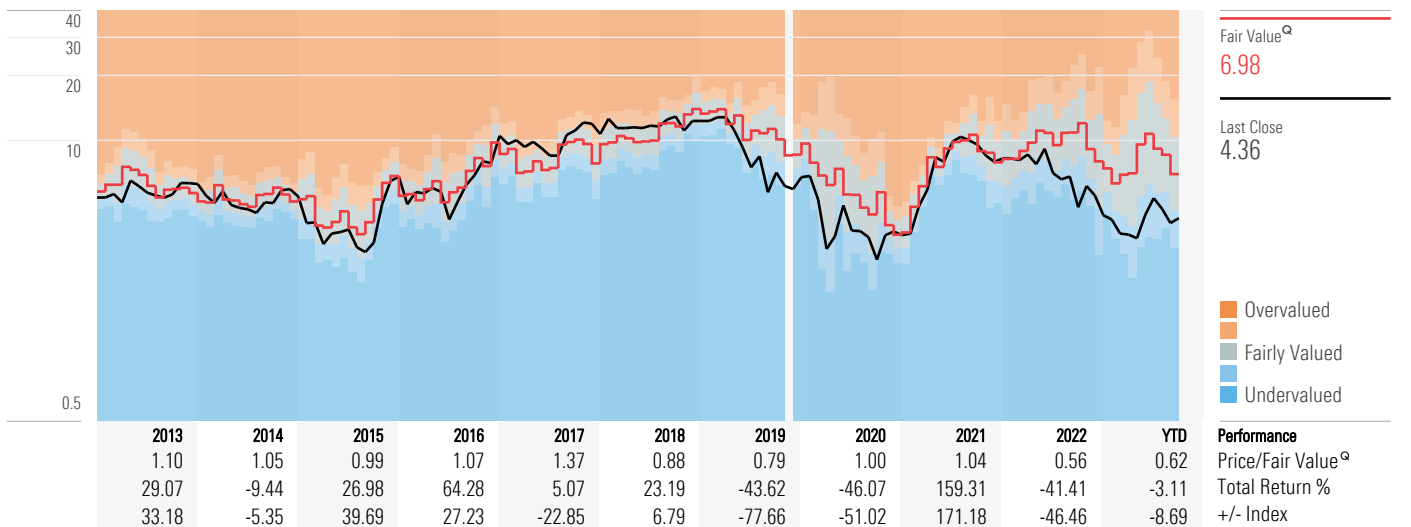


# Braskem SA Class A XBRK ★★★ Q 27 Sep 2023, 22:36 UTC

<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	Very High	0.6	6 Sep 2023 05:00, UTC	30.02	3.2087 Bil	Mid Value	Basic Materials	Chemicals



As of 27 Sep 2023 | Index: Morningstar Brazil GR BRL. Fair Value data as of 27 Sep 2023, 22:36 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 26 Sep 2023

Metrics	Value	Percentile in Sector
Earnings Yield (%)	-20.5	25.0
Sales Yield (%)	490.9	96.0
Book Value Yield (%)	43.5	31.0
Return on Assets (%)*	-3.8	48.0
Revenue(Bil)*	16.4	96.0
Market Value (Bil)	3.5	88.0
Enterprise Value (Bil)	11.2	93.0
EVMV Ratio	3.2	97.0
Volatility TTM (%)	41.4	47.0
Drawdown TTM (%)	40.9	51.0
Volume (Mil)	3.9	88.0

\*30 Jun 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 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 28 Sep 2023

Morningstar affirms a 3-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 4.36, a discount of 37.53% to its Quantitative Fair Value estimate of 6.98. This discount has ranged between 57.23% and 35.87% over the past year. The stock's price to fair value ratio is at the 29th percentile in our global equity coverage universe for this methodology and at the 46th 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 09/22/2023, before which it was 4-star. Similarly, the firm's uncertainty rating changed from Extreme to Very High after 09/14/2023.

We examine the financials and market statistics for Braskem to determine these ratings. Its enterprise value-to-market value ratio is 3.10 and its trailing 12-month maximum drawdown is 40.64%. These fall at the 93rd and 68th percentiles in the equity universe and at the 95th and 50th in the basic materials sector, respectively.

## Economic Moat <sup>Q</sup> as of 27 Sep 2023

Quantitatively, we do not believe Braskem has an economic moat. Its moat score of 0.68 corresponds to the 73rd percentile in the basic materials sector. Furthermore, this rating last differed from its previous rating of Narrow on 09/20/2023, when the company's moat score fell from its maximum of 0.85 (score of 1 indicates greatest economic moat). The company also maintains a quantitative financial health rating of Moderate. Its score sits at the 9th percentile overall and the 7th percentile in the sector.

Examining the company's financials and market statistics, we find these ratings are principally driven by its book value yield and annualized trailing 12-month volatility. The book value yield is 43.53%, sitting at the 31st percentile in the basic materials sector. The company's annualized trailing 12-month volatility is 41.40%, corresponding to the 65th percentile in the equity coverage universe and the 47th percentile in the sector.

## Fundamentals as of 27 Sep 2023

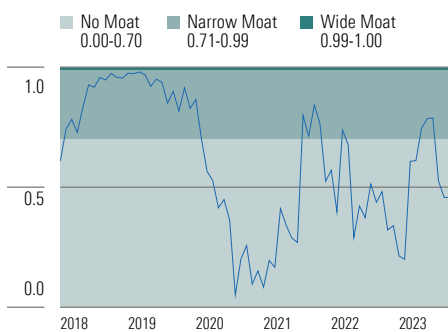
Braskem maintains losses per share of -4.27. The company further earns a return on invested capital of -0.99%. These values are calculated over a trailing 12-month period.

## Contact


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

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

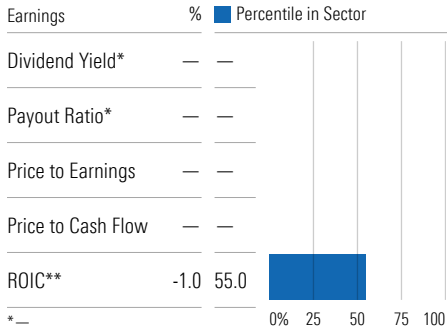
## Economic Moat <sup>Q</sup> History as of 27 Sep 2023



# Braskem SA Class A XBRK ★★★ Q 27 Sep 2023, 22:36 UTC

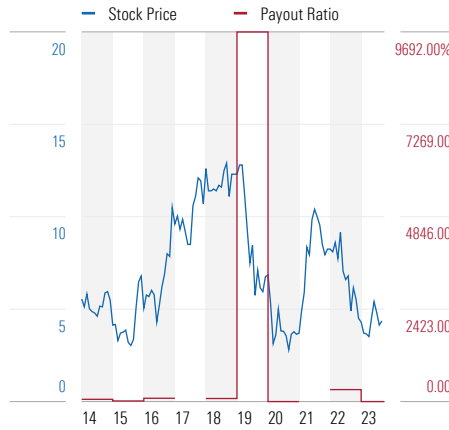
<b>Economic Moat</b> ◊	<b>Uncertainty</b> ◊	<b>Price/Fair Value</b> ◊	<b>ESG Risk Rating Assessment</b> <sup>1</sup>	<b>Trailing Dividend Yield</b> %	<b>Market Cap</b>	<b>Investment Style</b>	<b>Sector</b>	<b>Industry</b>
None	Very High	0.6		30.02	3.2087 Bil	Mid Value	Basic Materials	Chemicals
			6 Sep 2023 05:00, UTC					

## Earnings as of 26 Sep 2023

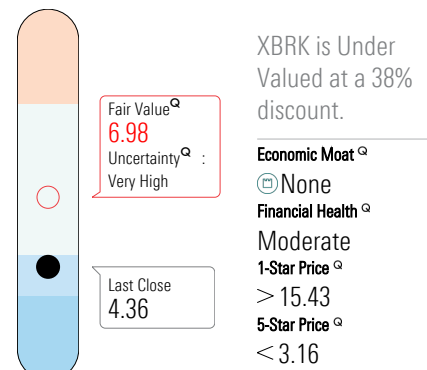


\*—  
\*\*30 Jun 2023

## Dividends as of 27 Sep 2023



## Valuation ◊ as of 27 Sep 2023



## Financials as of 27 Sep 2023 (Fiscal Year End 31 Dec 2023)

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	Fiscal
41	46	47	48	49	58	52	59	106	97	37	Revenue (Bil)
2.99	3.46	7.67	6.20	9.61	7.79	0.17	7.19	27.18	6.11	-1.85	Operating Income (Bil)
7.32	7.56	16.36	13.0	19.5	13.43	0.32	12.28	25.74	6.33	-4.97	Operating Margin (%)
0.44	0.72	3.00	-0.41	3.87	2.83	-2.54	-6.69	13.98	-0.34	-0.59	Net Income (Bil)
0.52	0.90	3.77	-0.52	4.85	3.55	-3.19	-8.41	17.57	-0.42	-0.74	Diluted Earnings/Share
2.41	3.81	7.09	4.46	2.46	9.25	2.27	6.29	14.79	8.95	-0.82	Operating Cash Flow (Bil)
-5,682	-5,409	-3,338	-2,587	-2,273	-2,706	-2,683	-2,760	-3,421	-4,848	-2,073	Capital Spending (Mil)
-3.27	-1.60	3.75	1.87	0.19	6.54	-0.42	3.53	11.37	4.10	-2.90	Free Cash Flow (Bil)
796	796	796	795	796	796	797	797	797	796	797	Avg Shares Outstand(Mil)

## Valuation as of 27 Sep 2023

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	Calendar
1.10	1.05	0.99	1.07	1.37	0.88	0.79	1.00	1.04	0.56	0.62	Price/Fair Value ◊
0.42	0.31	0.50	0.59	0.69	0.78	0.44	0.35	0.51	0.19	0.22	Price/Sales
37.39	17.42	7.84	12.49	29.19	13.92	3,515.87	—	4.55	10.57	—	Price/Earnings
7.95	4.95	3.04	4.52	12.49	4.53	10.28	5.50	4.42	1.86	4.13	Price/Cash Flow
2.00	1.90	10.05	5.37	4.36	6.05	3.33	—	4.92	2.32	2.53	Price/Book

## Operating Performance as of — (Fiscal Year End 31 Dec 2023)

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Q3	Fiscal (%)
1.14	1.77	5.74	-0.74	7.39	5.07	-4.0	-8.68	15.66	-0.37	-0.86	Return on Assets
6.32	12.72	77.91	-17.28	85.53	44.07	-44.51	-498	493	-4.42	-10.24	Return on Equity
3.94	4.7	10.42	1.65	15.58	9.47	-3.14	-8.93	25.68	2.79	-0.66	Rtn on Invested Capital

## Dividends as of —

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	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 27 Sep 2023 (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
2023	0.21	0.20	0.61	0.61	0.75	0.79	0.79	0.53	0.46	—	—	—
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
2018	0.61	0.74	0.78	0.73	0.83	0.93	0.92	0.96	0.95	0.97	0.96	0.95

## Quantitative Equity Reports 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.

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

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

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

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