

# Vale SA XVALO ★★★★★ 22 Sep 2020 02:00 UTC

**Last Close**  
22 Sep 2020  
9.18

**Fair Value<sup>Q</sup>**  
22 Sep 2020 02:00 UTC  
9.90

**Market Cap**  
22 Sep 2020  
47,092.6 Mil

**Sector**  
Basic Materials

**Industry**  
Other Industrial Metals & Mining

**Country of Domicile**  
BRA Brazil

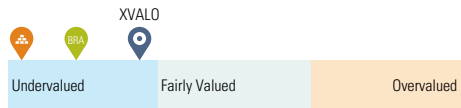
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## Company Profile

Vale is the world's largest iron ore miner and one of the largest diversified miners, along with BHP and Rio Tinto. Earnings are dominated by the bulk materials division, primarily iron ore and iron ore pellets, with minor contributions from iron ore proxies, including manganese and coal. The base metals division is much smaller, primarily consisting of nickel mines and smelters with a small contribution from copper.

## Quantitative Scores

		Scores		
		All	Rel Sector	Rel Country
Quantitative Moat	None	11	12	9
Valuation	Undervalued	16	15	13
Quantitative Uncertainty	High	98	99	100
Financial Health	Moderate	61	36	34



## Valuation

	Current	5-Yr Avg	Sector Median	Country Median
Price/Quant Fair Value	0.93	1.47	0.78	0.84
Price/Earnings	43.5	14.2	13.3	13.7
Forward P/E	5.7	—	10.4	11.4
Price/Cash Flow	5.6	5.3	8.0	7.3
Price/Free Cash Flow	10.0	11.4	14.7	11.6
Trailing Dividend Yield %	6.54	3.61	2.43	2.55
Price/Book	1.6	1.4	1.4	1.3
Price/Sales	1.6	1.5	1.0	1.1

## Profitability

	Current	5-Yr Avg	Sector Median	Country Median
Return on Equity %	3.5	0.7	11.5	12.0
Return on Assets %	1.5	0.7	5.7	4.8
Revenue/Employee (K)	487.3	436.4	857.4	963.2

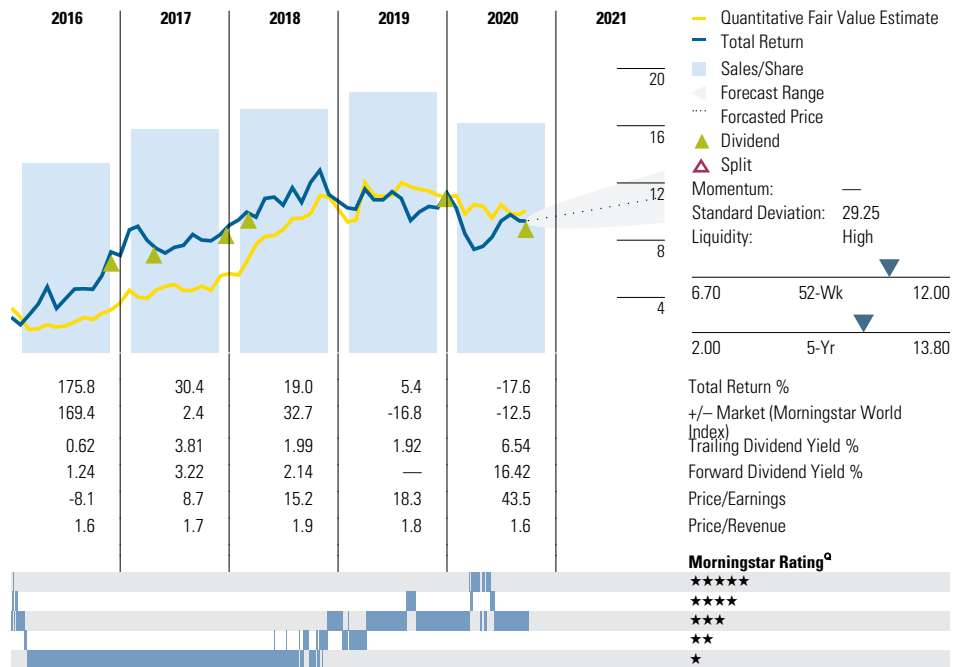
## Financial Health

	Current	5-Yr Avg	Sector Median	Country Median
Distance to Default	0.5	0.4	0.6	0.6
Solvency Score	637.6	—	474.7	530.5
Assets/Equity	2.3	2.3	1.4	2.1
Long-Term Debt/Equity	0.3	0.5	0.2	0.3

## Growth Per Share

	1-Year	3-Year	5-Year	10-Year
Revenue %	2.7	11.0	1.4	4.9
Operating Income %	7.4	18.6	9.4	6.2
Earnings %	—	—	—	—
Dividends %	134.0	94.0	-15.4	-4.0
Book Value %	-8.9	36.2	4.7	-1.5
Stock Total Return %	-5.1	5.6	20.1	-3.3

## Price vs. Quantitative Fair Value

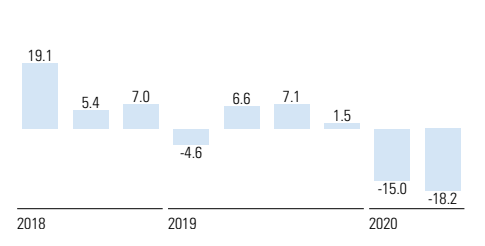


	2015	2016	2017	2018	2019	TTM	Financials (Fiscal Year in Mil)
Revenue	25,609	27,488	33,967	36,575	37,570	34,668	Revenue
% Change	-31.8	7.3	23.6	7.7	2.7	-7.7	% Change
Operating Income	2,582	8,051	11,241	12,854	13,842	12,144	Operating Income
% Change	-70.0	211.8	39.6	14.3	7.7	-12.3	% Change
Net Income	-12,129	3,982	5,507	6,860	-1,683	1,326	Net Income
Operating Cash Flow	4,491	6,581	12,450	12,901	12,110	9,976	Operating Cash Flow
Capital Spending	-8,371	-4,951	-3,831	-3,784	-3,704	-4,454	Capital Spending
Free Cash Flow	-3,880	1,630	8,619	9,117	8,406	5,522	Free Cash Flow
% Sales	-15.2	5.9	25.4	24.9	22.4	15.9	% Sales
EPS	-2.35	0.77	1.05	1.32	-0.33	0.25	EPS
% Change	-1,907.7	—	36.4	25.7	-125.0	—	% Change
Free Cash Flow/Share	-0.94	-0.12	1.17	1.69	1.52	0.91	Free Cash Flow/Share
Dividends/Share	0.30	0.05	0.41	0.15	0.35	0.35	Dividends/Share
Book Value/Share	3.40	7.29	7.25	6.95	7.31	5.58	Book Value/Share
Shares Outstanding (Mil)	5,153	5,153	5,197	5,126	5,128	5,130	Shares Outstanding (Mil)
Return on Equity %	-57.0	30.1	18.5	15.7	-4.0	3.5	Profitability
Return on Assets %	-11.8	4.3	5.6	7.3	-1.9	1.5	Return on Assets %
Net Margin %	-47.4	14.5	16.2	18.8	-4.5	3.8	Net Margin %
Asset Turnover	0.25	0.29	0.34	0.39	0.42	0.39	Asset Turnover
Financial Leverage	8.4	6.2	2.3	2.0	2.3	2.4	Financial Leverage
Gross Margin %	19.9	35.8	38.1	39.6	43.6	42.9	Gross Margin %
Operating Margin %	10.1	29.3	33.1	35.1	36.8	35.0	Operating Margin %
Long-Term Debt	26,560	27,789	21,761	15,423	12,798	16,855	Long-Term Debt
Total Equity	33,589	39,042	43,458	43,985	40,067	34,136	Total Equity
Fixed Asset Turns	0.4	0.5	0.6	0.7	0.8	0.8	Fixed Asset Turns

## Quarterly Revenue & EPS

Revenue (Mil)	Mar	Jun	Sep	Dec	Total
2020	6,969.0	7,518.0	—	—	—
2019	8,203.0	9,186.0	10,217.0	9,964.0	37,570.0
2018	8,603.0	8,616.0	9,543.0	9,813.0	36,575.0
2017	8,515.0	7,235.0	9,050.0	9,167.0	33,967.0
Earnings Per Share (I)					
2020	0.05	0.19	—	—	—
2019	-0.32	-0.03	0.32	-0.30	-0.33
2018	0.30	0.01	0.27	0.73	1.32
2017	0.48	0.00	0.43	0.15	1.05

## Revenue Growth Year On Year %



# Quantitative Equity Reports Overview

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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, and the Quantitative Uncertainty Rating. The rating is expressed as One-Star, Two-Star, Three-Star, Four-Star, and Five-Star.

**One-Star** – the stock is overvalued with a reasonable margin of safety.

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

**Two-Star** - the stock is somewhat overvalued.

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

**Three-Star** – the stock is approximately fairly valued.

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

**Four-Star** – the stock is somewhat undervalued.

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

**Five-Star** – the stock is undervalued with a reasonable margin of safety.

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

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

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

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