Research Update:

Braskem S.A. Outlook Revised To Negative On Weak Profitability Raising Leverage, 'BBB-' Ratings Affirmed

August 9, 2023

Rating Action Overview

- Brazilian petrochemical company Braskem S.A. has been posting very weak profitability in the past few quarters, given sluggish demand growth and significant capacity entering the market. And we expect these conditions to remain over the next few quarters.
- As a result, we now expect the company to post very high leverage for its rating level over the next few quarters, with debt to EBITDA likely close to 7.0x in 2023.
- On Aug. 9, 2023, S&P Global Ratings revised its global scale rating outlook on Braskem to negative from stable. We also affirmed our 'BBB-' global scale and 'brAAA' national scale issuer credit ratings on the company. The national scale outlook remains stable.
- We also affirmed all issue-level ratings on the company: 'BBB-' and 'brAAA' on senior unsecured notes and debentures, respectively, and 'BB' on subordinated notes.
- The negative outlook reflects that we could lower the ratings in the next 12 months if the company fails to reduce its debt to EBITDA to 3.0x-3.5x in 2024 and below 3.0x in 2025.

PRIMARY CREDIT ANALYST

Luisa Vilhena
Sao Paulo
+ 55 11 3039 9727
luisa.vilhena
@spglobal.com

SECONDARY CONTACT

Fabiana Gobbi
Sao Paulo
+ 55 11 3039 9733
fabiana.gobbi
@spglobal.com

Rating Action Rationale

Industry conditions have been worse than previously expected and should remain weak for the next few quarters. Over the past few quarters, petrochemical spreads have been pressured due to the global economic slowdown mainly because China's recovery has been weaker than anticipated and more focused on the services sector rather than on the industrial sector, depressing demand for petrochemical products. Also, the global polyethylene (PE) and polypropylene (PP) capacity has been expanding, and input prices remain high.

Given the expectations that global capacity will continue to rise until next year amid sluggish global economic growth, petrochemical spreads should remain at low levels, likely until mid-2024. As a result, we now expect Braskem's revenue to plummet 30%-35% this year compared with

2022, leading to an EBITDA decline of about 50%, reaching close to R$4.5 billion.

The significant drop in EBITDA and margins for Braskem is deeper than for its global peers that use ethane as the main input, because a substantial portion of Braskem's production capacity is dependent on naphtha. While under more normal market conditions, ethane's competitive edge over naphtha tends to be partly compensated in prices for Braskem's basic chemicals (that correlate with oil prices), the current weak demand for basic chemicals-–mainly because of a slump in China--has precluded higher prices.

Difficult industry conditions will result in significantly higher-than-expected leverage for our 'BBB-' rating on Braskem. Given a much weaker EBITDA, our base-case scenario now assumes that leverage will rise slightly above 7x in 2023. We expect a rapid improvement in EBITDA and cash flow in 2024 and 2025, which would allow a leverage reduction to about 3.3x in 2024 and closer to 2.5x in 2025. Still, the significant EBITDA decline this year, and volatile profitability and credit metrics prompted the outlook revision to negative.

A credible plan by Braskem's management to improve profitability and reduce leverage over the next few months will be key to the rating trajectory. The company has been implementing several measures to mitigate the margin pressures stemming from weaker spreads and to protect cash flow. These include a stronger focus on service margin, cost reductions across all corporate levels, capital expenditures (capex) cuts, and improvements in working capital.

Our base-case scenario assumes most of Braskem's planned capex reduction and working-capital efficiencies, considering the company's bargaining power with suppliers due to its large share of the Brazilian market. We partly incorporate the company's cost efficiency measures, mostly impacting 2024 results, as some of these take some time to be fully implemented and might be challenging to achieve in the next 12-18 months.

Still, depending on industry fundamentals over the next few months, management might need to undertake additional actions, such as asset sales, in order to return to its leverage target of close to 2.5x across the industry cycles.

Outlook

The negative outlook reflects that we could lower the ratings in the next 12 months because Braskem's leverage will likely be above our expectations for its rating level for several quarters. Our current base-case scenario assumes that the company will post debt to EBITDA close to 7.0x in 2023 and to fall below 3.5x in 2024.

Downside scenario

We could lower the ratings in the next 12 months if the company's leverage doesn't return to 3.0x-3.5x in 2024 and below 3x in 2025. This would likely result from continued stagnant industry conditions with weaker demand growth over the next few quarters, delaying the rebound of petrochemical spreads to mid-cycle levels. We could also lower the ratings if we were to expect weaker and more volatile margins than those of peers, which would indicate some competitive disadvantages to Braskem's current rating level.

Upside scenario

We could revise the outlook to stable in the next 12-18 months if leverage improves close to 3.5x or below on a three-year moving average. This could result from a faster increase in petrochemical spreads or if the company's actions to mitigate current market pressures bolster profitability and cash flow above our current forecast.

Company Description

Braskem is the leading thermoplastic resins producer in the Americas and among the world's top 10 sector players, with leading positions in PE (low density [LDPE], high density [HDPE], and linear low density [LLDPE]), PP, and polyvinyl chloride (PVC). The company integrates the first and second generations of the Brazilian petrochemicals industry, consisting of the naphtha or ethane cracking function (basic petrochemicals) and thermoplastics production (polyolefin and PVC). Braskem registered revenue of R$93 billion (almost $18 billion) in 2022. Novonor (formerly Odebrecht S.A.) controls 38.3% of Braskem's total shares (50.1% of voting shares), and Petroleo Brasileiro S.A. - Petrobras (BB-/Stable/--) owns 36.1% of total shares (47% of voting). The company's remaining shares trade on Bovespa, Latibex, and NYSE.

Our Base-Case Scenario

- An average exchange rate of R$5.08 per $1 in 2023, R$5.15 in 2024, and R$5.23 in 2025.
- Brent crude prices of about $85 per barrel (bbl) for the remainder of 2023 as well as for 2024 and 2025.
- Volumes decline of about 5% in Brazil's domestic market, decline about 10% for exports, and broadly stable volumes in the U.S. and Europe in 2023.
- In 2024, we assume a rebound in volumes in Brazil to those similar to 2022 as market conditions normalize and the company could focus again on recovering its market share.
- Spreads in 2023 for PE and PVC about 30% below 2022 levels, while those for PP similar to 2022 levels.
- For 2024, we assume almost stable spreads on average due to continued new capacity additions. For 2025, we assume an average increase of close to 20% from the 2024 level, closer to historical average.
- Cost and expense reductions related to the company's several measures in place to reduce these lines.
- Capex of about R$3.6 billion in 2023 ($724 million), falling to about R$2.2 billion ($450 million) in 2024, and rising to R$3.3 billion ($650 million) in 2025, in line with the company's assumptions. Capex consists basically of maintenance capex.
- Net cash outflows related to Alagoas geological event of close to R$3 billion in 2023, about R$2.5 billion in 2024, and falling to about R$1.1 billion in 2025.
- No dividend payments in 2023 and 2024.
- We don't consolidate the Mexican subsidiary, Braskem Idesa S.A.P.I., in our financial analysis and forecasts for Braskem.

Braskem S.A.--Forecast summary

Industry sector: Chemical companies

	--Fiscal year ended Dec. 31--								
(Mil. R$)	**2019a**	**2020a**	**2021a**	**2022a**	**2023e**	**2024f**	**2025f**	**2026f**	**2027f**
Revenue	49,961	55,780	101,448	93,039	61,259	65,866	73,789	79,851	81,748
EBITDA (reported)	3,565	3,996	30,217	8,970	5,516	10,049	13,459	18,014	18,142
Plus/(less): Other	827	5,037	(3,113)	149	(1,011)	(1,199)	(2,541)	(2,659)	(2,684)
EBITDA	4,393	9,033	27,104	9,120	4,505	8,849	10,918	15,355	15,458
Less: Cash interest paid	(2,417)	(2,989)	(3,076)	(3,108)	(2,917)	(2,947)	(2,801)	(2,574)	(2,316)
Less: Cash taxes paid	(412)	(258)	(2,707)	(1,621)	(493)	(57)	(790)	(2,056)	(2,093)
Funds from operations (FFO)	1,564	5,786	21,322	4,391	1,095	5,845	7,327	10,724	11,049
Interest expense	1,592	2,225	2,830	3,150	3,024	3,054	2,908	2,681	2,423
Cash flow from operations (CFO)	256	7,172	12,328	5,431	4,179	8,281	9,790	13,852	14,965
Capital expenditure (capex)	2,401	2,401	3,057	3,951	3,578	2,218	3,300	5,180	5,180
Free operating cash flow (FOCF)	(2,144)	4,772	9,271	1,480	601	6,063	6,490	8,672	9,785
Dividends	669	2	5,993	1,350	--	--	554	3,271	5,588
Discretionary cash flow (DCF)	(2,813)	4,769	3,278	130	601	6,063	5,937	5,401	4,197
Debt (reported)	29,292	41,968	35,094	35,717	42,465	42,795	40,080	36,071	32,775
Plus: Lease liabilities debt	2,677	3,208	3,156	4,241	4,241	4,241	4,241	4,241	4,241
Plus: Pension and other postretirement debt	257	312	322	326	326	326	326	326	326
Less: Accessible cash and liquid Investments	(7,474)	(15,247)	(9,548)	(12,272)	(14,145)	(17,294)	(15,671)	(16,147)	(15,656)
Plus/(less): Other	(1,687)	2,045	55	(6)	(285)	(723)	(909)	(909)	(909)
Debt	23,065	32,286	29,080	28,005	32,602	29,345	28,067	23,582	20,776
Cash and short-term investments (reported)	8,491	17,490	12,173	14,762	15,706	18,527	17,773	18,248	18,232
Adjusted ratios									
Debt/EBITDA (x)	5.3	3.6	1.1	3.1	7.2	3.3	2.6	1.5	1.3
FFO/debt (%)	6.8	17.9	73.3	15.7	3.4	19.9	26.1	45.5	53.2
EBITDA interest coverage (x)	2.8	4.1	9.6	2.9	1.5	2.9	3.8	5.7	6.4
CFO/debt (%)	1.1	22.2	42.4	19.4	12.8	28.2	34.9	58.7	72.0
FOCF/debt (%)	(9.3)	14.8	31.9	5.3	1.8	20.7	23.1	36.8	47.1
DCF/debt (%)	(12.2)	14.8	11.3	0.5	1.8	20.7	21.2	22.9	20.2
Annual revenue growth (%)	(8.9)	11.6	81.9	(8.3)	(34.2)	7.5	12.0	8.2	2.4
EBITDA margin (%)	8.8	16.2	26.7	9.8	7.4	13.4	14.8	19.2	18.9

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

Liquidity

We assess Braskem's liquidity as strong. We expect sources to exceed uses by close to 2x in the next 24 months even amid expected weaker operating cash flows. This is thanks to the company's robust cash position and committed credit lines, which are more than enough to cover the relatively small short-term debt, capex, and other short-term needs. Braskem has access to diversified funding sources, which supports its smooth debt maturity profile.

Principal Liquidity Sources:

- Cash and cash equivalents of R$13.9 billion as of June 30, 2023;
- Undrawn committed lines of $1 billion (about R$5.2 billion) due 2026;
- Cash funds from operations of about R$4.8 billion in the next 12 months from June 30, 2023; and
- Working capital inflow of R$600 million in the next 12 months.

Principal Liquidity Uses:

- Short-term debt maturities of R$1.9 billion as of June 30, 2023;
- Capex of R$3.0 billion in in the next 12 months from June 30, 2023;
- Seasonal working capital needs of R$3.2 billion; and
- Cash outflows related to Alagoas disbursements and the leniency agreements, totaling about R$4.2 billion in the next 12 months.

Covenants

The company has no financial covenants on its debt. Braskem's bonds have a payment acceleration clause in case the issue ratings are lowered as a result of a change of control at Braskem's level. We would need to monitor the payment acceleration risk in case a change of control prompts us, or another rating agency, to take a negative rating action on the company.

Environmental, Social, And Governance

Environmental and governance factors are a negative consideration in our credit rating analysis of Braskem. Producers of petrochemicals and thermoplastics are among the most intensive CO_2 emissions producers. Brazilian authorities claimed that Braskem's rock salt extraction caused geological damage in the state of Alagoas. The company provisioned R$14.3 billion (more than 40% of its debt as of December 2019) to shut down the salt extraction operation, relocate the affected families, and for socio-environmental expenses.

Also, the leniency agreement following a corruption investigation of the company resulted in a R$3.1 billion fine in 2016. As part of that agreement, Braskem went through considerable internal control changes and an independent monitoring period, complying with Brazil's Federal Prosecution Office, U.S. Department of Justice, and Securities and Exchange Commission's requirements. We believe this improved the company's governance practices, with more independent members on the board, who are also part of the audit and compliance committee.

On the positive side, Braskem aims to achieve carbon neutrality by 2050 and reduce GHG emissions (scopes 1 and 2) by 15% by 2030 from the average of 2018-2020 level. This would be done through higher consumption of renewable energy and efficient energy projects. Also, the company expanded its production capacity of green ethylene, made from sugarcane ethanol, to produce PE. It recently completed an investment of $87 million to increase green ethylene production capacity from 200,000 tons per year to 260,000 tons per year. This product still represents only close to 1% of total production capacity, but Braskem has a target to increase production capacity to 1 million tons by 2030.

Issue Ratings - Subordination Risk Analysis

Capital structure

We rate several senior unsecured notes and debentures, either issued or guaranteed by Braskem. We also rate the company's subordinated notes issued in 2020. We categorize these notes as having intermediate equity content, because they're subordinated in liquidation to Braskem's senior debt obligations and aren't subject to features that could discourage or considerably delay deferral.

Analytical conclusions

We rate Braskem's senior unsecured international issuances at 'BBB-' and local issuances at 'brAAA', at the same level as our issuer credit ratings, because the company has limited secured debt. Even if the senior unsecured debt ranked behind the debt issued by subsidiaries in the capital structure, we believe the risk of subordination is mitigated by a priority debt ratio that's far less than 50% and the material earnings generated on the parent level. We rate the financing vehicles' unsecured debt the same as our issuer credit rating on Braskem, based on its guarantee of this debt. We rate Braskem's subordinated notes at 'BB'. This two-notch difference between the subordinated notes rating and credit rating reflects our deduction of:

- One notch to reflect subordination to the company' senior debt obligations; and
- One notch for loss absorption or cash conservation features. Braskem's coupon deferral is discretionary and not limited in time.

Ratings Score Snapshot

Issuer Credit Rating

- Global scale: BBB-/Negative/--
- National scale: brAAA/Stable/--

Business risk: Satisfactory

- Country risk: Moderately high
- Industry risk: Moderately high
- Competitive position: Satisfactory

Financial risk: Significant

- Cash flow/leverage: Significant

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: Fair (no impact)
- Comparable rating analysis: Neutral (no impact)

Related Criteria

- General Criteria: National And Regional Scale Credit Ratings Methodology , June 8, 2023
- General Criteria: Hybrid Capital: Methodology And Assumptions , March 2, 2022
- 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
- General Criteria: Guarantee Criteria , Oct. 21, 2016
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers , Dec. 16, 2014
- Criteria | Corporates | General: Corporate Methodology , Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions , Nov. 19, 2013
- 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: Methodology: Management And Governance Credit Factors For Corporate Entities , Nov. 13, 2012
- General Criteria: Principles Of Credit Ratings , Feb. 16, 2011

Ratings List

Ratings Affirmed; CreditWatch/Outlook Action

	To	From
Braskem S.A.		
Issuer Credit Rating	BBB-/Negative/--	BBB-/Stable/--
Ratings Affirmed		
Braskem S.A.		
Issuer Credit Rating		
Brazil National Scale	brAAA/Stable/--	
Braskem S.A.		
Senior Unsecured	brAAA	
Braskem America Finance Co.		
Senior Unsecured	BBB-	
Braskem Netherlands Finance		
Senior Unsecured	BBB-	
Subordinated	BB	