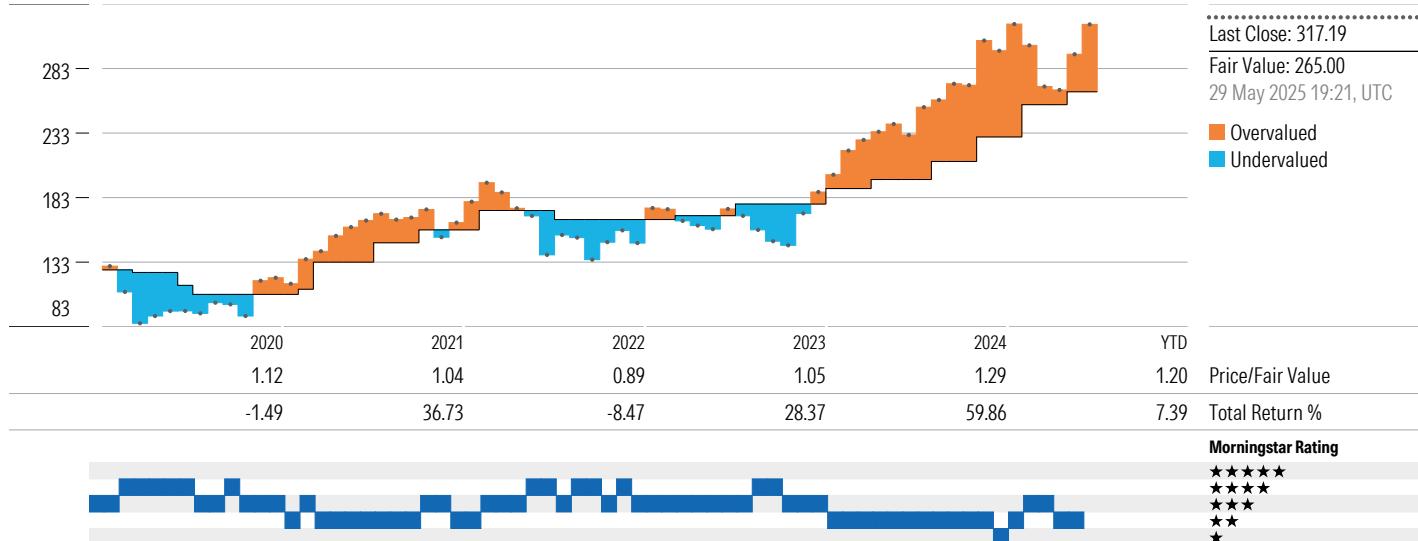


American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

Price vs. Fair Value



Total Return % as of 27 Jun 2025. Last Close as of 27 Jun 2025. Fair Value as of 29 May 2025 19:21, UTC.

Contents

- Analyst Note (29 Jun 2025)
- Business Description
- Business Strategy & Outlook (29 May 2025)
- Bulls Say / Bears Say (29 May 2025)
- Economic Moat (29 May 2025)
- Fair Value and Profit Drivers (29 May 2025)
- Risk and Uncertainty (29 May 2025)
- Capital Allocation (29 May 2025)
- Analyst Notes Archive
- Financials
- ESG Risk
- Appendix
- Research Methodology for Valuing Companies

Important Disclosure

The conduct of Morningstar's analysts is governed by Code of Ethics/Code of Conduct Policy, Personal Security Trading Policy (or an equivalent of), and Investment Research Policy. For information regarding conflicts of interest, please visit: <http://global.morningstar.com/equitydisclosures>.

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

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

US Banks' Stress Test Results Look Favorable, With Goldman, Wells Fargo Performing Particularly Well

Analyst Note Sean Dunlop, CFA, Director, 29 Jun 2025

The Federal Reserve released its annual stress test results on Friday, June 27. With significantly stronger results compared with a year ago, the shares of the 22 tested institutions traded slightly higher in after hours trading.

Why it matters: The test results estimate the maximum capital drawdown that banks are likely to experience during a severely adverse scenario, which in turn informs the level of stress capital buffer they are required to hold for the ensuing year.

- ▶ Lower capital requirements correspond with higher leverage and higher returns for banks, which may elect to return excess capital to shareholders, generally through share repurchases.
- ▶ After Friday's test, we estimate that the banks in our coverage will see their stress capital buffers decline by about 40 basis points on average, provided that the Fed's proposal to average stress test results over two consecutive years, in order to reduce volatility, is implemented, or 65 basis points otherwise.

The bottom line: A less punitive stress scenario and strong capitalization across our banking coverage means that the average bank we cover could hold as much as 5% of its market capitalization in excess capital that could theoretically be returned to shareholders.

- ▶ Wide-moat-rated Goldman Sachs and wide-moat Wells Fargo were the biggest winners, with our

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	

Sector	Industry
Financial Services	Credit Services

Business Description

American Express is a global financial institution, operating in about 130 countries, that provides consumers and businesses charge and credit card payment products. The company also operates a highly profitable merchant payment network. The firm operates in four segments: US consumer services, US commercial services, international card services, and global merchant and network services. In addition to payment products, the company's commercial business offers expense management tools, consulting services, and business loans.

estimates suggesting these two banks will see their stress capital buffers fall by 1.5 and 1.2 percentage points, respectively, in October.

- Our optimism is, however, tempered by overvaluation. While returning capital to shareholders can improve a firm's returns on equity regardless of price, we'd prefer that the banks don't repurchase \$1 worth of shares for \$1.25, which is what they would effectively be doing at our market-cap-weighted fair value estimates.

Business Strategy & Outlook Michael Miller, CFA, Equity Analyst, 29 May 2025

American Express has enjoyed several years of accelerated growth as its new card acquisition and loan growth has significantly outpaced peers'. The company has historically been a payment network first and lender second. While this has not changed and it still only gets around 25% of its revenue from net interest income, its shift toward a younger cardholder base and more lending features on its cards drove a 26.1% compound annual growth rate in net interest income from 2021 to 2024, providing a major tailwind to overall growth. We expect this growth to decelerate significantly in 2025 and on, as it was driven by specific strategic and product shifts that have run their course. As a case in point, net interest income increased 11% in the first quarter of 2025—still a strong result but well below the three-year average.

A point of concern for American Express has been whether economic pressure would affect spending. So far, spending on the company's cards has remained surprisingly resilient, with average total spending per card continuing to rise in 2024, though growth was modestly below the historical average. While consumer spending remains solid, this will still be something to monitor as American Express relies more on discretionary spending levels than its card-issuing peers. Moreover, the company's commercial card business, which accounted for around 34% of 2024 volume, has shown more signs of pressure, with spending volume growth in the very low single digits in 2024.

The company's greatest strength remains its existing cardholder base of high-spending individuals and small businesses. The high average spending rate on American Express' cards makes its cardholders attractive to merchants, and the company has been able to form valuable partnerships in exchange for access to these cardholders. We anticipate that this will continue as American Express' position in the premium credit card market has only gotten stronger in recent years, with the size of its cardholder base growing in the mid-single digits as the company's efforts to reposition its products as premium lifestyle cards and attract a younger demographic bear fruit.

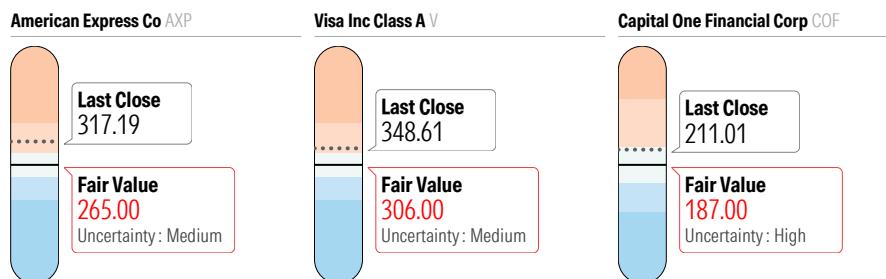
Bulls Say Michael Miller, CFA, Equity Analyst, 29 May 2025

- American Express operates as a closed-loop network for the cards that it issues. This allows it to capture more of the economic profit of a single credit card payment than other credit card issuers.
- American Express has found considerable success in growing its net interest income in recent years,

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price 317.19 USD 27 Jun 2025	Fair Value Estimate 265.00 USD 29 May 2025 19:21, UTC	Price/FVE 1.20	Market Cap 222.22 USD Bil 27 Jun 2025	Economic Moat™ Wide	Equity Style Box Large Blend	Uncertainty Medium	Capital Allocation Standard	ESG Risk Rating Assessment¹  4 Jun 2025 05:00, UTC
---	---	-------------------	---	------------------------	---------------------------------	-----------------------	--------------------------------	--

Competitors



Economic Moat	Wide	Wide	Narrow
Currency	USD	USD	USD
Fair Value	265.00 29 May 2025 19:21, UTC	306.00 9 Jun 2025 19:18, UTC	187.00 27 Feb 2025 18:29, UTC
1-Star Price	357.75	413.10	289.85
5-Star Price	185.50	214.20	112.20
Assessment	Overvalued 27 Jun 2025	Overvalued 27 Jun 2025	Fairly Valued 27 Jun 2025
Morningstar Rating	★★ 27 Jun 2025 21:28, UTC	★★ 27 Jun 2025 21:35, UTC	★★★ 27 Jun 2025 21:26, UTC
Analyst	Michael Miller, Equity Analyst	Brett Horn, Senior Equity Analyst	Michael Miller, Equity Analyst
Capital Allocation	Standard	Standard	Standard
Price/Fair Value	1.20	1.14	1.13
Price/Sales	3.35	18.51	2.04
Price/Book	7.13	18.38	1.27
Price/Earning	22.87	32.76	16.70
Dividend Yield	0.92%	0.66%	1.14%
Market Cap	222.22 Bil	681.01 Bil	134.97 Bil
52-Week Range	220.43–326.28	252.70–375.51	128.23–212.82
Investment Style	Large Blend	Large Blend	Large Value

enjoying better loan growth and lower credit costs than its peers.

- American Express' efforts to reposition its cards as lifestyle products for younger cardholders has been a success and new card acquisition has risen significantly.

Bears Say Michael Miller, CFA, Equity Analyst, 29 May 2025

- American Express operates with a narrower scope than many of its competitors, offering fewer deposit and lending products than other credit card issuers.
- Despite much improved acceptance rates in the US, the company still trails other payment networks in international acceptance rates.
- A weaker economy would be a major headwind on American Express' spending-centric business model, with the company's commercial cards already showing signs of deceleration.

Economic Moat Michael Miller, CFA, Equity Analyst, 29 May 2025

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

In our view, American Express has a wide economic moat. We believe its differentiated operating model has allowed it to build durable competitive advantages that will allow returns on equity well above its cost of capital for the foreseeable future. American Express operates as a closed-loop network for payments made by its cardholders. This means that American Express issues the credit card to the consumer, operates the payment network, and establishes a direct relationship with the merchant. By operating as a closed-loop network, American Express can capture the full economic profit from a single credit card payment. As a result, it generates most of its revenue from discount revenue and card fees, with noninterest income making up roughly 75% of its revenue, unlike other credit card issuers that typically rely heavily on net interest income. Not being as reliant on interest income helps allow American Express to build a strong competitive position in credit cards for high-income individuals and businesses, as both groups are less likely to maintain large outstanding balances on their cards. American Express' strength in these spaces has allowed it to remain effectively tied with Chase as the largest credit card issuer in the US by purchase volume, which should allow it to continue to enjoy returns on equity above its cost of capital for the foreseeable future.

American Express benefits from power network effects. In order for a payment network to convince merchants that they should accept its payments, the network needs to have enough users to encourage acceptance. But until a network has broad acceptance, it is difficult to attract users to its platform, making it difficult for new competitors to enter the market. Additionally, credit card networks have become deeply entrenched in US retail payments due to the reward structures that come attached to credit cards. While smaller than that of Visa or Mastercard, American Express' network has historically been able to charge rates that match or even exceed its larger rivals' due to the higher spending rates on the company's consumer cards and its strong competitive positioning in commercial payments. Additionally, the costs of running a network are mostly fixed, so incremental revenue from additional purchase volume drops directly to the network's bottom line, further advantaging existing networks over potential entrants that would not benefit from scale.

Outside of American Express' network business, the company shows signs of a moat in its credit card issuing business on both the consumer and the commercial sides. A key feature of American Express' consumer credit cards segment is the high average spending rate on its cards and the bias toward travel and entertainment spending. Both are a consequence of the company's historical branding as well as the current reward and fee structure on its front-line cards that favor cardholders that travel frequently and live in urban environments. Premium fee-paying reward cards attract cardholders with higher income; in 2024, the average American Express cardholder spent more than \$24,600 on their card, well above the average for a Visa or Mastercard cardholder. This high-spending cardholder base is highly attractive to merchants, and American Express has historically been able to gain concessions from merchants in exchange for access to its cardholders—especially in the travel and entertainment industries, where its spending is concentrated. Historically, this came in the form of charging

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

merchants higher discount rates for purchases made with its cards, particularly those in the travel and entertainment industry. American Express also benefits from forming partnerships with key retailers to provide its cardholders with unique benefits in exchange for steering its cardholders to those businesses. For example, the company's Fine Hotels & Resorts program offers a hotel booking service on American Express' website and mobile app that gives the company's premium cardholders discounts on hotel rooms and other special benefits, but the service only lists hotels that have agreed to be part of American Express' platform. This creates a network effect as the value for a hotel chain to join the platform is tied to the number of users, while the value provided to the users is tied to the number of hotels on the platform. The company has a similar program for flights and the partnerships that American Express forms can be long-lasting and extend beyond just bookings. The company has worked with Delta for decades; the airline markets multiple co-branded credit cards with American Express. These travel and entertainment benefits help the company avoid competing strictly on reward point generation since benefits like late checkout and airport lounge access cannot be directly compared with rewards points generated on other cards. These partnerships also help defray the cost of generous rewards and benefits offered by American Express' premium cards. This makes it difficult for new premium credit cards to enter American Express' market since without a preexisting cardholder base that is attractive to merchants, they will need to compete with American Express' benefits programs without support.

While American Express has competitive advantages in its global consumer services segment, its competitive position in commercial services is stronger. Both as a credit card issuer and as a credit card network, the company has a larger market share on the commercial side of the credit card industry than it does on the consumer side. American Express' strength in the commercial space is driven by its success in becoming the card of choice for small- and medium-sized enterprises, which represent about 75% of its commercial business, a success that is driven by its fully integrated operating model. On its primary fee-paying business cards, American Express offers its SME cardholders revolving debt with no preset spending limit. In practice, the major draw of American Express' cards over its competitors' offerings is that they have line sizes that are several times larger. In order to offer its cardholders these larger lines, the firm controls its risk by adjusting the exact line size proactively based on spending patterns and payment history of the cardholder as well as requiring monthly payment. This structure requires access to the data necessary to drive the firm's credit models as well as a business strategy that is not reliant on net interest income. The company's cards present a highly attractive value proposition to a small business since they are a payment method, a cheap line of credit with a large spending limit, and generate reward points all in a single package. This creates switching costs because if a cardholder decides to change cards they will be forced to find an alternative source of financing for their day-to-day expenses. The consequence of this structure is that global commercial services generates very little in the way of interest, with net interest income representing less than 17% of revenue for the segment in 2024. Because American Express has its own network, it can compensate

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

for the lack of interest payments by capturing more value from each dollar spent with its cards; competitors do not have this advantage.

Fair Value and Profit Drivers Michael Miller, CFA, Equity Analyst, 29 May 2025

We are increasing our fair value estimate to \$265 per share from \$255, which translates to 16.9 times our projected 2025 earnings. Around \$5 of the adjustment comes from earnings since our last update. Another \$5 comes from higher net interest income projections and lower medium-term net charge-off expectations.

We expect loan growth to continue to decelerate from the breakneck pace seen over the last three years, but changes to the structure of American Express' card products as well as its high rate of cardholder growth have provided the bank's lending business with meaningful tailwinds. As a result, we do expect American Express' loan growth to remain higher than the industry average for the foreseeable future, leading to a net interest income CAGR of 7.2% from 2024-29, despite falling interest rates.

We expect discount revenue to increase in the mid-single digits in 2025 as the firm faces near-term headwinds. We expect this to be driven more by cardholder base growth, as the company benefits from the impressive cardmember acquisition numbers it achieved in 2024, than from higher spending per card. Weak commercial spending growth has been a headwind to the firm for nearly two years and is depressing discount revenue growth below its long-term average. In the medium term, we expect the company to generate high-single-digit discount revenue growth in 2026 and beyond as we think the firm's shift towards a younger demographic will benefit its long-term spending volume growth trajectory. Additionally, we expect the firm's card fee income to enjoy several more years of double-digit growth, as the company continues to enjoy strong momentum in its premium card business, before decelerating to the high single digits by 2028.

We project American Express' membership reward expense to grow faster than discount revenue in the long term. The credit card market remains competitive, and cardmember reward programs have become more generous over time as companies seek to attract new cardholders. While the intensity of new reward offers from its competitors has slackened from its peak, the overall trend of increasing rewards remains in place, and American Express will need to follow in order to stay relevant. American Express' cost structure does benefit from fixed-cost leverage as spending on its cards increases; however, historically the benefit of this leverage has simply been returned to its cardholders in the form of more generous reward programs. As a result, we expect American Express' operating margin to be stable over time, ending 2029 at 22%, effectively unchanged from 2024.

Risk and Uncertainty Michael Miller, CFA, Equity Analyst, 29 May 2025

We assign American Express a Medium Morningstar Uncertainty Rating. American Express faces risks

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	

from intense competition in the payments segment, including competing against the largest payment networks in the world, such as Visa and Mastercard, while also competing against some of the largest credit card providers in the world, such as JPMorgan, Citigroup, and Bank of America.

American Express differs from normal bank issuers of credit cards in that less than 25% of its revenue comes from net interest income and its net charge-offs are small relative to the size of the firm. This leaves American Express substantially less exposed to credit and interest-rate cycles, though these do remain considerations for the firm. On the other hand, the firm's revenue is heavily influenced by spending volume, both from consumers and business, which can rise and fall based on macroeconomic factors. Also, a disproportionate amount of the company's revenue comes from travel and entertainment, which are historically considered luxuries. This means economic pressure could potentially squeeze the ability of the bank's cardholders to spend on travel or other luxury goods, causing spending volume on American Express' cards to fall more than its peers'. That said, the firm's affluent cardholder base is less affected by economic pressure than the average consumer; American Express has been relatively unaffected by the current credit cycle.

American Express faces very limited environmental, social, and governance risk. Credit cards often carry inherent product risk due to their high interest rates, which have the potential to trap customers into a cycle of debt. However, American Express' business model favors discount revenue—the fees charged to merchants when cardholders use their cards—over net interest income. With about 24% of the company's revenue coming from interest, regulatory action on credit card lending practices would have limited impact on American Express.

Capital Allocation Michael Miller, CFA, Equity Analyst, 29 May 2025

We give American Express a Standard Morningstar Capital Allocation Rating. The company has a strong balance sheet with a common equity Tier 1 capital ratio of 10.7% at the end of March 2025. While we do expect net charge-offs to be modestly higher in 2025 than in 2024, we believe that the strength of American Express' balance sheet will see it through without difficulties. This is particularly true given that the company has typically seen lower net charge-off rates than other credit card issuers due to the nature of its cardholder base. This credit cycle has not been an exception, with American Express' credit costs materially outperforming its peers' on both an absolute and relative basis.

The company has historically had an appropriate, if not somewhat conservative, distribution policy. Unlike some of its competitors, American Express was able to keep its dividend unchanged throughout 2020, despite the impact the pandemic had on its cash flow. While the company has a relatively low payout ratio, this makes sense, given the cyclical nature of credit cards and the effect that changes in economic activity can have on the company. The company has also shown a clear willingness to make use of share buybacks to return value to shareholders when it finds itself with excess capital on its balance sheet, with the company buying back around 7% of its outstanding shares in 2022.

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

American Express has historically been a modest but consistent investor of capital, both in inorganic acquisitions and organic investments back into its business. Rather than make large transformational acquisitions, the company has typically preferred to make smaller bolt-on purchases to offer specific new services to its existing cardholders, like restaurant booking and analytics service Resy in 2019. While the company has certainly not damaged its financial position with its investment strategy, many of these acquisitions are too small or niche to move the needle for the bottom line. That said, recently the company has been building up its position in small-business services and business-to-business payments. While it remains to be seen if American Express can turn this into a material source of revenue, we view these investments favorably as they leverage the firm's already strong position with small businesses in the US.

Analyst Notes Archive

American Express Earnings: Strong Net Card Fee and Net Interest Income Drive Growth Michael Miller, CFA, Equity Analyst, 17 Apr 2025

American Express reported solid earnings in the first quarter, with earnings per share rising 9% from last year to \$3.64, partially thanks to a \$73 million credit reserve release. These results translate to a return on average equity of 33.6%. Why it matters: These results were largely in line with our expectations, though we would have liked the strength in discount revenue—the transaction fees American Express charges merchants when they accept its cards—to continue from last quarter. The firm has been relying on accelerated net interest income growth to help offset to modest discount revenue growth, which came in at only 4% this quarter. This is not a long-term solution, as the firm is a payment network first and lender second, and net interest income growth is slowing. Customer acquisition continues to be major source of strength with gross new card acquisition accelerating to 3.4 million, leading to a 4% increase in card-in-force. Better yet, this growth was disproportionately in the firm's luxury fee-based cards, helping drive net card fee revenue up 18%. The bottom line: We maintain our \$255 fair value estimate for wide-moat-rated American Express. We see the shares as fairly valued at the current price. While American Express' business performance in recent years has been impressive, we were skeptical about the strength of the rally seen in 2024 and the first month of 2025. With the shares down more than 20% from their January peak, the valuation is much more appealing now. Key stats: Alongside earnings, American Express reaffirmed its guidance for 2025 despite tariff-related turbulence, with the firm expecting revenue growth of 8%-10% and EPS of \$15.00-\$15.50. While American Express is on track to hit these targets, economic uncertainty is elevated.

American Express Earnings: Strong Results on Better Spending Volume Growth Michael Miller, CFA, Equity Analyst, 24 Jan 2025

American Express reported another quarter of midteens earnings per share growth, with fourth-quarter

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

EPS increasing 16% to \$3.04 from \$2.62 last year. The annual rate of revenue growth accelerated to 10%, when adjusted for foreign-exchange rate movements, from 8% last quarter. Why it matters: While American Express' shares are trading modestly lower on the earnings release, we think the results are better than they look on the surface. For most of 2024, the firm relied on accelerated net interest income growth to compensate for disappointing discount revenue—the transaction fees American Express charges merchants when they accept its cards. This was not a long-term solution, as American Express is a payment network first and lender second. Only around 25% of its revenue comes from net interest income. However, the fourth quarter saw a recovery in network volume growth, driving an 8% increase in discount revenue. The bottom line: While these were solid results, we are maintaining our \$230 fair value estimate. We see the shares as materially overvalued. We believe the market is taking an overly optimistic view of American Express' medium- to long-term growth potential as it projects too-high market share gains. That said, the recovery in American Express' spending volume growth will be a point to watch. We do not want to read too deeply into a single holiday quarter, but if the firm builds on this improved performance, it could provide upside to our projections. Key stats: Spending volume growth came from both new card signups and higher spending per card. Average spending per card increased 3% from last year to \$6,378, while the number of proprietary cards in force rose 4% to 64.3 million. Coming up: Alongside earnings, American Express gave guidance for 2025, expecting revenue growth of 8%-10% and EPS of \$15.00-\$15.50. This seems readily achievable to us.

American Express: Increasing Our Fair Value Estimate Michael Miller, CFA, Equity Analyst, 1 Nov 2024

Returning to wide-moat-rated American Express following earnings, we are increasing our fair value estimate to \$230 from \$211, a larger adjustment than we had initially expected. Around \$5 of the positive adjustment comes from earnings since our last update while another \$2 comes from slightly higher net interest income assumptions. The remaining increase comes from higher net card fees, the annual fees American Express charges for its premium fee-based credit cards, partially offset by high member reward and service spending. While card fees are only American Express' third largest source of revenue, the firm's success here has made it a relevant source of growth, with card fee revenue increasing at an average rate of 16% from 2018 to 2023. A major force behind the rapid growth is American Express' product refreshes, where the firm typically adds new benefits to a card product while also raising the fee to match the new rewards program. With the company's average fee per card at \$105 in the third quarter of 2024, up from \$75 three years ago, this provides a major tailwind to growth over time. Given that American Express has recently increased the price of its US consumer gold card, the benefit of which should flow through the firm's income statement over the next year, we expect net card fees to continue to grow in the double digits for the immediate future and now project a CAGR of 12.2% over the next five years.

American Express Earnings: Strong Net Interest Income Drives High-Single-Digit Revenue Growth

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

Michael Miller, CFA, Equity Analyst, 18 Oct 2024

Wide-moat-rated American Express reported decent third-quarter earnings as strong net interest income growth helped offset slower discount revenue growth. Net revenue increased 8% from last year's period, while earnings per share increased to \$3.49 from \$3.30 in the third quarter of 2023. As we incorporate these results, we do not expect to materially alter our \$211 per share fair value estimate for American Express. Despite strong business results in 2024, we see the firm's shares as meaningfully overvalued following an impressive run the past 12 months. Discount revenue—the transaction fees American Express charges merchants when they accept its cards—was a drag on top-line growth, increasing just 4% from last year to \$8.8 billion. The firm's commercial cards were a major culprit, with total spending volume rising only 1% from last year. Spending from the company's international and US consumer cardholders was stronger, though, increasing 13% and 6%, respectively, during the quarter. American Express' commercial card performance has been unimpressive for some time, with rapid net interest and net card fee income growth offsetting the problem. Spending volume growth was, however, driven primarily by new-card growth, with the number of proprietary cards outstanding increasing 4% year over year to 82.9 million. We generally value cardholder growth over increases in average per card spending, as the value of cardholder growth extends beyond higher discount revenue. Moreover, a growing premium cardholder base creates a virtuous cycle for American Express as an increasingly larger affluent cardholder base encourages the firm's merchant partners to offer benefits to its cardholders. This makes it easier for the company to further expand its cardholder base. The cardholder expansion also powered the 18% year-over-year increase in American Express' net card fee revenue, as card member growth has been disproportionately weighted toward cards with premium fees.

Opportunity in Credit Card Issuers Despite High Charge-Offs Michael Miller, CFA, Equity Analyst, 20 Aug 2024

Net charge-offs for the credit card issuers have risen significantly so far in 2024, continuing an ongoing trend from 2023. Questions about credit conditions have become a repeated feature of conversations with management teams, and many have focused on the topic as a lens into the financial health of the United States consumer. While we do think some of the fears surrounding credit card defaults are overstated, it is true that both net charge-offs and delinquencies are now solidly above normal levels. The risk of higher credit losses is a common concern for credit card issuers, as it most distinguishes this business from other forms of lending. Credit card receivables are highly lucrative, with interest rates on credit card debt ranging from the midteens to as high as 30%, allowing firms in this part of the banking industry to enjoy net interest margins and returns on equity far above peers'. That said, we expect credit costs to plateau in the second half of 2024. However, they should remain modestly elevated in 2025 and into 2026 as the impact of tighter underwriting offsets rising unemployment.

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

There are already signs of improvement as delinquency rates, a leading indicator for net charge-offs, have performed well industrywide in 2024. When looking at valuations on a full-cycle basis, we still see opportunity in the sector, with Capital One Financial as our preferred name, as it trades well below our fair value estimate. We still see American Express as the most competitively advantaged firm in our coverage. Still, it trades at a premium to our fair value estimate, and the high expectations implied make it less attractive to us. Meanwhile, Bread Financial and Synchrony Financial's weaker credit and lack of noninterest revenue make them more sensitive to credit losses if economic conditions deteriorate more than expected.

American Express Earnings: Net Interest Income and Card Fees Drive Double-Digit Net Income Growth

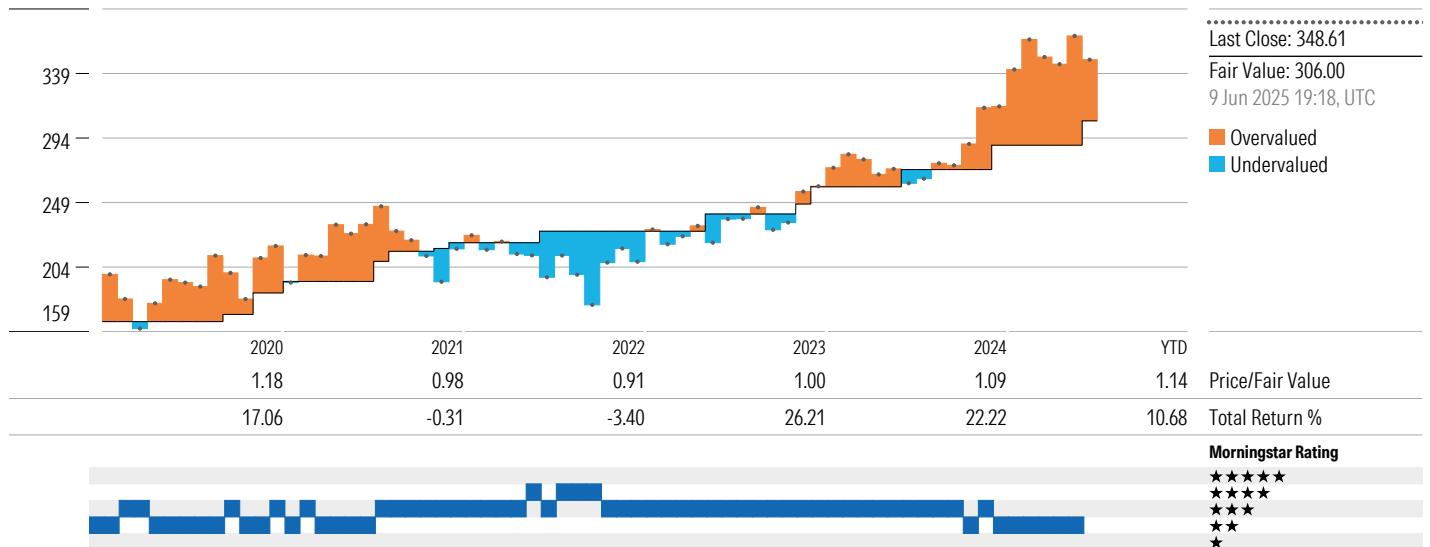
Michael Miller, CFA, Equity Analyst, 19 Jul 2024

Wide-moat-rated American Express reported strong second-quarter earnings as it benefited from strong net interest income growth and the sale of Accertify. Net revenue increased 8% from last year and 3.4% from last quarter to \$16.3 billion. Earnings per share increased 44% to \$4.15, or 21% to \$3.49 when excluding the gain on sale from Accertify. As we incorporate these results, we do not expect to materially alter our \$197 fair value estimate. We see the shares as modestly overvalued. While we generally view American Express as a payment network first and a lender second, net interest income has been a major source of growth in recent years as the company's loan growth outpaces that of the broader industry. The second quarter continued this trend, with net interest income rising 20% year over year to \$3.7 billion, though this was a small sequential decrease from last quarter. The year-over-year increase was due to both net interest margin expansion and loan growth, with period-end cardmember loans increasing 14% from last year to \$130.9 billion. That said, net interest income growth is clearly decelerating from the more than 30% annual growth rates seen last year. This was expected, but American Express will need faster noninterest revenue growth to compensate if it wants to achieve its revenue growth targets. Discount revenue--the transaction fees American Express charges merchants when they accept its cards--ended a series of weak quarters, increasing 4% from last year but 5.7% sequentially to \$8.9 billion. International cardholders and US consumers remain the driving force behind American Express' results, with spending volume increasing 13% and 6%, respectively. Spending volume growth was supported by strong new card applications; the firm acquired 3.3 million new cards during the quarter. This led to a 4% increase in the number of proprietary cards outstanding to 82.1 million. ■■■

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

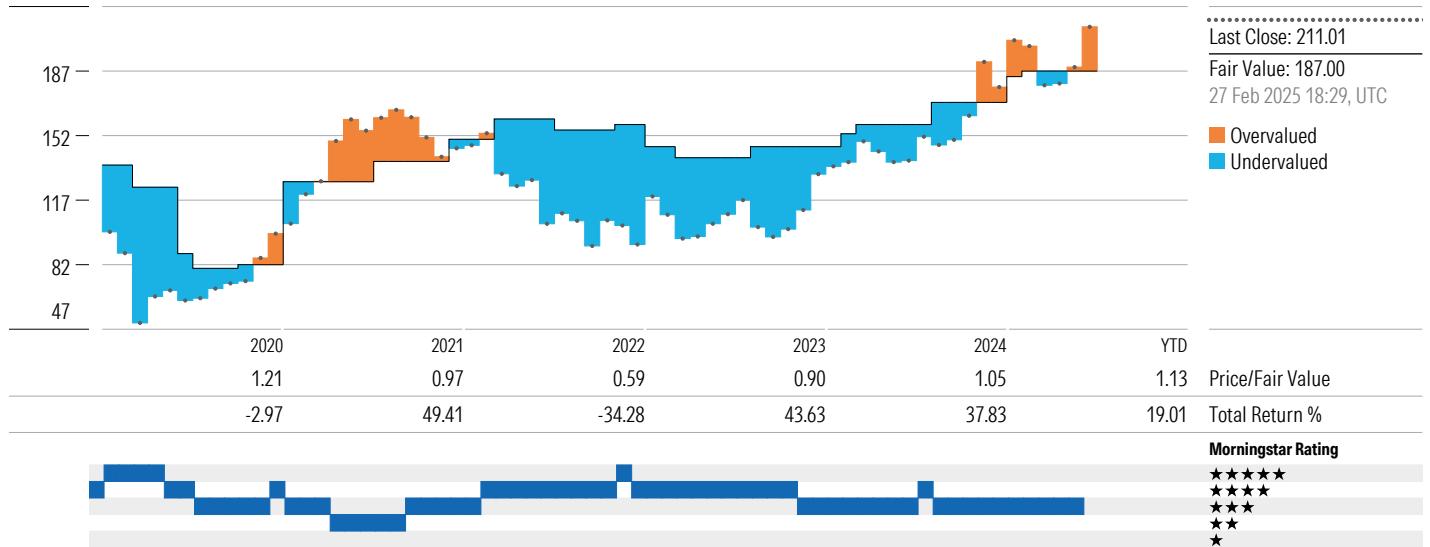
Competitors Price vs. Fair Value

Visa Inc Class A V



Total Return % as of 27 Jun 2025. Last Close as of 27 Jun 2025. Fair Value as of 9 Jun 2025 19:18, UTC.

Capital One Financial Corp COF



Total Return % as of 27 Jun 2025. Last Close as of 27 Jun 2025. Fair Value as of 27 Feb 2025 18:29, UTC.

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price 317.19 USD 27 Jun 2025	Fair Value Estimate 265.00 USD 29 May 2025 19:21, UTC	Price/FVE 1.20	Market Cap 222.22 USD Bil 27 Jun 2025	Economic Moat™ Wide	Equity Style Box Large Blend	Uncertainty Medium	Capital Allocation Standard	ESG Risk Rating Assessment¹  4 Jun 2025 05:00, UTC
---	---	-------------------	---	------------------------	---------------------------------	-----------------------	--------------------------------	--

Morningstar Valuation Model Summary

Financials as of 29 May 2025

	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Fiscal Year, ends 31 Dec								
Net Interest Income (USD Mil)	9,895	13,134	15,543	16,847	18,102	19,336	20,531	21,961
Non Interest Income (USD Mil)	42,967	47,381	50,406	53,940	58,365	62,870	67,368	72,197
Total Pre-Provision Revenue (USD Mil)	52,862	60,515	65,949	70,787	76,467	82,205	87,900	94,158
Provision for Loan Losses (USD Mil)	2,182	4,923	5,185	4,373	4,455	4,736	5,699	6,094
Operating Expenses (USD Mil)	41,095	45,079	47,869	52,407	56,048	59,956	64,153	68,660
Operating Income (USD Mil)	9,585	10,513	12,895	14,007	15,964	17,513	18,048	19,405
Net Income Available to Common Stockholders (USD Mil)	7,514	8,374	10,129	10,995	12,532	13,748	14,168	15,233
Adjusted Net Income (USD Mil)	7,400	8,252	9,995	10,995	12,532	13,748	14,168	15,233
Weighted Average Diluted Shares Outstanding (Mil)	752	736	735	703	703	703	703	703
Earnings Per Share (Diluted) (USD)	9.84	11.21	13.60	15.65	17.84	19.57	20.17	21.68
Adjusted Earnings Per Share (Diluted) (USD)	9.84	11.21	13.60	15.65	17.84	19.57	20.17	21.68
Dividends Per Share (USD)	2.08	2.40	2.80	3.28	3.44	3.62	3.80	3.99

Margins & Returns as of 29 May 2025

	Actual			Forecast					
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029
Net Interest Margin %	5.9	5.3	5.9	6.5	6.7	6.8	6.9	6.9	6.8
Efficiency Ratio %	74.9	77.7	74.5	72.6	74.0	73.3	72.9	73.0	72.9
Provision as % of Loans	2.2	1.3	2.6	2.6	2.0	1.9	1.9	2.2	2.0

Growth & Ratios as of 29 May 2025

	Actual			Forecast					
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029
Net Interest Income Growth %	26.1	27.7	32.7	18.3	8.4	7.4	6.8	6.2	7.0
Non Interest Income Growth %	13.3	24.1	10.3	6.4	7.0	8.2	7.7	7.2	7.4
Total Pre-Provision Revenue Growth %	—	24.7	14.5	9.0	7.3	8.0	7.5	6.9	7.1
Operating Expenses Growth %	—	24.1	9.7	6.2	9.5	7.0	7.0	7.0	—
Operating Income Growth %	—	-10.3	9.7	22.7	8.6	14.0	9.7	3.1	7.5
Net Income Growth %	7.8	-6.8	11.5	21.0	8.6	14.0	9.7	3.1	7.5
Earnings Per Share Growth %	10.4	-2.7	13.9	21.3	15.1	14.0	9.7	3.1	7.5

Valuation as of 29 May 2025

	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Price/Earning	15.0	16.7	21.8	20.3	17.8	16.2	15.7	14.6
Price/Book	—	—	—	—	—	—	—	—
Price/Tangible Book	4.5	4.9	7.2	7.3	7.0	6.6	6.2	5.9
Dividend Yield %	1.2	0.9	0.9	1.0	1.1	1.1	1.2	1.3
Dividend Payout %	21.0	21.3	19.9	21.0	19.3	18.5	18.8	18.4

Operating Performance / Profitability as of 29 May 2025

	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Fiscal Year, ends 31 Dec								
ROA %	3.6	3.5	3.9	4.1	4.4	4.5	4.4	4.5
ROE %	33.9	31.5	34.5	36.1	40.2	42.0	40.8	41.4
Return on Tangible Equity %	33.7	31.3	34.3	36.1	40.2	42.0	40.8	41.4

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price 317.19 USD 27 Jun 2025	Fair Value Estimate 265.00 USD 29 May 2025 19:21, UTC	Price/FVE 1.20	Market Cap 222.22 USD Bil 27 Jun 2025	Economic Moat™  Wide	Equity Style Box  Large Blend	Uncertainty Medium	Capital Allocation Standard	ESG Risk Rating Assessment ¹  4 Jun 2025 05:00, UTC
---	---	-------------------	---	--	---	-----------------------	--------------------------------	---

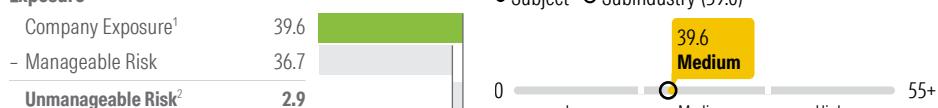
Financial Leverage (Reporting Currency)	Actual			Forecast					
	2022	2023	2024	2025	2026	2027	2028	2029	
Fiscal Year, ends 31 Dec									
Equity/Assets %	11.0	11.0	11.4	11.0	10.8	10.8	10.8	10.8	
Forecast Revisions as of	2025			2026			2027		
Prior data as of		Current	Prior		Current	Prior		Current	Prior
Fair Value Estimate Change (Trading Currency)	265.00	—	—	—	—	—	—	—	—
Net Interest Income (USD Mil)	16,847	16,403	18,102	17,535	19,336	18,695			
Total Pre-Provision Revenue (USD Mil)	70,787	70,678	76,467	76,695	82,205	82,887			
Operating Income (USD Mil)	14,007	14,289	15,964	16,091	17,513	17,085			
Net Income (USD Mil)	—	—	—	—	—	—			
Earnings Per Share (Diluted) (USD)	15.65	15.97	17.84	17.98	19.57	19.09			
Adjusted Earnings Per Share (Diluted) (USD)	15.65	15.97	17.84	17.98	19.57	19.09			
Dividends Per Share (USD)	3.28	3.28	3.44	3.44	3.62	3.62			
Key Valuation Drivers as of 29 May 2025									
Cost of Equity %	9.0								
Stage II Net Income Growth Rate %	5.0								
Stage II Incremental ROIC %	20.0								
Perpetuity Year	20								
Additional estimates and scenarios available for download at https://pitchbook.com/ .									
Discounted Cash Flow Valuation as of 29 May 2025									USD Mil
Present Value Stage I	—								0
Present Value Stage II	—								0
Present Value of the Perpetuity	—								0
Total Common Equity Value before Adjustment									0
Other Adjustments	—								—
Equity Value									188,905
Projected Diluted Shares	703								
Fair Value per Share (USD)									265.00

American Express Co AXP ★★ 27 Jun 2025 21:28, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
317.19 USD 27 Jun 2025	265.00 USD 29 May 2025 19:21, UTC	1.20	222.22 USD Bil 27 Jun 2025	Wide	Large Blend	Medium	Standard	 4 Jun 2025 05:00, UTC

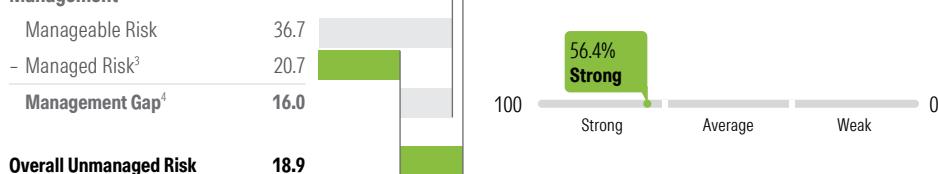
ESG Risk Rating Breakdown

Exposure



- 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



- 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 56.4% 4. Management Gap assesses risks that are not managed, but are considered manageable 5. ESG Risk Rating Assessment = Overall Unmanaged Risk + Unmanageable Risk

ESG Risk Rating Assessment⁵



ESG Risk Rating is of Jun 04, 2025. Highest Controversy Level is as of Jun 08, 2025. Sustainalytics Subindustry: Consumer Finance. 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 04 Jun 2025

Company Name	Exposure	Management	ESG Risk Rating
American Express Co	39.6 Medium	56.4 Strong	18.9 Low
Capital One Financial Corp	38.2 Medium	50.1 Strong	20.4 Medium
The Western Union Co	34.3 Low	53.3 Strong	17.4 Low
Visa Inc	36.4 Medium	65.2 Strong	14.5 Low
PayPal Holdings Inc	38.7 Medium	55.4 Strong	19.0 Low

Appendix

Historical Morningstar Rating

American Express Co AXP 27 Jun 2025 21:28, 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
★★★	★★★	★★★★	★★★	★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★	★★★

Visa Inc Class A V 27 Jun 2025 21:35, 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
★★	★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★

Capital One Financial Corp COF 27 Jun 2025 21:26, 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, 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 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

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	Uncertainty Ratings	★★★★★ 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	

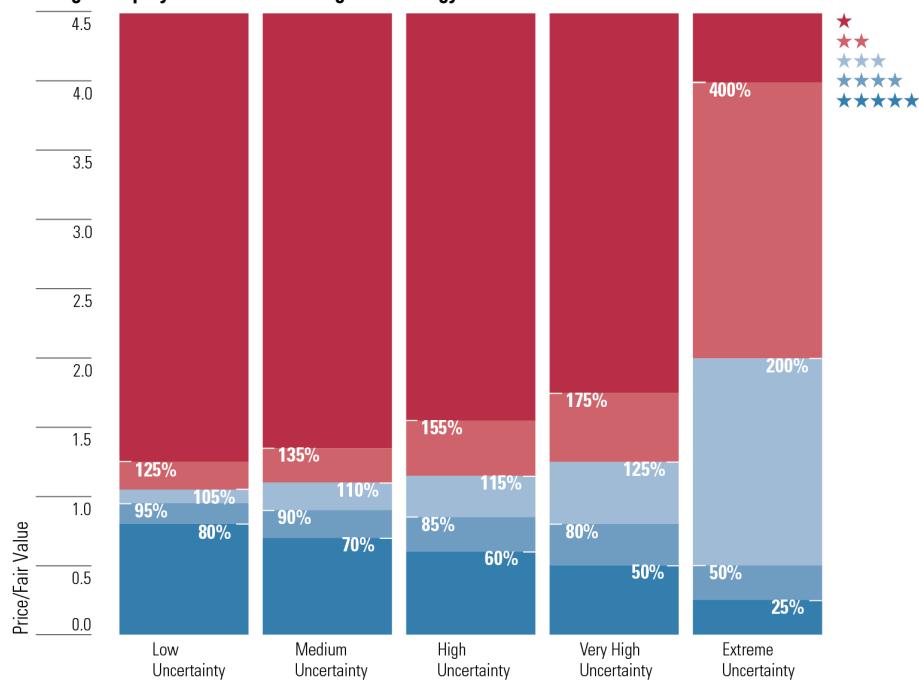
Our uncertainty rating is based on the interquartile range, or the middle 50% of potential outcomes, covering the 25th percentile–75th percentile. This means that when a stock hits 5 stars, we expect there is a 75% chance that the intrinsic value of that stock lies above the current market price. Similarly,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

Research Methodology for Valuing Companies

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.

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.

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.

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/

Ratings should not be used as the sole basis in evaluating a company or security. Ratings involve unknown risks and uncertainties which may cause our expectations not to occur or to differ significantly from what was expected and should not be considered an offer or solicitation to buy or sell a security.

Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security's investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Uncertainty Rating serves as a useful data point with respect to sensitivity analysis of the assumptions used in our determining a fair value price.

General Disclosure

Unless otherwise provided in a separate agreement, recipients accessing this report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the report is Morningstar Research Services LLC, a U.S.A. domiciled financial institution.

This Report is for informational purposes, should not be the sole piece of information used in making an investment decision, and has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. This publication is intended to provide information to assist investors in making their

own investment decisions, not to provide investment advice to any specific investor. Therefore, investments discussed herein may not be suitable for all investors; investors must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position. Morningstar encourages Report recipients to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an investment decision and when deemed necessary, to seek the advice of a financial, legal, tax, and/or accounting professional. The information, data, analyses and opinions presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, neither Morningstar, Inc. or the Equity Research Group represents that the report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, the analyst, Morningstar, Inc. and the Equity Research Group and their officers, directors and employees shall not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions within the report.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Morningstar, Inc. or its affiliates to any registration or licensing requirements in such jurisdiction.

Where this report is made available in a language other than English and in the case of inconsistencies between the English and translated versions of the report, the English version will control and supersede any ambiguities associated with any part or section of a report that has been issued in a foreign language. Neither the analyst, Morningstar, Inc., or the Equity Research Group guarantees the accuracy of the translations.

This report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries and/or distributors ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst, Morningstar, Inc. or the Equity Research Group. In Territories where a Distributor distributes our report, the Distributor is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established

Research Methodology for Valuing Companies

by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research reports.

Conflicts of Interest

- ▶ No interests are held by the analyst with respect to the security subject of this investment research report.
- ▶ Morningstar, Inc. may hold a long position in the security subject of this investment research report that exceeds 0.5% of the total issued share capital of the security. To determine if such is the case, please click <http://msi.morningstar.com> and <http://mdi.morningstar.com>
- ▶ Analysts' compensation is derived from Morningstar, Inc.'s overall earnings and consists of salary, bonus and in some cases restricted stock.
- ▶ Neither Morningstar, Inc. or the Equity Research Group receives commissions for providing research nor do they charge companies to be rated.
- ▶ Morningstar's overall earnings are generated in part by the activities of the Investment Management and Research groups, and other affiliates, who provide services to product issuers.
- ▶ Morningstar employees may not pursue business and employment opportunities outside Morningstar within the investment industry (including but not limited to, working as a financial planner, an investment professional or investment professional representative, a broker-dealer or broker-dealer agent, a financial writer, reporter, or analyst) without the approval of Morningstar's Legal and if applicable, Compliance teams.
- ▶ Neither Morningstar, Inc. or the Equity Research Group is a market maker or a liquidity provider of the security noted within this report.
- ▶ Neither Morningstar, Inc. or the Equity Research Group has been a lead manager or co-lead manager over the previous 12-months of any publicly disclosed offer of financial instruments of the issuer.
- ▶ Morningstar, Inc.'s investment management group does have arrangements with financial institutions to provide portfolio management/investment advice some of which an analyst may issue investment research reports on. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.
- ▶ Morningstar, Inc. is a publicly traded company (Ticker Symbol: MORN) and thus a financial institution the security of which is the subject of this report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section <https://shareholders.morningstar.com/investor-relations/financials/sec-filings/default.aspx>

- ▶ Morningstar, Inc. may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.

Further information on Morningstar, Inc.'s conflict of interest policies is available from <http://global.morningstar.com/equitydisclosures>. Also, please note analysts are subject to the CFA Institute's Code of Ethics and Standards of Professional Conduct.

Risk Warning Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security's investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions.

For more information about Morningstar's methodologies, please visit global.morningstar.com/equitydisclosures

For a list of securities which the Equity Research Group currently covers and provides written analysis on please contact your local Morningstar office. In addition, for historical analysis of securities covered, including their fair value estimate, please contact your local office.

For recipients in Australia: This Report has been issued and distributed in Australia by Morningstar Australasia Pty Ltd (ABN: 95 090 665 544; ASFL: 240892). Morningstar Australasia Pty Ltd is the provider of the general advice ('the Service') and takes responsibility for the production of this report. The Service is provided through the research of investment products.

To the extent the Report contains general advice it has been prepared without reference to an investor's objectives, financial situation or needs. Investors should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at <http://www.morningstar.com.au/fsg.pdf>

For recipients in New Zealand: This report has been is-

sued and distributed by Morningstar Australasia Pty Ltd and/or Morningstar Research Ltd (together 'Morningstar'). This report has been prepared and is intended for distribution in New Zealand to wholesale clients only and has not been prepared for use by New Zealand retail clients (as those terms are defined in the Financial Markets Conduct Act 2013). The information, views and any recommendations in this material are provided for general information purposes only, and solely relate to the companies and investment opportunities specified within. Our reports do not take into account any particular investor's financial situation, objectives or appetite for risk, meaning no representation may be implied as to the suitability of any financial product mentioned for any particular investor. We recommend seeking financial advice before making any investment decision.

For recipients in Hong Kong: The Report is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited.

For recipients in India: This investment research is issued by Morningstar Investment Adviser India Private Limited. Morningstar Investment Adviser India Private Limited is registered with SEBI as a Portfolio Manager (registration number INP000006156) and as a Research Entity (registration number INH000008686). Morningstar Investment Adviser India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. Morningstar Investment Adviser India Private Limited is a wholly owned subsidiary of Morningstar Investment Management LLC. In India, Morningstar Investment Adviser India Private Limited has one associate, Morningstar India Private Limited, which provides data-related services, financial data analysis, and software development. The research analyst has not served as an officer, director, or employee of the fund company within the last 12 months, nor have they or their associates engaged in market-making activity for the fund company. The ESG-related information, methodologies, tool, ratings, data and opinions contained or reflected herein are not directed to or intended for use or distribution to India-based clients or users and their distribution to Indian resident individuals or entities is not permitted, and Morningstar/Sustainalytics accepts no responsibility or liability whatsoever for the actions of third parties in this respect.

*The Conflicts of Interest disclosure above also applies to relatives and associates of Manager Research Analysts in

Research Methodology for Valuing Companies

India # The Conflicts of Interest disclosure above also applies to associates of Manager Research Analysts in India. The terms and conditions on which Morningstar Investment Adviser India Private Limited offers Investment Research to clients, varies from client to client, and are detailed in the respective client agreement.

For recipients in Japan: The Report is distributed by Ibbotson Associates Japan, Inc., which is regulated by Financial Services Agency, for informational purposes only. Neither Ibbotson Associates Japan, Inc., nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information.

For recipients in Singapore: The Report is intended for Institutional Investor audiences and is distributed by Morningstar Investment Adviser Singapore Pte. Limited, which is licensed by the Monetary Authority of Singapore to provide financial advisory services in Singapore. Morningstar Investment Adviser Singapore Pte. Limited is the entity responsible for the creation and distribution of the research services described in this Report.

This content is provided for informational purposes only and may be shared or redistributed by Institutional Investors to their clients or other permitted persons, subject to obtaining the appropriate licence from Morningstar. Redistribution of this content is subject to any applicable conditions or limitations, including those agreed commercially or contractually with Morningstar. The person who shares or redistributes this content shall be solely responsible for compliance with all relevant legal and regulatory obligations in the jurisdictions in which the material is made available.

Investors should consult a financial adviser regarding the suitability of any investment product, taking into account their specific investment objectives, financial situation or particular needs, before making any investment decision.

Morningstar, Inc., and its affiliates rely on certain exemptions (Financial Advisers Regulations, Section 27(1)(e), Section 32B and 32C) to provide its investment research to recipients in Singapore.

For recipients in Korea: The report is distributed by Morningstar Korea Ltd., which has filed to the Financial Services Committee, for informational purposes only. Neither Morningstar Korea Ltd. nor its representatives are acting or will be deemed to be acting as an investment advisor to any recipients of this information.