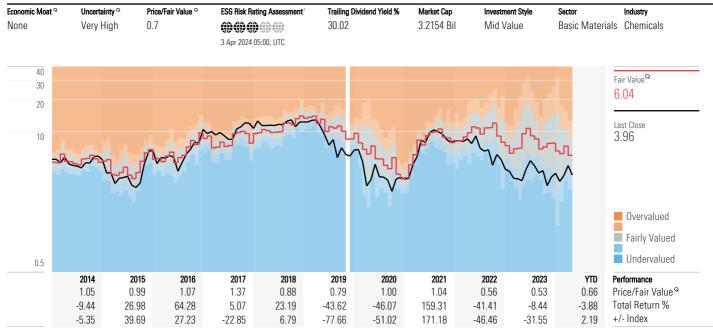
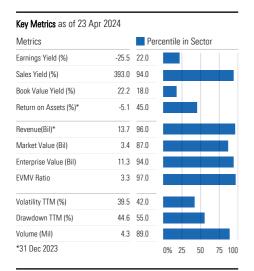
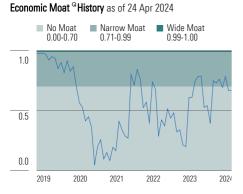
## Braskem SA Class A XBRK ★★★ Q 24 Apr 2024, 22:34 UTC



As of 24 Apr 2024 | Index: Morningstar Brazil GR BRL. Fair Value data as of 24 Apr 2024, 22:34 UTC.

The ESG Risk Rating Assessment is a representation of Sustainalytics' ESG Risk Rating. Lee Davidson, Chief Analytics Officer for Morningstar, Inc, oversees the methodology that supports Quantitative Fair Value Estimates and Quantitative Star Ratings. Mr. Davidson is guided by the Morningstar, Inc. Code of Ethics in carrying out his responsibilities. For information regarding Conflicts of Interests, visit http://global.morningstar.com/equitydisclosures.





### **Business Description**

Braskem SA manufactures and sells chemicals, petrochemicals, fuels, and utilities. The company's geographical segments include Brazil; the United States and Europe and Mexico. It derives a majority of its revenue from Brazil. It produces olefins, such as ethylene, polymer and chemical-grade propylene, butadiene, and butene-1; fuels, such as automotive gasoline, liquefied petroleum gas, or LPG, ethyl tertiary-butyl ether, or ETBE, and methyl tertiary-butyl ether, or MTBE; intermediates, such as cumene and others.

### Valuation as of 24 Apr 2024

Morningstar affirms a 4-star quantitative rating for Braskem. We calculate this outcome using the company's underlying model-driven valuation and uncertainty scores.

The stock's last closing price was 3.96, a discount of 34% to its Quantitative Fair Value estimate of 6.00. This discount has ranged between 57.99% and 30.65% over the past year. The stock's price to fair value ratio is at the 37th percentile in our global equity coverage universe for this methodology and at the 58th percentile relative to its peers in the basic materials sector.

Braskem furthermore holds a Very High quantitative uncertainty rating.

The company's quantitative star rating dates to after 04/22/2024, before which it was 3-star. Similarly, the firm's uncertainty rating changed from Extreme to Very High after 04/22/2024.

We examine the financials and market statistics for Braskem to determine these ratings. Its enterprise value-to-market value ratio is 3.32 and its annualized trailing 12-month volatility is 39.46%. These fall at the 94th and 62nd percentiles in the equity universe and at the 95th and 42nd in the basic materials sector, respectively.

### Economic Moat <sup>Q</sup> as of 24 Apr 2024

With a Morningstar quantitative moat rating of None, the quantitative moat score for Braskem falls at the 68th percentile in the basic materials sector and at the 60th in the equity coverage universe. The company has maintained its None quantitative moat rating since after 04/08/2024, when it was downgraded from Narrow.

We also assign a Moderate quantitative financial health rating to Braskem. The company's raw score on this metric, termed Distance to Default, ranks at the 11th percentile overall and 10th in the basic materials sector. Furthermore, this financial health rating has stayed Moderate over the last year.

Supporting these ratings are the company's sales yield and annualized trailing 12-month volatility. The sales yield of 393.03%, ranks at the 91st percentile in the covered equity universe and at the 94th percentile among its peers. Meanwhile, its annualized trailing 12-month volatility of 39.46%, falls at the 62nd percentile in the universe and the 42nd percentile in the basic materials sector.

### Fundamentals as of 24 Apr 2024

Braskem reports losses per share of -5.75. Its return on invested capital is -3.2%. These values are calculated over a trailing 12-month period.

### Contact

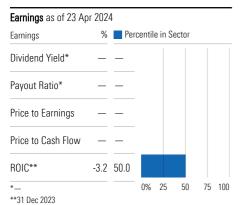
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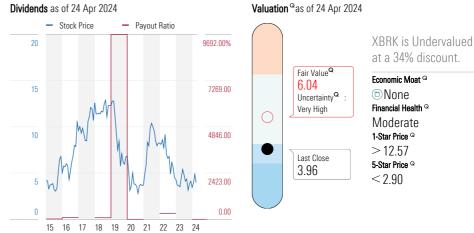
https://www.braskem.com.br



## Braskem SA Class A XBRK ★★★ Q 24 Apr 2024, 22:34 UTC

Economic Moat Q	Uncertainty Q	Price/Fair Value Q	ESG Risk Rating Assessment <sup>1</sup>	Trailing Dividend Yield %	Market Cap	Investment Style	Sector	Industry
None	Very High	0.7	<b>0000</b>	30.02	3.2154 Bil	Mid Value	Basic Materials	Chemicals
			2 Apr 2024 05:00 LITC					





2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD	Fiscal	
46	47	48	49	58	52	59	106	97	71	71	Revenue (Bil)	
3.46	7.67	6.20	9.61	7.79	0.17	7.19	26.05	4.28	-2.72	-2.72	Operating Income (Bil)	
					0.17							
7.56	16.36	13.0	19.5	13.43		12.28	24.66	4.43	-3.85	-3.85	Operating Margin (%)	
0.72	3.00	-0.41	3.87	2.83	-2.54	-6.69	13.99	-0.34	-4.58	-4.58	Net Income (Bil)	
0.90	3.77	-0.52	4.85	3.55	-3.19	-8.41	17.57	-0.42	-5.75	-5.75	Diluted Earnings/Share	
3.81	7.09	4.46	2.46	9.25	2.27	6.29	14.79	8.95	-2.27	-2.27	Operating Cash Flow (B	
-5,409	-3,338	-2,587	-2,273	-2,706	-2,683	-2,760	-3,421	-4,848	-4,530	-4,530	Capital Spending (Mil)	
-1.60	3.75	1.87	0.19	6.54	-0.42	3.53	11.37	4.10	-6.80	-6.80	Free Cash Flow (Bil)	
796	796	795	796	796	797	797	797	796	797	797	Avg Shares Outstand(Mil	
aluation a	as of 24 A	pr 2024										
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Current	Calendar	
1.05	0.99	1.07	1.37	0.88	0.79	1.00	1.04	0.56	0.53	0.66	Price/Fair Value Q	
0.31	0.50	0.59	0.69	0.78	0.44	0.35	0.51	0.19	0.24	0.25	Price/Sales	
17.42	7.84	12.49	29.19	13.923,	515.87	_	4.55	10.57	_	_	Price/Earnings	
4.95	3.04	4.52	12.49	4.53	10.28	5.50	4.42	1.86	_	3.64	Price/Cash Flow	
1.90	10.05	5.37	4.36	6.05	3.33	_	4.92	2.32	3.51	4.35	Price/Book	
perating l	Performa	nce as of	— (Fiscal	Year End	31 Dec 2	024)						
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	03	Fiscal (%)	
1.77	5.74	-0.74	7.39	5.07	-4.0	-8.68	15.66	-0.37	-5.09	-1.71	Return on Assets	
12.72	77.91	-17.28	85.53	44.07	-44.51	-498	493	-4.42	-80.95	-34.94	Return on Equity	
4.7	10.42	1.65	15.58	9.47	-3.14	-8.93	25.68	2.79	-3.2	-1.91	Rtn on Invested Capital	
vidends	as of —											
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Current	Calendar (%)	
0.61	0.61	2.51	1.26	3.77	0.84	_	7.54	1.70	_	_	Dividend Per Share	
3.64	2.77	6.4	_	3.6	2.73	_	_	26.15	_	30.02	Trailing Dividend Yield	
											Buyback Yield	



# **Appendix**

Economic Moat <sup>Q</sup> History as of 24 Apr 2024 (No Moat: 0.00-0.70, Narrow Moat: 0.70-0.99, Wide Moat: 0.99-1.00)												
Year	January	February	March	April	May	June	July	August	September	October	November	December
2024	0.76	0.69	0.78	0.67	_	_	_	_	_	_	_	_
2023	0.21	0.20	0.61	0.61	0.75	0.79	0.79	0.53	0.54	0.40	0.75	0.73
2022	0.57	0.40	0.74	0.68	0.29	0.42	0.37	0.51	0.44	0.48	0.32	0.34
2021	0.08	0.19	0.17	0.41	0.34	0.29	0.27	0.80	0.71	0.84	0.76	0.52
2020	0.86	0.70	0.57	0.53	0.41	0.45	0.36	0.05	0.20	0.26	0.10	0.15
2019	0.97	0.97	0.98	0.97	0.92	0.95	0.94	0.85	0.90	0.82	0.91	0.83



# **Quantitative Equity Report Overview**

The quantitative report on equities consists of data, statistics and quantitative equity ratings on equity securities. Morningstar, Inc.'s quantitative equity ratings are forward looking and are generated by a statistical model that is based on Morningstar Inc.'s analyst-driven equity ratings and quantitative statistics. Given the nature of the quantitative report and the quantitative ratings, there is no one analyst in which a given report is attributed to; however, Mr. Lee Davidson, Head of Quantitative Research for Morningstar, Inc., is responsible for overseeing the methodology that supports the quantitative equity ratings used in this report. As an employee of Morningstar, Inc., Mr. Davidson is guided by Morningstar, Inc.'s Code of Ethics and Personal Securities Trading Policy in carrying out his responsibilities.

### **Quantitative Equity Ratings**

Morningstar's quantitative equity ratings consist of: (i) Quantitative Fair Value Estimate, (ii) Quantitative Star Rating, (iii) Quantitative Uncertainty, (iv) Quantitative Economic Moat, and (v) Quantitative Financial Health (collectively the "Quantitative Ratings).

The Quantitative Ratings are calculated daily and derived from the analyst-driven ratings of a company's peers as determined by statistical algorithms. Morningstar, Inc. ("Morningstar", "we", "our") calculates Quantitative Ratings for companies whether or not it already provides analyst ratings and qualitative coverage. In some cases, the Quantitative Ratings may differ from the analyst ratings because a company's analyst-driven ratings can significantly differ from other companies in its peer group.

- i. Quantitative Fair Value Estimate: Intended to represent Morningstar's estimate of the per share dollar amount that a company's equity is worth today. Morningstar calculates the Quantitative Fair Value Estimate using a statistical model derived from the Fair Value Estimate Morningstar's equity analysts assign to companies. Please go to http://global.morningstar.com/equitydisclosures for information about Fair Value Estimate Morningstar's equity analysts assign to companies.
- ii. **Quantitative Economic Moat:** Intended to describe the strength of a firm's competitive position. It is calculated using an algorithm designed to predict the Economic Moat rating a Morningstar analyst would assign to the stock. The rating is expressed as Narrow, Wide, or None.

**Narrow** – assigned when the probability of a stock receiving a "Wide Moat" rating by an analyst is greater than 70% but less than 99%.

**Wide** — assigned when the probability of a stock receiving a "Wide Moat" rating by an analyst is greater than 99%.

**None** — assigned when the probability of an analyst receiving a "Wide Moat" rating by an analyst is less than 70%.

- iii. **Quantitative Star Rating:** Intended to be the summary rating based on the combination of our Quantitative Fair Value Estimate, current market price, Quantitative Uncertainty Rating, and momentum. The rating is expressed as One-Star, Two-Star, Three-Star, Four-Star, and Five-Star.
  - ★ the stock is overvalued with a reasonable margin of safety. Log (Quant FVE/Price) < -1\*Quantitative Uncertainty Micro-Caps: Log (Quant FVE/Price) < -1.5\*Quantitative Uncertainty</p>
  - \*\* the stock is somewhat overvalued.

Log (Quant FVE/Price) between (-1\*Quantitative Uncertainty, -0.5\*Quantitative Uncertainty)

Micro-Caps: Log (Quant FVE/Price) between (-1.5\*Quantitative Uncertainty, -0.75\*Quantitative Uncertainty)

★★★ – the stock is approximately fairly valued.

 $\label{log-log-log-log-log-log} \textit{Log (Quant FVE/Price) between (-0.5*Quantitative Uncertainty, 0.5*Quantitative Uncertainty)}$ 

Micro-Caps: Log (Quant FVE/Price) between (-0.75\*Quantitative Uncertainty, 0.75\*Quantitative Uncertainty)

 $\star\star\star\star$  – the stock is somewhat undervalued.

Log (Quant FVE/Price) between (0.5\*Quantitative Uncertainty, 1\*Quantitative

Uncertainty)

Micro-Caps: Log (Quant FVE/Price) between (0.75\*Quantitative Uncertainty, 1.5\*Quantitative Uncertainty)

★★★★ — the stock is undervalued with a reasonable margin of safety.

Log (Quant FVE/Price) > 1\*Quantitative Uncertainty

Micro-Caps: Log (Quant FVE/Price) > 1.5\*Quantitative Uncertainty

After the initial calculation for the star rating, there is a final filtering step based on the momentum of the company. We rank the companies based on their 12-1 month momentum, then restrict those below the 30th percentile to a maximum of 3 stars

iv. **Quantitative Uncertainty:** Intended to represent Morningstar's level of uncertainty about the accuracy of the Quantitative Fair Value Estimate. Generally, the lower the Quantitative Uncertainty, the narrower the potential range of outcomes for that particular company. The rating is expressed as Low, Medium, High, Very High, and Extreme.

Low – the interquartile range for possible fair values is less than 10%
Medium – the interquartile range for possible fair values is less than 15%
but greater than 10%

 $\overrightarrow{\text{High}}-\text{the}$  interquartile range for possible fair values is less than 35% but greater than 15%

**Very High** – the interquartile range for possible fair values is less than 80% but greater than 35%

**Extreme** – the interquartile range for possible fair values is greater than 80%

v. **Quantitative Financial Health:** Intended to reflect the probability that a firm will face financial distress in the near future. The calculation uses a predictive model designed to anticipate when a company may default on its financial obligations. The rating is expressed as Weak, Moderate, and Strong.

 $\begin{array}{ccc} \textbf{Weak} & - \text{ assigned when Quantitative Financial Health} < 0.2 \\ \textbf{Moderate} & - \text{ assigned when Quantitative Financial Health} \text{ is between } 0.2 \\ \text{and } 0.7 \\ \end{array}$ 

Strong - assigned when Quantitative Financial Health > 0.7

### Other Definitions

- i. Last Close Price of the stock as of the close of the market of the last trading day before date of the report.
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**Undervalued – Last Price** is below Morningstar's quantitative fair value estimate.

Farily Valued – Last Price is in line with Morningstar's quantitative fair value estimate.

Farily Valued – Last Price is in line with Morningstar's quantitative fair value estimate.

Overvalued – Last Price is above Morningstar's quantitative fair value

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Based on their quantitative scores, companies are grouped into one of five Risk Categories (negligible, low, medium, high, severe). These risk categories are absolute, meaning that a 'high risk' assessment reflects a comparable degree



of unmanaged ESG risk across all subindustries covered.

The ESG Risk Rating Assessment is a visual representation of Sustainalytics ESG Risk Categories on a 1 to 5 scale. Companies with Negligible Risk = 5 Globes, Low Risk = 4, Medium Risk = 3 Globes, High Risk = 2 Globes, Severe Risk = 1 Globe. For more information, please visit sustainalytics.com/esgratings/

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