

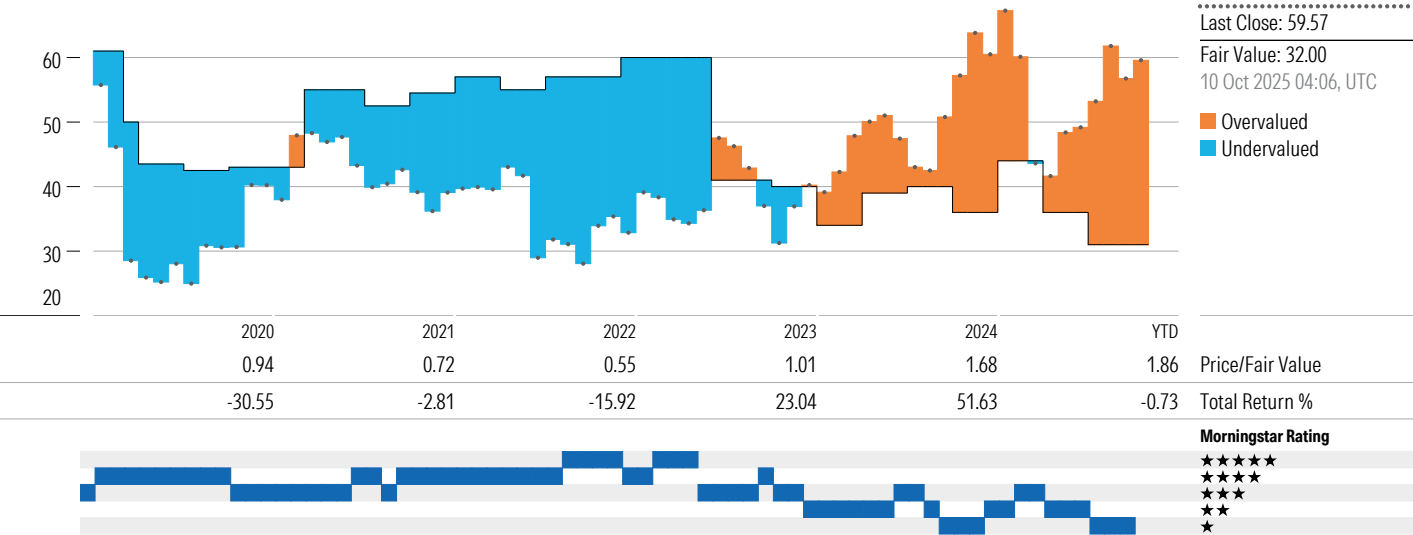
Delta Air Lines Inc

DAL★

10 Oct 2025 04:08, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
59.57 USD 9 Oct 2025	32.00 USD 10 Oct 2025 04:06, UTC	1.86	38.90 USD Bil 9 Oct 2025	None	Mid Value	Very High	Standard	 3 Sep 2025 05:00, UTC

Price vs. Fair Value



Total Return % as of 09 Oct 2025. Last Close as of 09 Oct 2025. Fair Value as of 10 Oct 2025 04:06, UTC.

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The primary analyst covering this company does not own its stock.

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

Delta Air Lines Earnings: Premium Travel Rebounded Since the Spring Swoon; Shares Still Overvalued

Analyst Note Nicolas Owens, Equity Analyst, 10 Oct 2025

Delta earned 21% more operating profit on 6% more revenue and 4% more capacity in the third quarter, compared with 2024. Salaries increased 5% since last year, while fuel expenses were 6% lower. Delta's premium cabin sales increased 9% versus 2024, offset by a 4% decline in economy seating revenue.

Why it matters: Delta's industry-leading segmentation of its travel offerings allows it to outearn peers and command an outsize share of industry profits. Its fortunes are tied to continued demand for premium travel experiences from well-heeled consumers.


- Travel demand so far in 2025 closely resembles overall volume in the same period of 2024, though Delta's sales of premium tickets outpaced those of its economy offering.
- Market worries about a recession resulting from April's announcements of new tariff policies have all but disappeared as the summer travel season shaped up to closely match last year's record travel pace.

The bottom line: We have increased our fair value estimate for no-moat Delta's shares to \$32 from \$31, reflecting a few offsetting adjustments to our forecast, including the time value of money, which added \$1.

- Upping our oil price forecast to \$60 per barrel nearly halved our fair value estimate, but because airlines pass fuel cost on to passengers, we forecast offsetting gains in yield, and we adjusted the

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Sector

 Industrials

Industry

Airlines

firm's cost of debt to more closely reflect market conditions, lowering our weighted average cost of capital to 8.1% from 9%.

Business Description

Atlanta-based Delta Air Lines is one of the world's largest airlines, with a network of over 300 destinations in more than 50 countries. Delta operates a hub-and-spoke network, where it gathers and distributes passengers across the globe through its biggest hubs in Atlanta, New York, Salt Lake City, Detroit, Seattle, and Minneapolis-St. Paul. Delta has historically earned most of its international revenue and profits from flying passengers over the Atlantic Ocean.

► Even with our forecast of nearly \$9.5 billion of EBITDAR in 2025, Delta's shares seem overvalued as we do not anticipate market conditions will allow the airline to maintain such outside profits indefinitely.

Business Strategy & Outlook Nicolas Owens, Equity Analyst, 10 Oct 2025

Delta Air Lines positions itself as a premium airline, with the highest revenue yield and among the highest costs per seat mile in the North American market. Even in the relatively harmonious 2015-19 period after the airline industry consolidated and fuel costs fell, Delta's industry-leading operating margins declined due to increased fuel, labor, and depreciation expense on almost flat capacity. While we believe Delta will continue to garner premium revenue yields, we see the spread between those yields and its overall costs more closely resembling the industry's in the long term, especially as postpandemic supply and demand return to some kind of equilibrium.

A pillar of full-service airlines' strategy before the pandemic was price discrimination between so-called business and leisure travelers. More-frequent and shorter-stay travelers who booked through their employers' corporate travel agency got marginal bulk discounts for the highest-priced last-minute fares and premium seats. The pandemic scrambled this formula as travel habits rapidly evolved and the reality dawned that business and leisure travelers can be the same person. Airlines are finding new ways to attract and reward brand-loyal travelers willing to pay up for a more comfortable travel experience.

Our outlook for US airlines remains quite rosy in the near term, but these companies are acutely governed by the laws of gravity and economics. Since travel restrictions lifted in 2022, demand rebounded more quickly than airlines' capacity to meet it, constrained by shortages of planes, pilots, and other crew. As a result, airlines have recorded record revenue and profits. These conditions functioned as a boon to the whole industry, but we believe they began to even out in mid-2024. As they do, we forecast a return to more-normalized operating conditions, which will erode airline profitability. When airplanes and personnel are no longer a constraint, we expect the incremental incentives that airlines constantly operate under to return to the fore, leading to competition over prices and market share anywhere their route maps overlap, which is almost everywhere.

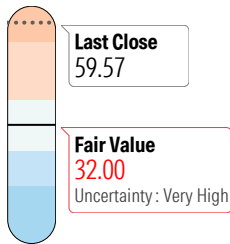
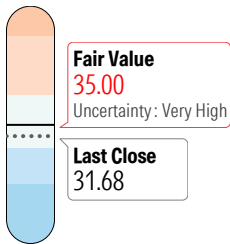
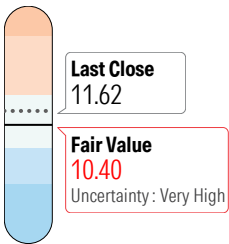
Bulls Say Nicolas Owens, Equity Analyst, 10 Oct 2025

- The strategy of providing premium travel experiences has resonated with customers, and Delta generally earns a unit revenue premium relative to peers.
- Delta has the largest frequent-flyer program of the US-based network carriers. These frequent-flyer programs bring in high-margin advances on revenue from banks to fund mileage rewards.
- Airport throughput has begun to lap prepandemic levels in almost every segment amid robust leisure

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Competitors

	Delta Air Lines Inc DAL	Southwest Airlines Co LUV	American Airlines Group Inc AAL
			
Economic Moat	None	None	None
Currency	USD	USD	USD
Fair Value	32.00 10 Oct 2025 04:06, UTC	35.00 24 Jul 2025 20:04, UTC	10.40 25 Jul 2025 22:07, UTC
1-Star Price	56.00	61.25	18.20
5-Star Price	16.00	17.50	5.20
Assessment	Overvalued 9 Oct 2025	Fairly Valued 9 Oct 2025	Fairly Valued 9 Oct 2025
Morningstar Rating	★ 10 Oct 2025 04:08, UTC	★★★ 9 Oct 2025 21:32, UTC	★★★ 9 Oct 2025 21:43, UTC
Analyst	Nicolas Owens, Equity Analyst	Nicolas Owens, Equity Analyst	Nicolas Owens, Equity Analyst
Capital Allocation	Standard	Standard	Standard
Price/Fair Value	1.86	0.91	1.12
Price/Sales	0.62	0.70	0.15
Price/Book	2.07	2.26	—
Price/Earning	9.60	32.33	7.35
Dividend Yield	1.07%	2.27%	0.00%
Market Cap	38.90 Bil	16.64 Bil	7.67 Bil
52-Week Range	34.74—69.98	23.82—37.96	8.50—19.10
Investment Style	Mid Value	Mid Blend	Small Value

demand and recovering business and international travel.

Bears Say Nicolas Owens, Equity Analyst, 10 Oct 2025

- Business travel recoveries tend to lag economic recoveries, and Delta has high and evolving exposure to the business travel market.
- Amid very strong demand and constrained capacity, Delta may be the first US airline to face challenges delivering on its premium promise in overcrowded cabins and lounges.
- Delta has the most to lose if a financially distressed rival were to lower prices to compete for passengers.

Economic Moat Nicolas Owens, Equity Analyst, 10 Oct 2025

Airlines rent out seats by the hour on aircraft designed to fly for decades, and their operations and financial results are subject to fluctuations beyond their control, including ticket prices, fuel costs, labor

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costs, weather, and seasonal variation in people's travel plans. The airline business is highly price-competitive, capital-intensive, and labor-intensive, all of which makes it difficult for an airline to generate any profit beyond its cost of capital. Industry group IATA estimated in 2018 that return on invested capital had only approached the industry's cost of capital once in the preceding two decades, never exceeding it. Our own modeling reflects the same reality. We conclude that Delta Air Lines does not have an economic moat.

What's more, the industry has been pummeled by three of the most severe global macroeconomic events of the last two decades: the terrorist attacks on Sept. 11, 2001, two global pandemics (SARS and SARS-Cov-2), and the Great Recession of 2007-08. In each case, air carriers experienced drastic and systemic disruptions to their operations, staffing, and financial viability, including bankruptcies and increased leverage. Similar macroeconomic events are likely to recur in the foreseeable future, and investors in airlines risk permanent capital loss in such a situation.

Airlines hire and train thousands of people with specialized skills, including ground crews, technicians, and air crews. They tend to plan their routes from a few months to a year in advance, and we observe that their costs for salaries, wages, and benefits usually total between one fourth and one third of revenue and tend to grow in tandem with their overall route capacity (measured as available seat miles, or ASMs). In the short term, these costs are fixed, even though they flex with capacity in the medium and longer term. Embedded in the cost of doing business as an airline, and exacerbating the challenge of staffing, is the strong seasonality of travel—over the last 20 years, US carriers have collectively faced a 30% January-to-June spike in monthly demand (one could also see that as a 23% June-to-January slump), measured as aggregate monthly revenue passenger miles. International demand is even more volatile and brings extra competition from non-US carriers.

The most volatile expense an airline experiences is for fuel. Although the amount of fuel required to power a given aircraft on its daily routes is known to the gallon (or by weight at takeoff), the price the airline will have to pay for it can vary widely over a year, seasonally, and even regionally. Airlines were paying more than \$3 per gallon of jet fuel (kerosene) in 2011, and fuel prices spiked in the 2022 aftermath of postpandemic supply shortages as well as macroeconomic stress on the energy market caused by Russia's invasion of Ukraine. During 2011-15, jet fuel prices stayed over \$2 per gallon, and airline industry ticket prices (termed yield and measured as cents per passenger mile) approached \$0.25 in the period. When jet fuel prices fell in 2016, airline yields did, too. The most important point about fuel prices is that each airline experiences them more or less the same way—they are a commodity. Airlines have shown they can pass this element of their costs on to customers by charging more per mile when fuel prices are high. Over the long term, airline CPI, a measure of inflation, has been remarkably stable, notwithstanding a bit of a bump in 2022-23, which reflected the spike in fuel prices that we do not believe will persist as competition heats up again.

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The most costly competition airlines engage in is for aircraft. Every handful of years, Boeing and Airbus offer a new model of aircraft that can fly a bit farther or carry a few more passengers on almost the same amount of fuel. We observe a steady increase in the available seat miles per gallon consumed across all airlines as they consistently upgrade their fleets. The major US carriers—Delta, United, and American—were able to fly an average airplane seat about 60 miles on a gallon of fuel in 2012; they were approaching 70 ASMs per gallon in 2023. Southwest, which flies only variants of the narrow-body 737, went from 70 ASMs per gallon a decade ago to approaching 80 in 2023. While this trend reflects ongoing improvements in engine efficiency, wing, and fuselage design, it also represents a competitive ratchet that no airline can afford to ignore: Multiplied over many hundreds of millions of seat miles per year, even a small difference in fleet efficiency would represent a structural disadvantage for an airline competing on the same routes. Thus, airlines constantly refresh their fleets to stay competitive. New seats, bigger luggage trays, and the like are a side benefit of new planes that also may augment an airline's brand perception for a short time.

Major US carriers partner with a credit card-issuing bank to promote loyalty programs that feature their frequent-flyer miles. For some, these programs, in which the bank pays the airline more for the miles up front than they are technically worth to redeem, represent the lion's share of ongoing operating profit. We do not see these programs as changing the competitive dynamic or structural profitability of the airline. The airlines have just time-shifted when they experience the profit of serving one of their most loyal customer segments, in many cases redeeming miles for services such as baggage allowance, priority boarding, and lounge access, which cost incrementally very little to provide over and above the actual cost of the flight.

Airlines provide invaluable service to their customers and communities, often stimulating the economies of those destinations they connect into the global travel network. However, investors in airlines are flying on a wing and a prayer, as we see no prospect for durable economic profit in this industry. Instead, Airbus and Boeing, the duopoly of airframe suppliers, as well as jet engine manufacturers GE Aerospace, Safran, and Pratt & Whitney, reap the economic reward from providing successively more efficient, powerful aircraft, which airlines line up to buy or rent so their service and cost profile can keep up with competing carriers.

Fair Value and Profit Drivers Nicolas Owens, Equity Analyst, 10 Oct 2025

Our fair value estimate is \$32 per share, which represents an enterprise value multiple of 3.7 times our 2026 EBITDAR estimate. We increased our fair value estimate for no-moat Delta's shares from \$31, reflecting a few offsetting adjustments to our forecast, including time value of money, which added \$1.

We forecast continued single-digit revenue growth with a return to more normal industry operating conditions and as consumers slake pent-up demand for travel. Delta surpassed 2019 levels of capacity

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in 2024, and we expect revenue passenger miles will be approximately 22% higher in 2029, our midcycle year, than in 2019.

Over the near term, we expect strong domestic leisure travel, continued business travel recovery, and increasing international travel, though these will not grow as rapidly as they did emerging from the pandemic.

Delta's five-cabin segmentation strategy sets it apart from peers; it gives customers more options to pay up for premium experiences (whether with miles, dollars, or their flyer status) and the airline more opportunity to monetize its capital investments. Delta commanded an industry-leading \$0.0409 spread between its passenger revenue and structural costs per mile over 2015-19. But load factors in the high 80s mean the front two cabins may be perennially booked, leaving fewer opportunities to trade miles for perks. Without enough fully reclining seats or lounge passes to go around, and a functionally equivalent experience available on another carrier, Delta wouldn't be able to continue to maximize its spread to the same degree, in our view. We forecast this metric converging closer to peers in the next five years, trending below \$0.02.

Our average forecast operating margin for Delta is 8.3%, or 440 basis points below its 2017-19 average. We no longer see evidence that pandemic-related restructuring has generated labor efficiencies at Delta, nor do we believe that the airline or its peers will benefit from elevated yields indefinitely. In fact, we observe airlines adding unit costs as they rehire necessary crew and renegotiate labor agreements. We forecast \$0.045 more in structural costs per available seat mile in Delta's midterm future than in 2017-19, albeit with passenger revenue yields remaining about \$0.02 above 2019 highs.

We expect capital expenditure will be shy of \$5 billion in 2025 and will average around \$4 billion per year over our forecast period. We think this elevated capital expenditure is reasonable relative to historical levels as Delta has orders to replace much of its fleet and deferred capital expenditures during the pandemic.

We think an above-average cost of equity and cost of debt are reasonable for this airline, which leads us to a 8.1% weighted average cost of capital.

Risk and Uncertainty Nicolas Owens, Equity Analyst, 10 Oct 2025

Our Morningstar Uncertainty Rating for Delta Air Lines is Very High. Airlines are exposed to geopolitical risks throughout their networks, commodity price risk from the oil market, risk of irrational competition, ongoing and occasionally severe operational disruption due to weather, and cyclical risk because demand for air travel is sensitive to overall economic activity. The geopolitical risk is broad, as unpredictable events such as wars, pandemics, international tension, and natural disasters often affect travel.

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Airlines have a long history of irrational competition due to the industry's low entry barriers, high exit barriers, and price-sensitive marginal customers. We believe airline consolidation after the 2007-09 financial crisis temporarily reduced irrational competition, as distressed carriers like Northwest, Continental, US Airways, AirTran, ATA, and Virgin America were all absorbed by incumbents. During the ensuing 2015-19 honeymoon, most US carriers also benefited from low tax bills as they used net operating loss carryforwards from previous recessions. Even as most US carriers took on billions of dollars of debt to weather the pandemic, we expect most of their deferred tax benefits will be used up soon. Thus, the probability that one or more carriers could experience financial distress in the next few years and succumb to price competition is much higher today than it was before the pandemic.

We see some environmental, social, and governance risk for Delta, as for airlines in general, primarily stemming from the greenhouse gas emissions from their operations. If carbon taxes or similar carbon reduction incentives were enacted, airlines would likely pass the cost on to the consumer, which we anticipate would reduce marginal travel demand. We expect airframe and engine manufacturers to shoulder the upfront costs of developing more fuel-efficient aircraft and eventually pass these on to airlines and their customers.

Capital Allocation Nicolas Owens, Equity Analyst, 10 Jan 2025

We award Delta a Standard Capital Allocation Rating based on a weak balance sheet rating, a fair investments rating, and an appropriate shareholder distribution rating.

Delta has a weak balance sheet, broadly speaking, but it weathered the pandemic better than other full-service airlines. At the end of 2024, about \$17 billion of debt and \$3 billion of cash remained on the balance sheet. Although Delta has high leverage, it raised substantial excess cash during the pandemic, and unlike some peers, it did not issue equity to do so. We anticipate that Delta, like other airlines, will prioritize using free cash flow to reduce debt in the near term, while continuing to acquire new aircraft. Unlike some peers, it has already reinstated a regular dividend as of the third quarter of 2023.

Among full-service airlines, we think Delta has been the best at capitalizing on its access to high-spending travelers through its frequent-flyer program and extensive cabin segmentation. The airline promises a premium flying experience, particularly to loyal customers, and is able to collect some revenue in advance by selling miles to American Express while maintaining more elaborate, segmented, and costly cabin amenities than the industry norm. However, we do not see Delta's internal or external investments resulting in a durable competitive advantage, and as such, we see its prudent investment policy, balanced with appropriate shareholder distributions, as fair.

We think Delta has appropriate shareholder distributions. The firm maintained a dividend and a share-repurchase program from 2013 through early 2020 and historically delivered most of its free cash flow back to shareholders, but it suspended its dividend in the wake of the covid-19 pandemic. Delta raised capital to survive past 2020, but we think that its strong margins, which we think are also a function of

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prudent management, would allow the firm to survive a normal recession without raising capital. Given its new leverage and an evolving operating environment, we don't think most airline investors should count on additional shareholder remuneration returning for a few years.

Analyst Notes Archive

US Airlines: Adjusting Our Uncertainty Ratings to Reflect Rising Macroeconomic Doubts Nicolas Owens, Equity Analyst, 11 Apr 2025


Shares of US airlines were buffeted in recent sessions by heightened investor concerns about tariffs potentially triggering a worldwide recession, or worse. Airline profits remain vulnerable to slack demand, and we have reviewed our uncertainty ratings for US airlines under coverage. Why it matters: Airline stocks tend to exhibit above-average volatility and sensitivity to stock market movements. Fundamentally, small changes in airlines' operating performance can have large effects on their bottom line. Notwithstanding a 90-day delay in most of the tariffs announced on April 2 by President Donald Trump, the likelihood of economic dislocation and a recession is higher than before, though the timing is uncertain. Our thesis remains that in the coming year or two, as supply of aircraft and personnel becomes less constrained while consumers may rein in their travel spending, airline profits will suffer. The bottom line: We have increased the Morningstar Uncertainty Rating for Delta, United, American, and Southwest airlines from High to Very High to account for a wider spread of likely outcomes in the near to medium term. None of these airlines has an economic moat and each is highly vulnerable to macroeconomic shifts. Bulls say: We aren't concerned about potential tariff impacts for airlines taking delivery of aircraft from Boeing and Airbus. Delta declared that it would not pay tariffs on any jet delivery and would defer deliveries rather than pay double-digit surcharges. We believe all the airlines we cover, to the extent they are expecting planes from a manufacturer outside their home country, will follow the same approach. We also believe Boeing and Airbus will work with customers to juggle delivery schedules and avoid incurring tariffs.

Delta Air Lines Earnings: Reducing Long-Term Profit Forecast Lowers Fair Value by 18% to \$36

Nicolas Owens, Equity Analyst, 10 Apr 2025

Delta reported solid first-quarter earnings despite having lowered its expected results in early March. Management did not reaffirm guidance for the second half of 2025, other than to indicate it will lower its planned capacity growth and mind costs amid softer demand for economy seats. Why it matters: Delta's industry-leading product segmentation allows it to command higher unit revenue than peers and pocket most of the industry's overall profits. For the near and medium term, we see these tailwinds continuing for Delta. Our forecast includes free cash flow exceeding \$3.5 billion annually through 2029, though with operating margins slowly narrowing from 11.3% in 2025 to 6.6% in 2029 as we assume Delta's passenger revenue yield will normalize closer to historical levels from their 2023 peak of

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\$0.2106. Indeed, over the long term and through an economic cycle, we observe airlines behave almost perfectly competitively. Thus, we see no structural reason Delta's features will remain more in demand or more profitable than other airlines' in perpetuity. The bottom line: We've lowered our fair value estimate for the no-moat airline's shares to \$36 from \$44 as a result of narrower long-term operating margins in our forecast. Delta's stock price gyrated wildly in the last few sessions over investor concerns about a tariff-induced recession, climbing 24% on April 9. We now view the shares as approximately 22% overvalued relative to our revised \$36 fair value estimate.

Delta Air Lines Earnings: Good Times for Industry Leader; Fair Value Estimate Up Over 20% to \$44

Nicolas Owens, Equity Analyst, 10 Jan 2025

Delta's fourth-quarter and 2024 results provided just over \$1 billion more revenue than we expected, but also a similar amount of additional operating costs. Nonetheless, the airline booked a heady \$0.2577 revenue yield in the quarter, near a record high and offering an 11% operating margin. Why it matters: Airlines have benefited from surging travel demand after the pandemic, especially from relatively price-insensitive travelers looking for a luxury experience. Meanwhile, the scarcity of trained pilots, air traffic controllers, and new airplanes has crimped supply industrywide, boosting the industry's profitability, led by Delta. While Delta's superior product segmentation (it sells more seating classes and mileage perks than competitors) does offer some differentiation, we do not agree with management's claim that these features will provide "durable" profitability. On the contrary, we reassert that despite the good times, there is no structural reason for Delta's features to remain more in demand or more profitable than other airlines', especially if consumers ratchet down their spending or fuel prices spike again. The bottom line: We have raised our fair value estimate for no-moat Delta to \$44 per share from \$36, mostly to account for a few more years of elevated yields and continued low fuel costs in our forecast. The shares still seem expensive by our reckoning, trading 50% above our revised fair value estimate.

Delta Air Lines Earnings: It's Expensive to Deliver Luxury; Fair Value Estimate Down 10%


Nicolas Owens, Equity Analyst, 10 Oct 2024

Delta reported third-quarter revenue \$300 million shy of our expectations while costs exceeded our estimate by \$240 million, even after accounting for the effect of the airline's disastrous CrowdStrike outage. Why it matters: Even though Delta commands the most premium revenue in the industry and remains profitable, the cost to deliver deluxe travel continues to creep upward. Looking past the quarter's results, we see continued growth in Delta's unit costs cutting into the airline's margins. Led by a 12.5% increase in labor costs, which account for nearly 30% of expenses, operating costs increased 5.4% while capacity rose 4% in the quarter compared with last year. The bottom line: We lowered our fair value estimate of the no-moat airline to \$36 from \$40 as a result of a few basis points of unit cost growth over our forecast horizon. We now forecast an average operating margin of 6.5% over the next five years versus 7.6% previously. Even so, we think Delta's shares remain overvalued. In our view,

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pandemic-related restructuring has not generated labor efficiencies at Delta, nor do we believe that the airline or its peers will benefit from elevated yields indefinitely.


Delta Air Lines: Software Glitch to Cost Delta \$500 Million Plus; Fair Value Estimate Unaffected

Nicolas Owens,Equity Analyst,8 Aug 2024

Delta Air Lines announced it will pursue lawsuits against CrowdStrike and Microsoft to recover more than \$500 million of damages it attributes to the software outage that began July 19. The outage affected Delta's computer systems for more than five days, causing the airline to cancel 7,000 flights. Other airlines recovered more swiftly, and Delta's premium reputation seems to have taken on some tarnish, including attracting a customer lawsuit, though we do not think its reputation will likely suffer long term.We have not altered our forecast beyond incorporating the impacts Delta attributed to the outage: We shaved 1.5% from third-quarter capacity, removed \$380 million from \$14 billion of anticipated third-quarter revenue, added \$170 million to operating costs, and removed approximately \$50 of fuel cost. The result has negligible effect on our fair value estimate, which remains \$40 per share.

Delta Air Lines Earnings: Solid Margins and a Return to Single-Digit Growth; Fair Value Up Slightly

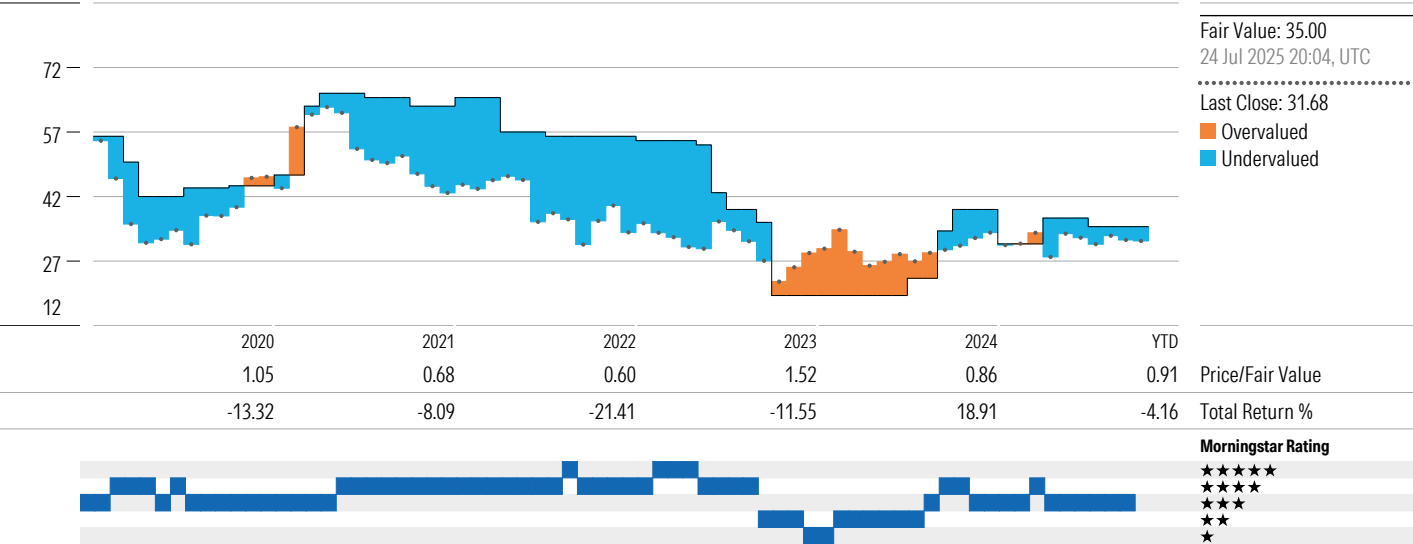
Nicolas Owens,Equity Analyst,11 Jul 2024

Delta Air Lines reported second-quarter financial results that were very close to our forecast amid another record summer travel season. Setting expectations for the third quarter, Delta now targets 5%-6% capacity growth compared with the prior year, with revenue growth of 2%-4%, indicating slightly softer revenue yields and supporting our thesis that consumer appetite for travel has begun to normalize.We have not altered our forecast beyond a small shave in expected 2024 cargo revenue. The time value of money since our last report added \$1 to our fair value estimate, which we have raised to \$40 per share.The airline is operating at similar capacity levels to 2019, with 10% more staff and nearly 3.5 cents more in structural unit costs, though it delivered a very respectable 15% adjusted operating margin in the quarter. Management previously reined in its expectations for 2024 capacity growth and said the company will shift focus to “optimizing” the routes and fares it operates, meaning that it will look to increase their profitability over time. While we expect no-moat Delta will likely persist in its ability to book higher revenue per seat than the industry average, we expect a more price-competitive environment in the medium term as capacity eventually laps 2019 levels and consumer spending normalizes. 

Delta Air Lines Inc DAL ★ 10 Oct 2025 04:08, UTC

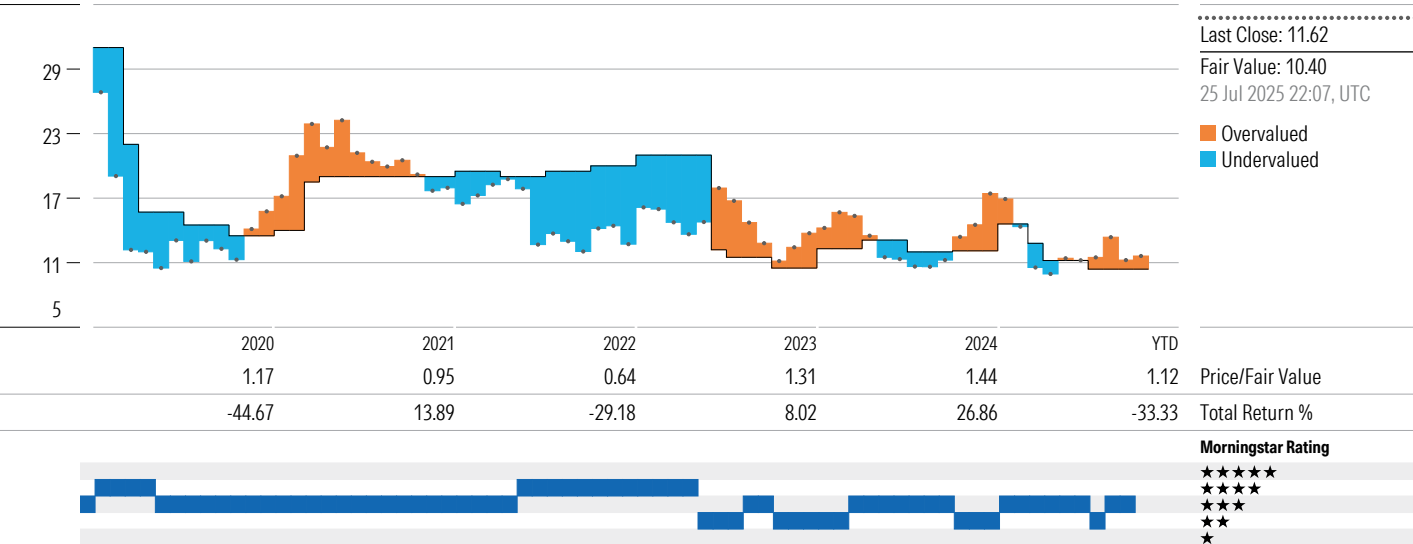
Competitors Price vs. Fair Value

Southwest Airlines Co LUV



Total Return % as of 09 Oct 2025. Last Close as of 09 Oct 2025. Fair Value as of 24 Jul 2025 20:04, UTC.

American Airlines Group Inc AAL



Total Return % as of 09 Oct 2025. Last Close as of 09 Oct 2025. Fair Value as of 25 Jul 2025 22:07, UTC.

Delta Air Lines Inc DAL ★

10 Oct 2025 04:08, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
59.57 USD 9 Oct 2025	32.00 USD 10 Oct 2025 04:06, UTC	1.86	38.90 USD Bil 9 Oct 2025	None	Mid Value	Very High	Standard	 3 Sep 2025 05:00, UTC

Morningstar Valuation Model Summary

Financials as of 09 Oct 2025

Fiscal Year, ends 31 Dec	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Revenue (USD Mil)	50,582	58,048	61,643	63,500	64,503	65,087	65,132	65,038
Operating Income (USD Mil)	3,537	6,385	5,995	6,302	6,715	5,777	4,639	3,270
EBITDA (USD Mil)	5,768	7,862	8,508	8,821	9,426	8,789	7,811	6,593
Adjusted EBITDA (USD Mil)	5,768	7,862	8,508	8,821	9,426	8,789	7,811	6,593
Net Income (USD Mil)	1,318	4,609	3,457	4,746	5,018	4,313	3,467	2,465
Adjusted Net Income (USD Mil)	1,962	3,948	3,990	3,773	5,018	4,313	3,467	2,465
Free Cash Flow To The Firm (USD Mil)	-1,378	1,437	3,324	2,802	3,553	3,834	3,406	2,550
Weighted Average Diluted Shares Outstanding (Mil)	641	643	648	650	640	622	601	578
Earnings Per Share (Diluted) (USD)	2.06	7.17	5.33	7.30	7.84	6.93	5.77	4.26
Adjusted Earnings Per Share (Diluted) (USD)	3.06	6.14	6.16	5.80	7.84	6.93	5.77	4.26
Dividends Per Share (USD)	0.00	0.20	0.50	0.68	1.00	1.18	1.30	1.30

Margins & Returns as of 09 Oct 2025

	3 Year Avg	Actual			Forecast					5 Year Avg
		2022	2023	2024	2025	2026	2027	2028	2029	
Operating Margin %	8.8	7.0	11.0	9.7	9.9	10.4	8.9	7.1	5.0	8.3
EBITDA Margin %	—	11.4	13.5	13.8	13.9	14.6	13.5	12.0	10.1	—
Adjusted EBITDA Margin %	—	11.4	13.5	13.8	13.9	14.6	13.5	12.0	10.1	12.8
Net Margin %	5.4	2.6	7.9	5.6	7.5	7.8	6.6	5.3	3.8	6.2
Adjusted Net Margin %	5.7	3.9	6.8	6.5	5.9	7.8	6.6	5.3	3.8	5.9
Free Cash Flow To The Firm Margin %	1.7	-2.7	2.5	5.4	4.4	5.5	5.9	5.2	3.9	5.0

Growth & Ratios as of 09 Oct 2025

	3 Year CAGR	Actual			Forecast					5 Year CAGR
		2022	2023	2024	2025	2026	2027	2028	2029	
Revenue Growth %	27.3	69.2	14.8	6.2	3.0	1.6	0.9	0.1	-0.1	1.1
Operating Income Growth %	47.5	89.5	80.5	-6.1	5.1	6.6	-14.0	-19.7	-29.5	-11.4
EBITDA Growth %	31.0	48.5	36.3	8.2	3.7	6.9	-6.8	-11.1	-15.6	-4.6
Adjusted EBITDA Growth %	29.9	48.5	36.3	8.2	3.7	6.9	-6.8	-11.1	-15.6	-5.0
Earnings Per Share Growth %	130.3	370.7	248.6	-25.6	36.8	7.5	-11.6	-16.7	-26.1	-4.4
Adjusted Earnings Per Share Growth %	130.3	600.7	100.6	0.3	-5.8	35.2	-11.6	-16.7	-26.1	-4.4

Valuation as of 09 Oct 2025

	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Price/Earning	10.7	6.6	9.8	10.3	7.6	8.6	10.3	14.0
Price/Sales	0.4	0.4	0.6	0.6	0.6	0.6	0.6	0.6
Price/Book	3.2	2.3	2.6	2.0	1.6	1.4	1.3	1.2
Price/Cash Flow	—	—	—	—	—	—	—	—
EV/EBITDA	7.5	6.1	7.0	6.4	5.9	6.4	7.2	8.5
EV/EBIT	12.3	7.5	9.9	8.9	8.4	9.7	12.1	17.2
Dividend Yield %	—	0.5	0.8	1.1	1.7	2.0	2.2	2.2
Dividend Payout %	0.0	3.3	8.1	11.6	12.8	17.0	22.5	30.5
Free Cash Flow Yield %	—	—	—	—	—	—	—	—

Operating Performance / Profitability as of 09 Oct 2025

Fiscal Year, ends 31 Dec	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
ROA %	1.8	6.3	4.6	6.0	6.0	5.0	3.9	2.8
ROE %	20.0	41.5	22.6	24.2	21.7	16.7	12.6	8.7
ROIC %	14.2	20.5	17.4	17.6	18.1	15.2	12.3	8.8

Delta Air Lines Inc DAL ★ 10 Oct 2025 04:08, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
59.57 USD 9 Oct 2025	32.00 USD 10 Oct 2025 04:06, UTC	1.86	38.90 USD Bil 9 Oct 2025	None	Mid Value	Very High	Standard	 3 Sep 2025 05:00, UTC

Financial Leverage (Reporting Currency)

Fiscal Year, ends 31 Dec	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Debt/Capital %	59.2	51.3	36.8	42.7	42.0	40.6	39.3	36.5
Assets/Equity	11.0	6.6	4.9	4.1	3.6	3.3	3.2	3.1
Net Debt/EBITDA	4.2	3.0	2.3	1.1	0.8	0.6	0.4	0.5
Total Debt/EBITDA	5.3	3.5	2.7	1.8	1.7	1.8	2.0	2.2
EBITDA/ Net Interest Expense	3.3	-90.4	6.4	-338.4	385.0	342.1	502.2	-381.9

Forecast Revisions as of 9 Oct 2025

Prior data as of 10 Jul 2025	2025		2026		2027	
	Current	Prior	Current	Prior	Current	Prior
Fair Value Estimate Change (Trading Currency)	32.00	30.97	—	—	—	—
Revenue (USD Mil)	63,500	64,000	64,503	64,395	65,087	65,773
Operating Income (USD Mil)	6,302	7,385	6,715	6,192	5,777	5,690
EBITDA (USD Mil)	8,821	9,905	9,426	8,904	8,789	8,702
Net Income (USD Mil)	3,773	3,603	5,018	3,638	4,313	3,246
Earnings Per Share (Diluted) (USD)	7.30	7.04	7.84	5.69	6.93	5.22
Adjusted Earnings Per Share (Diluted) (USD)	5.80	5.54	7.84	5.69	6.93	5.22
Dividends Per Share (USD)	0.68	0.45	1.00	1.00	1.18	1.18

Key Valuation Drivers as of 09 Oct 2025


Cost of Equity %	11.0
Pre-Tax Cost of Debt %	5.3
Weighted Average Cost of Capital %	8.1
Long-Run Tax Rate %	23.0
Stage II EBI Growth Rate %	3.0
Stage II Investment Rate %	19.4
Perpetuity Year	10

Additional estimates and scenarios available for download at <https://pitchbook.com/>.

Discounted Cash Flow Valuation as of 09 Oct 2025

	USD Mil
Present Value Stage I	12,886
Present Value Stage II	5,803
Present Value Stage III	16,559
Total Firm Value	35,248
Cash and Equivalents	3,069
Debt	16,194
Other Adjustments	2,493
Equity Value	19,629
Projected Diluted Shares	653
Fair Value per Share (USD)	32.00

Delta Air Lines Inc DAL ★ 10 Oct 2025 04:08, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
59.57 USD 9 Oct 2025	32.00 USD 10 Oct 2025 04:06, UTC	1.86	38.90 USD Bil 9 Oct 2025	None	Mid Value	Very High	Standard	 3 Sep 2025 05:00, UTC

ESG Risk Rating Breakdown

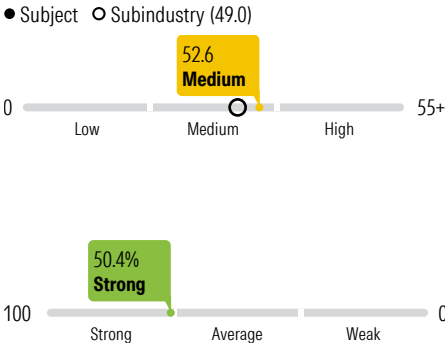
Exposure

Company Exposure¹	52.6
- Manageable Risk	44.0
Unmanageable Risk²	8.6

Management

Manageable Risk	44.0
- Managed Risk³	22.1
Management Gap⁴	21.8

Overall Unmanaged Risk 30.5



- ▶ 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 50.4% 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 Assessment⁵



ESG Risk Rating is of Sep 03, 2025. Highest Controversy Level is as of Oct 08, 2025. Sustainalytics Subindustry: Airlines. 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 03 Sep 2025

Company Name	Exposure	Management	ESG Risk Rating
Delta Air Lines Inc	52.6 Medium 0 — 55+	50.4 Strong 100 — 0	30.5 High 0 — 40+
Southwest Airlines Co	46.9 Medium 0 — 55+	45.3 Average 100 — 0	28.6 Medium 0 — 40+
American Airlines Group Inc	49.9 Medium 0 — 55+	59.9 Strong 100 — 0	24.4 Medium 0 — 40+
JetBlue Airways Corp	54.6 Medium 0 — 55+	55.1 Strong 100 — 0	29.0 Medium 0 — 40+
United Airlines Holdings Inc	50.4 Medium 0 — 55+	53.9 Strong 100 — 0	27.0 Medium 0 — 40+

Appendix

Historical Morningstar Rating

Delta Air Lines Inc DAL 9 Oct 2025 21:36, 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 ★★★★

Southwest Airlines Co LUV 9 Oct 2025 21:32, 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 ★★★

American Airlines Group Inc AAL 9 Oct 2025 21:43, 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 ★★★★

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, in-depth 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 short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term 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 single-point 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 working capital 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

Morningstar Equity Research Star Rating Methodology



Research Methodology for Valuing Companies

outcomes for the intrinsic value of a company, and anything 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.

Margin of Safety		
Qualitative Analysis	★★★★★ 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

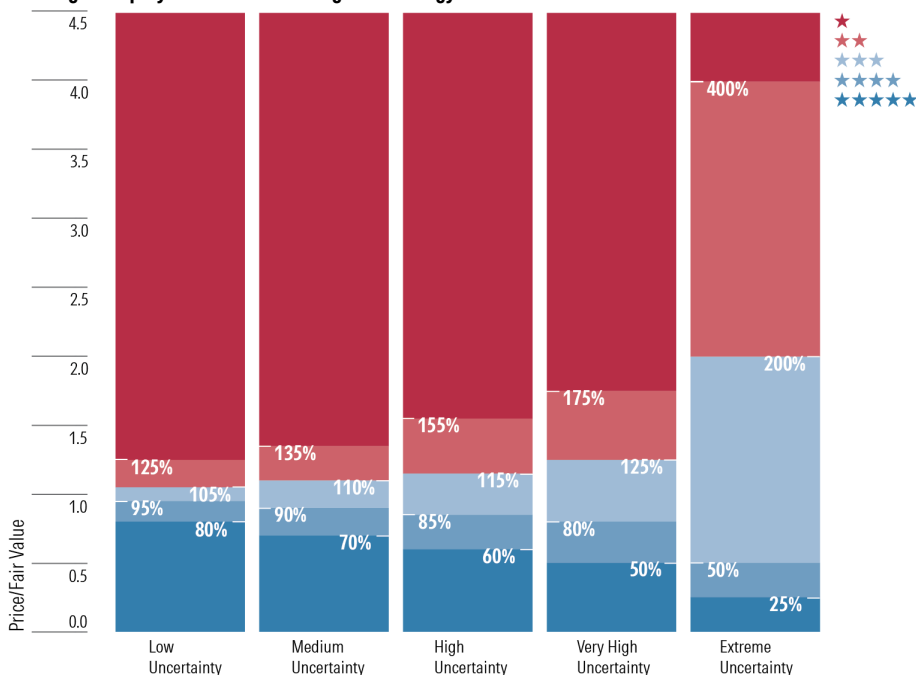
Our uncertainty rating is based on the interquartile range, or the middle 50% of potential outcomes, covering the 25th percentile–75th percentile. This means that when a stock hits 5 stars, we expect there is a 75% chance that the intrinsic value of that stock lies above the current market price. Similarly,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



Morningstar Star Rating for Stocks

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 multi-year 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,

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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.

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.

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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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