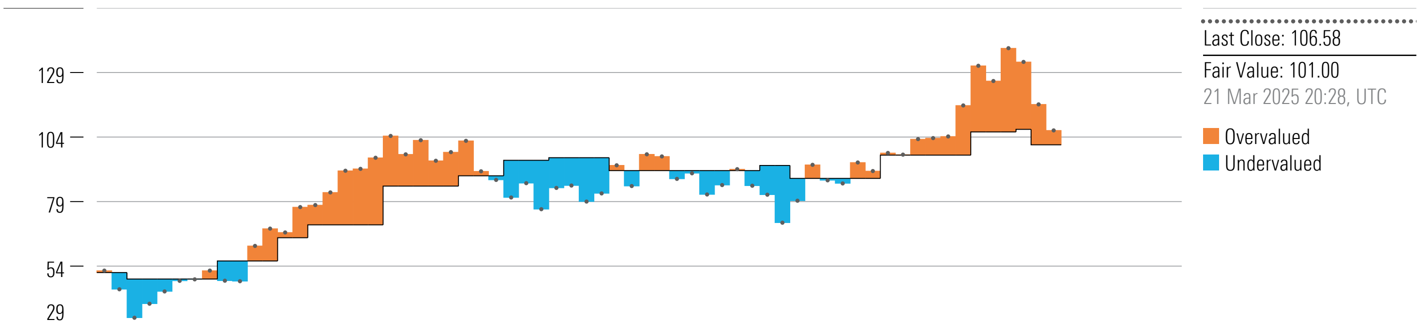
Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 1 of 25

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

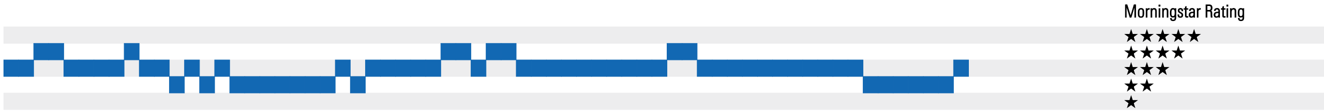
Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
106.58 USD 10 Apr 2025	101.00 USD 21 Mar 2025 20:28, UTC	1.06	174.23 USD Bil 11 Apr 2025	Narrow	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

Price vs. Fair Value



	2020	2021	2022	2023	2024	YTD	
	1.22	1.15	0.93	1.06	1.19	1.06	Price/Fair Value
	36.80	46.30	-10.38	13.50	38.63	-14.49	Total Return %

Morningstar Rating



Total Return % as of 10 Apr 2025. Last Close as of 10 Apr 2025. Fair Value as of 21 Mar 2025 20:28, UTC.

Contents

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

Morgan Stanley Earnings: Trading Revenue Drives Record-Setting Quarter, but Shares Still Expensive

Analyst Note Brett Horn, CFA, Senior Equity Analyst, 11 Apr 2025

Narrow-moat-rated Morgan Stanley reported strong first-quarter results, highlighted by record-setting net revenue generated by the Institutional Securities business, as it took full advantage of the heightened volatility in the trading environment. Despite the strong quarterly results and recent selloff of the stock alongside broader equity markets, we continue to see shares as modestly overvalued compared with our $101 per share fair value estimate.

The company reported net income to common shareholders of $4.2 billion, or $2.60 per diluted share, on $17.7 billion of net revenue. Net revenue increased 9% sequentially and 17% year over year as trading volumes spiked amid continued developments in tariff policies that have the potential to disrupt long-standing globalization trends. We believe that trading revenue should ultimately correct from its currently elevated level over the long run. However, we note that this trend may persist in the near term until markets attain more clarity on global trading policies and the second-order effects they have on geopolitical uncertainty.

Investment banking revenue grew 8% from the year-ago quarter, which we view favorably as heightened macroeconomic uncertainty typically exhibits downward pressure on merger activity, with IPO markets also depressed relative to historic averages. We continue to believe that 2024 was only the early innings of a recovery in dealmaking and investment banking revenue, but would note that the

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 2 of 25

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
106.58 USD 10 Apr 2025	101.00 USD 21 Mar 2025 20:28, UTC	1.06	174.23 USD Bil 11 Apr 2025	Narrow	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

Sector	Industry
Financial Services	Capital Markets

Business Description

Morgan Stanley is a global investment bank whose history, through its legacy firms, can be traced back to 1924. The company has institutional securities, wealth management, and investment management segments with approximately 45% of net revenue from its institutional securities business, 45% from wealth management, and 10% from investment management. About 24% of its total revenue is from outside the Americas. The company had over $6 trillion of client assets as well as around 70,000 employees at the end of 2024.

current backdrop has the potential to delay any sort of normalization by a few years.

The wealth management segment, which we view as the crown jewel of the company, continued its momentum. While client assets ticked down 3% from the previous quarter, we viewed this as a solid outcome during a quarter when major indexes had begun to trade down. Further, we would note that management continues to execute on its initiative to raise client assets, booking a further $93.8 billion in net inflows.

Business Strategy & Outlook Brett Horn, CFA, Senior Equity Analyst, 21 Mar 2025

Morgan Stanley has built a more stable business model, and its shift to wealth management from investment banking will continue to be a main part of the company's story over the long term. Investment banking is capital intensive, and many banks, especially the European investment banks, have had trouble generating adequate returns in that business and have purposely shrunk that business line. Morgan Stanley has remained dedicated to investment banking and has gained market share. The company had relatively strong returns on equity in its institutional securities business of about 14% from 2020 through 2024, but only averaged about 11% over the previous decade.

Wealth management and asset management tend to be relatively more stable than investment banking and have high returns on capital. Merging Citigroup's Smith Barney business into its own wealth management business after the global financial crisis was transformational and catapulted Morgan Stanley into an industry leader. Wealth management operating margins that had frequently been single digits expanded to the mid- to upper-20s and returns on equity have been in the mid-teens to 20s. The acquisitions of E-Trade and Eaton Vance in the early 2020s added both scale and additional capabilities to Morgan Stanley.

Proposed Basel III regulatory capital rules could increase risk-weighted assets by up to 20% at Morgan Stanley, which would pose some headwinds despite being well capitalized.

Given shifts in market expectations regarding the likelihood of a recession, investment banking revenue should taper over the next several years after a strong bounceback from cyclical lows in 2022. We continue to believe that trading revenue is abnormally high, but we think there could be several more quarters left of relatively high trading revenue as macroeconomic uncertainty leads to higher market volatility before some pronounced mean reversion occurs in the back half of our explicit forecast. We assess that asset markets are around fairly valued, which should lead to average growth in the company's investment management business over the long run.

Bulls Say Brett Horn, CFA, Senior Equity Analyst, 21 Mar 2025

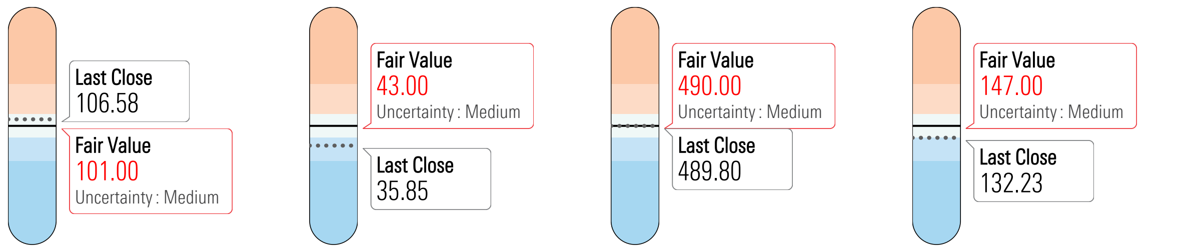
- Increases in asset prices can materially improve revenue and operating margins in the company's asset-management and wealth-management segments. There's also a sweet spot to the level of interest rates

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
106.58 USD 10 Apr 2025	101.00 USD 21 Mar 2025 20:28, UTC	1.06	174.23 USD Bil 11 Apr 2025	Narrow	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

Competitors

Morgan Stanley MS | Bank of America Corp BAC | The Goldman Sachs Group Inc GS | Raymond James Financial Inc RJF



	Morgan Stanley MS	Bank of America Corp BAC	The Goldman Sachs Group Inc GS	Raymond James Financial Inc RJF
Economic Moat	Narrow	Wide	Narrow	Narrow
Currency	USD	USD	USD	USD
Fair Value	101.00 21 Mar 2025 20:28, UTC	43.00 4 Feb 2025 23:19, UTC	490.00 21 Mar 2025 20:20, UTC	147.00 12 Dec 2024 03:05, UTC
1-Star Price	136.35	58.05	661.50	198.45
5-Star Price	70.70	30.10	343.00	102.90
Assessment	Fairly Valued 10 Apr 2025	Undervalued 10 Apr 2025	Fairly Valued 10 Apr 2025	Undervalued 10 Apr 2025
Morningstar Rating	★★★10 Apr 2025 21:31, UTC	★★★★10 Apr 2025 21:32, UTC	★★★10 Apr 2025 21:33, UTC	★★★★10 Apr 2025 21:34, UTC
Analyst	Brett Horn, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst	Brett Horn, Senior Equity Analyst	Kevin Brown, Senior Equity Analyst
Capital Allocation	Exemplary	Standard	Standard	Standard
Price/Fair Value	1.06	0.83	1.00	0.90
Price/Sales	2.98	2.79	3.05	2.12
Price/Book	1.81	1.00	1.47	2.28
Price/Earning	13.41	11.17	11.77	12.50
Dividend Yield	3.40%	2.85%	2.40%	1.44%
Market Cap	171.43 Bil	272.56 Bil	152.23 Bil	27.10 Bil
52-Week Range	85.01—142.03	33.07—48.08	387.12—672.19	104.24—174.32
Investment Style	Large Value	Large Value	Large Value	Mid Blend

that can improve earnings.

- The E-Trade and Eaton Vance acquisitions give Morgan Stanley exposure to some interesting tailwinds, such as employee stock administration plans, mass customization of asset management products, and self-directed brokerage.
- Morgan Stanley arguably has billions of dollars in excess capital that it can use for acquisitions or return to shareholders.

Bears Say Brett Horn, CFA, Senior Equity Analyst, 21 Mar 2025

- Operating leverage has recently led to strong earnings performance, but any pullback in revenue from a recession could also lead to material margin contraction.
- Proposed bank capital rules could lower repurchases and slow dividend growth over the next several years.
- Recent acquisitions may fail to live up to expectations. Self-directed trading activity could be at a

cyclical high, while many asset management mergers don't lead to improved net asset inflows.

Economic Moat Brett Horn, CFA, Senior Equity Analyst, 21 Mar 2025

We assess Morgan Stanley as having a Narrow Morningstar Moat Rating. Its status as one of the largest financial institutions by both headcount and global reach means that the company has a competitive advantage derived from the personal networks of its employees and financial product distribution channels to garner transaction mandates. The company's reputation, developed over the decades, for pricing transactions to benefit both sellers and buyers puts it in a strong position when management teams are contemplating an investment banking deal. Morgan Stanley is consistently ranked in the top 5, often the top 3, among global investment banks for revenue. Its relatively high revenue production per employee is evidence that its brand makes the company an employer of choice when financial talent is seeking a new home.

In wealth management, Morgan Stanley is considered one of the wirehouse wealth management firms in the United States along with Bank of America-Merrill Lynch, UBS, and Wells Fargo. At the end of 2024, Morgan Stanley had around $4.7 trillion of client assets supervised by its financial advisors and another $1.4 trillion of self-directed retail client assets.

There are two major ways of generating revenue for advisors: collecting asset-based fees and commission-based. Fee-based advisors charge clients a flat rate based on asset levels, while commission-based advisors generate commissions from transactions, such as securities trades and purchasing mutual funds. There's a trend in the wealth management industry toward more fee-based accounts than commission-based.

Wealth management firms benefit from both client asset stickiness and advisor stickiness. On the one hand, clients are often hesitant to switch advisors because of existing relationships with their current advisor, uncertainty about the potential cost-benefit trade-off of a switch, and inertia with financial management decision-making. For example, wealth management firm LPL Financial often posts an AUM retention rate above 95%. Data from McKinsey show that for advisors serving households with more than $250,000 in assets, even the bottom-performing quartile of advisors have a client retention rate of 92%, with top-performing quartile advisors retaining 99% of clients.

On the other hand, we believe advisors tend to stay with their current firm due to the risk of losing client assets if they switch. Based on Cerulli's research, an advisor loses around 30% of client assets when switching. The 2004 Broker Protocol allows advisors to bring key client information when transitioning to new firms without being sued by former firms. Nevertheless, former firms could still limit the client documents and paperwork a switching advisor could bring, adding to the leaving advisor's client attrition. Operational logistics challenges, such as transferring client accounts and learning new technology, could deter advisors from switching. Cerulli estimates that the average tenure of an advisor with a firm is 10.8 years, equivalent to a 90.7% retention rate.

Advisors going independent has been an industry trend for the past decade, and we've seen wirehouse firms and broker/dealers lose advisors. The wirehouse firms lost their advisor headcount at a negative 1.6% 10-year CAGR from 2011 to 2021, and broker/dealers (national and regional broker/dealers and independent broker/dealers) recorded a smaller decline CAGR at negative 1.3%. A wealth management firm's brand can also play a role in attracting and retaining clients.

Investment banking moats (equity underwriting, debt underwriting, merger advisory, restructuring advisory) are primarily built on intangibles. Intangibles for an investment bank are in the strength of its reputation, relationships with investors, history with company executives, industry expertise, research analyst coverage, track record of successful deals, and distribution capabilities. Having a strong intangibles asset-based moat increases the probability that the investment bank will be hired for the coveted lead advisor position on an investment banking deal that comes with superior revenue share and economics compared with other investment banks in the underwriting syndicate or that provides lower value services, such as a fairness opinion on the valuation of a deal. A strong brand can also position the firm as an employer of choice for productive bankers. High-level indicators of an investment bank's intangible asset can be seen in its investment banking league table position, participation in high-profile transactions, and revenue production of its bankers.

We see little evidence of moats in developed financial markets for institutional securities trading by investment banks and broker/dealers. Financial instruments in developed markets often have fairly transparent pricing and high levels of liquidity (the ability to trade without significantly affecting the financial instrument's price). The tight trading spreads of equities on financial exchanges and increased electronification of fixed-income trading are examples of the decreased profit potential for institutional broker/dealers. Increased profits may be had in more opaque areas of trading, such as bespoke derivatives or block trades, but they often come with greater risk for the broker/dealer. For example, a close-to-ideal situation for a broker/dealer would be to execute two offsetting trades simultaneously, such as buying shares from a client who wants to sell out of a position and immediately selling those shares to another client who wants to buy them. However, in a block trade where the investment bank buys a large chunk of shares from a selling shareholder, those shares would sit on the investment bank's balance sheet while looking for investors to buy those shares. In the time that the shares are on the investment bank's balance sheet, the value of the shares could decrease and produce a loss on that block trade.

Even high revenue and operating margins in institutional trading don't necessarily indicate an economic moat that generates excess returns on capital. For a couple of global investment banks with USD billions in institutional trading revenue and operating margins that can be 10 percentage points higher than smaller investment banks, they can have returns on capital that are volatile and in the high-single digits to low-double digits, which is not significantly different from the cost of capital needed to support the business. Broker/dealers often have to hold an inventory of financial instruments on their balance sheet to facilitate client transactions, such as fixed-income securities. Financial regulators have increased the amount of generally more expensive capital, such as shareholders' equity or long-dated corporate bonds, that are used to fund the inventory of financial instruments at large banks with trading operations to reduce their solvency risk and liquidity risk. So, even if the revenue and operating margins of an investment bank's institutional trading business are high, returns on capital can be low, which signals the lack of a moat that generates excess economic returns.

We believe the asset-management business is conducive to the creation of economic moats, with switching costs and intangible assets being the most durable sources of competitive advantage for firms operating in the industry. Although the switching costs might not be explicitly large, inertia and the uncertainty of achieving better results by moving from one asset manager to another tend to keep many investors invested with the same funds for extended periods. As a result, money that flows into asset-management firms tends to stay there. For the industry overall, the average narrow redemption (retention) rate, which does not include exchange redemptions, has been 25% or less (75% or greater) annually during the past five-, 10-, 15-, 20-, 25-, and 30-year periods. While traditional asset managers tend to rely more on investor inaction to keep redemption rates low, alternative asset managers use lockup periods to prevent investors from redeeming part or all of their investments for prolonged periods. Private equity funds tend to have the longest lockup periods of seven-10 years compared with what is more common quarterly redemption periods for most hedge funds and credit alternatives offerings after a period of time invested with a fund (albeit generally with a cap on period-level redemptions).

Asset managers can improve on the switching cost advantage inherent in their business with organizational attributes (such as product mix, distribution channel concentration, and geographic reach) and intangible assets (such as strong and respected brands and manager reputations derived from successful records of investment performance), which can provide them with a degree of differentiation from their peers.

We generally refer to all these things—the organizational attributes and the more common intangibles—as intangible assets that can either add to or subtract from the switching cost advantage that might be inherent in an asset manager's business model. For example, firms that offer niche products with significantly higher switching costs—such as retirement accounts, alternative funds with lockup periods, and tax-managed strategies—that allow them to hold on to assets longer are generally viewed as having intangibles that clearly separate them from peers. Meanwhile, the depth and breadth of product mix, distribution channel concentration, geographic reach, and successful investment performance records are all visible attributes. Still, it tends to be harder to make a direct connection to their influence on switching costs. It can generally be inferred that firms with above-average investment performance will tend to see lower redemption rates. At the same time, companies with diversified offerings can offset flows out of one asset class or geography with flows into another during market cycles.

While the industry's barriers to entry are not particularly significant, the barriers to success are extremely high. It not only takes time and skill to put together a long enough record of investment performance to start gathering assets but even more time to build the scale necessary to remain competitive. This has generally provided the larger, more established asset managers with an advantage over the smaller players in the industry, especially when it comes to gaining cost-effective access to distribution platforms.

Competition for investor inflows can be stiff and has traditionally centered on investment performance, especially in the retail channel. Although institutional investors and retail gatekeepers are exerting pressure on pricing, competition based on price has been rare, aside from what we've seen in the US market for exchange-traded funds. While compensation remains the single largest expense for most asset managers, supplier power has been manageable, as many firms have reduced their reliance on star managers and have tied manager and analyst pay to both portfolio and overall firm performance.

Asset stickiness (the degree to which assets remain with a manager over time) can be a primary differentiator between wide- and narrow-moat firms, as asset managers that have demonstrated an ability to gather and retain investor assets during different market cycles have tended to produce more stable levels of profitability, with returns exceeding their cost of capital for longer periods. While the more broadly diversified asset managers are structurally set up to hold on to assets regardless of market conditions, it has been firms with solid product sets across asset classes (built on repeatable investment processes), charging reasonable fees, and with singular corporate cultures dedicated to a common purpose that have done a better job of gathering and retaining assets. Firms offering niche products with significantly higher switching costs—such as retirement accounts, funds with lockup periods, and tax-managed strategies—have tended to hold on to assets longer.

Fair Value and Profit Drivers Brett Horn, CFA, Senior Equity Analyst, 21 Mar 2025

We are lowering our fair value estimate for Morgan Stanley to $101 per share from $107 after making some adjustments to our projections based on current capital market conditions. Our fair value estimate equates to a forward price/earnings ratio of 11.7 times and a price/tangible book ratio of 2.6 times.

We project a net revenue compound annual growth rate of over 2.5% during the next five years. We forecast most revenue lines annually increasing at low- to mid-single-digit percentage rates, except for trading revenue that we believe will contract slightly after a period of likely overearning. We forecast assets under management growing at a 6%-8% compound annual growth rate over the next five years from asset price appreciation and the shift to wealth management fee-based assets from commission-based assets. We expect investment banking revenue to grow at a 2.5% compound annual growth rate after recovering from recent cyclical lows but entering a period of heightened economic uncertainty.

We have net interest income growing at a 8% compound annualized growth rate as the effects of normalized short-term interest rates is more than offset by the impacts of balance sheet growth. We forecast institutional trading to contract over the next five years. We believe recent trading revenue has been abnormally high at many investment banks, so it will take multiple years of growth in the global economy and at Morgan Stanley for the current trading revenue level to be considered normal.

We model across-a-cycle operating margins of around 26%, which is a bit short of management's target for an expense ratio (or bank efficiency ratio) of less than 70%. We calculate Morgan Stanley earning about a 18% return on average tangible common equity and having a long-term gross leverage ratio of 12-13 times. Last, we use a cost of equity of 9% in our discounted cash flow model.

Risk and Uncertainty Brett Horn, CFA, Senior Equity Analyst, 21 Mar 2025

Morgan Stanley has performed well over the previous several years and any missteps under new leadership could reverse recently positive market sentiment. Management has more than doubled its wealth management segment operating margins in recent years from about 12% in 2012 and is aiming for over 30% in the long run. The company also booked extremely strong fixed income trading results of $7 to $9 billion since 2020 compared with $4 to $5 billion before 2020. With the company doing so well on multiple metrics, there’s arguably more room to disappoint than surprise to the upside.

While we believe Morgan Stanley’s acquisitions of Eaton Vance and E-Trade have good strategic rationale, the company has been integrating two relatively large organizations at the same time. Part of the reason for the acquisitions is that they’re complementary to Morgan Stanley’s existing businesses, but being complementary does mean some degree of difference. For example, E-Trade is more of an online brokerage that caters to do-it-yourself investors, while Morgan Stanley has historically operated a full-service wealth manager.

Morgan Stanley has moderate exposure to environmental, social, and governance risks. The largest social issue for Morgan Stanley and many other investment banks is their ability to attract and retain high-quality talent. Additionally, many investment banks are notorious for their long work hours. This is factored into our model in a relatively high compensation ratio. Investment banks and wealth management firms can often have product governance issues stemming from their trading operations. Regulatory fines and litigation expenses are a normal part of business that we generally incorporate into our valuation model.

Our Morningstar Uncertainty Rating for Morgan Stanley is Medium, as the company has increased the diversity and stability of its earnings.

Capital Allocation Brett Horn, CFA, Senior Equity Analyst, 21 Mar 2025

Our Morningstar Capital Allocation Rating for Morgan Stanley is Exemplary. In our opinion, the company's balance sheet is sound, its capital investment decisions are exceptional, and its capital return strategy is appropriate. At the end of 2024, the company had a common equity Tier 1 capital ratio of 15.9%. This ratio is calculated based on risk-weighted assets, so it is a reasonable measure of capital adequacy for comparison with peers. Morgan Stanley's 15.9% is on the higher end for banks and is above the company's required statutory ratios.

The company's capital investment decisions are exceptional. At the end of 2024, the company had over $23 billion of goodwill and intangibles with much of it from the acquisitions of Smith Barney, E-Trade, and Eaton Vance. Smith Barney was a transformative deal for Morgan Stanley and has been a key driver of the company's strategy and outperformance over the previous decade. More recent acquisitions of Eaton Vance and E-Trade also have the potential to further the company's shift to higher return on capital and steadier investment management revenue, give Morgan Stanley capabilities to compete with the largest financial sector companies, and gives the company exposure to secular tailwinds in workplace services and mass customization of asset management products.

We assess the company's capital return strategy as appropriate. Morgan Stanley has historically returned more capital through share repurchases than dividends, which we think makes sense for a firm with a large investment banking business. With a greater portion of earnings coming from steadier investment management activities, the company has increased its dividend payout over time, including a doubling of the dividend in 2021. The firm holds more capital than many of its peers, which is reducing returns on capital, but that's largely been due to restrictions on capital returns that regulators had placed on all banks in the US

Ted Pick, who joined Morgan Stanley in 1990, became CEO in 2024. Pick has been co-president of Morgan Stanley, head of the institutional securities business, and co-head of the firm's strategy. He was a leader in the institutional securities business when there was significant skepticism over whether the company would be able to streamline its fixed-income securities. Over the previous decade, the company has fairly consistently earned over $5 billion in annual fixed income, currencies, and commodities trading revenue compared with the early to mid-2010s when $4 billion was often mentioned as a benchmark of success.

James Gorman, who had been CEO since early 2010, is executive chairman. Gorman has been with the firm since 2006 and held responsibilities associated with the company's wealth management, investment management, operations, and corporate strategy. Before joining Morgan Stanley, he was an executive in Merrill Lynch's private client business. Gorman's time at Merrill should prove invaluable, as Morgan Stanley's wealth-management business significantly increased in importance following the Smith Barney acquisition. More recent acquisitions in employee stock plan administration services and discount brokerage further emphasize the importance of investment services experience for the company.

Historically, Morgan Stanley earned returns above its cost of capital. Management has greatly bolstered its credibility over the past several years by delivering on its wealth management operating margin and fixed-income trading goals. We also believe management has taken a reasonable approach to not cave in to the pressure of analysts and investors to increase its guidance targets, as much of the company's earnings and operating margins depend on macro factors that the company can't control. This arguably conservative guidance policy should lead to relatively less disappointment in the currently unpredictable macroeconomic environment.

Analyst Notes Archive

US Blanket Tariffs Pose Significant Macroeconomic Risks and Are Unconditionally Bad for US Banks

Suryansh Sharma,Senior Equity Analyst,3 Apr 2025

President Donald Trump unleashed a barrage of tariffs on US trading partners that were significantly more aggressive and broader in scope than the market's expectation. US banks reacted negatively to the tariff announcements, and the US bank index was down more than 8%. Why it matters: The banking business is inherently tied to the macroeconomic performance of the US economy, and any negative impact on the economy will eventually percolate through the US banking industry's profitability. Economic slowdowns (or recessions) have a materially adverse impact on the US banking industry's loan growth, credit costs, investment banking fees, trading profitability, and asset management fees. The bottom line: Given the significant uncertainty associated with the tariff announcements, we are currently in the wait-and-see stance and do not plan to materially change our fair value estimates for US banks. While there are selective opportunities, US banks are fairly valued on average even after today's sharp correction, and we think investors should wait for a bigger margin of safety before going all-in into the sector. Big picture: If the current tariff regime remains in place in the long run, the US banking industry will certainly be hit hard, and the probability of recession will increase substantially. We estimate a midteens percentage fair value estimate decrease for the sector in a bear-case scenario, but the bank stocks can correct significantly more than that in the near term, given the hit to their profitability.

Morgan Stanley Earnings: Outlook Remains Positive, and Market Has Priced It In Michael Wong, CFA,Director,16 Jan 2025

Narrow-moat-rated Morgan Stanley reported strong 2024 results, and we expect results to remain fairly strong for the foreseeable future. However, we believe the market has priced in this view over the previous two quarters, and we see the shares as slightly overvalued compared with our $106 fair value estimate.Morgan Stanley reported net income of $12.8 billion, or $7.95 per diluted share, on $61.8

billion of net revenue for 2024. Net revenue even surpassed 2021's previous record, thanks to strength in trading and growth in wealth management client assets to $6.2 billion from $4.9 billion in 2021. There's likely still room for growth in investment banking as the economy remains strong. We still believe that trading revenue is above normal levels and that it could experience slow growth or even a slight reset lower going forward.Management said net interest income in the first quarter of 2025 will likely be around the fourth quarter's level and noted that low-cost sweep deposit balances increased for the second quarter in a row, which could be positive for all wealth management firms and retail brokerages if this marks a turning point for sweep deposits. We don't currently view interest rates remaining relatively high as being that impactful to Morgan Stanley through its net interest income line, but if higher interest rates cause a prolonged market correction, then investment management fees would take a step back.Political uncertainty in the US could temporarily disrupt capital-raising and merger activity, but given generally looser regulations, as long as new policies aren't a material detriment to the economy, we expect investment banking activity to grow over the medium term.

Morgan Stanley: FVE up to $106 From $97 After Adjusting for Client Assets and Regulatory Capital

Michael Wong, CFA,Director,18 Nov 2024

We've increased our fair value estimate for narrow-moat-rated Morgan Stanley to $106 per share from $97. This implies a forward price/earnings ratio of about 12.5 times and a price/tangible book ratio of 2.4 times. Of the $9 increase in our fair value estimate, approximately $2 is from earnings accumulated since our previous valuation update, $3 is from higher client asset levels after strong equity market returns, $2 is from higher forecast institutional securities revenue, and $2 is from incorporating a 10% increase in regulatory capital levels compared with our previous model that included a 20% increase.We're projecting a net revenue compound annual growth rate of over 4.5% during the next five years. We forecast assets under management growing at a 6%-7% compound annual growth rate over the next five years from asset price appreciation and the shift to wealth management fee-based assets from commission-based assets. We have investment banking revenue growing at an 8.5% CAGR as it recovers from recent cyclical lows. We have net interest income hovering around $8 billion to $9.5 billion as a decline in short-term interest rates decreases yields on earning assets and funding costs. We forecast institutional trading to be nearly flat over the next five years. We believe recent trading revenue has been abnormally high at many investment banks, so it will take multiple years of growth in the global economy and at Morgan Stanley for the current trading revenue level to be considered normal.We model across-a-cycle operating margins of around 30%. This operating margin is consistent with management's target for an expense ratio (or bank efficiency ratio) of less than 70%. We calculate Morgan Stanley earning about a 20% return on average tangible common equity and having a long-term gross leverage ratio of 11-12 times. Last, we use a cost of equity of 9% in our discounted cash flow model.

Republican Win Largely Positive for Capital Markets and Investment-Services Firms Michael Wong, CFA,Director,15 Nov 2024

We believe the election of Donald Trump as president and Republican control of the US Senate and House will be largely positive for capital markets and investment-services firms. We will adjust our valuation models as government policies solidify, but with a rally of over 10% for multiple capital markets companies after the election, we believe potential tailwinds have largely been incorporated into share prices. We view most capital markets and investment-services firms as fairly valued to slightly overvalued.In terms of investment banking, the Republican Party has historically been more friendly toward mergers than the Democratic Party. Investment banks in general, and M&A-focused investment banks like Evercore and Lazard especially, will benefit from higher M&A volume. Equity underwriting should remain strong as long as the stock market holds up, while there's more uncertainty around fixed-income underwriting with the yield curve steepening.A likely steepening yield curve should add to net interest income. The Federal Reserve is cutting rates on the short end, and the 10-year US Treasury yield is picking up after the election, as the market is pricing in likely higher inflation in the long term. While the Federal Reserve should continue to cut interest rates, the market is pricing in a more gradual pace of cuts, which benefits some companies with a relatively higher proportion of interest-earning assets tied to short-term interest rates.If the stock market is able to hold on to recent gains, and especially if the market continues to trend upward, wealth-management and retail brokerages should report new records in client assets, which are the foundation of earnings growth.

The New World of Direct Indexing and Mass Personalization: Potential Disruption Can't Be Ignored Michael Wong, CFA,Director,11 Nov 2024

Direct indexing in some form has existed for decades, but advances in technology have recently broadened its availability. With its arguable superiority to existing passive index funds and exchange-traded funds, investment industry leaders are positioning for the opportunities and threats it unleashes. While there have already been hundreds of billions of dollars dedicated to direct indexing offerings, numerous firms such as BlackRock and Morgan Stanley have acquired direct indexing capabilities in anticipation of further rapid growth.Informed by our case studies and analysis, we calculate a broad range of outcomes for the growth of direct indexing. At the low end, direct-to-retail investor direct indexing offerings could remain a niche product of unfulfilled potential similar to robo-advisors with annual revenue in hundreds of millions. Though, at the high end, direct indexing and mass personalization could be as momentous as the advent of exchange-traded funds, restructuring the investment services ecosystem.If direct indexing becomes widespread, we believe the winners will be the retail brokerages and robo-advisors. Traditional active and passive asset managers will likely be hit by direct indexing. And index providers, financial data firms, and wealth management service providers could face opportunities and threats from the growth of direct indexing. We see little effect on the profits of wealth management firms.

Morgan Stanley Earnings: Wealth Management Improved; Institutional Securities Remains Strong

Michael Wong, CFA,Director,16 Oct 2024

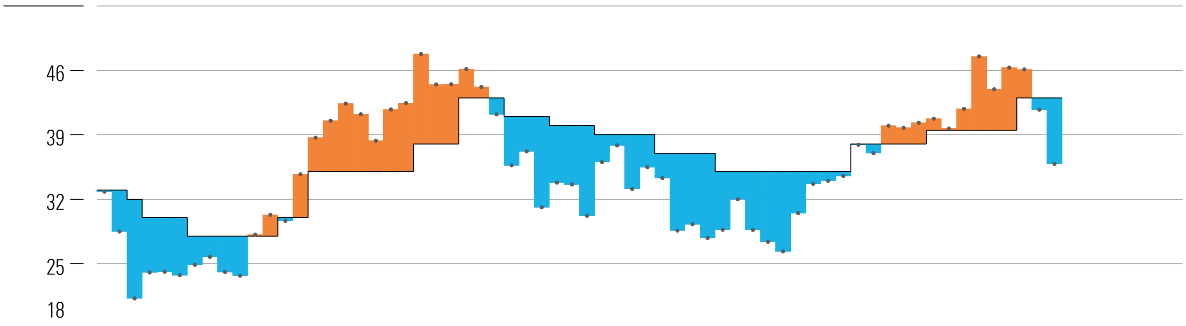
With the generally positive outlook for the economy and upward trending asset prices, Morgan Stanley's institutional securities business has remained strong and the wealth management business is making new records. The company reported net income to common shareholders of $3 billion, or $1.88 per diluted share, on $15.4 billion of net revenue. Net revenue increased 2% sequentially and 16% from the previous year with the year-over-year growth being broad based across investment banking, trading, and asset management. We currently believe that the economy is on a soft- or no-landing trajectory and that interest rates will decline over the next couple of years, which should be supportive of capital markets activity and asset prices. We don't anticipate making a material change to our $97 fair value estimate for narrow-moat Morgan Stanley and assess shares are slightly overvalued.While there can be some more room for cyclical growth in the investment banking business, we're more interested in the new records wealth management is currently and will likely continue to make going forward. Wealth management segment assets ended the quarter at a record $6 trillion, and pre-tax operating income was a record $2 billion. While operating margins had been stuck in a range over the previous several years, the segment booked its highest operating margin in recent years of 28.3%. This quarter might provide some evidence that even if net interest income, which had been a major contributor to operating margin expansion historically, isn't growing, the company could still make progress to reaching 30% operating margins with upward trending asset prices and client net asset inflows.

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 14 of 25

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

Competitors Price vs. Fair Value

Bank of America Corp BAC

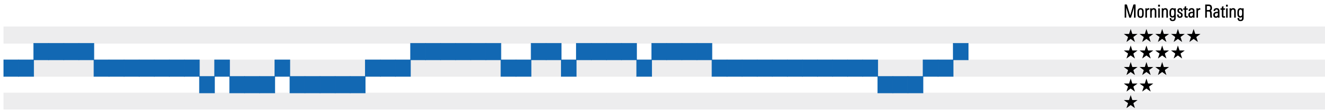


Fair Value: 43.00
4 Feb 2025 23:19, UTC

Last Close: 35.85
Overvalued
Undervalued

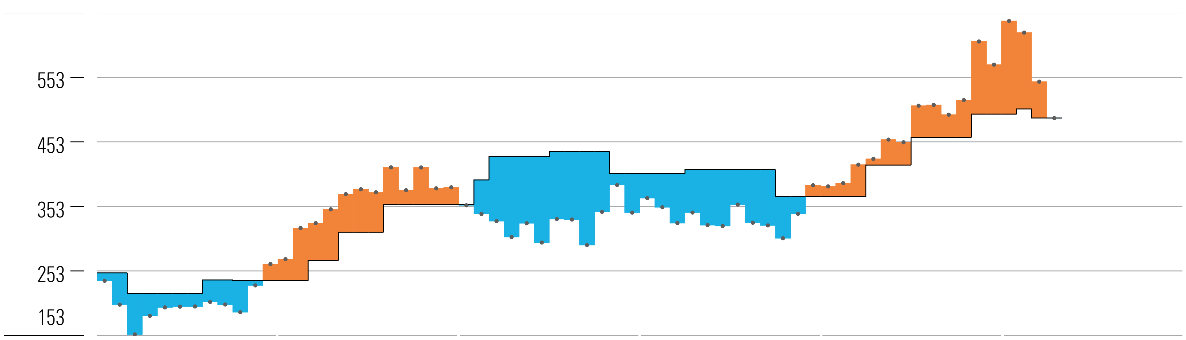
	2020	2021	2022	2023	2024	YTD	
	1.08	1.17	0.85	0.96	1.11	0.83	Price/Fair Value
	-11.90	49.36	-23.62	4.44	33.50	-17.84	Total Return %

Morningstar Rating



Total Return % as of 10 Apr 2025. Last Close as of 10 Apr 2025. Fair Value as of 4 Feb 2025 23:19, UTC.

The Goldman Sachs Group Inc GS

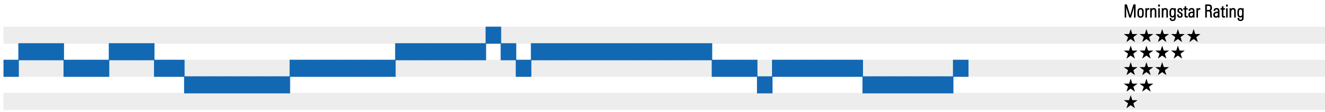


Fair Value: 490.00
21 Mar 2025 20:20, UTC

Last Close: 489.80
Overvalued
Undervalued

	2020	2021	2022	2023	2024	YTD	
	1.11	1.07	0.85	1.05	1.15	1.00	Price/Fair Value
	16.87	47.53	-7.89	15.40	51.42	-13.94	Total Return %

Morningstar Rating



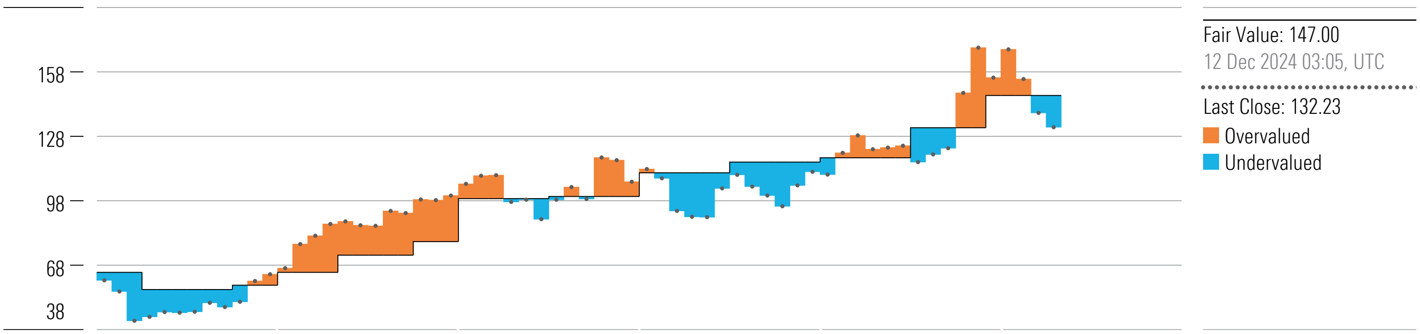
Total Return % as of 10 Apr 2025. Last Close as of 10 Apr 2025. Fair Value as of 21 Mar 2025 20:20, UTC.

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC.

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

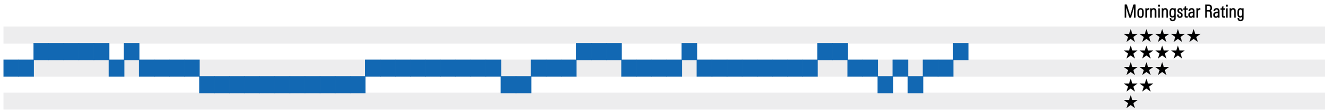
Competitors Price vs. Fair Value

Raymond James Financial Inc RJF



	2020	2021	2022	2023	2024	YTD	
	1.09	1.27	1.07	0.96	1.06	0.90	Price/Fair Value
	8.18	59.05	8.20	5.95	40.52	-14.23	Total Return %

Morningstar Rating



Total Return % as of 10 Apr 2025. Last Close as of 10 Apr 2025. Fair Value as of 12 Dec 2024 03:05, UTC.

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 16 of 25

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
106.58 USD 10 Apr 2025	101.00 USD 21 Mar 2025 20:28, UTC	1.06	174.23 USD Bil 11 Apr 2025	Narrow	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

Morningstar Valuation Model Summary

Financials as of 20 Mar 2025	Actual			Forecast				
Fiscal Year, ends 31 Dec	2022	2023	2024	2025	2026	2027	2028	2029
Net Interest Income (USD Mil)	9,327	8,230	8,611	9,973	10,970	11,519	11,980	12,459
Non Interest Income (USD Mil)	44,341	45,913	53,150	55,318	57,500	60,155	59,783	57,709
Total Pre-Provision Revenue (USD Mil)	53,668	54,143	61,761	65,291	68,470	71,674	71,763	70,168
Provision for Loan Losses (USD Mil)	280	532	264	399	439	461	479	498
Operating Expenses (USD Mil)	39,299	41,798	43,901	46,286	48,153	50,046	51,330	51,873
Operating Income (USD Mil)	14,089	11,813	17,596	18,607	19,878	21,168	19,954	17,796
Net Income Available to Common Stockholders (USD Mil)	11,029	9,087	13,390	14,555	15,553	16,565	15,108	13,463
Adjusted Net Income (USD Mil)	10,540	8,530	12,800	13,965	14,963	15,975	14,518	12,873
Weighted Average Diluted Shares Outstanding (Mil)	1,713	1,646	1,611	1,611	1,611	1,611	1,611	1,611
Earnings Per Share (Diluted) (USD)	6.15	5.18	7.95	8.67	9.29	9.92	9.01	7.99
Adjusted Earnings Per Share (Diluted) (USD)	6.15	5.18	7.95	8.67	9.29	9.92	9.01	7.99
Dividends Per Share (USD)	2.96	3.26	3.55	3.70	3.70	3.70	3.70	3.70

Margins & Returns as of 20 Mar 2025		Actual			Forecast					
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Avg
Net Interest Margin %	0.8	0.8	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9
Efficiency Ratio %	73.8	73.2	77.2	71.1	70.9	70.3	69.8	71.5	73.9	71.3
Provision as % of Loans	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Growth & Ratios as of 20 Mar 2025		Actual			Forecast					
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Avg
Net Interest Income Growth %	2.3	15.9	-11.8	4.6	15.8	10.0	5.0	4.0	4.0	7.7
Non Interest Income Growth %	0.9	-14.2	3.6	15.8	4.1	3.9	4.6	-0.6	-3.5	1.7
Total Pre-Provision Revenue Growth %	—	-10.2	0.9	14.1	5.7	4.9	4.7	0.1	-2.2	—
Operating Expenses Growth %	—	-2.0	6.4	5.0	5.4	4.0	3.9	2.6	1.1	—
Operating Income Growth %	—	-28.4	-16.2	48.9	5.7	6.8	6.5	-5.7	-10.8	—
Net Income Growth %	-4.2	-26.6	-17.6	47.3	8.7	6.9	6.5	-8.8	-10.9	—
Earnings Per Share Growth %	-0.4	-23.4	-15.8	53.3	9.1	7.1	6.8	-9.1	-11.3	0.1

Valuation as of 20 Mar 2025	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Price/Earning	13.8	18.0	15.8	12.3	11.5	10.7	11.8	13.3
Price/Book	—	—	—	—	—	—	—	—
Price/Tangible Book	2.2	2.3	2.8	2.7	2.7	2.6	2.5	2.4
Dividend Yield %	3.5	2.8	3.4	3.5	3.5	3.5	3.5	3.5
Dividend Payout %	51.2	67.6	47.9	42.7	39.8	37.3	41.1	46.3

Operating Performance / Profitability as of 20 Mar 2025	Actual			Forecast				
Fiscal Year, ends 31 Dec	2022	2023	2024	2025	2026	2027	2028	2029
ROA %	0.9	0.8	1.1	1.2	1.2	1.3	1.1	1.0
ROE %	10.7	9.1	13.2	14.5	16.0	16.5	14.6	12.7
Return on Tangible Equity %	15.1	12.8	18.5	20.8	23.5	24.3	21.3	18.2

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 17 of 25

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
106.58 USD 10 Apr 2025	101.00 USD 21 Mar 2025 20:28, UTC	1.06	174.23 USD Bil 11 Apr 2025	Narrow	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

Financial Leverage (Reporting Currency)	Actual			Forecast				
Fiscal Year, ends 31 Dec	2022	2023	2024	2025	2026	2027	2028	2029
Equity/Assets %	8.5	8.3	8.6	7.7	7.8	7.7	7.7	7.6

Forecast Revisions as of	2025		2026		2027	
Prior data as of 28 Sep 2023	Current	Prior	Current	Prior	Current	Prior
Fair Value Estimate Change (Trading Currency)	101.00	89.19	—	—	—	—
Net Interest Income (USD Mil)	9,973	8,401	10,970	8,191	11,519	8,188
Total Pre-Provision Revenue (USD Mil)	65,291	54,401	68,470	55,488	71,674	56,917
Operating Income (USD Mil)	18,607	13,512	19,878	15,143	21,168	16,256
Net Income (USD Mil)	—	9,962	—	10,935	—	11,782
Earnings Per Share (Diluted) (USD)	8.67	6.21	9.29	7.12	9.92	6.88
Adjusted Earnings Per Share (Diluted) (USD)	8.67	6.21	9.29	7.12	9.92	6.88
Dividends Per Share (USD)	3.70	-3.25	3.70	-3.40	3.70	-3.40

Key Valuation Drivers as of 20 Mar 2025	
Cost of Equity %	9.0
Stage II Net Income Growth Rate %	3.5
Stage II Incremental ROIC %	15.0
Perpetuity Year	15

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

Discounted Cash Flow Valuation as of 20 Mar 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	**161,021**
Projected Diluted Shares	1,607
Fair Value per Share (USD)	**101.00**

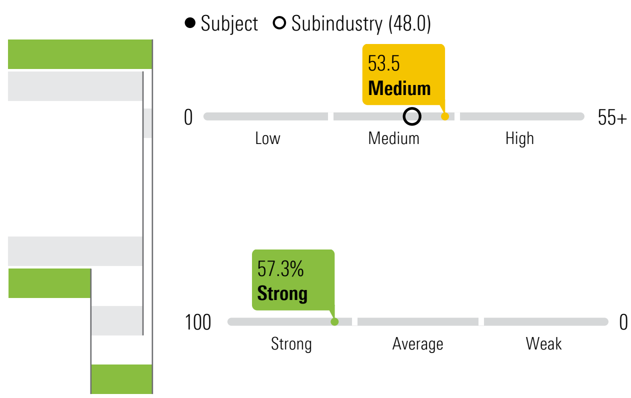
Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 18 of 25

Morgan Stanley MS ★★★ 10 Apr 2025 21:31, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
106.58 USD 10 Apr 2025	101.00 USD 21 Mar 2025 20:28, UTC	1.06	174.23 USD Bil 11 Apr 2025	Narrow	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

ESG Risk Rating Breakdown

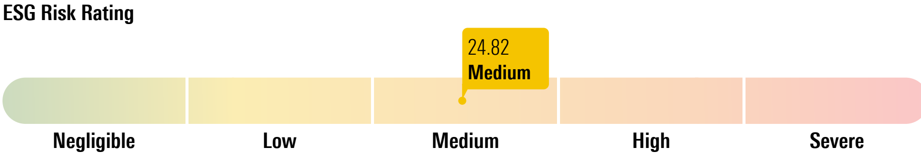
Exposure	
Company Exposure[1]	53.5
– Manageable Risk	50.0
Unmanageable Risk[2]	**3.5**
Management	
Manageable Risk	50.0
– Managed Risk[3]	28.6
Management Gap[4]	**21.4**
Overall Unmanaged Risk	**24.8**



- 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 57.3% 4. Management Gap assesses risks that are not managed, but are considered manageable 5. ESG Risk Rating Assessment = Overall Unmanaged Risk = Management Gap plus Unmanageable Risk

ESG Risk Rating Assessment[5]

ESG Risk Rating is of Apr 02, 2025. Highest Controversy Level is as of Apr 08, 2025. Sustainalytics Subindustry: Investment Banking and Brokerage. 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 02 Apr 2025

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

Company Name	Exposure			Management			ESG Risk Rating		
Morgan Stanley	53.5 | Medium	0	55+	57.3 | Strong	100	0	24.8 | Medium	0	40+
Bank of America Corp	53.2 | Medium	0	55+	58.4 | Strong	100	0	24.4 | Medium	0	40+
The Goldman Sachs Group Inc	53.7 | Medium	0	55+	56.8 | Strong	100	0	25.2 | Medium	0	40+
Raymond James Financial Inc	44.2 | Medium	0	55+	41.6 | Average	100	0	26.7 | Medium	0	40+
Stifel Financial Corp	49.7 | Medium	0	55+	44.9 | Average	100	0	28.7 | Medium	0	40+

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 19 of 25

Appendix
Historical Morningstar Rating

Morgan Stanley MS 10 Apr 2025 21:31, 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
★★	★★★	★★★	★★★★	★★★	★★★	★★★	★★★	★★★★	★★★★	★★★	★★★

Bank of America Corp BAC 10 Apr 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
★★★	★★★	★★★	★★★	★★★	★★★	★★★★	★★★★	★★★★	★★★★	★★★	★★★

The Goldman Sachs Group Inc GS 10 Apr 2025 21:33, 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
★★★	★★★	★★★★	★★★★	★★★★	★★★	★★★	★★★	★★★★	★★★★	★★★★	★★★

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 20 of 25

Raymond James Financial Inc RJF 10 Apr 2025 21:34, 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, indepth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss shortterm market-price movements), but we believe these negatives are mitigated by deep analysis and our longterm approach.

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

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

1. Economic Moat

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

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

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

2. Estimated Fair Value

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

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

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

Stage II: Fade

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

Stage III: Perpetuity

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

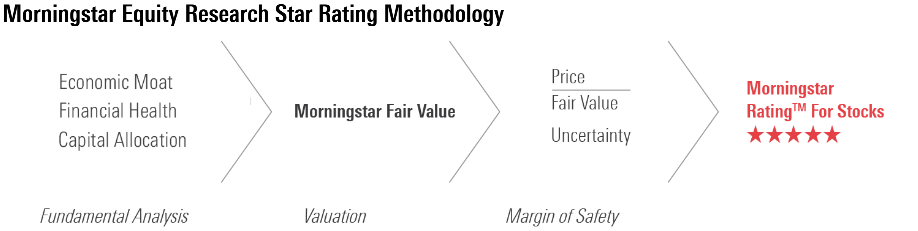
Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return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

3. Uncertainty Around That Fair Value Estimate

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

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

Morningstar Equity Research Star Rating Methodology



Morningstar Equity Analyst Report | Report as of 11 Apr 2025 18:03, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 22 of 25

Research Methodology for Valuing Companies

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

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

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

	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.

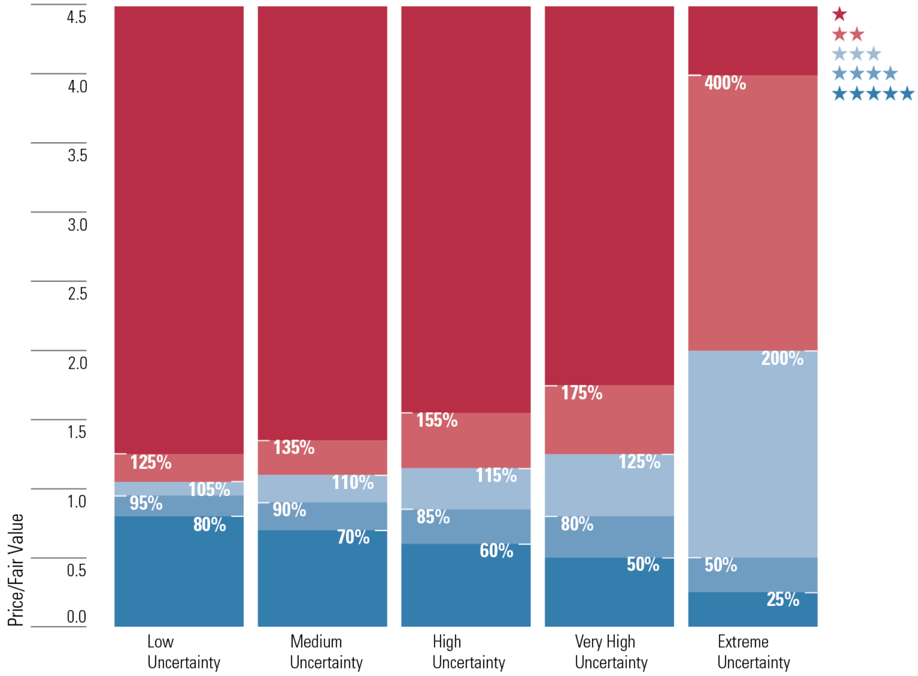
4. Market Price

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 Star Rating for Stocks

Morningstar Equity Research Star Rating Methodology



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

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

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

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

The Morningstar Star Ratings for stocks are defined below:

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

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

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

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

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

Other Definitions

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

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

Research Methodology for Valuing Companies

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

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

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

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 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 by local and/or regional regulatory bodies, including laws in

Research Methodology for Valuing Companies

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 issued 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 India # The Conflicts of Interest disclosure above also applies to associates of Manager Research Analysts in India. The terms and conditions on which Morningstar In-

Research Methodology for Valuing Companies

vestment 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: For Institutional Investor audiences only. The Report 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 presentation. 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 decisions.

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.