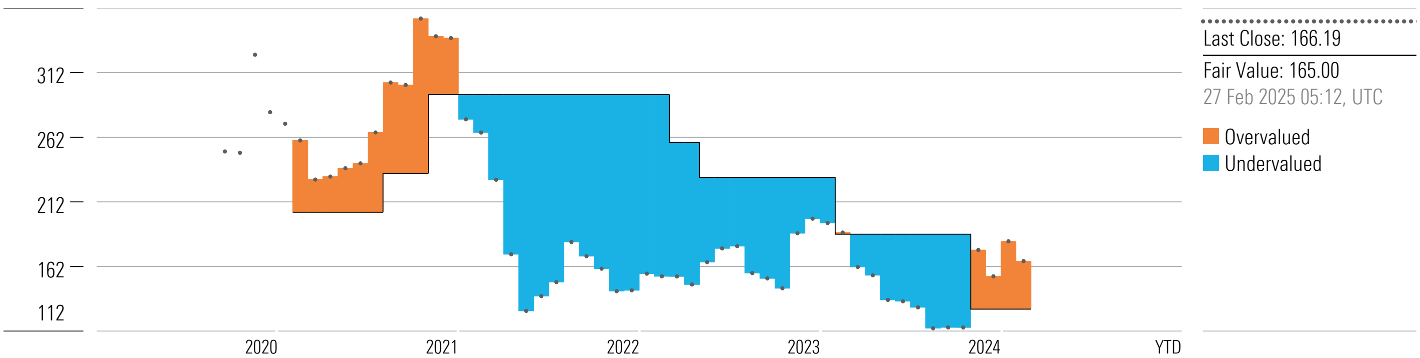
Morningstar Equity Analyst Report | Report as of 27 Feb 2025 05:24, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 1 of 20

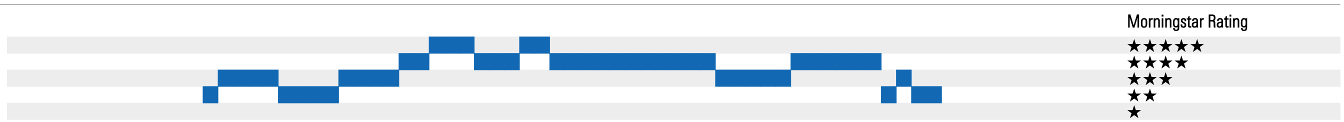
Snowflake Inc Ordinary Shares - Class A SNOW ★★★ 27 Feb 2025 05:14, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
166.19 USD 26 Feb 2025	165.00 USD 27 Feb 2025 05:12, UTC	1.01	54.85 USD Bil 26 Feb 2025	None	Mid Growth	Very High	Standard	5 Feb 2025 06:00, UTC

Price vs. Fair Value



2020	2021	2022	2023	2024	YTD	
—	1.15	0.49	0.86	1.20	1.01	Price/Fair Value
—	20.38	-57.63	38.64	-22.41	7.63	Total Return %



Total Return % as of 26 Feb 2025. Last Close as of 26 Feb 2025. Fair Value as of 27 Feb 2025 05:12, UTC.

Contents

[1] The ESG Risk Rating Assessment is a representation of Sustainalytics' ESG Risk Rating.

Snowflake Earnings: Strong AI Sales and Successful Product Launches Drive Fair Value Up 28% to $165

Analyst Note Eric Compton, CFA, Director, 27 Feb 2025

No-moat Snowflake reported strong fiscal 2025 fourth-quarter earnings that beat our top line and profitability expectations. Management unveiled good fiscal 2026 guidance, expecting product revenue growth of 24% and non-GAAP operating margin of 8% on the back of optimism around artificial intelligence sales.

The results and outlook were better than we expected, and Snowflake was able to deliver a revenue growth outlook of 20% or more for 2026, which we thought the company needed in order to justify the premium valuation. Therefore, we have raised our intermediate revenue growth and profitability estimates to reflect our increased confidence in Snowflake's ability to capitalize on the unyielding AI demand and ongoing cloud migrations. As a result, we are raising our fair value estimate to $165 per share from $129. The firm's strong performance sent shares up 9% after hours. We see the stock as slightly overvalued compared with our raised valuation, although given our Very High Morningstar Uncertainty Rating, shares would be rated at 3 stars.

Fourth-quarter revenue came in at $987 million, up 27% year over year and 5% sequentially. Product sales grew 28% year over year due to the strong adoption of the firm's data engineering and AI solutions. Snowflake's ability to identify new workload opportunities continues to impress us, as new products like Snowpark support both strong product attach and large customer acquisition. Remaining

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Snowflake Inc Ordinary Shares - Class A SNOW ★★★ 27 Feb 2025 05:14, UTC

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Sector	Industry
Technology	Software - Application

Business Description

Founded in 2012, Snowflake is a data lake, warehousing, and sharing company that went public in 2020. To date, the company has over 3,000 customers, including nearly 30% of the Fortune 500. Snowflake's data lake stores unstructured and semistructured data that can then be used in analytics to create insights stored in its data warehouse. Snowflake's data sharing capability allows enterprises to buy and ingest data, while its data solutions can be hosted on various public clouds.

performance obligation grew a solid 33% year over year, indicating strong demand for Snowflake's products. While revenue retention declined from 127% to 126% sequentially, this is normal as a software company scales, and the sequential customer and RPO growth of 5% and 20%, respectively, were exceptional. We expect successful new product launches and AI sales to drive above-guidance growth in the near term but anticipate increasing competitive pressures to weather growth over time.

Business Strategy & Outlook Eric Compton, CFA, Director, 27 Feb 2025

Snowflake is a leading data lake and data warehouse platform. As enterprises migrate workloads to the public cloud, significant obstacles have arisen, including hefty data transformation costs, breaking down data silos to create a single source of truth, and creating scalable performance. Snowflake seeks to address these issues with its platform, which gives its users access to its data lake, warehouse, and marketplace on various public clouds. Snowflake should have a good growth runway, although competition in the space is increasing and enterprise IT budgets are coming under more scrutiny.

Traditionally, data has been recorded in and accessed via databases, stored on premise. Yet, the rise of the public cloud has resulted in an increasing need to access data from different databases in one place. Data lakes and data warehouses help solve this problem by having more flexibility in how data is input into databases and also helps the overall IT structure better align with modern cloud requirements. Another consideration is making these platforms easy to use, while also being vendor agnostic. Snowflake offers these solutions, and the company's platform is interoperable across multiple public clouds.

We think that the amount of data collected and analytics on such data will continue to increase, which should drive demand for vendors like Snowflake. While Snowflake was one of the first movers in the space and its growth has been exceptional, competition has increased. New entrants and public cloud service providers have all increased and improved their own offerings in the space. Each provider has their own strengths and weaknesses, and will therefore appeal to different use cases. Further, we also are not convinced that Snowflake fits easily into the current generative AI growth story. We think Snowflake is still early into its generative artificial intelligence growth story, and a big part of future growth will depend on that working out. While Snowflake has come out with some workflows and products geared toward this growth driver, they were a bit late to the game. We think Snowflake will have to prove it is indeed an innovative force in this space.

Bulls Say Eric Compton, CFA, Director, 27 Feb 2025

- There are long-term tailwinds in the data space in general, which could fuel growth for Snowflake.
- If Snowflake can figure out how to monetize features that fit with the AI demand boom, it could be another growth driver.
- Snowflake could expand to other multicloud data needs, pushing spending per customer higher.

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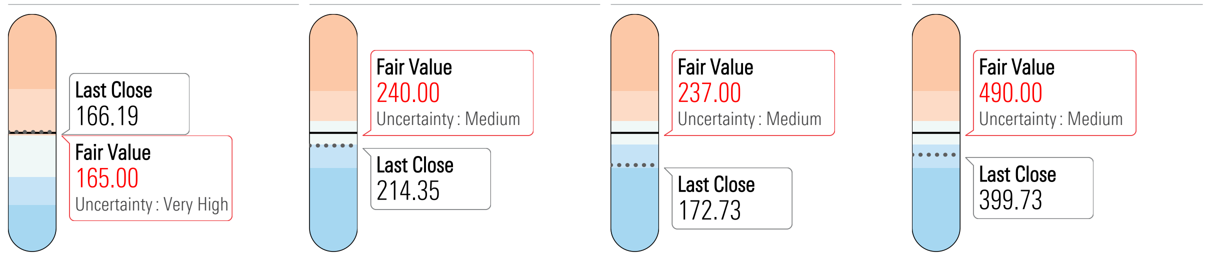
Competitors



	Snowflake Inc ...ares - Class A SNOW	Amazon.com Inc AMZN	Alphabet Inc Class A GOOGL	Microsoft Corp MSFT
Economic Moat	None	Wide	Wide	Wide
Currency	USD	USD	USD	USD
Fair Value	165.00 27 Feb 2025 05:12, UTC	240.00 7 Feb 2025 06:46, UTC	237.00 5 Feb 2025 04:14, UTC	490.00 31 Jul 2024 06:07, UTC
1-Star Price	288.75	324.00	319.95	661.50
5-Star Price	82.50	168.00	165.90	343.00
Assessment	Overvalued 26 Feb 2025	Fairly Valued 26 Feb 2025	Undervalued 26 Feb 2025	Undervalued 26 Feb 2025
Morningstar Rating	★★★27 Feb 2025 05:14, UTC	★★★26 Feb 2025 22:27, UTC	★★★★26 Feb 2025 22:29, UTC	★★★★26 Feb 2025 22:27, UTC
Analyst	Eric Compton, Director	Dan Romanoff, Senior Equity Analyst	Malik Ahmed Khan, Equity Analyst	Dan Romanoff, Senior Equity Analyst
Capital Allocation	Standard	Exemplary	Exemplary	Exemplary
Price/Fair Value	1.01	0.89	0.73	0.82
Price/Sales	15.25	3.60	6.14	11.41
Price/Book	18.29	7.94	6.49	9.82
Price/Earning	—	37.75	21.90	31.90
Dividend Yield	0.00%	0.00%	0.35%	0.79%
Market Cap	54.85 Bil	2,271.62 Bil	2,105.58 Bil	2,971.59 Bil
52-Week Range	107.13—235.66	151.61—242.52	130.67—207.05	385.58—468.35
Investment Style	Mid Growth	Large Blend	Large Blend	Large Blend

Bears Say Eric Compton, CFA, Director, 27 Feb 2025

- The space is increasingly competitive, and there are other offerings in the marketplace, both from the public cloud providers and from independent providers.
- Snowflake's valuation is demanding, and without its heavy use of stock-based compensation, it would not be cash flow positive. Any slowdown in growth could be devastating to the valuation.
- There is still a lot of uncertainty about how much revenue attributable to AI Snowflake will ultimately generate.

Economic Moat Eric Compton, CFA, Director, 21 Nov 2024

We assign Snowflake a no-moat rating. While there are probably some elements of switching costs present, we do not have enough confidence in Snowflake's future returns on invested capital 10 years from now to award the company a narrow moat rating.

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Snowflake Inc Ordinary Shares - Class A SNOW ★★★ 27 Feb 2025 05:14, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
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Snowflake is a fast-growing provider of data lake, data warehousing, and data sharing solutions. The company's value proposition lies in storing data in the cloud through its combined data lake and data warehouse platform. Traditionally, data has been recorded in and accessed via databases such as the Oracle database or SAP's HANA. However, the rise of the public cloud has resulted in an increasing need to access data from different databases in one place and in different formats and structures. A data warehouse and data lake can serve these needs by gathering data from various databases in one place and in structures that are more cloud-friendly.

Data lakes and data warehouses can be created in a number of ways. Enterprises can hire robust technological teams to build out data lakes and data warehouses, or use out-of-the-box platforms, such as Amazon's data warehouse offering, Redshift, or Microsoft Azure's SQL Data Warehouse. In fact, we believe competition is increasingly intense in this space, although Snowflake still appeals to clients looking for a cloud-agnostic platform, something not run by one of the major cloud providers. Snowflake's data lake and data warehouse combo can be deployed on various public clouds. We believe Snowflake's solution provides value to its customers in two ways. First, it allows for high-performance queries for firms using multiple public cloud vendors. Second, Snowflake offers flexibility if a firm wants to change public cloud providers, although we note that changing cloud providers has its own switching costs.

Altogether, we think data architecture software has elements of switching costs, as it is difficult to change your data infrastructure once you have integrated it within your software stack. Changing data infrastructure providers creates headaches that aren't dissimilar to the switching costs we see in other enterprise software, such as a learning curve in using new data architecture and significant monetary and time-related costs associated with "rewiring" how a company stores and accesses data. However, even with these elements present within Snowflake's business, the company is still unprofitable, and competition in the space is only increasing, which makes us hesitant to assign the firm a moat today.

Fair Value and Profit Drivers Eric Compton, CFA, Director, 27 Feb 2025

Our fair value estimate is $165 per share. Our valuation implies forward fiscal-year enterprise value/sales of 13 times. We expect Snowflake will achieve a compound annual growth rate for revenues of 23% (20%) over the next five (10) years, driven by an expansion of the overall data lake and data warehouse TAM, along with Snowflake taking share. This substantial growth is driven by continued shifts of workloads to a cloud environment.

We forecast that gross margins will expand from 67% in fiscal 2025 to 80% in fiscal 2035 as the company's growth leads to scale-based leverage. We expect GAAP operating margins to increase from negative 40% in fiscal 2025 to 26% by fiscal 2035, as we see operating leverage from improved scale and lower sales investment needs.

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Risk and Uncertainty Eric Compton, CFA, Director, 21 Nov 2024

Snowflake is a technology company that is still in the unprofitable, high-growth phase of its lifecycle. The key risk and uncertainty we see relates to Snowflake's future growth. The outlook could change dramatically if Snowflake is able to keep growing and taking share, or if growth starts to decelerate. Snowflake runs the risk that other cloud-neutral software will enter its market or that or that competition increases from the public cloud providers, as their offerings improve in terms of features or usability. Many clients that are already existing customers of public cloud providers may just decide to use the offerings their provider already offers.

When considering environmental, social, and governance, or ESG, risk, we see the possibility that Snowflake's customers' data is compromised by security threats. This is a risk for virtually all software companies. However, even if such attacks were to occur, we think the impact on Snowflake's business would be immaterial in the long run.

Based on these risks, along with the higher valuation uncertainty seen with any company expanding as fast as Snowflake, we assign the company a Very High Morningstar Uncertainty Rating.

Capital Allocation Eric Compton, CFA, Director, 27 Feb 2025

We consider Snowflake's capital allocation to be Standard, based on our assessment of a sound balance sheet, standard investment efficacy, and appropriate shareholder distributions.

We think Snowflake's balance sheet is sound, based on its healthy cash balances, although we are cognizant of the fact that the firm is unprofitable on a GAAP basis and uses heavy amounts of stock-based compensation (expected to be roughly 37% of revenue in fiscal 2026) to remain cash flow positive. We think the firm's investments are standard, as Snowflake is rightly investing in product features and its salesforce to generate growth. We think Snowflake is rightly withholding from shareholder distributions in the form of dividends and consistent share repurchases, which we view as appropriate given where they are in their growth cycle.

Analyst Notes Archive

Snowflake Earnings: Raised Guidance Drives Up Stock; FVE Cut to Reflect More Cautious Take Eric Compton, CFA,Director,21 Nov 2024

No-moat Snowflake reported strong third-quarter earnings, with revenue and profitability coming in above guidance. Management now expects fiscal 2025 product revenue growth of 29%, up from the previous guide of 26%. Non-GAAP operating margins are expected to reach 5%, up from the previous guide of 3%, driven by the higher revenue outlook.While overall results were positive, sending shares up 20% after hours at close to $155 per share, we are revisiting our own expectations as we transfer coverage to a new analyst. We have tempered our long-term revenue growth estimates to reflect increasing competition in the industry and the possibility for growth to decelerate once again over the next several years, which was one of the primary worries throughout this year. While the current quarter's results are a data point suggesting that growth can indeed reaccelerate into the mid-20% range, we are not convinced this type of growth can hold for several more years. As a result, our fair value estimate drops to $129 from $187, and we view shares as moderately overvalued following the after-hours pop.Third-quarter revenue came in at $942 million, growing 28% year over year and 8% sequentially. Product sales grew 29% year over year due to growing adoption of the firm's AI solutions, new data engineering features, and improving IT budget conditions, offsetting losses in storage revenue from Iceberg's adoption. In addition to strong customer acquisitions, the firm reported a solid net retention rate of 127%. This was the first time in several years that the metric did not decline sequentially, as Snowflake's cross-selling opportunities and customer base continue to mature. Remaining performance obligations were up 55% from the previous year as the firm continues to identify new workloads. We expect contributions from new products and some momentum in AI offerings to drive above-guidance near-term growth, but we remain wary of how long mid-20% growth can last.

Snowflake Earnings: Stable Buying Patterns With Consumption Trends Up; Shares Attractive Julie Bhusal Sharma,Equity Analyst,22 Aug 2024

We are maintaining our fair value estimate of $187 per share for no-moat Snowflake after it reported second-quarter earnings slightly above our expectations. It is showing all the right signs of healthy results in the near term and beyond. We were pleased that the firm signed two nine-figure deals in the quarter, indicating massive potential when other customers' workloads go into production. In addition, we continue to believe there is ample upside from our $187 fair value estimate, given the early seedlings of a network effect that we see in Snowflake's smaller data marketplace business.Despite the solid quarter and upped guidance, shares are down 8% upon results (from an already undervalued price)—likely influenced by overall concern that volatility in the firm's lock-in free consumption-based revenue model brought on by the weaker macroenvironment will have long-term implications. We see this concern in Berkshire Hathaway recently shedding Snowflake shares. We, however, think this makes for a ripe opportunity to buy this growthy stock. We continue to believe the market is significantly discounting Snowflake's potential by underestimating three key areas: datasphere (total data in existence) growth, how differentiated Snowflake's technology is, and the powerful potential of Snowflake's small but mighty data marketplace.Snowflake reported second-quarter revenue of $869 million, an increase of 29% year over year. Product sales boasted revenue of $829 million, representing a 30% year-over-year increase—which was above the high end of management's guide. Fortunately, the CrowdStrike outage had little effect on Snowflake consumption in the quarter, and consumption demand trended up while overall buying patterns became more predictable.

Snowflake Earnings: Revenue Moving in Right Direction, but Investment Needs Weigh on Margins

Eric Compton, CFA,Director,23 May 2024

No-moat-rated Snowflake reported a mixed bag for fiscal first-quarter earnings. Revenue growth was ahead of expectations, but updated full-year guidance showed expected margins moving in the wrong direction yet again. It was encouraging that management is now looking for 24% year-over-year growth in product revenue, slightly higher than the previous outlook of 22%. However, non-GAAP operating margins are now expected to be 3% for full-year results, compared with the previous outlook of 6% and actual results of 8% last year. With slightly higher growth but lower margins for the year roughly offsetting, we do not plan to change our long-term forecasts, and we maintain our fair value estimate of $187 per share.After a rough previous quarter, we sense Snowflake is starting to find some stability. Eventually, however, we will need to see some better margin realization and there is still some risk from decelerating revenue growth. This increases the downside risk if consumption and new workloads, hopefully driven by the company's new product launches, can't make up for some of the other headwinds. We estimate revenue growth will likely decelerate to a mid- to high-20% rate by the end of the year from over 30% recently. If that deceleration continues, there are risks to our fair value.We thought shares were mildly undervalued heading into today's earnings, and being up roughly 4% in after-hours trading, they would be within 10% of our fair value estimate. We continue to think that maintaining decent growth in the mid-20s after the current year and seeing margins go in the right direction will be key for Snowflake as it builds off current results.

Snowflake Earnings: Revenue Outlook Disappoints; New CEO Taking Over Eric Compton, CFA,Director,29 Feb 2024

No-moat-rated Snowflake reported decent fiscal fourth-quarter earnings. However, the company's outlook for fiscal 2025 was disappointing. This, combined with the surprise retirement of the company's CEO, Frank Slootman, created a challenging quarter for Snowflake, and investors are never thrilled with a surprise CEO succession. Slootman will be replaced by Sridhar Ramaswamy, who has only been with Snowflake since May 2023. As we factor in slower growth than we were previously expecting, driven by the disappointing outlook, we are lowering our fair value estimate to $187 from $231. We thought shares were fairly valued heading into today's earnings, and based on the drop in share price of roughly 20% afterhours, our updated fair value estimate implies shares are fairly valued once againQuarterly results weren't terrible, as Snowflake had a slight beat on revenue, 2% higher than our estimates and FactSet consensus. At the same time, adjusted earnings per share came in at over double FactSet consensus expectations. However, the company guided for fiscal 2025 growth of only 22% while consensus was looking for growth of closer to 30%, and our expectations were even higher than that. Maintaining their current growth momentum is key for a fast-expanding company like Snowflake. As we adjust our own forecasts, this slowdown in growth is particularly damaging to our valuation, where we

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had hoped for growth of over 30% for years to come. The company also pulled its longer-term guidance, which had previously gone out to 2029, again signaling that confidence in the outlook has weakened. A combination of lower storage pricing, increased use of iceberg tables, which allow more data to be stored outside of Snowflake environments, and lower consumption patterns are affecting results. For the company to bounce back, we think improved product consumption and Snowflake's ability to enhance products and drive new workload volumes will be essential.

Snowflake Earnings: Long-Term Upside Is Far From Melting; Shares Remain Undervalued Julie Bhusal Sharma,Equity Analyst,30 Nov 2023

Snowflake’s third quarter was a mixed one, in our view, as revenue came in above our expectations while the bottom line came in under, as we had rosier expectations than the market. Encouragingly though, full-year fiscal 2024 guidance was raised on the revenue and profitability front. Shares have popped 7% upon results, inching the stock somewhat closer to our $231 fair value estimate, while still leaving room for ample upside as the stock remains in 4-star territory. Overall, we can’t stress enough to investors that Snowflake is extremely well-positioned to benefit from a world that is rapidly collecting more data, which requires a place to live, but also a playground like Snowflake’s to work with such data so as to extract more value. While these are passive tailwinds, we think Snowflake’s technical expertise and execution will make it more than just a passive beneficiary in the data management software space. We still believe the name is a top pick under our technology coverage.Snowflake reported third-quarter revenue of $734 million and product sales of $699 million, growing by 32% and 34% year over year, respectively. Solid results had execution as well as a stabilizing macroeconomic environment to thank. Management noted that they hardly hear “AI” and “budget” in the same sentence and we think this leaves Snowflake in a sweet spot, with customers eager to be at the forefront of cutting-edge technology. We think this safeguards the uncertainty that can come with a consumption-based revenue model.Snowflake reported quarterly GAAP losses per share of $0.65 and non-GAAP earnings per share of $0.25. While we had rosier expectations for earnings than the market’s (which were beaten), we are unfazed as we keep our sights on the long term.

Snowflake Earnings: Stabilized Consumption, but Not Yet Recovery; Shares Attractive Julie Bhusal Sharma,Equity Analyst,24 Aug 2023

Snowflake’s second quarter was a solid one, as revenue came in line with our expectations and GAAP EPS was slightly below our forecast. However, we baked in rosier expectations on the top and bottom line than consensus. As a result, shares are up 3% upon results due to the bigger beat relative to consensus. While we have moderated our expectations for the remainder of the year as we bake in continued consumption stabilization as seen in the quarter, we think Snowflake will see top-line reacceleration next year—as several new offerings will be released soon (including containerized services). We are maintaining our fair value estimate of $231 per share for no-moat Snowflake and we

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believe ample upside is still very much on the table, making Snowflake a top pick in the technology sector, in our view. Altogether, we believe the market is significantly discounting Snowflake's potential by underestimating three key areas: datasphere (total data in existence) growth, how differentiated Snowflake's technology is, and the powerful potential of Snowflake's small but mighty data marketplace. We think Snowflake’s consumption model spooks the market but we think switching costs inherent in the data storage space don’t need a formal subscription model to reap value.Snowflake reported second-quarter revenue of $674 million, an increase of 36% year over year. Product sales boasted revenue of $640 million, representing a 37% year-over-year increase. GAAP losses per share were $0.69, slightly worse than our expectations. We like Snowflake’s approach of not undermining the potential of startup customers—which made up 20% of new customers landed in the quarter.

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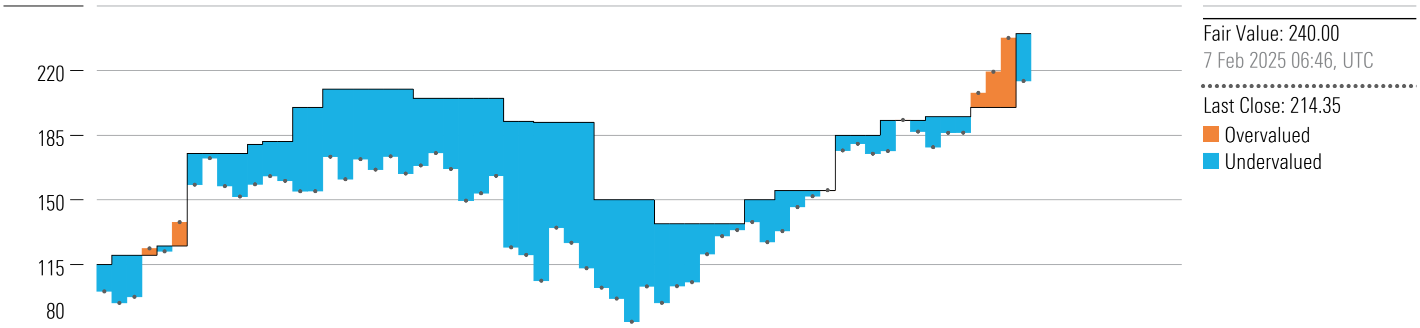
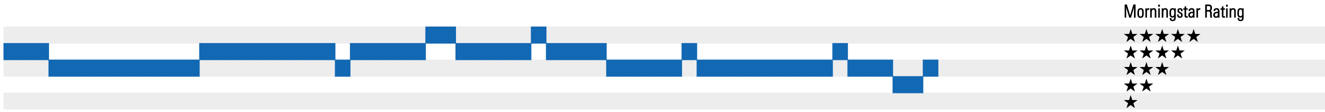
Competitors Price vs. Fair Value

Amazon.com Inc AMZN



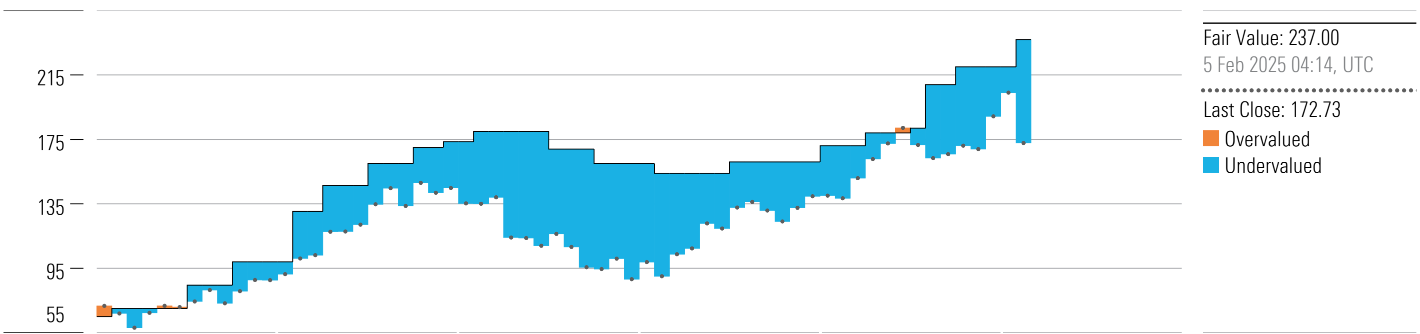
	2020	2021	2022	2023	2024	YTD
Price/Fair Value	0.90	0.81	0.56	0.98	1.10	0.89
Total Return %	76.26	2.38	-49.62	80.88	44.39	-2.30

Morningstar Rating



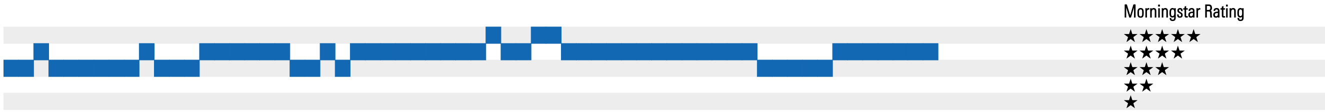
Total Return % as of 26 Feb 2025. Last Close as of 26 Feb 2025. Fair Value as of 7 Feb 2025 06:46, UTC.

Alphabet Inc Class A GOOGL



	2020	2021	2022	2023	2024	YTD
Price/Fair Value	0.89	0.83	0.55	0.87	0.86	0.73
Total Return %	30.85	65.30	-39.09	58.32	35.94	-8.75

Morningstar Rating



Total Return % as of 26 Feb 2025. Last Close as of 26 Feb 2025. Fair Value as of 5 Feb 2025 04:14, UTC.

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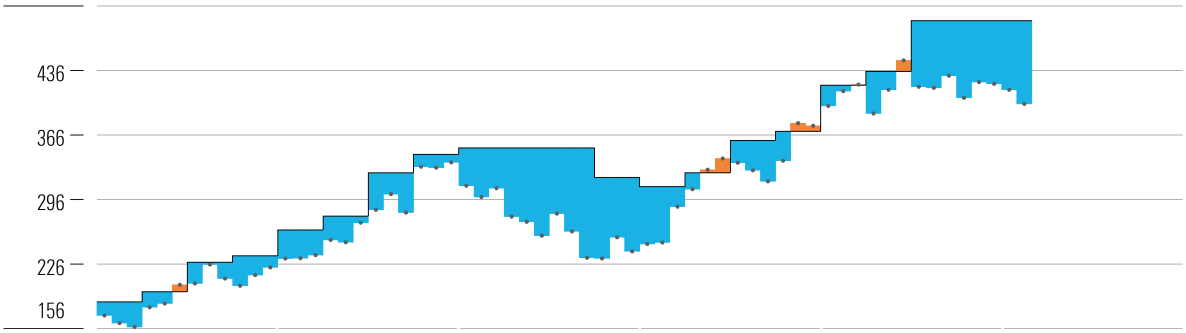
Snowflake Inc Ordinary Shares - Class A SNOW ★★★ 27 Feb 2025 05:14, UTC

Competitors Price vs. Fair Value

Microsoft Corp MSFT



Fair Value: 490.00
31 Jul 2024 06:07, UTC

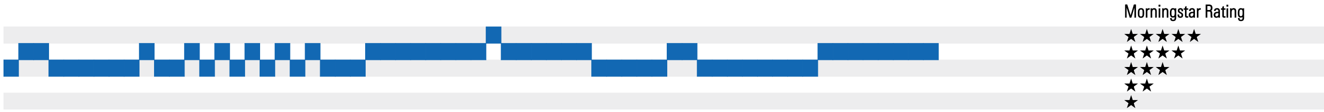
Last Close: 399.73

Overvalued

Undervalued

	2020	2021	2022	2023	2024	YTD
Price/Fair Value	0.95	0.97	0.75	1.02	0.86	0.82
Total Return %	42.37	52.24	-27.94	57.96	12.91	-4.97

Morningstar Rating



Total Return % as of 26 Feb 2025. Last Close as of 26 Feb 2025. Fair Value as of 31 Jul 2024 06:07, UTC.

Snowflake Inc Ordinary Shares - Class A SNOW ★★★ 27 Feb 2025 05:14, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
166.19 USD 26 Feb 2025	165.00 USD 27 Feb 2025 05:12, UTC	1.01	54.85 USD Bil 26 Feb 2025	None	Mid Growth	Very High	Standard	5 Feb 2025 06:00, UTC

Morningstar Historical Summary

Financials as of 31 Oct 2024

Fiscal Year, ends 31 Jan	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	YTD	TTM
Revenue (USD K)	—	—	—	—	96,666	264,748	592,049	1,219,327	2,065,659	2,806,489	2,639,626	3,414,325
Revenue Growth %	—	—	—	—	—	173	123	106	69.4	35.9	29.9	30.3
EBITDA (USD K)	—	—	—	—	-184,103	-354,566	-534,111	-693,538	-778,732	-974,870	-821,977	-1,206,752
EBITDA Margin %	—	—	—	—	-190	-133	-90.2	-56.9	-37.7	-34.7	-31.1	-35.3
Operating Income (USD K)	—	—	—	—	-185,465	-358,088	-543,937	-715,036	-842,267	-1,094,773	-1,069,332	-1,344,837
Operating Margin %	—	—	—	—	-191	-135	-91.9	-58.6	-40.8	-39.0	-40.5	-39.4
Net Income (USD K)	—	—	—	—	-178,028	-348,535	-539,102	-679,948	-796,705	-836,097	-958,166	-1,127,518
Net Margin %	—	—	—	—	-184	-131	-91.1	-55.8	-38.6	-29.8	-36.3	-33.0
Diluted Shares Outstanding (K)	—	—	—	—	238,370	238,370	141,613	300,273	318,730	328,001	333,136	332,630
Diluted Earnings Per Share (USD)	—	—	—	—	-0.75	-1.46	-3.81	-2.26	-2.50	-2.55	-2.88	-3.39
Dividends Per Share (USD)	—	—	—	—	—	—	—	—	—	—	—	—

Valuation as of 31 Jan 2025

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Recent Qtr	TTM
Price/Sales	—	—	—	—	—	163.9	97.1	24.3	24.8	15.0	15.0	17.7
Price/Earnings	—	—	—	—	—	-188.7	-166.7	-62.9	-74.1	-45.5	-45.5	-53.5
Price/Cash Flow	—	—	—	—	—	-714.3	2,000.0	111.1	90.1	58.8	58.8	69.4
Dividend Yield %	—	—	—	—	—	—	—	—	—	—	—	—
Price/Book	—	—	—	—	—	16.0	20.7	8.5	13.3	17.4	17.4	20.4
EV/EBITDA	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.1	0.0	0.0

Operating Performance / Profitability as of 31 Oct 2024

Fiscal Year, ends 31 Jan	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	YTD	TTM
ROA %	—	—	—	—	-23.3	-39.2	-15.6	-10.8	-11.1	-10.5	—	-14.6
ROE %	—	—	—	—	—	—	-24.6	-13.6	-15.2	-15.7	—	-28.7
ROIC %	—	—	—	—	—	—	-22.7	-13.2	-15.9	-18.5	—	-24.0
Asset Turnover	—	—	—	—	0.1	0.3	0.2	0.2	0.3	0.4	—	0.4

Financial Leverage

Fiscal Year, ends 31 Jan	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Recent Qtr	TTM
Debt/Capital %	—	—	—	—	—	—	3.6	3.5	4.0	4.7	46.6	—
Equity/Assets %	—	—	—	—	—	—	83.4	75.9	70.7	63.0	35.7	—
Total Debt/EBITDA	—	—	—	—	—	—	-0.4	-0.3	-0.3	-0.3	-3.2	—
EBITDA/Interest Expense	Infinite	Infinite	Infinite	Infinite	—	—	—	—	—	—	-1,193.2	—

Morningstar Analyst Historical/Forecast Summary as of 26 Feb 2025

Financials

Fiscal Year, ends 31 Jan 2025	2024	2025	Estimates 2026	2027	2028
Revenue (USD Mil)	2,806	3,626	4,464	5,532	6,885
Revenue Growth %	35.9	29.2	23.1	23.9	24.5
EBITDA (USD Mil)	-974	-1,261	-1,345	-1,295	-1,114
EBITDA Margin %	-34.7	-34.8	-30.1	-23.4	-16.2
Operating Income (USD Mil)	-1,095	-1,456	-1,422	-1,376	-1,202
Operating Margin %	-39.0	-40.2	-31.9	-24.9	-17.5
Net Income (USD Mil)	353	301	391	675	851
Net Margin %	12.6	8.3	8.8	12.2	12.4
Diluted Shares Outstanding (Mil)	328	333	374	387	400
Diluted Earnings Per Share(USD)	1.08	0.91	1.04	1.75	2.13
Dividends Per Share(USD)	0.00	0.00	0.00	0.00	0.00

Forward Valuation

	2024	2025	Estimates 2026	2027	2028
Price/Sales	18.0	18.0	12.3	9.9	8.0
Price/Earnings	181.1	199.5	159.8	95.0	78.0
Price/Cash Flow	—	—	—	—	—
Dividend Yield %	—	—	—	—	—
Price/Book	12.4	20.1	33.6	100.7	-162.9
EV/EBITDA	-48.2	-49.2	-39.3	-40.9	-47.5

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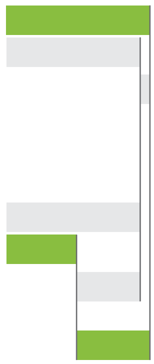
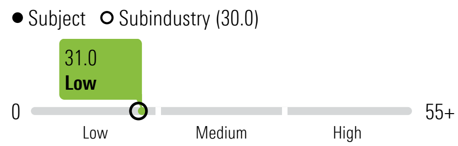
Snowflake Inc Ordinary Shares - Class A SNOW ★★★ 27 Feb 2025 05:14, UTC

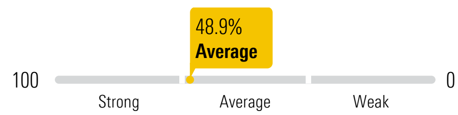
Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
166.19 USD 26 Feb 2025	165.00 USD 27 Feb 2025 05:12, UTC	1.01	54.85 USD Bil 26 Feb 2025	None	Mid Growth	Very High	Standard	5 Feb 2025 06:00, UTC

ESG Risk Rating Breakdown

Exposure	
Company Exposure[1]	31.0
– Manageable Risk	28.9
Unmanageable Risk[2]	**2.1**
Management	
Manageable Risk	28.9
– Managed Risk[3]	14.1
Management Gap[4]	**14.8**
Overall Unmanaged Risk	**16.9**







- Exposure represents a company's vulnerability to ESG risks driven by their business model
- Exposure is assessed at the Subindustry level and then specified at the company level
- Scoring ranges from 0-55+ with categories of low, medium, and high-risk exposure

- Management measures a company's ability to manage ESG risks through its commitments and actions
- Management assesses a company's efficiency on ESG programs, practices, and policies
- Management score ranges from 0-100% showing how much manageable risk a company is managing

ESG Risk Rating

ESG Risk Ratings measure the degree to which a company's value is impacted by environmental, social, and governance risks, by evaluating the company's ability to manage the ESG risks it faces.

1. A company's Exposure to material ESG issues 2. Unmanageable Risk refers to risks that are inherent to a particular business model that cannot be managed by programs or initiatives 3. Managed Risk = Manageable Risk multiplied by a Management score of 48.9% 4. Management Gap assesses risks that are not managed, but are considered manageable 5. ESG Risk Rating Assessment = Overall Unmanaged Risk = Management Gap plus Unmanageable Risk

ESG Risk Rating Assessment[5]

ESG Risk Rating is of Feb 05, 2025. Highest Controversy Level is as of Feb 08, 2025. Sustainalytics Subindustry: Enterprise and Infrastructure Software. Sustainalytics provides Morningstar with company ESG ratings and metrics on a monthly basis and as such, the ratings in Morningstar may not necessarily reflect current Sustainalytics' scores for the company. For the most up to date rating and more information, please visit: sustainalytics.com/esg-ratings/.

Peer Analysis 05 Feb 2025

Peers are selected from the company's Sustainalytics-defined Subindustry and are displayed based on the closest market cap values

Company Name	Exposure			Management			ESG Risk Rating		
Snowflake Inc	31.0 | Low	0	55+	48.9 | Average	100	0	16.9 | Low	0	40+
Alphabet Inc	44.1 | Medium	0	55+	46.8 | Average	100	0	24.9 | Medium	0	40+
Microsoft Corp	33.6 | Low	0	55+	64.3 | Strong	100	0	13.5 | Low	0	40+
Amazon.com Inc	39.2 | Medium	0	55+	36.4 | Average	100	0	26.1 | Medium	0	40+
Oracle Corp	34.0 | Low	0	55+	60.2 | Strong	100	0	14.9 | Low	0	40+

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Appendix
Historical Morningstar Rating

Snowflake Inc Ordinary Shares - Class A SNOW 26 Feb 2025 22:47, UTC

Dec 2025 —	Nov 2025 —	Oct 2025 —	Sep 2025 —	Aug 2025 —	Jul 2025 —	Jun 2025 —	May 2025 —	Apr 2025 —	Mar 2025 —	Feb 2025 ★★	Jan 2025 ★★
Dec 2024 ★★★	Nov 2024 ★★	Oct 2024 ★★★★	Sep 2024 ★★★★	Aug 2024 ★★★★	Jul 2024 ★★★★	Jun 2024 ★★★★	May 2024 ★★★★	Apr 2024 ★★★	Mar 2024 ★★★	Feb 2024 ★★★	Jan 2024 ★★★
Dec 2023 ★★★	Nov 2023 ★★★★	Oct 2023 ★★★★	Sep 2023 ★★★★	Aug 2023 ★★★★	Jul 2023 ★★★★	Jun 2023 ★★★★	May 2023 ★★★★	Apr 2023 ★★★★	Mar 2023 ★★★★	Feb 2023 ★★★★	Jan 2023 ★★★★
Dec 2022 ★★★★★	Nov 2022 ★★★★★	Oct 2022 ★★★★	Sep 2022 ★★★★	Aug 2022 ★★★★	Jul 2022 ★★★★★	Jun 2022 ★★★★★	May 2022 ★★★★★	Apr 2022 ★★★★	Mar 2022 ★★★★	Feb 2022 ★★★	Jan 2022 ★★★
Dec 2021 ★★★	Nov 2021 ★★★	Oct 2021 ★★	Sep 2021 ★★	Aug 2021 ★★	Jul 2021 ★★	Jun 2021 ★★★	May 2021 ★★★	Apr 2021 ★★★	Mar 2021 ★★★	Feb 2021 ★★	Jan 2021 —
Dec 2020 —	Nov 2020 —	Oct 2020 —	Sep 2020 —	Aug 2020 —	Jul 2020 —	Jun 2020 —	May 2020 —	Apr 2020 —	Mar 2020 —	Feb 2020 —	Jan 2020 —

Amazon.com Inc AMZN 26 Feb 2025 22:27, UTC

Dec 2025 —	Nov 2025 —	Oct 2025 —	Sep 2025 —	Aug 2025 —	Jul 2025 —	Jun 2025 —	May 2025 —	Apr 2025 —	Mar 2025 —	Feb 2025 ★★★	Jan 2025 ★★
Dec 2024 ★★	Nov 2024 ★★★	Oct 2024 ★★★	Sep 2024 ★★★	Aug 2024 ★★★★	Jul 2024 ★★★	Jun 2024 ★★★	May 2024 ★★★	Apr 2024 ★★★	Mar 2024 ★★★	Feb 2024 ★★★	Jan 2024 ★★★
Dec 2023 ★★★	Nov 2023 ★★★	Oct 2023 ★★★★	Sep 2023 ★★★	Aug 2023 ★★★	Jul 2023 ★★★	Jun 2023 ★★★	May 2023 ★★★	Apr 2023 ★★★★	Mar 2023 ★★★★	Feb 2023 ★★★★	Jan 2023 ★★★★
Dec 2022 ★★★★★	Nov 2022 ★★★★	Oct 2022 ★★★★	Sep 2022 ★★★★	Aug 2022 ★★★★	Jul 2022 ★★★★	Jun 2022 ★★★★★	May 2022 ★★★★★	Apr 2022 ★★★★	Mar 2022 ★★★★	Feb 2022 ★★★★	Jan 2022 ★★★★
Dec 2021 ★★★★	Nov 2021 ★★★	Oct 2021 ★★★★	Sep 2021 ★★★★	Aug 2021 ★★★★	Jul 2021 ★★★★	Jun 2021 ★★★★	May 2021 ★★★★	Apr 2021 ★★★★	Mar 2021 ★★★★	Feb 2021 ★★★★	Jan 2021 ★★★
Dec 2020 ★★★	Nov 2020 ★★★	Oct 2020 ★★★	Sep 2020 ★★★	Aug 2020 ★★★	Jul 2020 ★★★	Jun 2020 ★★★	May 2020 ★★★	Apr 2020 ★★★	Mar 2020 ★★★★	Feb 2020 ★★★★	Jan 2020 ★★★★

Alphabet Inc Class A GOOGL 26 Feb 2025 22:29, UTC

Dec 2025 —	Nov 2025 —	Oct 2025 —	Sep 2025 —	Aug 2025 —	Jul 2025 —	Jun 2025 —	May 2025 —	Apr 2025 —	Mar 2025 —	Feb 2025 ★★★★	Jan 2025 ★★★★
Dec 2024 ★★★★	Nov 2024 ★★★★	Oct 2024 ★★★★	Sep 2024 ★★★★	Aug 2024 ★★★★	Jul 2024 ★★★	Jun 2024 ★★★	May 2024 ★★★	Apr 2024 ★★★	Mar 2024 ★★★	Feb 2024 ★★★★	Jan 2024 ★★★★
Dec 2023 ★★★★	Nov 2023 ★★★★	Oct 2023 ★★★★	Sep 2023 ★★★★	Aug 2023 ★★★★	Jul 2023 ★★★★	Jun 2023 ★★★★	May 2023 ★★★★	Apr 2023 ★★★★	Mar 2023 ★★★★	Feb 2023 ★★★★	Jan 2023 ★★★★★
Dec 2022 ★★★★★	Nov 2022 ★★★★	Oct 2022 ★★★★	Sep 2022 ★★★★★	Aug 2022 ★★★★	Jul 2022 ★★★★	Jun 2022 ★★★★	May 2022 ★★★★	Apr 2022 ★★★★	Mar 2022 ★★★★	Feb 2022 ★★★★	Jan 2022 ★★★★
Dec 2021 ★★★★	Nov 2021 ★★★	Oct 2021 ★★★★	Sep 2021 ★★★	Aug 2021 ★★★	Jul 2021 ★★★★	Jun 2021 ★★★★	May 2021 ★★★★	Apr 2021 ★★★★	Mar 2021 ★★★★	Feb 2021 ★★★★	Jan 2021 ★★★
Dec 2020 ★★★	Nov 2020 ★★★	Oct 2020 ★★★★	Sep 2020 ★★★	Aug 2020 ★★★	Jul 2020 ★★★	Jun 2020 ★★★	May 2020 ★★★	Apr 2020 ★★★	Mar 2020 ★★★★	Feb 2020 ★★★	Jan 2020 ★★★

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Dec 2025	Nov 2025	Oct 2025	Sep 2025	Aug 2025	Jul 2025	Jun 2025	May 2025	Apr 2025	Mar 2025	Feb 2025	Jan 2025
—	—	—	—	—	—	—	—	—	—	★★★★	★★★★
Dec 2024	Nov 2024	Oct 2024	Sep 2024	Aug 2024	Jul 2024	Jun 2024	May 2024	Apr 2024	Mar 2024	Feb 2024	Jan 2024
★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★	★★★	★★★	★★★	★★★	★★★
Dec 2023	Nov 2023	Oct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
★★★	★★★	★★★★	★★★★	★★★	★★★	★★★	★★★	★★★	★★★★	★★★★	★★★★
Dec 2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022
★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Dec 2021	Nov 2021	Oct 2021	Sep 2021	Aug 2021	Jul 2021	Jun 2021	May 2021	Apr 2021	Mar 2021	Feb 2021	Jan 2021
★★★	★★★	★★★	★★★★	★★★	★★★★	★★★	★★★★	★★★	★★★★	★★★	★★★★
Dec 2020	Nov 2020	Oct 2020	Sep 2020	Aug 2020	Jul 2020	Jun 2020	May 2020	Apr 2020	Mar 2020	Feb 2020	Jan 2020
★★★	★★★	★★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★★	★★★★	★★★

Research Methodology for Valuing Companies

Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, indepth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss shortterm market-price movements), but we believe these negatives are mitigated by deep analysis and our longterm approach.

Morningstar's equity research group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-star stocks sell for the biggest risk adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's fair value, (3) our uncertainty around that fair value estimate and (4) the current market price. This process ultimately culminates in our singlepoint star rating.

1. Economic Moat

The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Companies with a narrow moat are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, no-moat companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats.

When considering a company's moat, we also assess whether there is a substantial threat of value destruction, stemming from risks related to ESG, industry disruption, financial health, or other idiosyncratic issues. In this context, a risk is considered potentially value destructive if its occurrence would eliminate a firm's economic profit on a cumulative or midcycle basis. If we deem the probability of occurrence sufficiently high, we would not characterize the company as possessing an economic moat.

2. Estimated Fair Value

Combining our analysts' financial forecasts with the firm's economic moat helps us assess how long returns on invested capital are likely to exceed the firm's cost of capital. Returns of firms with a wide economic moat rating are assumed to fade to the perpetuity period over a longer period of time than the returns of narrow-moat firms, and both will fade slower than no-moat firms, increasing our estimate of their intrinsic value.

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

In this stage, which can last five to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in workingcapital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes (EBI) and the net new investment (NNI) to derive our annual free cash flow forecast.

Stage II: Fade

The second stage of our model is the period it will take the company's return on new invested capital—the return on capital of the next dollar invested ("RONIC")—to decline (or rise) to its cost of capital. During the Stage II period, we use a formula to approximate cash flows in lieu of explicitly modeling the income statement, balance sheet, and cash flow statement as we do in Stage I. The length of the second stage depends on the strength of the company's economic moat. We forecast this period to last anywhere from one year (for companies with no economic moat) to 10–15 years or more (for wide-moat companies). During this period, cash flows are forecast using four assumptions: an average growth rate for EBI over the period, a normalized investment rate, average return on new invested capital (RONIC), and the number of years until perpetuity, when excess returns cease. The investment rate and return on new invested capital decline until a perpetuity value is calculated. In the case of firms that do not earn their cost of capital, we assume marginal ROICs rise to the firm's cost of capital (usually attributable to less reinvestment), and we may truncate the second stage.

Stage III: Perpetuity

Once a company's marginal ROIC hits its cost of capital, we calculate a continuing value, using a standard perpetuity formula. At perpetuity, we assume that any growth or decline or investment in the business neither creates nor destroys value and that any new investment provides a return in line with estimated WACC.

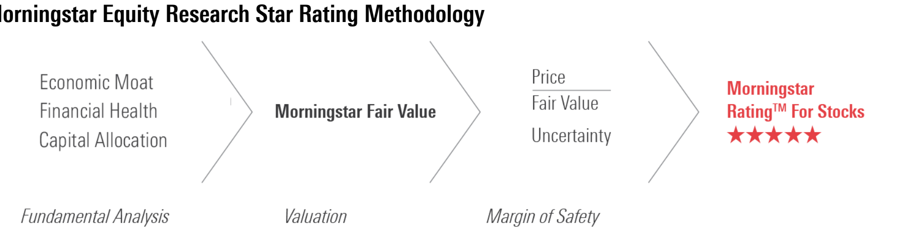
Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return to all capital providers—we discount future cash flows using the WACC, which is a weighted average of the costs of equity, debt, and preferred stock (and any other funding sources), using expected future proportionate long-term, market-value weights.

3. Uncertainty Around That Fair Value Estimate

Morningstar's Uncertainty Rating is designed to capture the range of potential outcomes for a company's intrinsic value. This rating is used to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating is aimed at identifying the confidence we should have in assigning a fair value estimate for a given stock.

Our Uncertainty Rating is meant to take into account anything that can increase the potential dispersion of future outcomes for the intrinsic value of a company, and any-

Morningstar Equity Research Star Rating Methodology



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Research Methodology for Valuing Companies

thing that can affect our ability to accurately predict these outcomes. The rating begins with a suggested rating produced by a quantitative process based on the trailing 12-month standard deviation of daily stock returns. An analyst overlay is then applied, with analysts using the suggested rating, historical rating data, and their own knowledge of the company to inform them as they make the final Uncertainty Rating decision. Ultimately, the rating decision rests with the analyst. Analysts take into account many characteristics when making their final decision, including cyclical factors, operational and financial factors such as leverage, company-specific events, ESG risks, and anything else that might increase the potential dispersion of future outcomes and our ability to estimate those outcomes.

Our recommended margin of safety—the discount to fair value demanded before we'd recommend buying or selling the stock—widens as our uncertainty of the estimated value of the equity increases. The more uncertain we are about the potential dispersion of outcomes, the greater the discount we require relative to our estimate of the value of the firm before we would recommend the purchase of the shares. In addition, the Uncertainty Rating provides guidance in portfolio construction based on risk tolerance.

Our Uncertainty Ratings are: Low, Medium, High, Very High, and Extreme.

Qualitative Analysis Uncertainty Ratings	Margin of Safety ★★★★★Rating	★Rating
Low	20% Discount	25% Premium
Medium	30% Discount	35% Premium
High	40% Discount	55% Premium
Very High	50% Discount	75% Premium
Extreme	75% Discount	300% Premium

Our uncertainty rating is based on the interquartile range, or the middle 50% of potential outcomes, covering the 25th percentile–75th percentile. This means that when a stock hits 5 stars, we expect there is a 75% chance that the intrinsic value of that stock lies above the current market price. Similarly, when a stock hits 1 star, we expect there is a 75% chance that the intrinsic value of that stock lies below the current market price.

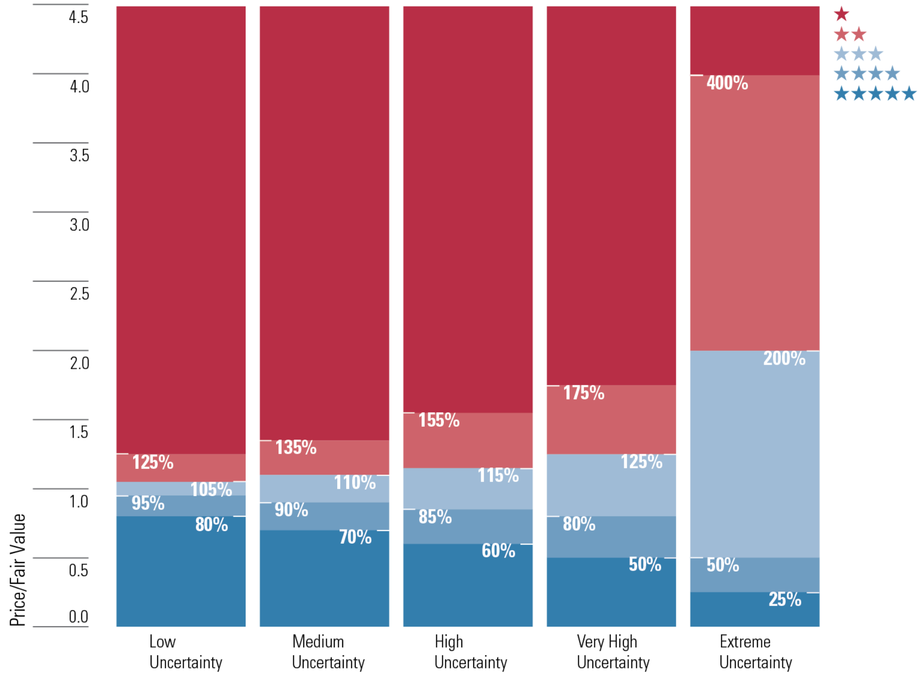
4. Market Price

The market prices used in this analysis and noted in the report come from exchange on which the stock is listed which we believe is a reliable source.

For more details about our methodology, please go to https://shareholders.morningstar.com

Morningstar Star Rating for Stocks

Morningstar Equity Research Star Rating Methodology



Once we determine the fair value estimate of a stock, we compare it with the stock's current market price on a daily basis, and the star rating is automatically re-calculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close tabs on the companies they follow, and, based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted.

Please note, there is no predefined distribution of stars. That is, the percentage of stocks that earn 5 stars can fluctuate daily, so the star ratings, in the aggregate, can serve as a gauge of the broader market's valuation. When there are many 5-star stocks, the stock market as a whole is more undervalued, in our opinion, than when very few companies garner our highest rating.

We expect that if our base-case assumptions are true the market price will converge on our fair value estimate over time generally within three years (although it is impossible to predict the exact time frame in which market prices may adjust).

Our star ratings are guideposts to a broad audience and individuals must consider their own specific investment goals, risk tolerance, tax situation, time horizon, income needs, and complete investment portfolio, among other factors.

The Morningstar Star Ratings for stocks are defined below:

★★★★★ We believe appreciation beyond a fair risk adjusted return is highly likely over a multiyear time frame. Scenario analysis developed by our analysts indicates that the current market price represents an excessively pessimistic outlook, limiting downside risk and maximizing upside potential.

★★★★ We believe appreciation beyond a fair risk-adjusted return is likely.

★★★ Indicates our belief that investors are likely to receive a fair risk-adjusted return (approximately cost of equity).

★★ We believe investors are likely to receive a less than fair risk-adjusted return.

★ Indicates a high probability of undesirable risk-adjusted returns from the current market price over a multiyear time frame, based on our analysis. Scenario analysis by our analysts indicates that the market is pricing in an excessively optimistic outlook, limiting upside potential and leaving the investor exposed to Capital loss.

Other Definitions

Last Price: Price of the stock as of the close of the market of the last trading day before date of the report.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments, and shareholder distributions. Analysts consider compan-

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ies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exemplary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

Capital Allocation (or Stewardship) analysis published prior to Dec. 9, 2020, was determined using a different process. Beyond investment strategy, financial leverage, and dividend and share buyback policies, analysts also considered execution, compensation, related party transactions, and accounting practices in the rating.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments, and shareholder distributions. Analysts consider companies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exemplary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

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Sustainalytics ESG Risk Rating Assessment: The ESG Risk Rating Assessment is provided by Sustainalytics; a Morningstar company.

Sustainalytics' ESG Risk Ratings measure the degree to which company's economic value at risk is driven by environment, social and governance (ESG) factors.

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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