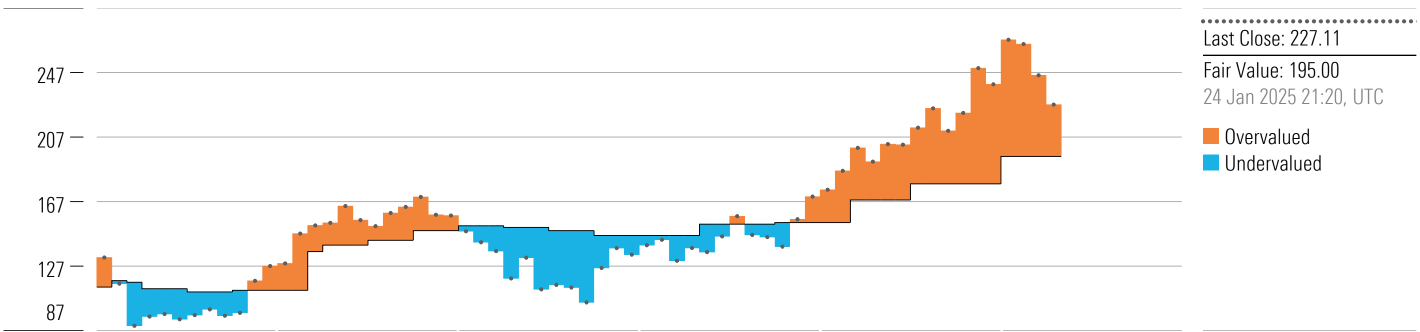
Morningstar Equity Analyst Report | Report as of 11 Apr 2025 16:51, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC. Page 1 of 29

JPMorgan Chase & Co JPM ★★ 10 Apr 2025 21:31, UTC

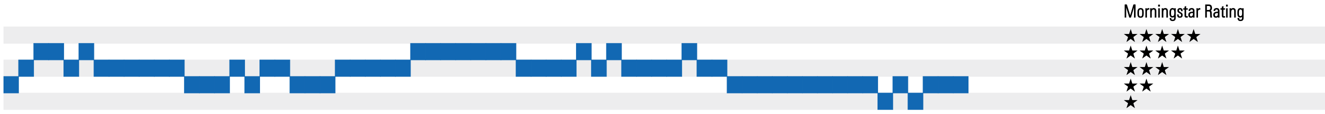
Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
227.11 USD 10 Apr 2025	195.00 USD 24 Jan 2025 21:20, UTC	1.16	651.14 USD Bil 11 Apr 2025	Wide	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

Price vs. Fair Value



	2020	2021	2022	2023	2024	YTD	
	1.13	1.06	0.92	1.10	1.35	1.16	Price/Fair Value
	-6.26	27.53	-12.79	29.87	43.63	-4.15	Total Return %

Morningstar Rating



Total Return % as of 10 Apr 2025. Last Close as of 10 Apr 2025. Fair Value as of 24 Jan 2025 21:20, UTC.

Contents

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

JPMorgan Earnings: Profitability Remains Strong, but the Bank Sounds Alarm on Economic Turbulence

Analyst Note Suryansh Sharma, Senior Equity Analyst, 11 Apr 2025

JPMorgan's profitability remains very strong as it reported first-quarter earnings of $5.07 per share, equating to a return on tangible equity of 21%. However, management sounded an alarm about the economy facing "considerable turbulence" primarily due to due to tariff-related disruptions.

Why it matters: The impact of tariff-related disruptions didn't show up in the first quarter, except for slightly higher provisions. We think the impacts will be much more visible in the second quarter. The bank increased its allowance for loan losses by around $1 billion in the quarter.

- The bank's first-quarter profitability was powered by solid net interest income, decent investment banking revenue, buoyant asset valuations helping asset management fees, and extremely strong principal transactions revenue due to increased market activity.
- We were skeptical about the rally in US bank stocks after the US presidential election, given the uncertainty around the administration's policies and the healthy valuations in the sector. Bank stocks have corrected by more than 20% from their highs, and valuations look more appealing now.

The bottom line: We maintain our $195 per share fair value estimate for wide-moat-rated JPMorgan after incorporating first-quarter results and continue to believe that the shares are overvalued and there are better options for prospective investors on a risk-adjusted basis.

- JPMorgan has a fortress balance sheet and should hold up much better in a worst-case scenario. Our

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Sector	Industry
Financial Services	Banks - Diversified

Business Description

JPMorgan Chase is one of the largest and most complex financial institutions in the United States, with nearly $4 trillion in assets. It is organized into four major segments: consumer and community banking, corporate and investment banking, commercial banking, and asset and wealth management. JPMorgan operates, and is subject to regulation, in multiple countries.

argument is that the strength of the bank's franchise is more than implied in its current valuations, and the probability of significant upside surprises is relatively lower.

Long view: The bank can continue to enjoy elevated levels of profitability in near term, but we believe that the recent levels of super-high profitability are unlikely to be maintained in the long run. Investors should wait for a higher margin of safety given the significantly uncertain macro outlook.

Business Strategy & Outlook Suryansh Sharma, Senior Equity Analyst, 3 Apr 2025

JPMorgan is arguably the most dominant bank in the United States. With leading investment bank, commercial bank, credit card, retail bank, and asset- and wealth-management franchises, it is a force to be reckoned with. The bank's combination of scale, diversification, and sound risk management seems like a simple path to competitive advantage, but few others have been able to execute a similar strategy. Even the best-managed banks are not immune from the occasional stumble, but JPMorgan seems to put all the pieces together in a more cohesive and less error-prone way than its peers. With the importance of scale and technology only increasing for the banks, we think it will be hard for competitors to catch up.

JPMorgan benefits from an unrivaled combination of scale and scope in the US, which only became more important during the banking industry turmoil of 2023, but management is not resting. JPMorgan has gone through several iterations of investments to generate share gains and started its next cycle of expansion in 2022, with investments set to continue at least until 2025. While this is pressuring expenses today, we expect the bank will take some incremental share across its different business lines for years to come and open up new avenues for growth.

For example, the bank has invested in Brazil and Europe, where the plan is to build out full banking services with a focus on digital platforms. JPMorgan is also hiring more financial advisors and bankers and has made investments in its consumer ecosystem by acquiring a travel agency, a restaurant review platform, and a travel loyalty rewards tech platform. Over time, we think these programs will help acquire more customers, but it will take years of work and calculating the exact payoff is difficult. We think the acquisition of First Republic has been accretive based on the balance sheet alone, with gains in wealth management only improving the math.

Being so large does have its downsides, including increased complexity, difficulty managing so many businesses, and higher capital requirements.

Bulls Say Suryansh Sharma, Senior Equity Analyst, 3 Apr 2025

- JPMorgan has emerged as the most dominant bank in the US. With leading share in many aspects of banking and financial services, it should be in an advantaged position for years to come.
- With JPMorgan, you can sleep well at night and not worry about the bank's balance sheet, regulatory

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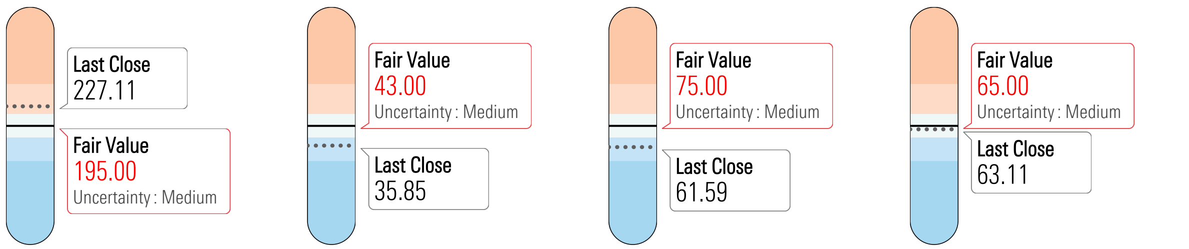
Competitors



	JPMorgan Chase & Co JPM	Bank of America Corp BAC	Citigroup Inc C	Wells Fargo & Co WFC
Economic Moat	Wide	Wide	None	Wide
Currency	USD	USD	USD	USD
Fair Value	195.00 24 Jan 2025 21:20, UTC	43.00 4 Feb 2025 23:19, UTC	75.00 5 Feb 2025 00:36, UTC	65.00 28 Jan 2025 19:36, UTC
1-Star Price	263.25	58.05	101.25	87.75
5-Star Price	136.50	30.10	52.50	45.50
Assessment	Overvalued 10 Apr 2025	Undervalued 10 Apr 2025	Undervalued 10 Apr 2025	Fairly Valued 10 Apr 2025
Morningstar Rating	★★10 Apr 2025 21:31, UTC	★★★★10 Apr 2025 21:32, UTC	★★★★10 Apr 2025 21:32, UTC	★★★10 Apr 2025 21:35, UTC
Analyst	Suryansh Sharma, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst
Capital Allocation	Exemplary	Standard	Standard	Standard
Price/Fair Value	1.16	0.83	0.82	0.97
Price/Sales	3.86	2.79	1.44	2.66
Price/Book	1.96	1.00	0.61	1.29
Price/Earning	12.50	11.17	9.84	11.75
Dividend Yield	2.22%	2.85%	3.59%	2.46%
Market Cap	632.05 Bil	272.56 Bil	115.92 Bil	206.06 Bil
52-Week Range	179.20—280.25	33.07—48.08	53.51—84.74	50.15—81.50
Investment Style	Large Value	Large Value	Large Value	Large Value

woes, or deposit flight.

- JPMorgan is investing heavily in organic expansion opportunities and its own distribution platforms, which should drive additional share gains over the next decade and secure the best competitive position.

Bears Say Suryansh Sharma, Senior Equity Analyst, 3 Apr 2025

- Higher interest rates are a double-edged sword. If the higher NII and solid economy narrative ever begins to reverse, banking profitability and sentiment will suffer.
- Heavy investments in organic expansion have increased expenses and hurt results today, and there are no guarantees about what revenue they will generate in the future, or when. Revenue and share payoffs in a competitive industry 5-10 years from now are hard to predict.
- We may not be done with higher investment spending, and negative expense surprises could still be lurking.

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Economic Moat Suryansh Sharma, Senior Equity Analyst, 3 Apr 2025

We believe that JPMorgan Chase has a Morningstar Economic Moat Rating of wide, based on cost advantage and switching costs, which is consistent with our bank moat framework. JPMorgan is the largest US money-center bank by assets and has a leading share in almost all the areas in which it competes. Even after accounting for the bank's higher capital requirements compared with its peers, we have a high degree of confidence that the bank will consistently earn returns that exceed its cost of equity through the cycle. We estimate the midcycle return on tangible equity of around 17% compared with the cost of equity of around 9.5%.

Industry Dynamic

JPMorgan boasts a sprawling ecosystem of services, operating as a leader in global investment banking, credit and debit card issuance, payments, trading, global custody, commercial banking, consumer banking (one of its products has more than 80 million US consumers utilizing it), and asset management (with more than $4 trillion in assets under management). Industry changes in recent years, including the increasing importance of scale and scope, along with changes in technology and the bank's heavy tech investments, should help maintain the bank's wide moat for some time.

The firm's scale advantage in its core banking business is demonstrated by the sheer size of its balance sheet, which stood at about $4 trillion as of the end of 2024 and was materially larger than that of its closest rival, Bank of America, which clocked in around $3.3 trillion.

The bank commands a striking 11.3% share of all US retail banking deposits as of the end of 2023 (per FDIC data), up from a 7.5% share as of the end of 2013. It also has a strong credit card franchise, boasting approximately 23% market share when last disclosed in 2023, measured by sales volume, according to management estimates. The credit card business of the bank, which involves lending at relatively higher rates while leveraging low-cost retail banking deposits, is a very profitable business for JPMorgan.

Across its other business lines, JPMorgan's commercial and investment banking segment houses market-leading investment banking, trading, payments, Treasury services, and securities services businesses with a whole host of commercial banking products offered across an unmatched global footprint. The breadth and depth of the bank's commercial and investment banking solutions make it a one-stop shop for a wide spectrum of corporate needs. The CIB segment of the company has relatively lower returns when compared with JPMorgan's retail banking and asset management businesses, but this fact can largely be attributed to the core characteristics of the business rather than the competitive standing of the bank. JPMorgan has a leading market share of about 9% in investment banking fees, per Dealogic. JPMorgan is one of the top investment banks in the world, and it consistently tops

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investment banking league tables. While many of the costs associated with investment banking are variable—most notably banker compensation—it has built a strong reputation and a massive securities distribution platform, attracts top talent, and has a global reach that only its largest peers can compete with. The bank has an estimated 11% share in markets revenue (trading), 9% in Treasury services, and 10.5% in security services in 2023, per Coalition Greenwich Competitor Analytics.

Investment Banking and Trading

Investment banking moats for equity and debt underwriting, merger and restructuring advisory, and loan syndication are largely built on intangible assets. These include a firm's reputation, investor relationships, executive connections, industry expertise, research coverage, track record, and distribution strength. A strong intangible asset base increases the likelihood of securing the lead advisor role in deals, which offers higher revenue potential. It also enhances recruitment of top talent. Indicators of these moats include league table rankings, involvement in major deals, and banker revenue generation.

Conversely, institutional securities trading in developed markets show little evidence of moats. Transparent pricing, high liquidity, and increased electronic trading have tightened profit margins for broker/dealers. Greater opportunities exist in less transparent areas like bespoke derivatives or block trades, though they carry higher risks. For instance, if a bank buys a large block of shares, it may have to keep it on its balance sheet for a period of time and may face potential losses if the share value declines before finding buyers. High revenue and margins in institutional trading don't guarantee excess returns on capital. While top banks like JPMorgan may earn slightly higher returns (and margins) than smaller firms, the business remains volatile, with returns barely exceeding the cost of capital. Broker/dealers must hold financial instruments on their balance sheets, such as fixed-income securities, which require costly capital. Stricter regulations have further increased capital requirements for the business, limiting profitability. As a result, even high margins in trading don't necessarily indicate a strong economic moat.

Asset and Wealth Management

JPMorgan also provides products related to asset management, wealth management, and private banking in its asset- and wealth-management segment. The bank is the fifth-largest asset manager when measured by AUM and is the third largest when measured by actively managed AUM, per the bank's disclosures. JPMorgan also has the world's biggest private banking franchise, primarily serving high-net-worth individuals. The bank's wealth management franchise received a substantial boost after acquiring the struggling First Republic Bank in 2023. We view scale and historical performance as increasingly important in asset management, and JPMorgan has both. The company's asset-management operations possess a sound brand, with the majority of its mutual fund assets at 4 or 5 stars and performing in the top two quartiles. Additionally, the bank competes with substantial scale, with about $5 trillion in assets under supervision, making it one of the largest global asset managers.

Asset management fosters economic moats, primarily through switching costs and intangible assets. While switching costs may not be high, investor inertia and uncertainty about better returns keep assets in place. On average, US long-term mutual funds retain about 75% of assets annually. Firms strengthen these moats with diverse product offerings, strong distribution, global reach, and respected brands backed by solid investment performance. These factors enhance differentiation and reinforce competitive advantages in the industry.

JPMorgan's wealth-management business benefits from both client asset stickiness and advisor switching costs. 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. On the other hand, we believe advisors tend to stay with their current firm due to the threat

of losing client assets if they switch. A 2021 study by Cerulli Associates suggests that advisors can lose as much as 19% of client assets if they switch firms. We believe that the moats within the bank's wealth-management business are generally stronger than in asset management.

While certain elements in JPMorgan's asset-management and investment banking businesses benefit somewhat from an intangible assets moat source, we do not award the intangible assets moat source to money-center banks, given its limited contribution on a consolidated basis.

Retail and Commercial Banking

We believe bank moats are derived primarily from two sources: cost advantage and switching costs. We see cost advantage as stemming from three primary factors: a low-cost deposit base, excellent operating efficiency, and conservative underwriting. Regulatory costs must also be considered.

JPMorgan's overall deposit market share is attractive, as the bank has one of the highest weighted average market shares in our coverage. JPMorgan is the top depositee in all three of its largest metropolitan statistical areas, and the bank is dominant in some of the toughest markets, including the New York-Newark-Jersey City MSA, where it has the top deposit share. The bank has benefits from a strong deposit franchise and has been gaining deposit share over the past five years. Total deposit balances grew by around 32% for the entire US banking system from 2019 to 2024, while the balances for JPMorgan grew by around 54% during the same period. JPMorgan has gained material deposit market share, even after excluding the First Republic acquisition. JPMorgan's cost of interest-bearing deposits has consistently been lower than the industry average, thereby indicating an advantaged deposit franchise. On a cost-advantage basis, we view the bank's deposit base as likely to remain advantageous in the future as well.

Within the operating efficiency bucket, we also see room for economies of scope, leading to a cost advantage via lower relative customer acquisition costs. This factor applies primarily to the banks with the largest distributional scale and the largest breadth of products, JPMorgan being the quintessential example. JPMorgan's operating efficiency has generally been close to its peers in the past two decades, but the bank's efficiency has improved materially in recent years. While some recent improvements in the efficiency ratio during 2023 and 2024 are due to the bank's favorable balance-sheet positioning for a higher interest rate environment, we believe that the bank's structural efficiency has also improved in recent years. The bank has executed extremely well in growing share in various banking segments and invested adequately in technology while prudently managing its expense base. We project that the bank will be able to maintain its efficiency ratio (defined as operating expenses/revenue) in the mid-fifties in the upcoming decade, attributable to its competitively advantaged positioning in the banking industry.

We would like to highlight that JPMorgan has a much higher exposure to certain business lines such as asset management, investment banking, and home lending that typically have much higher efficiency ratios than traditional retail banking. These segments weigh on the efficiency ratio of the consolidated bank due to the structural characteristics of these businesses, which have lower margins but are relatively capital light. However, despite this, and despite some potential for diseconomies of scale at the far end of the bank size spectrum, the banking behemoth has maintained impressive operating efficiency. Given the new phase of banking that we are now entering, where technological changes are occurring faster and are more impactful than ever, and can be deployed across singular integrated platforms, we expect increasing advantages for the largest banks when it comes to operating efficiency in the future. With JPMorgan's tech budget of over $15 billion per year, the bank may not drop to the lowest overall efficiency ratio, but it will be able to maintain higher levels of investment at similar efficiency levels. Further, with its solid mix of fee income, JPMorgan is much better insulated in low-rate environments.

JPMorgan fared better than many of its peers during the financial crisis, with lower collateralized debt obligation exposure and lower overall credit costs. The bank's largest exposures came via the firms it ultimately acquired as part of the crisis fallout, namely Bear Stearns and Washington Mutual. Both firms were key reasons for multiple legal settlements and charges, reaching as high as $13 billion in 2013. Even so, the bank remained profitable in all years and dipped below its cost of equity on a tangible return basis in only one year. We are encouraged by the bank's history of above-average underwriting and risk-taking, and believe the culture has likely remained or even improved following all the reforms that have taken place in the industry since the crisis.

JPMorgan's credit costs (net charge-offs as a percent of loans) have been slightly higher than the US banking industry average over the past two decades, but this can largely be explained by a different loan mix. JPMorgan has a much higher exposure to credit card loans, which tend to have substantially higher charge-off rates when compared with other types of loans. JPMorgan had an average exposure of roughly 17% to credit card loans in its loans book in the past decade, which is almost double the exposure of a typical US bank. JPMorgan's credit cost advantage becomes more apparent after we adjust for the fact that the bank has a different loan mix. The bank has been investing aggressively in data analytics and tech to improve its underwriting, and we think that the bank should continue to maintain an advantage in underwriting loans.

Banks primarily earn moats because of their cost advantages, but the competitive positioning of a bank can be reinforced by the ability of a particular bank to retain the advantages through switching costs. We see switching costs as more of a supporting moat source for banks rather than a primary moat source. Banks with deep customer relationships spanning multiple products can generate higher-than-average switching costs. The higher the number of products that a particular customer uses from a bank, the higher the associated switching costs.

Customers tend to keep their money in the same bank despite changes in interest rates, economic conditions, or the availability of similar higher-yield products offered by competing banks. This can largely be attributed to the financial, time, and psychological barriers that make it difficult or inconvenient for customers to move their deposits from one bank to another institution. Switching banks is often not just about transferring money from one account to another; it can also involve changing direct deposit, credit card linkages, automatic bill payments, and so on. The time, inconvenience, and friction associated with changing banks are similar for businesses as for retail customers. In addition to this, the financial rewards associated with changing banks are often very limited. For example, the rates paid on certificates of deposits are comparable among money-center banks, and to earn materially higher rates, the customer might have to move to a regional bank, community bank, or a financial technology firm that does not have comparable product offerings and may involve higher risk. This stickiness in deposits is an inherent characteristic of the banking business and arises from factors such as convenience, trust, switching costs, and the perceived safety of bank deposits.

The inherent switching costs in bank deposits can be seen in the fact that deposit market share doesn't change much among different banks during a typical year. The difficulty in moving bank accounts is also exemplified by the fact that it is now common practice in the US banking industry to offer hundreds of dollars or highly attractive rates to attract new customers.

We consider switching costs as a secondary moat source despite it being an inherent feature of bank deposits because all banks benefit from it. Having said this, we argue that certain types of deposits are stickier than others. We think that retail deposits are stickier than yield-sensitive institutional deposits, that a more granular deposit base is stickier than a lumpier deposit base, that checking accounts or working capital-related accounts are stickier than savings or investment-based accounts, and that noninterest-bearing deposits are stickier than interest-bearing deposits. Given the fact that the types of deposits with higher switching costs are generally cheaper, we argue that deposit costs for banks are the strongest indicator of relative switching cost advantage. This is the reason that both the cost advantage moat source and switching cost moat source for banks are joined at the hip, and we tend to rely more on cost advantage given the availability of quantitative metrics to support moat arguments.

Scale and Scope

Rounding out our moat discussion, we believe that the bank's key advantage comes from its scale in certain fixed-cost fixed-platform businesses, as well as the breadth of its products. This contributes to economies of scale and economies of scope, and creates switching costs for customers as they use the bank for more and more products. The bank is one of the top issuers of credit and debit cards, where many of the costs of running a payment platform are fixed and high in nature, leading to the need for scale. This has been borne out in the industry, where much consolidation and concentration within the top performers has occurred. The same has occurred in the mortgage industry and is occurring for other consumer-based mass-market products. JPMorgan has one of the largest fixed-income, currency, and commodities trading platforms, where incremental returns from the additional volume are maximal as the bank is able to spread the fixed costs of trading operations over an enormous base of transactions, which helps it compete effectively in a very competitive space.

While all the different segments of the bank are strong on their own, we believe there are advantages to combining them all under one banking roof. On the consumer side, JPMorgan can cross-sell multiple products, providing advantaged pricing to key customer segments (such as through its Sapphire banking program) and spread the overall costs of customer acquisition across more revenue streams. For a business where switching costs are important, having the product depth and reach that make it more likely for new customers to try your services first also play a key role. On the commercial side, similar dynamics apply. The bank can offer a complete package on a global scale that few can compete with, while sending out armies of bankers to both existing and new markets in an effort to win new business. Larger scale, powerful distribution networks, a multitude of products, and diversification of business lines lead to economies of scope, in addition to the economies of scale already achieved by the bank.

The rapid advancement of digitization, AI, and automation is reshaping banking, reducing reliance on physical branches, and enhancing efficiency. Large banks, such as JPMorgan, are leveraging economies of scale and scope to invest heavily in technology, widening the gap between them and smaller banks. While fintechs excel in niche areas, they face high regulatory and competitive barriers, limiting their ability to disrupt the industry. JPMorgan, with its vast technology budget—50% higher than its closest competitor—and a massive workforce in tech roles, is well-positioned to capitalize on this shift. Its ability to scale technology and harness extensive customer data strengthens its competitive edge, reinforcing the idea that scale, scope, and tech investment are crucial in modern banking.

Having the ability to offer a complete suite of products to both retail and institutional clients under a single roof, increasingly on a unified, well-integrated digital platform, is one of the strongest competitive characteristics of JPMorgan and the one that would be the difficult for rivals to replicate.

Conclusion

We believe the US banking system has improved over the past decade, as capital levels supporting it are at all-time highs. Further, regulation has become considerably stronger in the past several years. The US banking market is quite fragmented, and JPMorgan must compete with various regional and community banks as well as large money-center institutions, although this fragmentation has gradually decreased since the 1990s. While we do view the banking sector as intensely competitive, the largest banks by asset size have generally been able to earn higher returns on equity for the past several decades and still do so today.

Our long-term outlook is generally positive from a macroeconomic and political standpoint for the US banking system, as the US is still the world's leading democracy, has increased its GDP at a steady pace for years, and maintains the world's reserve currency, all of which contribute to banking stability. US money-center banks are more geographically diversified than the majority of US regional banks, which often have concentrations in individual states or local economies. This diversification is positive from a risk perspective.

The bank is large enough to be considered a global systemically important bank and also has the highest GSIB surcharge, which supports our view that it faces some of the highest regulatory requirements and costs. The bank is also large enough to be subject to the Federal Reserve's annual stress tests, as well as a host of other regulatory requirements, and we don't see any massive regulatory relief coming for the large money-center banks. The stringent capital requirements that the largest banks are held to give us some reassurance that these banks will be able to weather the next economic downturn.

We use ROTE to determine whether a bank has shown or is forecast to have the characteristics of an economic moat. After making certain adjustments, we calculate that JPMorgan has earned an average ROTE of about 13% in the past 10 years, which is significantly above our 9.5% cost of equity for the bank. We project that the bank should be able to earn a ROTE of around 17% in our midcycle forecast year, given its improved scale and competitive positioning in recent years. In the case of JPMorgan, we clearly have both quantitative and qualitative evidence of an economic moat and are confident in the bank's ability to maintain durable excess returns, underpinning our wide moat rating.

Fair Value and Profit Drivers Suryansh Sharma, Senior Equity Analyst, 3 Apr 2025

After incorporating the latest quarterly results, we are increasing our fair value estimate for JPMorgan to $195 per share from $178. This is equivalent to 2.0 times tangible book value per share as of the end of 2024.

We forecast through-the-cycle returns on tangible equity to be roughly 17%, in line with management's long-term profitability goal. We think the bank should be able to release some capital over time and have modeled a midcycle common equity Tier 1 ratio of 14.0%. The competitive nature of the US banking industry should keep fees and pricing in check over time. JPMorgan will overearn during years of higher rates and low credit costs and underearn during years of low rates and higher credit costs. Balancing these two dynamics is how we arrive at our longer-term return forecast. A key value driver for the bank will be how much its current expansion initiatives pay off over the next 5-10 years. This is hard to predict. We currently forecast the bank roughly earning back its expense increases through higher revenue, but results could differ.

We expect net interest margin to remain strong and project it to be around 2.58% in 2025 from 2.63% in 2024, as short-term interest rates remain high and the bank remains highly asset-sensitive. We expect loan growth to remain under a bit of pressure for a couple of years due to higher rates but have modeled healthy growth as rates decrease. The slight net interest margin compression is mostly offset by balance sheet growth in 2025, and we expect NII to remain flattish. The headwinds associated with the bank's high asset sensitivity start to truly play out in 2026 and 2027, as we project the fed-funds rate to reach 2.50% by the end of 2027. Lower interest rates result in NIM of 2.52% in 2026 and 2.46% in 2027. This results in net interest income declining around 2.2% in 2026 and remaining flattish in 2027. We expect decent NII growth from 2028 as we model rates stabilizing. JPMorgan's NII has benefited the most in a rising-rate cycle, and we believe the bank's balance sheet positioning makes it vulnerable to materially lower NIM when rates decline.

For fees, we see mixed trends in 2025, although the acquisition of First Republic has structurally strengthened the fee franchise of the bank. We see some pressure remaining on mortgages as rates remain high for much of the year. Trading-related fees have been exceptionally strong in the past couple of years, and we expect trading-related revenue to remain strong in the near term before it starts normalizing lower. We think that investment banking and mortgage fees will benefit as interest rates decline while the asset-management business should continue to be a bright spot for the company. Overall, we project a 2.8% core noninterest revenue compound annual growth rate for the next 10 years from already elevated levels in 2024.

We expect credit costs to remain slightly elevated in 2025 after strong credit-related performance in the years following the pandemic. We think that charge-offs will be nearing their peak in the next four quarters. Still, credit quality will continue to be a major source of uncertainty for the banking sector and will depend heavily on the macroeconomic backdrop.

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Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
227.11 USD 10 Apr 2025	195.00 USD 24 Jan 2025 21:20, UTC	1.16	651.14 USD Bil 11 Apr 2025	Wide	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

The bank is looking at another year of investments after a considerable step up in the past four years. Based on management guidance, we expect expense growth of around 4.3% in 2025 compared with the expense base from the prior year. We believe that investments will peak in the current year, followed by a more normalized level of 2%-3% expense growth thereafter. We expect gradual improvement in the midcycle efficiency ratio for the firm over time as its scale advantages widen due to increases in fixed operating and technology costs across the industry, and as fee growth and balance sheet growth catch up with the initial investments. We expect JPMorgan to achieve around a 55% efficiency ratio by the end of our forecast as it benefits from a normalized rate environment, additional fee revenue falling to the bottom line, and continued expense-management efforts.

We assign the bank a 9.5% cost of common equity.

Risk and Uncertainty Suryansh Sharma, Senior Equity Analyst, 24 Jan 2025

An investment in JPMorgan entails a significant amount of regulatory and macroeconomic risk. The costs of compliance are high. The bank is large and complex and is clearly a prime target of regulators seeking fines and litigants seeking compensation for alleged misdeeds. Profitability is affected by interest-rate cycles and the effects of credit and debt cycles, all of which are outside management's control.

Another risk is business disruption. The banking industry is arguably going through more technological change than ever before. Bank branches are declining in importance, more transactions are taking place digitally, and financial technology companies are constantly innovating. Though scale and regulatory expertise create barriers to entry, risks remain as the banking industry digitizes and becomes a more technology-focused industry.

From an environmental, social, and governance perspective, commercial banks are expected to have strong product governance. Predatory or discriminatory lending practices are examples of poor product governance, which can affect certain banks at times. We view product governance and social risks as manageable and incorporate a steady level of operational expenses related to compliance and litigation in our models. Outside of the rare, headline-grabbing scandals, we don't think social risks have a material effect on our valuation. Banks also lend to certain sectors that can come under more scrutiny at times. Commercial banks don't directly have a large environmental footprint, and governance practices are in line with most companies.

Because of JPMorgan's diversified revenue streams, which showed just how stable revenue can be even during the pandemic-driven downturn, we assign the bank a Medium Morningstar Uncertainty Rating. The bank is more complex, which can increase uncertainty for projections, but we believe that the underlying stability and strength of the business model offsets this.

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JPMorgan Chase & Co JPM ★★ 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]
227.11 USD 10 Apr 2025	195.00 USD 24 Jan 2025 21:20, UTC	1.16	651.14 USD Bil 11 Apr 2025	Wide	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

Capital Allocation Suryansh Sharma, Senior Equity Analyst, 3 Apr 2025

We give JPMorgan an Exemplary Morningstar Capital Allocation Rating. In our opinion, the company's balance sheet is sound, its capital investment decisions are exemplary, and its capital return strategy is appropriate. The bank's common equity Tier 1 ratio was 15.7% at the end of 2024, materially higher than its medium-term goal of roughly 13.5%. We view the company's capital investments as exemplary, as JPMorgan has avoided investing capital in value-destroying products, such as financial crisis-era mortgage-backed securities, while pursuing value-adding acquisitions and organic growth. Over the last decade-plus, JPMorgan's acquisitions, organic growth investments, and internal technology investments have built the most dominant US banking franchise. We assess the company's capital return strategy as appropriate. JPMorgan, like most banks, returns more capital through share repurchases than dividends, which makes sense for a company whose earnings can be volatile. JPMorgan also prefers to use excess capital for internal investments or acquisitions when available.

JPMorgan Chase is led by CEO Jamie Dimon. The bank not only emerged from the financial crisis unscathed, it was actually able to build its competitive advantage over time. It has easily outearned its assigned 9.5% cost of capital through the cycle. JPMorgan has maintained excellent credit quality for years, built its deposit base, and invested billions in technology and compliance to stay ahead of peers and remain in the good graces of customers and regulators.

The bank has been on the offense for years as it continues to increase its share in key segments each year and invests billions in technology for the future. It is in the middle of multiple organic expansion initiatives, including building out its retail presence across the contiguous 48 states. The bank is expanding its commercial operations along with targeted international expansion. JPMorgan continues to make a number of bolt-on acquisitions as well, as it attempts to build out and expand improved technology offerings. The acquisition of First Republic continues expansion efforts. We think the price was advantageous, especially given First Republic's high-quality wealth franchise. In the end, arguably no bank is doing more to prepare for the future than JPMorgan.

Analyst Notes Archive

JPMorgan Earnings: Fundamentals Remain Robust but Implied Expectations Are a Bit Too Optimistic

Suryansh Sharma,Senior Equity Analyst,15 Jan 2025

JPMorgan's fundamental performance remains rock solid as it reported fourth-quarter earnings of $4.81 per share, equating to an annualized return on tangible equity of 21%. The 2025 guidance was also decent, but we are concerned about the valuation as future expectations are overly optimistic. Why it matters: Profitability was powered by solid net interest income, or NII, investment banking recovery, continued outperformance in trading, and buoyant asset valuations helping asset management fees. Macroeconomic parameters also look robust, thereby improving the outlook for loan growth and credit costs. Bank stocks were trading at healthy valuations even before the US presidential election and have rallied further after the election results. In our opinion, banks can benefit from some of the announced policies of the incoming administration, but the overall impact remains uncertain. The bank guided for $94 billion in NII for 2025 as the impact of rate cuts is expected to be partially offset by higher credit card and deposit balances. The NII guidance was encouraging, but the expense guidance of $95 billion was slightly higher than our expectations. The bottom line: We plan on increasing our $178 per share fair value estimate for wide-moat-rated JPMorgan by high-single-digit percentage points after incorporating fourth-quarter results and continue to believe that the shares are in overvalued territory. We estimate that about half of the increase in our fair value estimate can be attributed to the time value of money with the other half being a result of high loan growth expectations, faster recovery in investment banking, continued strength in asset management, and lower capital requirements. The bank can enjoy elevated levels of profitability for a few more quarters, but our overall thesis on the bank remains unchanged, and we continue to believe that the recent levels of super-high profitability are unlikely to be maintained in the long run.

US Banks Election Impact: Tailwinds From Softer Regulation, More M&A, and Steepening Yield Curve Maoyuan Chen,Equity Analyst,15 Nov 2024

We think that the election of Donald Trump and Republican control of both the Senate and the House bring mostly tailwinds to the US banking industry. We will adjust our valuation models as the incoming government's policies solidify, but with a rally of over 10% for many US banks after the Nov. 5 election results, we believe potential tailwinds have largely been incorporated into share prices and view the banking sector as fairly valued to slightly overvalued.We expect less pressure from bank capital regulation, benefiting mainly the big banks. The 2023 Basel III Endgame proposal originally had about a 19% increase in capital for the biggest banks. However, Bloomberg reported in September 2024 that the revised proposal would only increase capital requirement by 9% for the US global systemically important banks. While it will take some time for the final capital regulation to come out, we think the eventual revision for bank capital regulation will end up on the lighter side. This will allow banks to grow their balance sheets more, have higher profitability, and give back more excess capital to shareholders, all else equal.The Republican Party's more friendly stance toward mergers and acquisitions also means the banking industry can see more consolidation, benefiting the regional banks. Through acquisitions, regional banks can enter into new markets, gain new product capabilities, and get more efficient through cost savings. We also think scale is going to be increasingly important as technology rapidly changes.A likely steepening yield curve should add to banks' 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. Because banks lend long and borrow short, an upward-sloping yield curve is better for bank earnings than a flat or inverted yield curve.

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Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
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JPMorgan Earnings: Strong Results on All Fronts Highlight Report Suryansh Sharma,Senior Equity Analyst,11 Oct 2024

Wide-moat-rated JPMorgan maintained strong profitability in the third quarter as net interest income, or NII, remains solid, investment banking recovers, trading continues to outperform, macroeconomic parameters look robust, and there are indications of loan growth picking up as rates decline. The bank reported earnings of $4.37 per share, 0.9% higher on a year-over-year basis. The third-quarter numbers resulted in a return on tangible equity of 19%, which is higher than management's midcycle ROTE target of 17%. We plan on maintaining our $178 fair value estimate for JPMorgan as we fully incorporate the third-quarter results. While JPMorgan is the strongest bank in our coverage in terms of competitive positioning and balance sheet strength, the current valuation remains demanding, and potential investors should wait for a better entry point in this high-quality name.The bank reported its NII at $23.4 billion in the third quarter, $0.6 billion higher on a sequential and year-over-year basis. The bank slightly improved its 2024 NII guidance to $92.5 billion, which implies an NII of $22.9 billion in the fourth quarter. While the company has not given guidance for 2025, management recently commented that the market's 2025 NII consensus expectation of around $90 billion is "not very reasonable," and that it expects the number to be materially lower as short-term interest rates decline. The era of super-strong NII for the bank will come under increased pressure in the interest-rate-cutting cycle, and investors should brace for earnings decline in the medium-term. The headwind to earnings from NIM compression can be offset by balance sheet growth, and there were some good signs of this in the third-quarter results as the loan balances grew by 1.5% on a sequential basis. We do expect loan growth to pick up in coming quarters as interest rates decline. The net interest income story will continue to be the driving force for the bank's earnings.

JPMorgan: Shares Down 5% as Management Questions Lofty 2025 NII Consensus Expectations
Suryansh Sharma,Senior Equity Analyst,10 Sep 2024

Wide-moat-rated JPMorgan shares tumbled 5% on President and Chief Operating Officer Daniel Pinto’s comments about the Street having lofty expectations for 2025 net interest income, or NII, and expenses. Pinto’s comments were exactly in line with our thesis on the company as we highlighted that the bank has been earning outsize profits in recent years as it benefits from its balance sheet being positioned favorably for a high interest rate environment. We continue to believe that the bank's net interest income and profits will normalize lower as interest rates fall. We are maintaining our $178 per share fair value estimate for the bank.Pinto commented that the 2025 NII consensus expectation of around $90 billion is “not very reasonable,” and he expects the number to be lower as short-term interest rates decline. While management did not give explicit guidance for 2025 NII, it reiterated that the current market expectations are quite high. We project 2025 NII for JPMorgan to be around $87 billion as net interest margins compress to 2.52% in 2025 compared with an estimate of 2.66% in 2024. The NII story will continue to be the driving force for the bank's earnings in the near term. We note that banks' NII-related businesses tend to have high operating leverage, therefore a substantial portion of the change in NII flows down to the bottom line.Pinto also commented that 2025 expenses will be slightly higher that the market's current expectations of $93.7 billion due to inflationary pressures and incremental investment spending. We currently project expenses to be around $94.3 billion in the next year, but the number could be slightly higher because of the bank's investment spending. Overall, we think that JPMorgan is positioned extremely well for a near-term uncertain macroenvironment, but the current valuation remains demanding and potential investors should wait it out for a better entry point in this high-quality name.

JPMorgan Earnings: Higher Rates and One-Time Gains Turbocharge Profits but Valuation Demands Caution Suryansh Sharma,Senior Equity Analyst,12 Jul 2024

Wide-moat-rated JPMorgan continued to earn outsize profits in the second quarter as its balance sheet remains favorably positioned for a high interest rate environment. The bank's headline earnings in the second quarter were positively impacted by a nonrecurring gain related to Visa shares of $7.9 billion, which was partially offset by a donation of $1.0 billion to the bank's foundation and net investment securities losses of $546 million. The gain related to Visa shares was an accounting gain as the bank converted its Visa Class B-1 shares into Class C shares that are being held at fair value. In our opinion, investors should ignore the noise related to these nonrecurring items.   Excluding the nonrecurring items, the bank reported earnings per share of $4.40, 0.7% higher on a year-over-year basis. As we have repeatedly highlighted previously, the era of super strong profit growth for the bank is over and investors should brace for earnings to decline when the Fed starts cutting rates eventually. Having said this, the absolute level of current profitability for the bank is still quite strong. The second-quarter numbers, after adjusting for nonrecurring items, resulted in a return on tangible equity, or ROTE, of 20%, which is materially higher than management's midcycle ROTE target of 17%. The strong results in the quarter were driven by solid net interest income, strong recovery in investment banking, and continued strength in trading revenue.We plan to increase our $168 fair value estimate for JPMorgan by a mid-single-digit percentage as we fully incorporate the second-quarter results. Approximately half of this increase can be attributed to the time value of money and the other half to rates remaining higher for longer than the market previously anticipated. Our overall thesis on the bank hasn't changed as we believe that the current valuation remains demanding and potential investors should wait it out for a better entry point in this high-quality name.

JPMorgan Investor Day: CEO Dimon Pushes Back Against Buying More Stock at Current Prices Suryansh Sharma,Senior Equity Analyst,20 May 2024

Wide-moat-rated JPMorgan's investor day highlighted the bank's current competitive strengths, market share gains, and areas for future investment. For us, the highlight was CEO Jamie Dimon's responses on additional share buybacks. Analysts repeatedly questioned Dimon about more share repurchases given that the bank is currently sitting on about $54 billion of excess capital. The bank has enough firepower to substantially increase buybacks even after accounting for management's discretionary capital buffer, uncertainty in the stress capital buffer, and the most aggressive assumptions on the Basel III endgame proposal. However, Dimon categorically rejected analyst requests for more buybacks and said that the bank is not going to increase buybacks at current prices. He added, "buying back stock as a financial company greatly in excess of 2 times tangible book is a mistake." We are maintaining our $168 per share fair value estimate for the bank. While the analyst community didn't like management's response on buybacks, we think it is the right call given the stock's valuation. Overall, the investor day substantiates our wide moat rating and Exemplary Capital Allocation Rating for the bank. JPMorgan is the most resilient bank franchise under our coverage in terms of balance sheet strength, asset liability management, liquidity, and capital levels. While markets are almost completely sold on the soft-landing story, we think there is still a possibility of a harder landing. Management has taken a conservative approach, which we like, and has positioned the bank to weather near-term macroeconomic challenges better than its peers.Having said this, our thesis remains unchanged on the bank materially overearning its normalized levels of net interest income because of its asset sensitivity. If anything, management comments during its investor day and its unwillingness to deploy more capital into buybacks reinforce our valuation argument.

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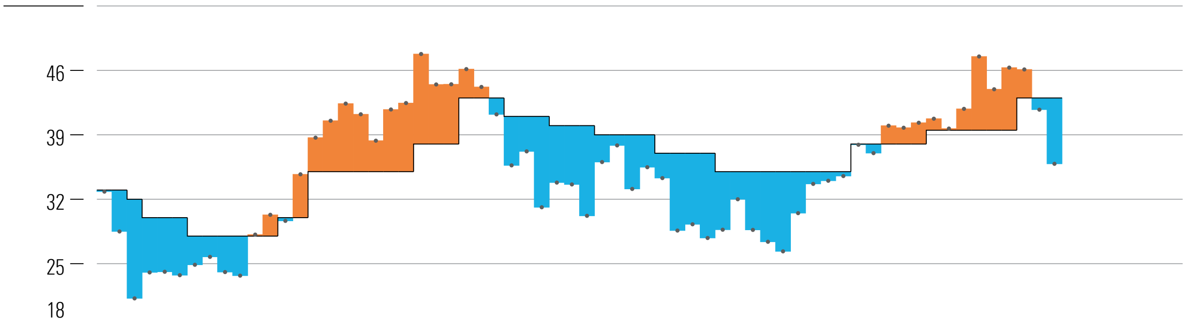
Competitors Price vs. Fair Value

Bank of America Corp BAC



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

Last Close: 35.85

Overvalued

Undervalued

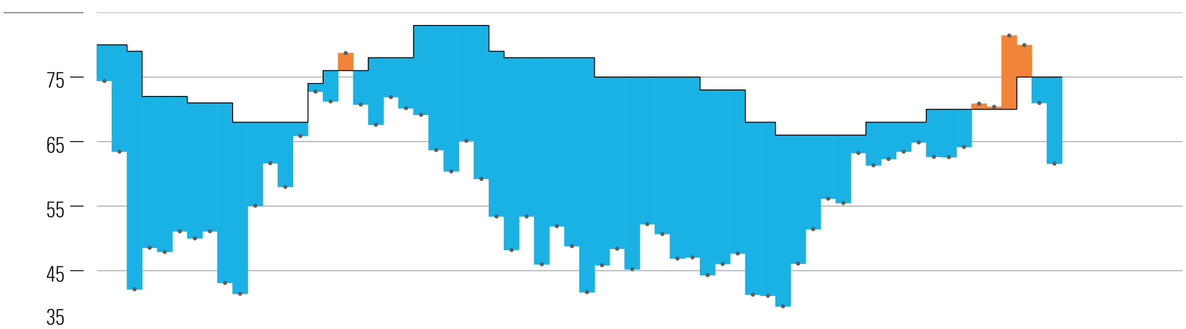
	2020	2021	2022	2023	2024	YTD	
	1.08	1.17	0.85	0.96	1.11	0.83	Price/Fair Value
	-11.90	49.36	-23.62	4.44	33.50	-17.84	Total Return %

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.

Citigroup Inc C



Fair Value: 75.00
5 Feb 2025 00:36, UTC

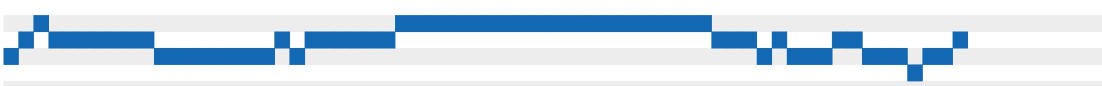
Last Close: 61.59

Overvalued

Undervalued

	2020	2021	2022	2023	2024	YTD	
	0.91	0.73	0.60	0.78	1.01	0.82	Price/Fair Value
	-20.27	1.25	-21.73	18.33	41.08	-11.71	Total Return %

Morningstar Rating



★★★★★
★★★★
★★★
★★
★

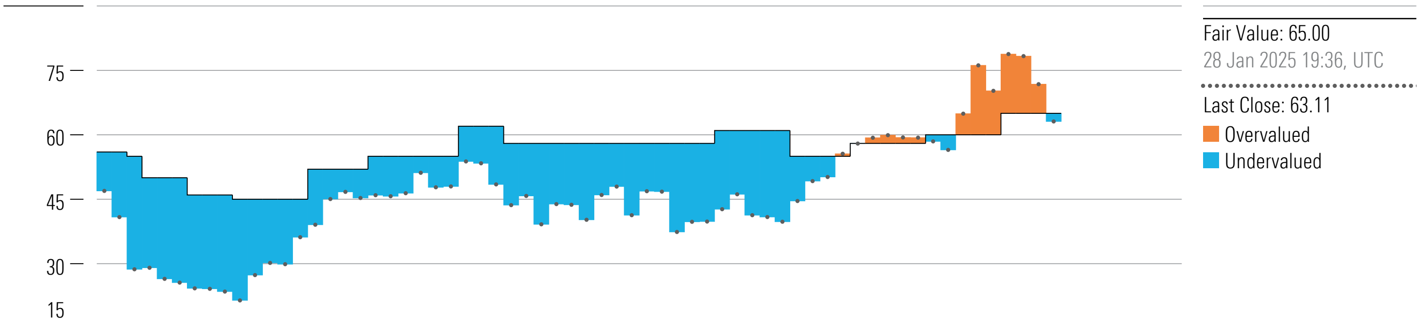
Total Return % as of 10 Apr 2025. Last Close as of 10 Apr 2025. Fair Value as of 5 Feb 2025 00:36, UTC.

Morningstar Equity Analyst Report | Report as of 11 Apr 2025 16:51, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC.

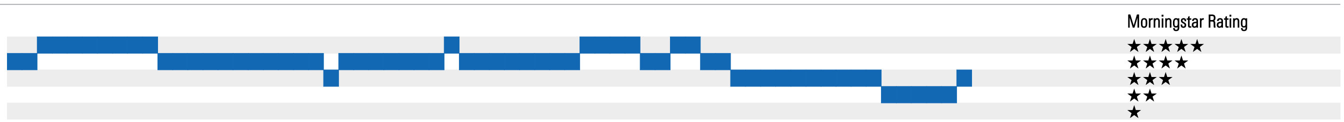
JPMorgan Chase & Co JPM ★★ 10 Apr 2025 21:31, UTC

Competitors Price vs. Fair Value

Wells Fargo & Co WFC



	2020	2021	2022	2023	2024	YTD	
	0.67	0.87	0.71	0.89	1.17	0.97	Price/Fair Value
	-41.64	60.97	-11.65	22.35	45.75	-9.58	Total Return %



Total Return % as of 10 Apr 2025. Last Close as of 10 Apr 2025. Fair Value as of 28 Jan 2025 19:36, UTC.

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JPMorgan Chase & Co JPM ★★ 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]
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Morningstar Valuation Model Summary

Financials as of 24 Jan 2025	Actual			Forecast				
Fiscal Year, ends 31 Dec	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Net Interest Income (USD Mil)	66,710	89,267	92,583	92,977	90,931	91,309	94,243	97,118
Non Interest Income (USD Mil)	61,985	68,837	84,973	77,781	78,829	81,412	83,989	86,599
Total Pre-Provision Revenue (USD Mil)	128,695	158,104	177,556	170,757	169,760	172,721	178,232	183,718
Provision for Loan Losses (USD Mil)	6,389	9,320	10,678	9,983	9,398	10,766	11,805	12,378
Operating Expenses (USD Mil)	76,140	87,172	91,797	94,737	97,526	100,367	103,139	105,846
Operating Income (USD Mil)	46,166	61,612	75,081	66,037	62,836	61,588	63,287	65,494
Net Income Available to Common Stockholders (USD Mil)	37,676	49,552	58,471	52,830	50,269	49,270	50,630	52,395
Adjusted Net Income (USD Mil)	35,892	47,760	56,679	51,075	48,526	47,533	48,886	50,643
Weighted Average Diluted Shares Outstanding (Mil)	2,970	2,943	2,879	2,777	2,634	2,538	2,432	2,330
Earnings Per Share (Diluted) (USD)	12.08	16.23	19.69	18.39	18.42	18.73	20.10	21.73
Adjusted Earnings Per Share (Diluted) (USD)	12.08	16.23	19.69	18.39	18.42	18.73	20.10	21.73
Dividends Per Share (USD)	4.00	4.10	4.80	5.24	5.53	5.62	6.03	6.52

Margins & Returns as of 24 Jan 2025		Actual			Forecast					
	3 Year Avg	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**5 Year Avg**
Net Interest Margin %	2.5	2.0	2.7	2.7	2.6	2.5	2.5	2.5	2.4	2.5
Efficiency Ratio %	55.3	59.2	55.1	51.7	55.5	57.5	58.1	57.9	57.6	57.3
Provision as % of Loans	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.8	0.8	0.7

Growth & Ratios as of 24 Jan 2025		Actual			Forecast					
	3 Year Avg	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**5 Year Avg**
Net Interest Income Growth %	21.0	27.5	33.8	3.7	0.4	-2.2	0.4	3.2	3.1	1.0
Non Interest Income Growth %	7.0	-10.6	11.1	23.4	-8.5	1.4	3.3	3.2	3.1	0.4
Total Pre-Provision Revenue Growth %	—	5.8	22.9	12.3	-3.8	-0.6	1.7	3.2	3.1	—
Operating Expenses Growth %	—	6.7	14.5	5.3	3.2	2.9	2.9	2.8	2.6	—
Operating Income Growth %	—	-22.5	33.5	21.9	-12.0	-4.9	-2.0	2.8	3.5	—
Net Income Growth %	6.8	-22.1	31.5	18.0	-9.7	-4.9	-2.0	2.8	3.5	—
Earnings Per Share Growth %	8.6	-21.3	34.3	21.3	-6.6	0.2	1.7	7.3	8.1	2.0

Valuation as of 24 Jan 2025	Actual			Forecast				
	2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Price/Earning	11.1	10.5	12.2	12.3	12.3	12.1	11.3	10.5
Price/Book	—	—	—	—	—	—	—	—
Price/Tangible Book	1.9	2.0	2.6	2.3	2.1	1.9	1.8	1.7
Dividend Yield %	2.4	1.9	2.2	2.3	2.4	2.5	2.7	2.9
Dividend Payout %	-33.0	-25.1	-21.2	-28.4	-29.8	-29.8	-29.8	-29.8

Operating Performance / Profitability as of 24 Jan 2025	Actual			Forecast				
Fiscal Year, ends 31 Dec	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
ROA %	1.0	1.3	1.5	1.3	1.2	1.2	1.1	1.1
ROE %	12.8	15.9	17.3	15.0	14.0	13.4	13.4	13.5
Return on Tangible Equity %	17.1	20.9	22.1	18.6	17.2	16.4	16.3	16.4

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JPMorgan Chase & Co JPM ★★ 10 Apr 2025 21:31, UTC

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Financial Leverage (Reporting Currency)	Actual			Forecast				
Fiscal Year, ends 31 Dec	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Equity/Assets %	8.0	8.5	8.6	8.7	8.6	8.6	8.5	8.4

Forecast Revisions as of	2025		2026		2027	
Prior data as of	**Current**	**Prior**	**Current**	**Prior**	**Current**	**Prior**
Fair Value Estimate Change (Trading Currency)	195.00	—	—	—	—	—
Net Interest Income (USD Mil)	92,977	91,112	90,931	86,852	91,309	83,612
Total Pre-Provision Revenue (USD Mil)	170,757	176,658	169,760	163,619	172,721	161,496
Operating Income (USD Mil)	66,037	73,647	62,836	59,333	61,588	56,083
Net Income (USD Mil)	—	—	—	—	—	—
Earnings Per Share (Diluted) (USD)	18.39	19.95	18.42	17.30	18.73	16.99
Adjusted Earnings Per Share (Diluted) (USD)	18.39	19.95	18.42	17.30	18.73	16.99
Dividends Per Share (USD)	5.24	4.99	5.53	4.93	5.62	5.10

Key Valuation Drivers as of 24 Jan 2025	
Cost of Equity %	9.0
Stage II Net Income Growth Rate %	3.5
Stage II Incremental ROIC %	11.7
Perpetuity Year	20

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

Discounted Cash Flow Valuation as of 24 Jan 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	**532,314**
Projected Diluted Shares	2,742
Fair Value per Share (USD)	**195.00**

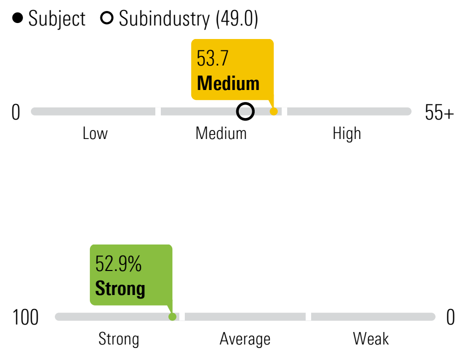
Morningstar Equity Analyst Report | Report as of 11 Apr 2025 16:51, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC.

JPMorgan Chase & Co JPM ★★ 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]
227.11 USD 10 Apr 2025	195.00 USD 24 Jan 2025 21:20, UTC	1.16	651.14 USD Bil 11 Apr 2025	Wide	Large Value	Medium	Exemplary	2 Apr 2025 05:00, UTC

ESG Risk Rating Breakdown

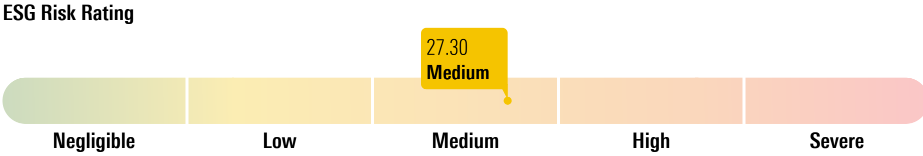
Exposure	
Company Exposure[1]	53.7
– Manageable Risk	49.9
Unmanageable Risk[2]	**3.8**
Management	
Manageable Risk	49.9
– Managed Risk[3]	26.4
Management Gap[4]	**23.5**
Overall Unmanaged Risk	**27.3**



- 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 52.9% 4. Management Gap assesses risks that are not managed, but are considered manageable 5. ESG Risk Rating Assessment = Overall Unmanaged Risk = Management Gap plus Unmanageable Risk

ESG Risk Rating Assessment[5]

ESG Risk Rating is of Apr 02, 2025. Highest Controversy Level is as of Apr 08, 2025. Sustainalytics Subindustry: Diversified Banks. 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	
JPMorgan Chase & Co	53.7 | Medium	0 55+	52.9 | Strong	100 0	27.3 | Medium	0 40+
Bank of America Corp	53.2 | Medium	0 55+	58.4 | Strong	100 0	24.4 | Medium	0 40+
Berkshire Hills Bancorp Inc	45.8 | Medium	0 55+	64.0 | Strong	100 0	18.2 | Low	0 40+
Citigroup Inc	53.3 | Medium	0 55+	69.5 | Strong	100 0	18.9 | Low	0 40+
Wells Fargo & Co	58.6 | High	0 55+	45.3 | Average	100 0	33.8 | High	0 40+

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Appendix
Historical Morningstar Rating

JPMorgan Chase & Co JPM 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 ★★★
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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 ★★
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Citigroup Inc C 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 ★★
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Wells Fargo & Co WFC 10 Apr 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
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Dec 2023	Nov 2023	Oct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
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Dec 2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022
★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Dec 2021	Nov 2021	Oct 2021	Sep 2021	Aug 2021	Jul 2021	Jun 2021	May 2021	Apr 2021	Mar 2021	Feb 2021	Jan 2021
★★★★	★★★★	★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Dec 2020	Nov 2020	Oct 2020	Sep 2020	Aug 2020	Jul 2020	Jun 2020	May 2020	Apr 2020	Mar 2020	Feb 2020	Jan 2020
★★★★	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★	★★★★

Research Methodology for Valuing Companies

Overview

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

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

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

1. Economic Moat

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

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

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

2. Estimated Fair Value

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

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

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

Stage II: Fade

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

Stage III: Perpetuity

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

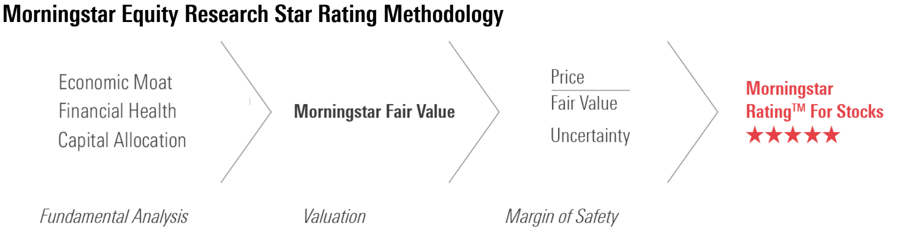
Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return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

3. Uncertainty Around That Fair Value Estimate

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

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

Morningstar Equity Research Star Rating Methodology



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

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

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

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

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

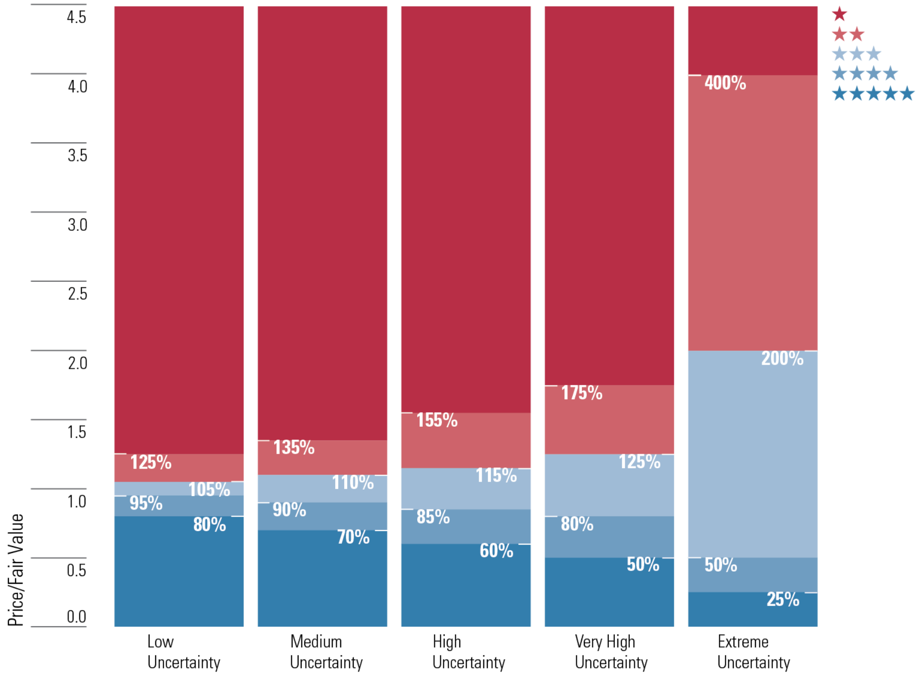
4. Market Price

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

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

Morningstar Star Rating for Stocks

Morningstar Equity Research Star Rating Methodology



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

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

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

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

The Morningstar Star Ratings for stocks are defined below:

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

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

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

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

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

Other Definitions

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

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

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.

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