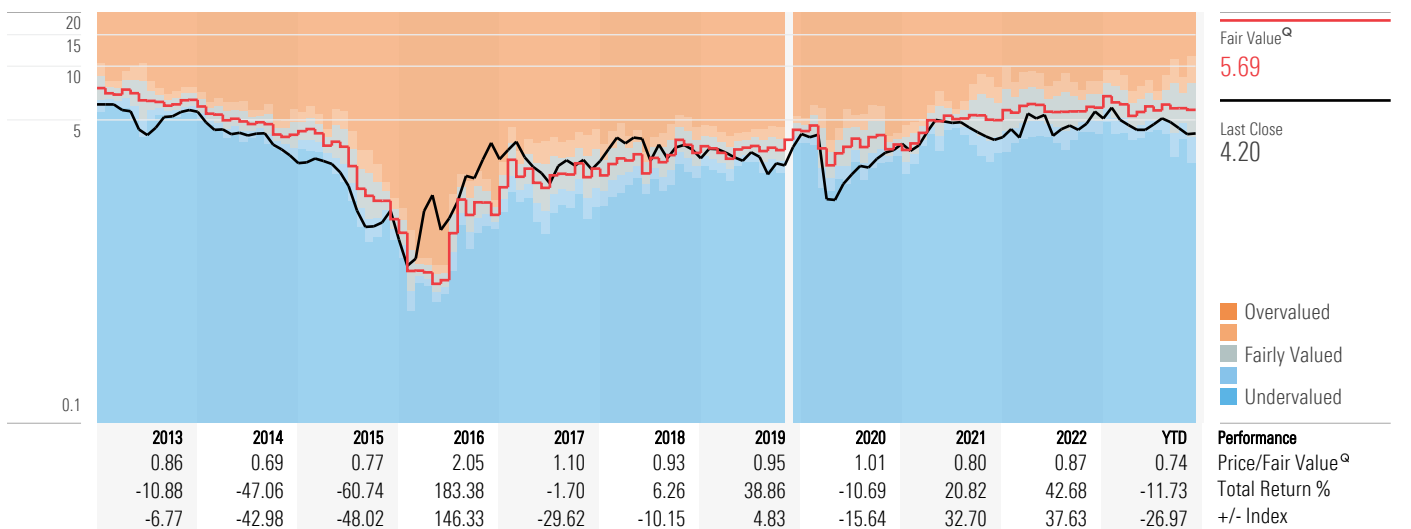


Gerdau SA XGGB ★★★ Q 29 Nov 2023, 23:39 UTC

Economic Moat ^Q	Uncertainty ^Q	Price/Fair Value ^Q	ESG Risk Rating Assessment ¹	Trailing Dividend Yield %	Market Cap	Investment Style	Sector	Industry
None	Very High	0.7	1 Nov 2023 05:00, UTC	7.09	7.1077 Bil	Large Value	Basic Materials	Steel



As of 29 Nov 2023 | Index: Morningstar Brazil GR BRL. Fair Value data as of 29 Nov 2023, 23:39 UTC.

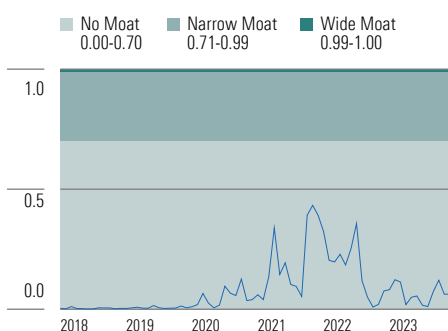
¹The ESG Risk Rating Assessment is a representation of Sustainalytics' ESG Risk Rating. Lee Davidson, Chief Analytics Officer for Morningstar, Inc, oversees the methodology that supports Quantitative Fair Value Estimates and Quantitative Star Ratings. Mr. Davidson is guided by the Morningstar, Inc. Code of Ethics in carrying out his responsibilities. For information regarding Conflicts of Interests, visit <http://global.morningstar.com/equitydisclosures>.

Key Metrics as of 28 Nov 2023

Metrics	Value	Percentile in Sector
Earnings Yield (%)	19.8	95.0
Sales Yield (%)	177.5	83.0
Book Value Yield (%)	129.7	76.0
Return on Assets (%)*	10.4	92.0
Revenue(Bil)*	14.8	96.0
Market Value (Bil)	7.8	93.0
Enterprise Value (Bil)	9.2	92.0
EV/MV Ratio	1.2	71.0
Volatility TTM (%)	24.1	19.0
Drawdown TTM (%)	26.5	27.0
Volume (Mil)	10.5	95.0

*30 Sep 2023

Economic Moat ^Q History as of 29 Nov 2023



Business Description

Gerdau SA produces steel and steel products. The company operates in civil construction, agriculture, automotive, iron ore, exports, research and development, and home steel products sectors. It offers products such as nails, rebar, columns, billets, slabs, tribar tutor, mechanical construction bars, reinforced steel locks. The company's geographical segment includes Brazil Operations; North America Operations; South America Operations as well as Special Steel Operations. It derives most of the revenue from the Brazil Operations segment.

Valuation ^Q as of 30 Nov 2023

Morningstar affirms a 3-star quantitative rating for Gerdau. We calculate this outcome using the company's underlying model-driven valuation and uncertainty scores.

The stock's last closing price was 4.20, a discount of 26.23% to its Quantitative Fair Value estimate of 5.69. This discount has ranged between 34.01% and 5.56% over the past year. The stock's price to fair value ratio is at the 54th percentile in our global equity coverage universe for this methodology and at the 72nd percentile relative to its peers in the basic materials sector.

Gerdau furthermore holds a Very High quantitative uncertainty rating.

The company's quantitative star rating dates to after 11/28/2023, before which it was 4-star. Similarly, the firm's uncertainty rating changed from Extreme to Very High after 11/16/2023.

We examine the financials and market statistics for Gerdau to determine these ratings. Its earnings yield is 19.83% and its trailing 12-month maximum drawdown is 25.40%. These fall at the 95th and 39th percentiles in the equity universe and at the 95th and 25th in the basic materials sector, respectively.

Economic Moat ^Q as of 29 Nov 2023

With a Morningstar quantitative moat rating of None, the quantitative moat score for Gerdau falls below the 5th percentile in the basic materials sector and at the 9th in the equity coverage universe. The company has maintained its None quantitative moat rating for the last year.

We also assign a Moderate quantitative financial health rating to Gerdau. The company's raw score on this metric, termed Distance to Default, ranks at the 56th percentile overall and 70th in the basic materials sector. Furthermore, this financial health rating has stayed Moderate over the last year.

Supporting these ratings are the company's book value yield and enterprise value-to-market value ratio. The book value yield of 129.77%, ranks at the 79th percentile in the covered equity universe and at the 76th percentile among its peers. Meanwhile, its enterprise value-to-market value ratio of 1.18, falls at the 61st percentile in the universe and the 71st percentile in the basic materials sector.

Fundamentals as of 29 Nov 2023

Gerdau reports earnings per share of 4.45. Its return on invested capital is 13.44%. The company maintains a dividend yield of 13.8%, paying out 65.47% of earnings. These values are calculated over a trailing 12-month period.

As of last market close, Gerdau has a price-to-earnings ratio of 5.12, falling at the 13th percentile in its sector (where a lower percentile means a lower ratio) and ranging between 3.12 and 5.52 over the past year. The company's price-to-free cash flow ratio is 11.02, falling at the 43rd percentile in its sector and ranging between 2.44 and 11.88 over the past year.

Gerdau SA XGGB ★★★ Q 29 Nov 2023, 23:39 UTC

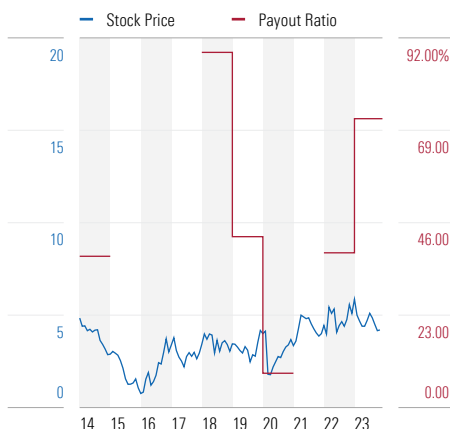
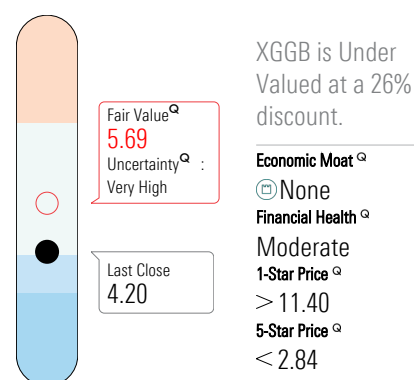
Economic Moat ^Q	Uncertainty ^Q	Price/Fair Value ^Q	ESG Risk Rating Assessment ¹	Trailing Dividend Yield %	Market Cap	Investment Style	Sector	Industry
None	Very High	0.7	1 Nov 2023 05:00, UTC	7.09	7.1077 Bil	Large Value	Basic Materials	Steel

Earnings as of 28 Nov 2023

Earnings	%	Percentile in Sector
Dividend Yield*	13.8	96.0
Payout Ratio*	65.5	76.0
Price to Earnings	5.1	13.0
Price to Cash Flow	11.0	43.0
ROIC**	13.4	89.0

*31 Oct 2023

**30 Sep 2023

Dividends as of 29 Nov 2023**Valuation** ^Q as of 29 Nov 2023**Economic Moat** ^Q

None

Financial Health ^Q

Moderate

1-Star Price ^Q

> 11.40

5-Star Price ^Q

< 2.84

Contact

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+55 1130946300

<https://www.gerdau.com>**Financials** as of 29 Nov 2023 (Fiscal Year End 31 Dec 2023)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	Fiscal
Revenue (Bil)	40	43	44	38	37	46	40	44	78	82	54	Revenue (Bil)
Operating Income (Bil)	2.70	2.50	1.81	1.35	2.04	4.46	3.22	5.52	20.02	16.60	8.80	Operating Income (Bil)
Operating Margin (%)	6.77	5.88	4.14	3.59	5.53	9.67	8.13	12.59	25.55	20.14	16.23	Operating Margin (%)
Net Income (Bil)	1.58	1.40	-4.55	-2.89	-0.36	2.30	1.20	2.37	15.49	11.43	6.92	Net Income (Bil)
Diluted Earnings/Share	0.89	0.78	-2.56	-1.62	-0.20	1.28	0.67	1.31	8.61	6.19	3.93	Diluted Earnings/Share
Operating Cash Flow (Bil)	4.10	2.57	7.16	3.52	2.08	2.00	1.64	6.41	12.52	11.15	7.53	Operating Cash Flow (Bil)
Capital Spending (Mil)	-2,757	-2,409	-2,451	-1,378	-911	-1,262	-1,847	-1,805	-3,192	-4,481	-3,760	Capital Spending (Mil)
Free Cash Flow (Mil)	1,342	162	4,711	2,138	1,165	737	-204	4,603	9,325	6,669	3,766	Free Cash Flow (Mil)
Avg Shares Outstand(Mil)	1,792	1,792	1,773	1,790	1,794	1,802	1,795	1,797	1,799	1,847	1,760	Avg Shares Outstand(Mil)

Valuation as of 29 Nov 2023

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	Calendar
Price/Fair Value ^Q	0.86	0.69	0.77	2.05	1.10	0.93	0.95	1.01	0.80	0.87	0.74	Price/Fair Value ^Q
Price/Sales	0.83	0.40	0.19	0.47	0.59	0.54	0.82	1.06	0.66	0.45	0.57	Price/Sales
Price/Earnings	25.05	11.45	—	—	—	44.78	22.70	30.10	3.57	3.75	5.09	Price/Earnings
Price/Cash Flow	7.28	5.87	1.41	4.90	14.27	9.39	9.45	11.56	6.37	2.25	4.44	Price/Cash Flow
Price/Book	1.10	0.53	0.23	0.67	0.85	0.91	1.23	1.34	1.13	1.02	0.78	Price/Book

Operating Performance as of 29 Nov 2023 (Fiscal Year End 31 Dec 2023)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Q3	Fiscal (%)
Return on Assets	2.85	2.31	-6.84	-4.64	-0.68	4.54	2.29	4.04	22.63	15.48	2.11	Return on Assets
Return on Equity	5.5	4.49	-14.25	-10.38	-1.51	9.33	4.57	8.18	42.18	25.76	3.18	Return on Equity
Rtn on Invested Capital	4.72	4.24	-6.41	-3.79	0.99	7.41	4.23	6.46	30.43	20.4	2.72	Rtn on Invested Capital

Dividends as of 29 Nov 2023

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	Calendar (%)
Dividend Per Share	0.22	0.24	0.21	0.05	0.05	0.36	0.27	0.30	2.92	5.61	0.30	Dividend Per Share
Trailing Dividend Yield	—	2.67	5.28	0.44	0.6	2.63	1.43	1.34	—	12.46	7.09	Trailing Dividend Yield
Buyback Yield	—	—	2.64	0.57	0.0	0.63	0.29	—	—	—	0.41	Buyback Yield

Appendix

Economic Moat [®]History as of 29 Nov 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	0.08	0.12	0.11	0.02	0.05	0.06	0.02	0.01	0.07	0.12	0.06	—
2022	0.32	0.20	0.20	0.23	0.18	0.25	0.36	0.12	0.05	0.01	0.02	0.08
2021	0.06	0.04	0.14	0.34	0.14	0.19	0.10	0.10	0.05	0.39	0.43	0.39
2020	0.01	0.02	0.07	0.03	0.01	0.02	0.10	0.07	0.06	0.13	0.04	0.04
2019	0.00	0.01	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.01	0.01
2018	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00

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/

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