geographies where the company operates. The distribution of TCCC's products is the key competitive advantage for CCH. The terms of the bottlers' agreements grant Coca-Cola HBC the right to produce and the exclusive right to sell and distribute the beverages of TCCC in each of the countries where the group operates. Consequently, Coca-Cola HBC is obliged to purchase all of the concentrate for TCCC's beverages from TCCC, or its designee, in the ordinary course of business. On 10 October 2012, TCCC agreed to extend the term of the bottlers' agreements for a further 10 years until 2023.

These agreements have been in place since the creation of the company in 2000 through a merger of different bottlers, although some of the agreements existed earlier and have always been renewed.

### Strong brand portfolio and leading market position in various geographies

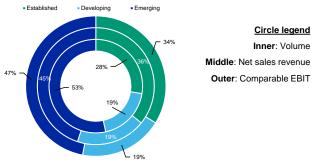
CCH produces and distributes a wide range of sparkling beverages, which represented around 71% of its total revenues in 2019, and still beverages, including water (8%), juices (8%) and ready-to-drink tea, energy and other drinks (13%). Although the share of sparkling beverages decreased from 90% in 2001, most of the products distributed by CCH are brands owned by TCCC. The company's strategy is to grow its core sparkling category and gradually diversify its product portfolio, including water, iced teas, juices and other ready-to-drink beverages, such as energy drinks, which, according to Euromonitor, will continue to benefit from more favourable consumption patterns.

### Modest geographical diversification and material exposure to volatile emerging markets

CCH's geographical footprint reflects the company's concentration in Central and Eastern Europe, Russia, Armenia and Nigeria. CCH derives almost half of its total volume from emerging markets, as Exhibit 3 shows. Its presence in emerging markets allows for higher-than-average growth rates in both volume and sales, driven by favourable demographics and increasing disposable income. However, exposure to these countries results in high volatility in the company's operating results and a less predictable regulatory environment.

Exhibit 3
Coca-Cola HBC generates around half of its total annual volume in emerging markets

2019 volume, revenue and profit split by geography

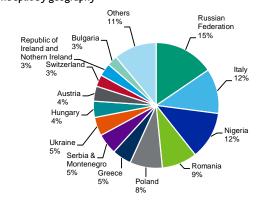


Established markets include Austria, Cyprus, Greece, Italy, the Republic of Ireland, Northern Ireland and Switzerland. Developing markets include the Baltics, Croatia, the Czech Republic, Hungary, Poland, Slovakia and Slovenia. Emerging markets include Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Moldova, Nigeria, Romania, Russia, Serbia and Montenegro, North Macedonia and Ukraine. Source: Company's annual report

Exhibit 4

Coca-Cola HBC has a diversified base in Europe, although it remains exposed to emerging markets

2019 volume split by geography



Source: Company's annual report

However, CCH remains one of the most diversified bottlers of the Coca-Cola system and its network spans 28 countries, 17 of which are in the European Union. In comparison, Coca-Cola European Partners plc (A3 stable), the other Coca-Cola bottler operating in Europe, serves 13 countries, all in Western Europe, and Coca-Cola FEMSA, S.A.B. de C.V. (A2 negative), the largest Coca-Cola bottler globally, serves 10 countries in emerging markets, mainly in Central and South America.

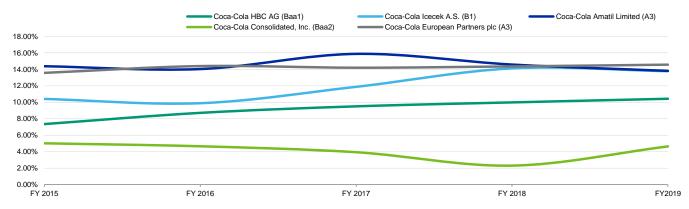
### Improved profitability but leverage increased in 2019 driven by higher shareholder distributions

In 2019, CCH reported a 4.4% increase in currency-neutral Net Sales Revenue and an 11.9% increase in operating profit to €715 million, mainly driven by higher volumes and better operating leverage. As a result, the company's Moody's-adjusted EBITA margin improved to 10.4% as of the end of December 2019 (from 10.0% in 2018).

The company has a strong record of delivering margin growth, with its Moody's-adjusted EBITA increasing 420 basis points from 2014, driven by improved operating leverage on the back of fixed costs supporting higher volumes, a better product mix and contribution from cost-efficiency initiatives.

Despite the improvement in margins, the company remains exposed to raw material and foreign-exchange volatility. CCH's margins are lower than those of most of its peers, as Exhibit 5 shows, because of two main factors: CCH's operations are spread across several countries (some of which have difficult logistics, such as Russia and Nigeria) compared with other bottlers, resulting in lower economies of scale, and the per capita consumption of carbonated soft drinks in its key markets is lower than that of other bottlers.

Exhibit 5
Coca-Cola HBC's profitability improved in recent years
Moody's-adjusted EBITA margin evolution across peers



Source: Moody's Financial Metrics™

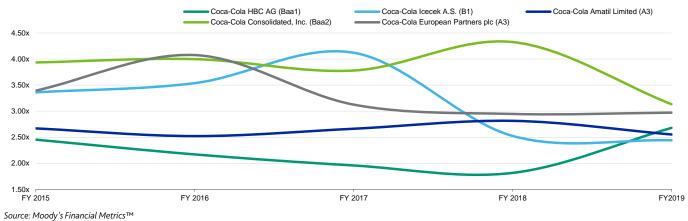
Moody's-adjusted operating cash flow increased slightly to €865 million in 2019 (compared with €820 million in 2018) because of stronger earnings. Moody's-adjusted capital spending increased marginally to €519 million in 2019 (from €490 million in 2018), while dividends rose to €933 million (from €199 million in 2018) as they include a special dividend of €733 million and therefore Moody's-adjusted FCF turned negative to €587 million (€131 million in 2018).

In addition in 2019, the company returned €193 million through share repurchases and spent €275 million (including €126 million net debt acquired) for the acquisition of Bambi, Serbia's leading confectionery business, which drove an increase in Moody's-adjusted net debt to €2.2 billion as of the end of December 2019 (from €1.1 billion in 2018).

Adjusted gross debt as of the end of December 2019 was  $\leq$ 3.4 billion (compared with the reported debt of  $\leq$ 3.3 billion), with the main adjustment being  $\leq$ 77 million of pension deficit. Moody's-adjusted leverage pro forma for the refinanced bond maturing in June 2020 deteriorated to 2.7x in 2019 (compared with 1.8x in 2018), leaving the company still adequately positioned in the rating category.

Exhibit 6

Coca-Cola HBC's financial leverage is among the lowest in the peer group Moody's-adjusted debt/EBITDA



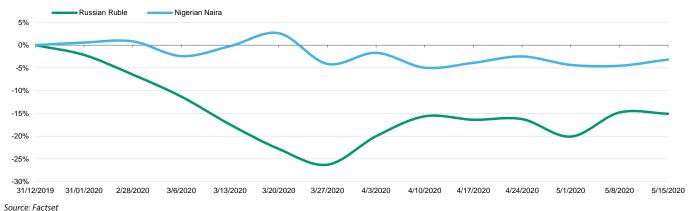
Credit metrics will weaken temporarily, but likely to recover in 2021

In March 2020, the company withdrew its original guidance whereby foreign exchange-neutral revenues were expected to grow above those recorded in 2019 and profit margins were expected to expand again. This is because of the weakened economic outlook caused by the rapid and widening spread of the coronavirus outbreak in some of CCH's key markets, which is likely to increase pressure on its profit.

Q1 2020 results point to a foreign exchange-neutral decline in revenue of 1.2%, with the severity of the decline considerably varying depending on the region, while April foreign exchange-neutral revenue declined 37.2% year over year, with all the markets served being in total or partial lockdowns (except for Belarus).

We expect trading conditions to be particularly severe in the "out of home" channel, which represents slightly more than 40% of CCH's revenue, given the strict measures implemented in Europe and emerging markets, which severely limit the mobility of people. We expect the revenue decline in this channel to be partially offset by a potential increase in home consumption. We also believe the company has some flexibility in implementing cost-saving measures. However, increased foreign exchange volatility in emerging markets could also reduce earnings. As Exhibit 7 shows, the Russian rouble and Nigerian naira depreciated significantly against the Euro in 2020 which is negative for CCH.

Exhibit 7
Emerging market currencies have significantly depreciated against the Euro
Russian Ruble and Nigerian Naira value against euro value at 31 December 2019



Assuming that the efforts to arrest the spread of coronavirus will be successful, we expect some improvement in trading performance in the second half, although, we expect the impact on revenue to persist, which is likely to result in a decline of 25%-30% in 2020 EBITDA, resulting in an increase in Moody's-adjusted debt/EBITDA to 3.6x, above the 3.0x level required for the Baa1 rating. However, despite the expected significant reduction in 2020 profit, we expect FCF to remain broadly neutral.

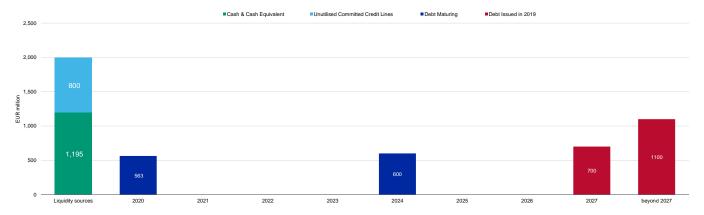
In 2021-22, we expect earnings to recover, driven by stronger volumes and positive product mix, and adjusted leverage to reduce towards 2.5x by 2022.

### Liquidity analysis

CCH's liquidity is strong, underpinned by its cash balance of €1.2 billion as of December 2019 and access to a five-year €800 million undrawn syndicated credit facility, maturing in April 2025, with an extension option up to April 2026. The next material debt maturity includes the €563 million bond due in June 2020.

The ample liquidity reserves available provide a significant buffer in case of 2020 negative FCF.

Exhibit 8
Coca-Cola HBC maturities



It does not include long-term finance lease and other long-term debt. Sources: Company reports and market announcements

# Rating methodology and scorecard factors

The scorecard-indicated outcome based on 2019 audited accounts is Baa1 (including the one-notch uplift provided by the implied support from TCCC), in line with the current assigned rating. We expect CCH's credit metrics to weaken in 2020 but recover in 2021, and this expectation is reflected by the wide range of our forward-looking view.

Exhibit 9
Rating factors
Coca-Cola HBC AG

Soft Beverage Industry Grid [1][2]	Curre FY 12/31	••••	Moody's 12-18 Month As of 5/7/20	
Factor 1 : SCALE (16%)	Measure	Score	Measure	Score
a) Revenue (USD Billion)	\$7.9	Baa	\$6.8 - \$7.5	Baa
Factor 2 : BUSINESS PROFILE (40%)				
a) Product Diversification	Baa	Baa	Baa	Baa
b) Geographic Characteristics	Baa	Baa	Baa	Baa
c) Market Position & Brand Strength	Baa	Baa	Baa	Baa
d) Innovation, Distribution & Infrastructure	Baa	Baa	Baa	Baa
e) Pricing Flexibility	Α	Α	A	Α
Factor 3 : FINANCIAL POLICY (16%)				
a) Financial Policy	Baa	Baa	Baa	Baa
Factor 4 : PROFITABILITY (7%)	<del></del>			
a) EBITA Margin	10.4%	Baa	7.5% - 10%	Ba
Factor 5 : LEVERAGE & COVERAGE (21%)				
a) RCF / Net Debt	-3.5%	Ca	15.5% - 30%	Baa
b) EBIT / Interest Expense	9.6x	A	6.5x - 11x	А
c) Debt / EBITDA	2.7x	Baa	2.8x - 3.6x	Baa
Rating:	<del></del>			
Indicated Rating from Grid Factor 1-5		Baa2		Baa2
Rating Lift	1	1	1	1
a) Scorecard-indicated outcome		Baa1		Baa1
b) Actual Rating Assigned				Baa1

<sup>[1]</sup> All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 12/31/2019, 2019 debt / EBITDA is pro forma for the Bond maturing in June 2020 refinanced in 2019. [3] This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Sources: Moody's Financial Metrics™ and Moody's Investors Service estimates

# **Appendix**

Exhibit 10

### Peer snapshot Coca-Cola HBC AG

	Co	ca-Cola HBC		Coca-Cola European Partners		Coca-Cola Icecek A.S.		Coca-Cola Amatil Limited			Coca-Cola Consolidated, Inc.				
	E	Baa1 Stable			A3 Stable			31 Negative			A3 Stable		1	Baa2 Stable	
(in US millions)	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19
Revenue	\$7,369	\$7,861	\$7,866	\$12,499	\$13,602	\$13,453	\$2,340	\$2,265	\$2,158	\$3,645	\$3,590	\$3,555	\$4,288	\$4,625	\$4,827
EBITDA	\$1,103	\$1,206	\$1,181	\$2,438	\$2,661	\$2,617	\$423	\$452	\$418	\$802	\$743	\$711	\$335	\$317	\$395
Total Debt	\$2,295	\$2,121	\$3,818	\$7,964	\$7,475	\$7,798	\$1,674	\$1,006	\$972	\$2,180	\$1,981	\$1,834	\$1,268	\$1,253	\$1,238
Cash & Cash Equiv.	\$849	\$839	\$1,341	\$432	\$353	\$355	\$1,022	\$430	\$474	\$812	\$660	\$602	\$17	\$14	\$10
EBITA Margin	9.5%	10.0%	10.4%	14.5%	14.7%	14.6%	11.7%	14.1%	13.8%	15.9%	14.5%	13.8%	3.9%	2.9%	4.6%
EBIT / Int. Exp.	10.9x	11.2x	9.6x	9.5x	10.3x	15.0x	4.5x	3.7x	5.2x	6.0x	6.1x	6.3x	3.2x	2.0x	3.9x
RCF / Net Debt	54.3%	55.7%	-3.5%	14.7%	16.8%	17.6%	47.3%	43.2%	51.0%	20.6%	18.4%	25.1%	26.6%	18.1%	23.7%
Debt / EBITDA	2.0x	1.8x	2.7x	3.1x	2.9x	3.0x	4.1x	2.5x	2.4x	2.7x	2.8x	2.6x	3.8x	4.0x	3.1x
FCF / Debt	10.7%	7.1%	-17.3%	7.9%	9.4%	7.6%	10.3%	9.3%	13.5%	-2.5%	-2.1%	0.2%	10.3%	2.9%	6.0%

All figures and ratios calculated using Moody's estimates and standard adjustments. FYE = Financial year-end. LTM = Last 12 Months. RUR\* = Ratings under review, where UPG = for upgrade and DNG = for downgrade.

CCH's 2019 debt / EBITDA is pro forma for the Bond maturing in June 2020 refinanced in 2019.

Source: Moody's Financial Metrics

Exhibit 11 CCH's Moody's-adjusted debt breakdown

(in EUR Millions)	FYE	FYE	FYE	FYE
(in EUR Millions)	Dec-16	Dec-17	Dec-18	Dec-19
As Reported Debt	1,625	1,626	1,604	3,325
Pensions	124	102	73	77
Operating Leases	258	183	178	0
Moody's-Adjusted Debt	2,007	1,911	1,855	3,402

[1] All figures are calculated using Moody's estimates and standard adjustments. Source: Moody's Financial Metrics  $^{\text{TM}}$ 

Exhibit 12 CCH's Moody's-adjusted EBITDA breakdown

(in FUR Millians)	FYE	FYE	FYE	FYE
(in EUR Millions)	Dec-16	Dec-17	Dec-18	Dec-19
As Reported EBITDA	860	929	978	1,068
Pensions	-5	2	7	3
Operating Leases	86	61	59	0
Unusual	-3	-4	-10	-3
Non-Standard Adjustments	-14	-12	-13	-13
Moody's-Adjusted EBITDA	925	976	1,022	1,055

[1] All figures are calculated using Moody's estimates and standard adjustments. Source: Moody's Financial Metrics  $^{\text{TM}}$ 

Exhibit 13 Historicals and forecasts Coca-Cola HBC

EUR Millions	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20 (f)	Dec-21 (f)	Dec-22 (f)
INCOME STATEMENT							
Net sales/Revenue	6,219	6,522	6,657	7,026	5,929	6,723	7,059
EBITDA	925	976	1,022	1,055	764	976	1,095
EBIT	542	620	665	732	453	657	741
Interest Expense	83	57	60	76	68	61	61
BALANCE SHEET							
Cash & Cash Equivalents	563	694	734	1,195	401	541	627
Total Liabilities	3,957	3,806	3,921	5,517	4,854	4,854	4,855
Total Debt (Gross)	2,007	1,911	1,855	3,402	2,739	2,739	2,739
CASH FLOW							
Cash Flow from Operating Activities	780	833	820	865	459	674	821
Capital Expenditures (CAPEX)	(425)	(467)	(490)	(519)	(342)	(382)	(504)
Dividends	(145)	(161)	(199)	(933)	(244)	(147)	(225)
Retained Cash Flow	602	654	625	(78)	365	627	645
RCF / Debt	30.0%	34.2%	33.7%	-2.3%	13.3%	22.9%	23.6%
Free Cash Flow (FCF)	211	205	131	(587)	(127)	145	91
FCF / Debt	10.5%	10.7%	7.1%	-17.3%	-4.6%	5.3%	3.3%
PROFITABILITY							
% Change in Sales (YoY)	-2.0%	4.9%	2.1%	5.5%	-15.6%	13.4%	5.0%
EBIT Margin %	8.7%	9.5%	10.0%	10.4%	7.6%	9.8%	10.5%
EBITA Margin %	8.7%	9.5%	10.0%	10.4%	7.7%	9.8%	10.5%
EBITDA Margin %	14.9%	15.0%	15.3%	15.0%	12.9%	14.5%	15.5%
INTEREST COVERAGE							
EBIT / Interest Expense	6.5x	10.9x	11.2x	9.6x	6.6x	10.8x	12.2x
EBITDA / Interest Expense	11.2x	17.1x	17.2x	13.8x	11.2x	16.0x	18.0x
LEVERAGE							
Debt / EBITDA	2.2x	2.0x	1.8x	2.7x	3.6x	2.8x	2.5x
Net Debt / EBITDA	1.6x	1.2x	1.1x	2.1x	3.1x	2.3x	1.9x

2019 debt / EBITDA is pro forma for the Bond maturing in June 2020 refinanced in 2019. Source: Moody's Financial Metrics™

# **Ratings**

Exhibit 14

Category	Moody's Rating
COCA-COLA HBC FINANCE B.V.	
Outlook	Stable
Bkd Senior Unsecured -Dom Curr	Baa1
Bkd Commercial Paper -Dom Curr	P-2
Source: Moody's Investors Service	

© 2020 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 INVESTORS SERVICE, INC. AND/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S 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 INVESTORS SERVICE 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 MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S INVESTORS SERVICE 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 AND PUBLICATIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS OF PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS 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 \$2,700,000. 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 <a href="https://www.moodys.com">www.moodys.com</a> 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 JPY125,000 to approximately JPY250,000,000.

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

REPORT NUMBER 1222659

