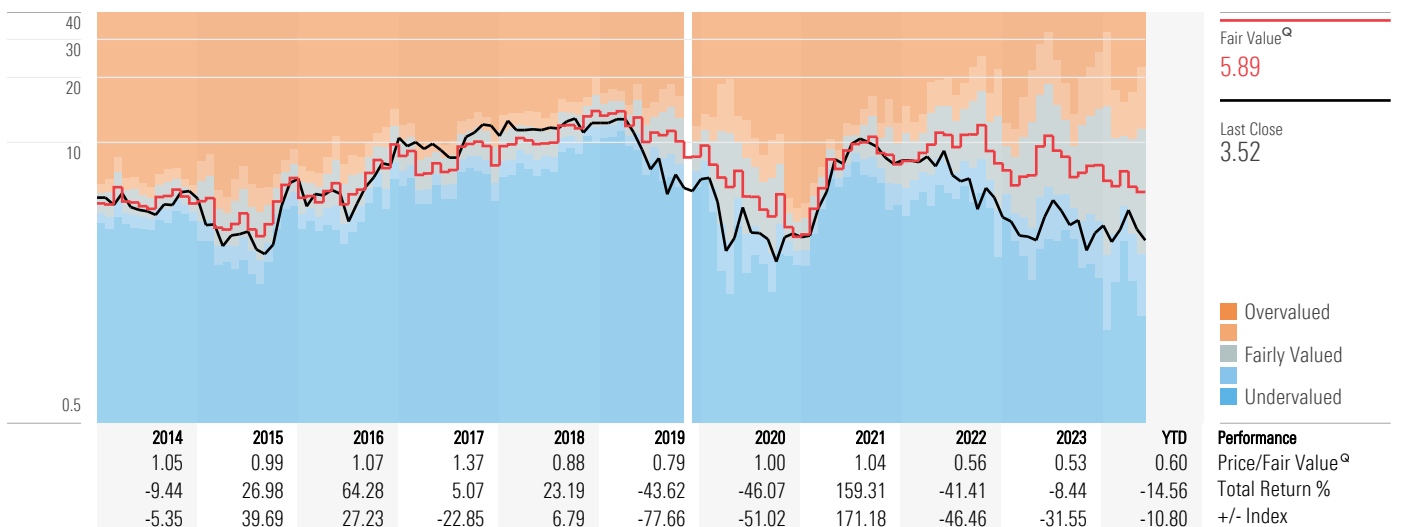


# Braskem SA Class A XBRK ★★★

10 May 2024, 22:40 UTC

<b>Economic Moat</b> <sup>Q</sup>	<b>Uncertainty</b> <sup>Q</sup>	<b>Price/Fair Value</b> <sup>Q</sup>	<b>ESG Risk Rating Assessment</b> <sup>1</sup>	<b>Trailing Dividend Yield %</b>	<b>Market Cap</b>	<b>Investment Style</b>	<b>Sector</b>	<b>Industry</b>
None	Extreme	0.6	1 May 2024 05:00, UTC	30.02	2.8290 Bil	Mid Value	Basic Materials	Chemicals



As of 10 May 2024 | Index: Morningstar Brazil GR BRL. Fair Value data as of 10 May 2024, 22:40 UTC.

<sup>1</sup>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>.

## Key Metrics as of 3 May 2024

Metrics	Value	Percentile in Sector
Earnings Yield (%)	-26.1	22.0
Sales Yield (%)	401.4	95.0
Book Value Yield (%)	22.7	18.0
Return on Assets (%)*	-5.1	45.0
Revenue(Bil)*	13.9	96.0
Market Value (Bil)	3.4	87.0
Enterprise Value (Bil)	11.4	93.0
EVMV Ratio	3.4	97.0
Volatility TTM (%)	39.3	41.0
Drawdown TTM (%)	40.6	50.0
Volume (Mil)	4.3	89.0

\*31 Dec 2023

## 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 <sup>Q</sup> as of 10 May 2024

Morningstar maintains a 3-star quantitative star rating for Braskem, derived from the firm's valuation and uncertainty scores.

The company's shares last closed at 3.78, below our quantitative fair value estimate of 5.97. These shares have traded between a 57.99% and 30.65% discount to their fair value estimate over the past year. In Morningstar's equity coverage universe for this methodology, the company's valuation rating lands at the 27th percentile; in the basic materials sector, the firm's score lies at the 48th percentile (higher percentile indicates more undervalued). Furthermore, Braskem maintains a quantitative valuation uncertainty rating of Extreme.

The company has held this star rating since the previous rating of 4, which was last assigned on 05/06/2024. The uncertainty rating for Braskem has remained Extreme since the previous rating of Very High, which was last assigned on 05/06/2024.

The key factors behind these ratings are the company's EV-MV ratio and earnings yield. The enterprise value-to-market value ratio is 3.59, and its maximum earnings yield is -1.60%. The EV-MV ratio falls above the 95th percentile in the basic materials sector while the earnings yield is at the 21st

percentile. Over the past year, the company's EV-MV ratio has ranged between 4.05 and 2.62; its earnings yield has ranged between -1.60% and -35.28%.

## Economic Moat <sup>Q</sup> as of 10 May 2024

Morningstar maintains a quantitative moat rating of None on the company. The firm's quantitative moat score of 0.51 sits at the 57th percentile in the basic materials sector. This is a decrease from 0.85, the maximum of its moat scores over the past year. The quantitative financial health rating for Braskem is Moderate. Its financial health score, termed Distance to Default, sits at the 10th percentile in the universe and 9th percentile in the sector.

The significant drivers of these ratings are the company's sales yield and annualized trailing 12-month volatility. The sales yield for Braskem is 449.26%, and its annualized trailing 12-month volatility is 41.56%. They sit at the 93rd and 64th percentile in the global equity universe, respectively.

## Fundamentals as of 10 May 2024

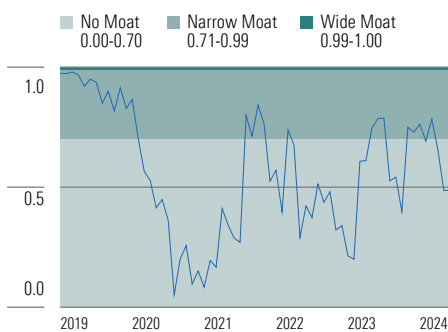
Braskem maintains losses per share of -5.75. The company further earns a return on invested capital of -3.2%. These values are calculated over a trailing 12-month period.

## Contact

Rua Lemos Monteiro, Butanta, SP CEP 05501-050  
+55 1135769000


<https://www.braskem.com.br>

## Economic Moat <sup>Q</sup> History as of 10 May 2024



# Braskem SA Class A XBRK ★★★

Q 10 May 2024, 22:40 UTC

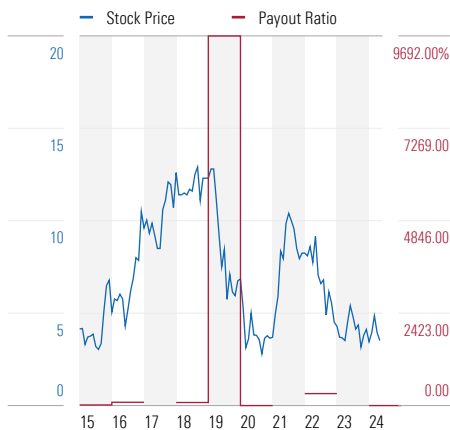
<b>Economic Moat</b> <sup>Q</sup>	<b>Uncertainty</b> <sup>Q</sup>	<b>Price/Fair Value</b> <sup>Q</sup>	<b>ESG Risk Rating Assessment</b> <sup>1</sup>	<b>Trailing Dividend Yield %</b>	<b>Market Cap</b>	<b>Investment Style</b>	<b>Sector</b>	<b>Industry</b>
None	Extreme	0.6	 1 May 2024 05:00, UTC	30.02	2.8290 Bil	Mid Value	Basic Materials	Chemicals

## Earnings as of 3 May 2024

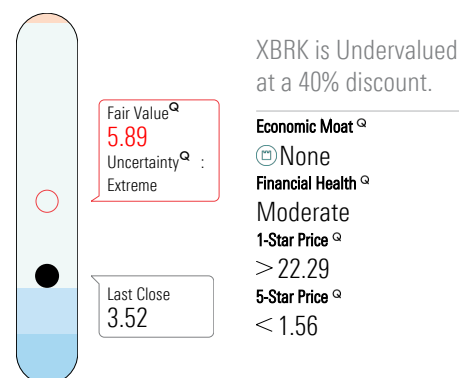
Earnings	%	■ Percentile in Sector
Dividend Yield*	—	—
Payout Ratio*	—	—
Price to Earnings	—	—
Price to Cash Flow	—	—
ROIC**	-3.2	50.0

\*—  
\*\*31 Dec 2023

## Dividends as of 10 May 2024



## Valuation <sup>Q</sup> as of 10 May 2024



**Economic Moat** <sup>Q</sup>  
None  
**Financial Health** <sup>Q</sup>  
Moderate  
**1-Star Price** <sup>Q</sup>  
> 22.29  
**5-Star Price** <sup>Q</sup>  
< 1.56

## Financials as of 10 May 2024 (Fiscal Year End 31 Dec 2024)

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)
7.56	16.36	13.0	19.5	13.43	0.32	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 (Bil)
-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)

## Valuation as of 10 May 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	0.60	Price/Fair Value <sup>Q</sup>
0.31	0.50	0.59	0.69	0.78	0.44	0.35	0.51	0.19	0.24	0.22	Price/Sales
17.42	7.84	12.49	29.19	13.92	3,515.87	—	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	3.84	Price/Book

## Operating Performance as of — (Fiscal Year End 31 Dec 2024)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Q3	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

## Dividends 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>®</sup>History as of 10 May 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	0.66	0.49	—	—	—	—	—	—	—
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*

★★ – 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.

*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)*

★★★★ – 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%

**High** – 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.

**Weak** – assigned when Quantitative Financial Health < 0.2

**Moderate** – assigned when Quantitative Financial Health is between 0.2 and 0.7

**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.

ii. **Quantitative Valuation** – Using the below terms, intended to denote the relationship between the security's **Last Price** and Morningstar's quantitative fair value estimate for that security.

**Undervalued – Last Price** is below Morningstar's quantitative fair value estimate.

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

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

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

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Sustainalytics analyzes over 1,300 data points to assess a company's exposure to and management of ESG risks. In other words, ESG Risk Ratings measures a company's unmanaged ESG Risks represented as a quantitative score.

Unmanaged Risk is measured on an open-ended scale starting at zero (no risk) with lower scores representing less unmanaged risk and, for 95% of cases, the unmanaged ESG Risk score is below 50.

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/esg-ratings/](https://sustainalytics.com/esg-ratings/)

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