
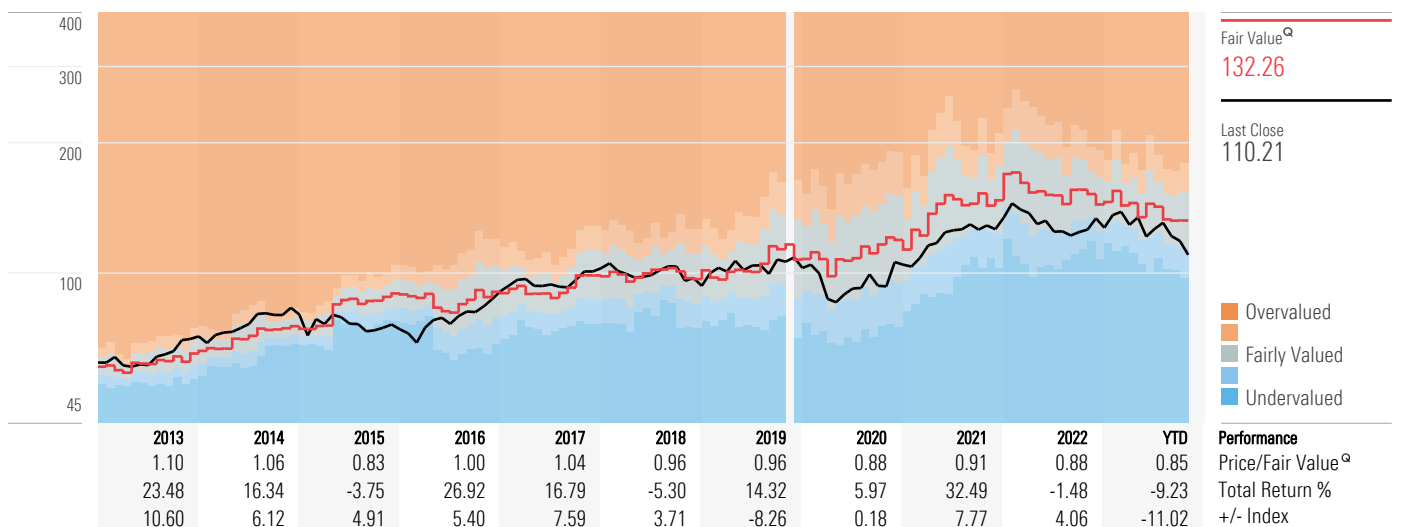


Royal Bank of Canada RY ★★★★★ Q 26 Oct 2023, 22:36 UTC

Economic Moat ^Q	Uncertainty ^Q	Price/Fair Value ^Q	ESG Risk Rating Assessment ¹	Trailing Dividend Yield %	Market Cap	Investment Style	Sector	Industry
Narrow	High	0.8	 4 Oct 2023 05:00, UTC	4.85	152.2375 Bil	Large Core	Financial Services	Banks - Diversified



As of 26 Oct 2023 | Index: Morningstar Canada GR CAD. Fair Value data as of 26 Oct 2023, 22:36 UTC.

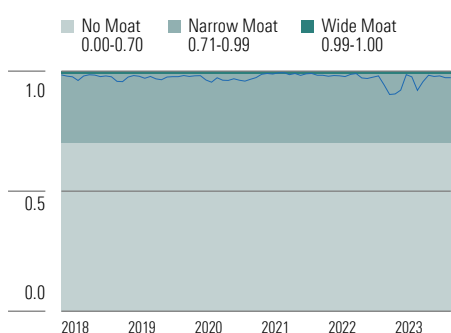
¹The ESG Risk Rating Assessment is a representation of Sustainability's ESG Risk Rating. Lee Davidson, Chief Analytics Officer for Morningstar, Inc, oversees the methodology that supports Quantitative Fair Value Estimates and Quantitative Star Ratings. Mr. Davidson is guided by the Morningstar, Inc.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

Key Metrics as of 25 Oct 2023

Metrics		Percentile in Sector
Earnings Yield (%)	9.5	60.0
Sales Yield (%)	36.6	46.0
Book Value Yield (%)	69.0	34.0
Return on Assets (%)*	0.8	41.0
Revenue(Bil)*	40.3	96.0
Market Value (Bil)	120.2	99.0
Enterprise Value (Mil)	96.5	47.0
EV/MV Ratio	0.0	12.0
Volatility TTM (%)	11.8	12.0
Drawdown TTM (%)	19.3	42.0
Volume (Mil)	4.1	84.0

*31 Jul 2023

Economic Moat^Q History as of 26 Oct 2023



Business Description

Royal Bank of Canada is one of the two largest banks in Canada. It is a diversified financial services company, offering personal and commercial banking, wealth-management services, insurance, corporate banking, and capital markets services. The bank is concentrated in Canada, with additional operations in the U.S. and other countries.

Valuation^Q as of 26 Oct 2023

Royal Bank of Canada achieves a 4-star quantitative star rating based on Morningstar's equity model. This reflects the company's valuation and uncertainty scores under this assessment system. The Quantitative Fair Value estimate is 132.40, above the previous closing price of 109.11. The stock has been trading between a 20.41% and 3.77% discount to its quantitative fair value over the past year. The stock's current valuation rating sits at the 78th percentile in the coverage universe and 74th percentile in the financial services sector (higher percentile indicates more undervalued). The quantitative uncertainty rating for Royal Bank of Canada is High. Our quantitative star rating last differed from the current rating on 10/03/2023; the uncertainty rating last differed on 07/26/2023. The previous ratings were 3 and Very High, respectively. The main drivers of the company's valuation and uncertainty are its earnings yield and volatility. The earnings yield of 9.49% falls at the 80th percentile in the equity universe and the 60th percentile in its sector. The annualized trailing 12-month volatility of 11.82% corresponds to the 5th percentile overall and the 12th percentile in the industry.

Economic Moat^Q as of 26 Oct 2023

Morningstar maintains a Narrow quantitative moat rating on the company. The firm's quantitative

moat score of 0.95 sits at the 89th percentile in the financial services sector. This is a decrease from 0.99, the maximum of its moat scores over the past year.

The quantitative financial health rating for Royal Bank of Canada is Strong. Its financial health score, termed Distance to Default, sits at the 95th percentile in both the universe and sector.

The significant drivers of these ratings are the company's revenue and annualized trailing 12-month volatility. The revenue for Royal Bank of Canada is 40 billion, and its annualized trailing 12-month volatility is 11.82%. They sit at the 95th and 5th percentile in the global equity universe, respectively.

Fundamentals as of 26 Oct 2023


Royal Bank of Canada maintains earnings per share of 10.36. The shares offer a dividend yield of 4.44%. These values are calculated over a trailing 12-month period.

As of last market close, Royal Bank of Canada has a price-to-earnings ratio of 10.54, falling below the 54th percentile in its sector (where a lower percentile means a lower ratio) and ranging between 10.54 and 13.06 over the past year. The company's price-to-free cash flow ratio is 4.44, falling at the 34th percentile in its sector and ranging between 4.36 and 10.09 over the past year.

Contact

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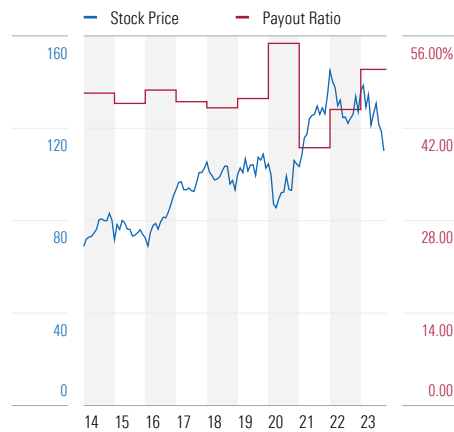
Economic Moat ^Q	Uncertainty ^Q	Price/Fair Value ^Q	ESG Risk Rating Assessment ¹	Trailing Dividend Yield %	Market Cap	Investment Style	Sector	Industry
Narrow	High	0.8	 4 Oct 2023 05:00, UTC	4.85	152.2375 Bil	Large Core	Financial Services	Banks - Diversified

Earnings as of 25 Oct 2023

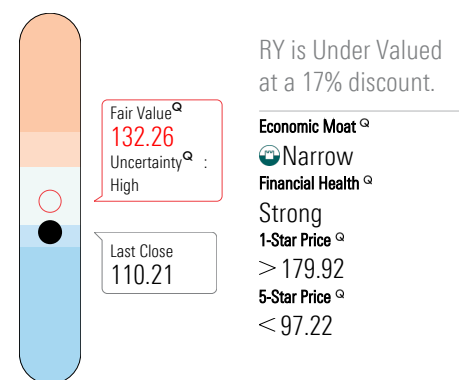
Earnings	%	Percentile in Sector
Dividend Yield*	4.4	55.0
Payout Ratio*	50.9	64.0
Price to Earnings	10.5	54.0
Price to Cash Flow	4.4	34.0
ROIC**	—	—

*29 Sep 2023
**31 Jul 2023

Dividends as of 26 Oct 2023



Valuation ^Q as of 26 Oct 2023



Financials as of 26 Oct 2023 (Fiscal Year End 31 Oct 2023)

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	Fiscal
31	34	35	38	40	43	46	47	50	49	43	Revenue (Bil)
—	—	—	—	—	—	—	—	—	—	—	Operating Income
—	—	—	—	—	—	—	—	—	—	—	Operating Margin (%)
7.99	8.70	9.73	10.11	11.13	12.12	12.59	11.16	15.78	15.55	10.56	Net Income (Bil)
5.49	6.00	6.73	6.78	7.56	8.36	8.75	7.82	11.06	11.06	7.60	Diluted Earnings/Share
7.09	15.17	24.15	26.86	37.73	17.47	14.27	138.82	61.04	21.94	37.20	Operating Cash Flow (Bil)
-932	-1,227	-1,337	-1,257	-1,364	-1,980	-2,261	-2,629	-2,186	-2,500	-1,962	Capital Spending (Mil)
6.15	13.95	22.81	25.60	36.36	15.49	12.00	136.19	58.86	19.44	35.24	Free Cash Flow (Bil)
1,467	1,452	1,450	1,494	1,474	1,450	1,441	1,429	1,427	1,406	1,390	Avg Shares Outstand(Mil)

Valuation as of 26 Oct 2023

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	Calendar
1.10	1.06	0.83	1.00	1.04	0.96	0.96	0.88	0.91	0.88	0.83	Price/Fair Value ^Q
3.39	3.43	3.06	3.60	3.77	3.18	3.22	3.17	3.87	3.67	2.76	Price/Sales
12.89	13.37	11.02	13.40	13.58	11.18	11.74	13.37	12.14	11.51	10.65	Price/Earnings
14.46	7.68	4.45	5.06	4.01	7.76	10.38	1.08	3.14	8.16	4.16	Price/Cash Flow
2.34	2.38	1.88	2.10	2.21	1.83	1.89	1.84	2.08	1.75	1.46	Price/Book

Operating Performance as of 26 Oct 2023 (Fiscal Year End 31 Oct 2023)

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Q3	Fiscal (%)
0.96	0.97	0.97	0.9	0.93	0.95	0.91	0.73	0.95	0.86	0.2	Return on Assets
19.37	18.79	18.43	16.66	16.9	17.19	16.64	14.08	18.28	16.14	3.65	Return on Equity
—	—	—	—	—	—	—	—	—	—	—	Rtn on Invested Capital

Dividends as of 26 Oct 2023

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	Calendar (%)
2.53	2.84	3.08	3.24	3.48	3.77	4.07	4.29	4.32	4.96	5.40	Dividend Per Share
3.54	3.54	4.15	3.57	3.39	4.03	3.96	4.1	3.22	3.9	4.85	Trailing Dividend Yield
0.27	—	—	0.13	1.92	1.07	0.66	0.55	—	3.18	0.52	Buyback Yield

Appendix

Economic Moat [®]History as of 26 Oct 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	0.91	0.92	0.99	0.98	0.92	0.96	0.98	0.98	0.98	0.97	—	—
2022	0.98	0.98	0.98	0.98	0.99	0.99	0.97	0.97	0.97	0.98	0.94	0.90
2021	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.99	0.99	0.98	0.98
2020	0.98	0.98	0.96	0.95	0.97	0.96	0.96	0.97	0.96	0.96	0.97	0.97
2019	0.98	0.98	0.98	0.97	0.98	0.97	0.96	0.98	0.98	0.98	0.98	0.98
2018	0.98	0.98	0.98	0.96	0.98	0.98	0.98	0.98	0.98	0.98	0.96	0.96

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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.

One-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*

Two-Star – 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)*

Three-Star – 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)*

Four-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)*

Five-Star – 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

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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.

This Report **has not been made available** to the issuer of the security prior to publication.

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