

Tear Sheet:

Gerdau S.A.

May 28, 2026

This report does not constitute a rating action.

Supportive industry dynamics and protective trade policies like Section 232 will continue to support robust performance in North America. Steel import restrictions, combined with robust demand from the infrastructure, data center, and renewable energy sectors, will support domestic pricing power in the U.S. Additionally, adequate metal spreads--around \$500 -\$650 per short ton, bolstered by low scrap costs amid comfortable supply--will help margins expand this year.

We project EBITDA margins in North America at 22%-23% in 2026, up from 18.1% in 2025, and 17.1% in 2024. While margins in the first quarter of this year reached 24.1%, our full-year forecast is lower to account for anticipated heightened energy costs stemming from Brent price hikes and geopolitical instability.

Sustainability of lower competition and flexibility to adjust prices in Brazil remains uncertain, but investments in cost competitiveness will sustain margins around 10%-11% in the country.

The competition from imports remains a concern for domestic players, with recently revised import policies showing few material and uneven effects in supporting local companies' pricing power, even as demand remains resilient. However, increasing freight costs globally could support healthier domestic competition, by pressuring import prices up or translating into lower import volumes. As per Aço Brasil, imports represented 20.5% from total consumption in March 2026, down from 23.9% last year.

Gerdau continues to invest in key cost competitiveness initiatives, with projects such as Miguel Burnier close to completion, which will expand the company's iron ore mining capacity. Along with footprint optimization and a better product mix, we expect the higher mining volumes will support profitability in Brazil, both from cost savings coming from increased verticalization and revenue from selling excess production.

We anticipate Gerdau will continue to focus on shareholder remuneration, amid robust cash flow. We forecast capital expenditure to decline to R\$ 4.7 billion in 2026, in line with the company's guidance, from R\$ 6.5 billion in 2025. This, coupled with higher EBITDA, mainly coming from North America, and a strict approach to optimize working capital will boost free operating cash flow (FOCF) to R\$ 3.8 billion in 2026, up from R\$ 817 million in 2025.

With that, we expect Gerdau will continue to remunerate shareholders, whether through dividend payouts or share repurchases, which we estimate at a total of R\$ 1.7 billion this year. Still, this is

Primary Contact

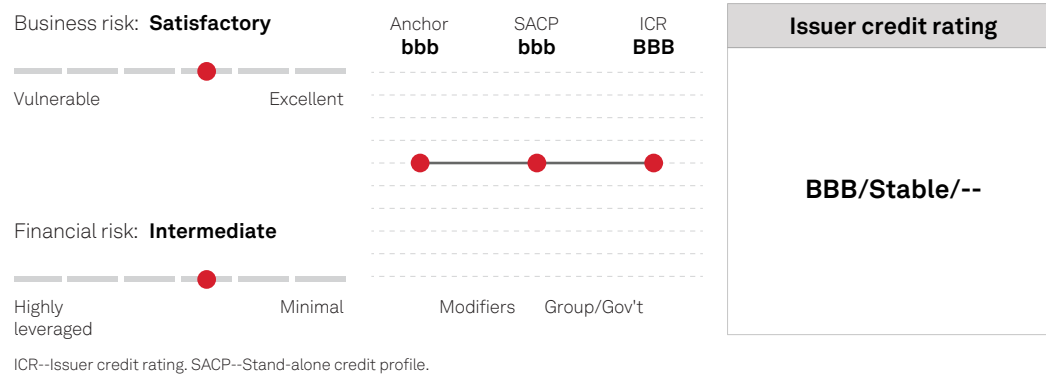
Matheus H Cortes
Sao Paulo
55-11-3039-9775
matheus.cortes
@spglobal.com

Secondary Contact

Flavia M Bedran
Sao Paulo
55-11-3039-9758
flavia.bedran
@spglobal.com

subject to maintaining a solid cash position and controlled leverage, which we forecast will remain below 1.0x in 2026 and 2027.

Ratings Score Snapshot



Recent Research

- [Gerdau S.A.](#), Nov. 12, 2025
- [Research Update: Gerdau S.A. Upgraded To 'BBB' From 'BBB-' On Sustained Low Leverage And Conservative Financial Policies; Outlook Stable](#), Oct. 16, 2024

Company Description

Gerdau is one of the largest steel producers in the Americas. With total crude steel production capacity of more than 15 million tons, the company operates mainly in Brazil and the U.S., but is also present in Canada, Mexico, Argentina, Uruguay, and Peru. Gerdau's portfolio largely consist of long steel (on average around 60%-70% of total production), but also produces about 20%-25% of flat and 10%-15% of specialty steel. Gerdau operates both with electric arc furnaces (EAF), representing 85%-90% of its total production capacity, and blast furnaces (BF), representing 10%-15%.

It also has 1.2-1.8 million tons of iron ore production capacity in Brazil, the majority of which is used for its own steel integration, but with the expectation to increase to 5.5 million tons once the Miguel Burnier mining project ramp ups fully by 2027.

Gerdau is ultimately controlled by the Gerdau Johannpeter family through the holding company Metalurgica Gerdau S.A. (MG; not rated), which holds a 33.5% economic stake but 55% of the voting shares. We consider Gerdau a core subsidiary of MG because it's the only operating asset and cash-flow generator of the holding company, and it holds 100% of the group's debt. In addition, Gerdau controls subsidiaries in the steel business, including Gerdau Ameristeel Corp., and financial vehicles.

Outlook

The stable outlook indicates that Gerdau will benefit from the strong performance in North America to maintain leverage below 1.0x in the next 18-24 months, despite still subdued margins in Brazil and amid sizable capex and shareholder remuneration. We also think that the company

Gerdau S.A.

will continue to manage its cash outflows conservatively to keep controlled leverage--below 1.5x--even during cyclical downturns.

We also expect Gerdau to maintain a sound liquidity cushion to withstand a potential downturn. As a result, we could rate it up to two notches above our 'BBB-' transfer and convertibility (T&C) assessment for Brazil.

Downside scenario

We could downgrade Gerdau if its adjusted debt to EBITDA remains above 1.5x and funds from operations (FFO) to debt fall below 60% for a consistent period, after a persistent downturn in the industry, with a significant drop in margins. This scenario could also result from recurrently high shareholder remuneration coupled with more aggressive approach to investments and/or mergers and acquisitions, leading to significant cash burn.

We could also lower the ratings if the company's liquidity weakens, limiting its ability to be rated two notches above our T&C assessment for Brazil.

Upside scenario

Although unlikely, we could upgrade Gerdau in the next 18-24 months if it sustains a longer track record of adjusted debt to EBITDA below 1.5x and FFO to debt above 60% through industry downturns. In this scenario, we would expect the company to have a more diversified product mix and operational footprint to strengthen its position in the sector, while supporting less volatile margins throughout industry cycles and increasing scale.

An upgrade would also depend on Gerdau's ability to continue posting sound liquidity to pass our stress test and be rated up to two notches above the 'BBB-' T&C assessment for Brazil.

Key Metrics

Gerdau S.A.--Forecast summary

Period ending	Dec-31-2022	Dec-31-2023	Dec-31-2024	Dec-31-2025	Dec-31-2026	Dec-31-2027	Dec-31-2028	Dec-31-2029
(Mil. BRL)	2022a	2023a	2024a	2025a	2026e	2027f	2028f	2029f
Revenue	82,412	68,916	67,027	69,859	71,648	74,237	77,439	80,294
Gross profit	21,618	14,380	12,329	11,651	14,063	14,352	15,392	16,409
EBITDA (reported)	20,618	13,511	10,844	9,397	12,190	12,253	13,199	14,127
Plus: Operating lease adjustment (OLA) rent	--	--	--	--	--	--	--	--
Plus/(less): Other	(446)	(853)	(13)	328	5	5	5	5
EBITDA	20,172	12,657	10,831	9,726	12,195	12,258	13,205	14,132
Less: Cash interest paid	(997)	(913)	(1,073)	(1,811)	(1,438)	(1,159)	(966)	(974)
Less: Cash taxes paid	(3,356)	(1,560)	(1,400)	(1,121)	(2,578)	(2,653)	(3,080)	(3,397)
Plus/(less): Other	--	--	--	--	--	--	--	--
Funds from operations (FFO)	15,819	10,185	8,359	6,794	8,180	8,445	9,158	9,762

Gerdau S.A.

Gerdau S.A.--Forecast summary

EBIT	18,572	10,711	8,906	4,472	9,112	9,035	9,961	10,965
Interest expense	1,020	922	941	1,507	1,440	1,161	968	975
Cash flow from operations (CFO)	11,122	9,938	8,745	7,272	8,486	8,596	9,405	10,314
Capital expenditure (capex)	4,263	5,155	5,653	6,455	4,700	4,500	4,500	4,500
Free operating cash flow (FOCF)	6,858	4,783	3,092	817	3,786	4,096	4,905	5,814
Dividends	5,892	2,683	1,656	1,286	709	2,502	2,575	2,989
Share repurchases (reported)	1,073	--	1,195	1,169	1,000	600	600	600
Discretionary cash flow (DCF)	(106)	2,100	241	(1,638)	2,077	994	1,730	2,224
Debt (reported)	12,607	10,893	13,636	14,182	11,482	11,482	11,482	11,482
Plus: Lease liabilities debt	1,031	1,278	1,281	1,389	1,459	1,532	1,608	1,689
Plus: Pension and other postretirement debt	374	254	70	--	--	--	--	--
Less: Accessible cash and liquid investments	(5,435)	(5,344)	(8,277)	(6,375)	(5,532)	(6,333)	(8,013)	(10,128)
Plus/(less): Other	1,282	1,233	1,070	624	624	624	624	624
Debt	9,859	8,314	7,780	9,821	8,033	7,305	5,702	3,667
Equity	46,298	49,239	58,174	53,798	57,093	59,142	61,945	64,949
FOCF (adjusted for lease capex)	6,533	4,105	2,802	271	3,587	3,900	4,713	5,624
Interest expense (reported)	965	840	797	1,274	1,434	1,156	963	970
Capex (reported)	4,292	5,209	5,778	6,682	4,700	4,500	4,500	4,500
Cash and short-term investments (reported)	5,435	5,344	8,277	6,375	5,532	6,333	8,013	10,128
Adjusted ratios								
Debt/EBITDA (x)	0.5	0.7	0.7	1.0	0.7	0.6	0.4	0.3
FFO/debt (%)	160.5	122.5	107.4	69.2	101.8	115.6	160.6	266.2
FFO cash interest coverage (x)	16.9	12.2	8.8	4.8	6.7	8.3	10.5	11.0
EBITDA interest coverage (x)	19.8	13.7	11.5	6.5	8.5	10.6	13.6	14.5
CFO/debt (%)	112.8	119.5	112.4	74.0	105.6	117.7	164.9	281.3
FOCF/debt (%)	69.6	57.5	39.7	8.3	47.1	56.1	86.0	158.5
DCF/debt (%)	(1.1)	25.3	3.1	(16.7)	25.9	13.6	30.3	60.7
Lease capex-adjusted FOCF/debt (%)	66.3	49.4	36.0	2.8	44.7	53.4	82.6	153.4

Gerdau S.A.

Gerdau S.A.--Forecast summary

Annual revenue growth (%)	5.2	(16.4)	(2.7)	4.2	2.6	3.6	4.3	3.7
Gross margin (%)	26.2	20.9	18.4	16.7	19.6	19.3	19.9	20.4
EBITDA margin (%)	24.5	18.4	16.2	13.9	17.0	16.5	17.1	17.6
Return on capital (%)	33.5	18.8	14.4	6.9	14.2	13.7	14.9	16.1
Return on total assets (%)	25.2	14.4	11.0	5.3	11.1	10.8	11.5	12.2
EBITDA/cash interest (x)	20.2	13.9	10.1	5.4	8.5	10.6	13.7	14.5
EBIT interest coverage (x)	18.2	11.6	9.5	3.0	6.3	7.8	10.3	11.2
Debt/debt and equity (%)	17.6	14.4	11.8	15.4	12.3	11.0	8.4	5.3
Debt fixed-charge coverage (x)	19.8	13.7	11.5	6.5	3.0	10.6	13.6	14.5
Debt/debt and undepreciated equity (%)	17.6	14.4	11.8	15.4	12.3	11.0	8.4	5.3

All figures are adjusted by S&P Global Ratings, unless stated as reported. a--Actual. e--Estimate. f--Forecast. R\$--Brazilian real.

Financial Summary

Gerdau S.A.--Financial Summary

Period ending	Dec-31-2020	Dec-31-2021	Dec-31-2022	Dec-31-2023	Dec-31-2024	Dec-31-2025
Reporting period	2020a	2021a	2022a	2023a	2024a	2025a
Display currency (mil.)	R\$	R\$	R\$	R\$	R\$	R\$
Revenues	43,815	78,345	82,412	68,916	67,027	69,859
EBITDA	7,237	22,059	20,172	12,657	10,831	9,726
Funds from operations (FFO)	5,512	17,964	15,819	10,185	8,359	6,794
Interest expense	1,093	1,135	1,020	922	941	1,507
Cash interest paid	1,105	1,202	997	913	1,073	1,811
Operating cash flow (OCF)	5,744	12,484	11,122	9,938	8,745	7,272
Capital expenditure	1,626	2,993	4,263	5,155	5,653	6,455
Free operating cash flow (FOCF)	4,118	9,491	6,858	4,783	3,092	817
Discretionary cash flow (DCF)	3,843	4,151	(106)	2,100	241	(1,638)
Cash and short-term investments	7,658	6,787	5,435	5,344	8,277	6,375
Gross available cash	7,658	6,787	5,435	5,344	8,277	6,375
Debt	15,751	11,895	9,859	8,314	7,780	9,821
Common equity	31,085	42,816	46,298	49,239	58,174	53,798
Adjusted ratios						
EBITDA margin (%)	16.5	28.2	24.5	18.4	16.2	13.9
Return on capital (%)	10.0	39.5	33.5	18.8	14.4	6.9
EBITDA interest coverage (x)	6.6	19.4	19.8	13.7	11.5	6.5
FFO cash interest coverage (x)	6.0	15.9	16.9	12.2	8.8	4.8

Gerdau S.A.

Gerdau S.A.--Financial Summary

Debt/EBITDA (x)	2.2	0.5	0.5	0.7	0.7	1.0
FFO/debt (%)	35.0	151.0	160.5	122.5	107.4	69.2
OCF/debt (%)	36.5	105.0	112.8	119.5	112.4	74.0
FOCF/debt (%)	26.1	79.8	69.6	57.5	39.7	8.3
DCF/debt (%)	24.4	34.9	(1.1)	25.3	3.1	(16.7)

Peer Comparison

Gerdau S.A.--Peer Comparisons

	Gerdau S.A.	Usinas Siderurgicas de Minas Gerais S.A.	Companhia Siderurgica Nacional	Steel Dynamics Inc.	ArcelorMittal
Foreign currency issuer credit rating	BBB/Stable/--	BB/Stable/--	B/Negative/--	BBB/Positive/--	BBB/Stable/A-2
Local currency issuer credit rating	BBB/Stable/--	BB/Stable/--	B/Negative/--	BBB/Positive/--	BBB/Stable/A-2
Period	Annual	Annual	Annual	Annual	Annual
Period ending	2025-12-31	2025-12-31	2025-12-31	2025-12-31	2024-12-31
Mil.	R\$	R\$	R\$	R\$	R\$
Revenue	69,859	26,263	44,798	100,116	424,428
EBITDA	9,726	2,014	8,808	11,654	43,078
Funds from operations (FFO)	6,794	1,050	4,065	9,360	31,187
Interest	1,507	954	5,970	979	6,920
Cash interest paid	1,811	840	4,671	1,457	6,968
Operating cash flow (OCF)	7,272	2,006	(793)	7,544	34,153
Capital expenditure	6,455	1,171	5,533	4,668	36,352
Free operating cash flow (FOCF)	817	835	(6,326)	2,877	(2,198)
Discretionary cash flow (DCF)	(1,638)	792	(7,021)	(3,689)	(13,826)
Cash and short-term investments	6,375	6,944	14,691	4,240	39,584
Gross available cash	6,375	6,944	14,691	4,240	39,584
Debt	9,821	7,339	55,718	19,900	117,232
Equity	53,798	23,701	15,736	48,411	340,015
EBITDA margin (%)	13.9	7.7	19.7	11.6	10.1
Return on capital (%)	6.9	4.6	9.3	13.1	6.4
EBITDA interest coverage (x)	6.5	2.1	1.5	11.9	6.2
FFO cash interest coverage (x)	4.8	2.2	1.9	7.4	5.5
Debt/EBITDA (x)	1.0	3.6	6.3	1.7	2.7
FFO/debt (%)	69.2	14.3	7.3	47.0	26.6
OCF/debt (%)	74.0	27.3	(1.4)	37.9	29.1
FOCF/debt (%)	8.3	11.4	(11.4)	14.5	(1.9)
DCF/debt (%)	(16.7)	10.8	(12.6)	(18.5)	(11.8)

Gerdau S.A.--Peer Comparisons

	Gerdau S.A.	Nucor Corp.
Foreign currency issuer credit rating	BBB/Stable/--	A-/Stable/A-1

Gerdau S.A.

Gerdau S.A.--Peer Comparisons

Local currency issuer credit rating	BBB/Stable/--	A-/Stable/A-1
Period	Annual	Annual
Period ending	2025-12-31	2025-12-31
Mil.	R\$	R\$
Revenue	69,859	178,977
EBITDA	9,726	23,965
Funds from operations (FFO)	6,794	20,910
Interest	1,507	968
Cash interest paid	1,811	1,629
Operating cash flow (OCF)	7,272	17,913
Capital expenditure	6,455	18,848
Free operating cash flow (FOCF)	817	(935)
Discretionary cash flow (DCF)	(1,638)	(9,158)
Cash and short-term investments	6,375	14,866
Gross available cash	6,375	14,866
Debt	9,821	26,038
Equity	53,798	121,859
EBITDA margin (%)	13.9	13.4
Return on capital (%)	6.9	10.9
EBITDA interest coverage (x)	6.5	24.8
FFO cash interest coverage (x)	4.8	13.8
Debt/EBITDA (x)	1.0	1.1
FFO/debt (%)	69.2	80.3
OCF/debt (%)	74.0	68.8
FOCF/debt (%)	8.3	(3.6)
DCF/debt (%)	(16.7)	(35.2)

Liquidity

We continue to assess Gerdau's liquidity as strong. Sources exceed uses of liquidity by more than 2.0x for the next 12 months and by 1.6x for the next 24 months, supported by a strong cash generation and a solid cash position, coupled with a fully available committed credit facility of \$875 million (or R\$ 4.4 billion), due in September 2027. We also expect that sources to uses would be positive even if EBITDA declines by 30% in the next 12 months.

As a result, we expect the company to have more than enough cushion to cover its short-term maturities, working capital needs, significant capex plan, and dividend payouts (including share repurchases), in the next 12-24 months.

We expect Gerdau to benefit from its high standing in both domestic and international credit markets to continue to refinance its maturities and extend its debt maturity schedule. In addition, the company has no financial covenants on its debt.

Principal liquidity sources	Principal liquidity uses
<ul style="list-style-type: none"> • Cash position of R\$5.6 billion as of March 31, 2026. • Availability under its committed credit facility of \$875 million (or close to R\$4.4 billion). • FFO generation of R\$8.8 billion over the next 12 months. 	<ul style="list-style-type: none"> • Short-term debt maturities of R\$909.8 million as of March 31, 2026. • Working capital outflows of about R\$450 million over the next 12 months. • Capital expenditures of R\$4.7 billion over the next 12 months. • Dividend payments and share buybacks amounting to close to R\$2 billion over the next 12 months.

Environmental, Social, And Governance

Environmental, social, and governance (ESG) factors have an overall neutral influence on our credit analysis of Gerdau. In line with downstream peers, Gerdau is exposed to the energy-intensive steel production process. However, it produces about 70% of its steel in electric arc furnaces, which pollute significantly less than traditional blast furnaces.

Through Newave Energia and other projects, the company has also been making several investments in renewable energy. Moreover, it has several clean energy projects, such as the construction of solar parks (one in the U.S. and others in Brazil), aiming to diversify its energy matrix.

Additionally, 71% of the steel Gerdau produces has scrap metal as its main raw material that the company sources from metal recyclers. Gerdau also invests in efficient water recirculation programs, allowing 97.6% of the water used in its production to be reused. The company has one of the lower averages of greenhouse gases emissions in the sector, at about 0.91 tons of carbon dioxide equivalent per ton of steel produced, and aims to reach 0.82 by 2031, potentially becoming carbon neutral in 2050.

Rating Component Scores

Foreign currency issuer credit rating	BBB/Stable/--
Local currency issuer credit rating	BBB/Stable/--
Business risk	Satisfactory
Country risk	Intermediate
Industry risk	Moderately High
Competitive position	Strong
Financial risk	Intermediate
Cash flow/leverage	Intermediate
Anchor	bbb
Modifiers	
Diversification/portfolio effect	Neutral (no impact)
Capital structure	Neutral (no impact)
Financial policy	Neutral (no impact)
Liquidity	Strong (no impact)
Management and governance	Neutral (no impact)
Comparable rating analysis	Neutral (no impact)
Stand-alone credit profile	bbb

Related Criteria

- [Criteria | Corporates | General: Sector-Specific Corporate Methodology](#), July 7, 2025
- [Criteria | Corporates | General: Corporate Methodology](#), Jan. 7, 2024
- [Criteria | Corporates | General: Methodology: Management And Governance Credit Factors For Corporate Entities](#), Jan. 7, 2024
- [General Criteria: National And Regional Scale Credit Ratings Methodology](#), June 8, 2023
- [General Criteria: Environmental, Social, And Governance Principles In Credit Ratings](#), Oct. 10, 2021
- [General Criteria: Group Rating Methodology](#), July 1, 2019
- [Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments](#), April 1, 2019
- [Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings](#), March 28, 2018
- [Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers](#), Dec. 16, 2014
- [General Criteria: Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions](#), Nov. 19, 2013
- [General Criteria: Methodology: Industry Risk](#), Nov. 19, 2013
- [General Criteria: Country Risk Assessment Methodology And Assumptions](#), Nov. 19, 2013
- [General Criteria: Principles Of Credit Ratings](#), Feb. 16, 2011

Copyright © 2026 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Some of the Content may have been created with the assistance of an artificial intelligence (AI) tool. Published Content created or processed using AI is composed, reviewed, edited, and approved by S&P personnel.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.spglobal.com/ratings (free of charge), and www.ratingsdirect.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.spglobal.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.