

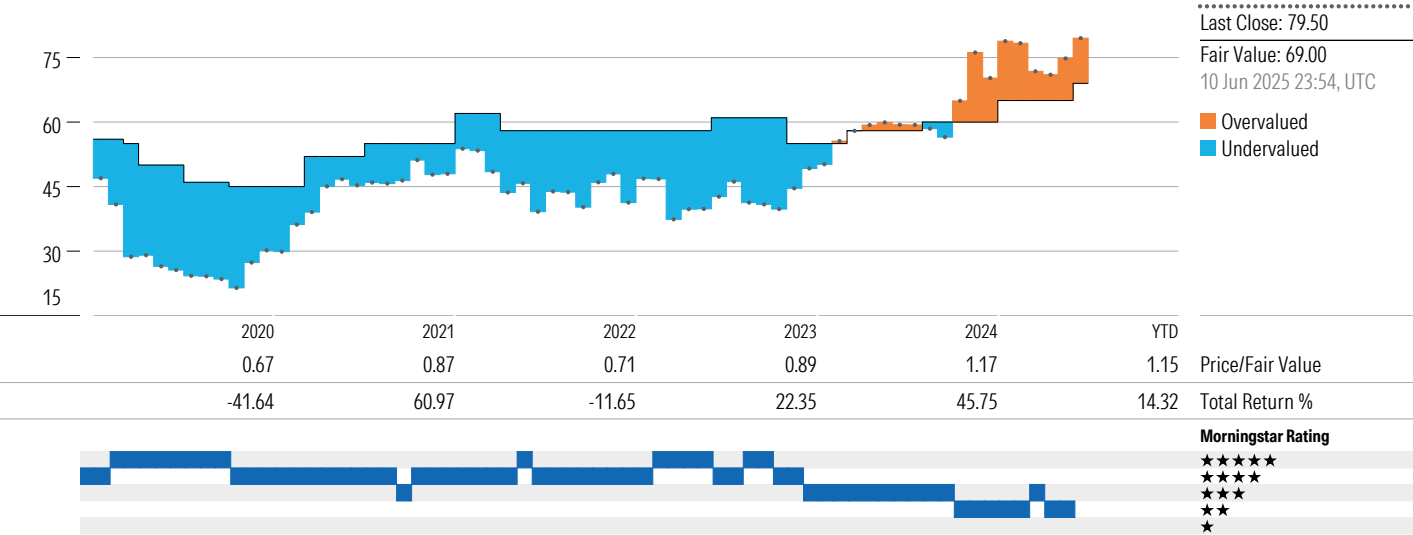
Wells Fargo & Co

WFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	<div><div></div><div></div><div></div><div></div></div> 4 Jun 2025 05:00, UTC

Price vs. Fair Value



Total Return % as of 27 Jun 2025. Last Close as of 27 Jun 2025. Fair Value as of 10 Jun 2025 23:54, UTC.

Contents

- Analyst Note (29 Jun 2025)
- Business Description
- Business Strategy & Outlook (10 Jun 2025)
- Bulls Say / Bears Say (10 Jun 2025)
- Economic Moat (10 Jun 2025)
- Fair Value and Profit Drivers (10 Jun 2025)
- Risk and Uncertainty (10 Jun 2025)
- Capital Allocation (10 Jun 2025)
- Analyst Notes Archive
- Financials
- ESG Risk
- Appendix
- Research Methodology for Valuing Companies

Important Disclosure

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

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

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

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

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

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

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


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

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

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

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

Sector	Industry
 Financial Services	Banks - Diversified

Business Description

Wells Fargo is one of the largest banks in the United States, with approximately \$1.9 trillion in balance sheet assets. The company has four primary segments: consumer banking, commercial banking, corporate and investment banking, and wealth and investment management. It is almost entirely focused on the US

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

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

Business Strategy & Outlook Suryansh Sharma, Senior Equity Analyst, 10 Jun 2025

Wells Fargo remains in the middle of a multiyear rebuild. The bank finally had positive news on the regulatory front as its asset cap was lifted in June 2025. Wells Fargo has years of expense-saving projects ahead of it as the bank attempts to get its efficiency ratio back under 60%. We also see a multiyear journey of repositioning and investing in the firm's existing franchises, including expanding its middle-market investment banking wallet share, investing in the cards franchise, and revitalizing a wealth segment that has lost advisors for years. These tasks take on increased importance for a bank that has been on defense for years after its fake accounts scandal broke in late 2016.

We're already getting glimpses of the transition to offense from defense with the launch of multiple new card products, advisor numbers stabilizing, and incremental internal investments in the banking franchise in recent years. Even so, while the bank is making progress, we expect a couple of more years of continued efforts ahead.

Despite its issues, the bank remains one of the top deposit gatherers in the US, with the third most deposits in the country behind JPMorgan Chase and Bank of America. The bank has one of the largest branch footprints in the US, excels in the middle-market commercial space, and has a large advisory network. We believe this scale and the bank's existing mix of franchises should provide the right foundation to eventually build out a decently performing bank. Wells Fargo may not reach the types of returns and efficiency that peers like JPMorgan have achieved, but we expect it to remain larger than any other regional bank and stay competitive as such. We're also gaining confidence that CEO Charlie Scharf is guiding the bank in a new and positive direction.

For now, the bank needs to consistently hit the expense targets it is laying out (it achieved this in 2021 and 2022 but not in 2023 and 2024) and keep its guard up for regulators. We expect that the asset cap removal will translate into higher deposit and loan growth in upcoming years which improves the bank's efficiency over time.

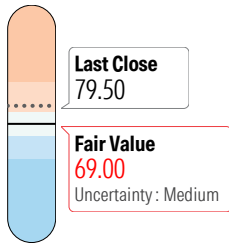
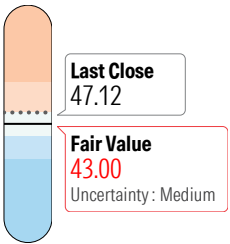
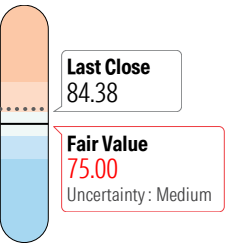
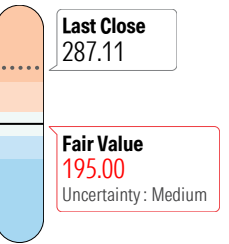
Bulls Say Suryansh Sharma, Senior Equity Analyst, 10 Jun 2025

- Wells should have several years of slower expense growth on the back of efficiency improvement initiatives, thereby boosting its profitability.

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	4 Jun 2025 05:00, UTC

Competitors

	Wells Fargo & Co WFC	Bank of America Corp BAC	Citigroup Inc C	JPMorgan Chase & Co JPM
				
Economic Moat	Wide	Wide	None	Wide
Currency	USD	USD	USD	USD
Fair Value	69.00 10 Jun 2025 23:54, UTC	43.00 4 Feb 2025 23:19, UTC	75.00 5 Feb 2025 00:36, UTC	195.00 24 Jan 2025 21:20, UTC
1-Star Price	93.15	58.05	101.25	263.25
5-Star Price	48.30	30.10	52.50	136.50
Assessment	Overvalued 27 Jun 2025	Fairly Valued 27 Jun 2025	Fairly Valued 27 Jun 2025	Overvalued 27 Jun 2025
Morningstar Rating	★★ 27 Jun 2025 21:30, UTC	★★★ 27 Jun 2025 21:26, UTC	★★★ 27 Jun 2025 21:26, UTC	★ 27 Jun 2025 21:24, UTC
Analyst	Suryansh Sharma, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst
Capital Allocation	Standard	Standard	Standard	Exemplary
Price/Fair Value	1.15	1.10	1.13	1.47
Price/Sales	3.31	3.59	1.96	4.75
Price/Book	1.60	1.30	0.81	2.41
Price/Earning	14.30	13.73	13.13	15.39
Dividend Yield	2.01%	2.21%	2.65%	1.76%
Market Cap	258.71 Bil	354.90 Bil	157.60 Bil	797.90 Bil
52-Week Range	50.15—81.50	33.07—48.08	53.51—84.79	190.90—289.41
Investment Style	Large Value	Large Value	Large Value	Large Value

- Wells Fargo's retail branch structure, advisory network, product offerings, and share in small and medium-size enterprises are difficult to duplicate, ensuring that the company's competitive advantage is maintained.
- Wells can materially increase its balance sheet growth of loans and deposits after the asset cap is lifted.

Bears Say Suryansh Sharma, Senior Equity Analyst, 10 Jun 2025

- Wells Fargo has been on defense for several years due to the asset cap, and this has raised the potential for structural damage to its competitive positioning.
- Wells has an asset-sensitive balance sheet and falling interest rates can result in net interest margin contraction.
- The market has started pricing in optimistic assumptions for the bank in recent quarters and any negative surprise related to regulatory scrutiny, macroeconomic weakness, or NIM contraction can have

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

a substantial impact on the share price.

Economic Moat Suryansh Sharma, Senior Equity Analyst, 10 Jun 2025

We believe that Wells Fargo possesses a wide economic moat based on cost advantages and switching costs, which is consistent with our bank moat framework. Wells Fargo is a US money-center bank and has a strong market share in consumer, small business, and middle-market segments. While the fake accounts scandal and ensuing regulatory costs have harmed Wells Fargo's returns on equity, the fact that the bank has still been able to outearn its assigned 9% cost of equity in most years since 2016 points to the reality of how hard it is to truly destroy the bank's franchises to the point where it becomes a cost-of-capital entity or worse.

The bank's return dipped below its COE only in 2020 and 2022. The profitability in 2020 was negatively affected by pandemic-related provisioning, which was reversed in the following year, while returns in 2022 were negatively affected by heavy regulatory operating losses (one-time legal and customer remediation expenses related to the bank's legacy issues). We estimate that the bank's returns have been negatively affected by about 1.5 percentage points on average because of regulatory operating losses in the past several years, and we expect these charges to decline significantly in upcoming years as regulatory concerns ease. The asset cap (\$1.95 trillion balance sheet limit imposed by the Federal Reserve in 2018 as a penalty for the bank's past regulatory and risk management failures) on the bank was lifted in June 2025 after several years of consistent management efforts. While we don't expect Wells' ROTE to return to its prior glory days or even to be as strong as some of its wide-moat peers, we nonetheless have enough confidence in the bank's ability to outearn its cost of capital over the next two decades that we believe a wide moat is still appropriate. We estimate the mid-cycle return on tangible equity of around 14.3% for the bank compared with the cost of equity of around 9.0%.

Industry Dynamics:

Wells Fargo has one of the largest retail branch networks in the US and is one of the leading deposit gatherers in the country. The bank is also one of the largest US issuers of credit and debit cards (with particular strength in debit), has one of the leading commercial banking franchises (with particular strength in the middle market), boasts a leading consumer franchise with products serving roughly 70 million consumers and small businesses, and also has significant wealth management operations within its advisory unit. The bank's business is predominantly concentrated in the US, in contrast with its two larger rivals, JPMorgan and Bank of America. Partly due to this fact, Wells Fargo has the lowest global systemically important bank surcharge of the Big Four banks (JPMorgan, Citigroup, Wells Fargo, and Bank of America), giving it a further structural return advantage from having to hold relatively less capital. The bank's business mix is also concentrated toward retail, small business, CRE lending, and middle-market segments compared with the other money-center banks, which has been advantageous for its return profile.

Wells Fargo & Co

WFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

Wells scale advantage in its core banking business can be demonstrated by the sheer size of its balance sheet, which stood at about \$1.9 trillion as of the end of 2024. For context, this figure compares to JPMorgan's \$4.0 trillion and Bank of America's \$3.3 trillion. Wells Fargo is still one of the biggest banks in the US, but arguably, it has lost some of its scale advantage due to the 2018 asset cap. The impact of the asset cap is inherent in the fact that JPMorgan's balance sheet was about 30% bigger than Wells Fargo's in 2017, but JPMorgan was almost twice as big as Wells Fargo by the end of 2024. Most of the market share that Wells Fargo lost after the asset cap was enacted is likely a permanent market share loss for the bank.

The consumer banking segment is a core strength of the bank, and it provides the bank with cheap deposits, which form the backbone of the bank's liability franchise. As of 2024, the consumer segment contributed about \$780 billion in deposits but had only \$320 billion in loans, thereby supporting other segments of the bank. The consumer banking segment had about 4,200 retail branches and 36 million digitally active customers as of 2024.

The bank's commercial banking segment includes its middle-market franchise and provides a complete suite of banking solutions to smaller companies. The corporate and investment banking segment contains capital markets and other banking products for larger-sized corporates, most of the bank's commercial real estate lending portfolio, and various trading, treasury management, and research capabilities of the bank. The bank ranked eighth globally in terms of investment banking revenue in 2024 (Dealogic), with a 2.4% share. Finally, the firm's wealth and investment management segment provides personalized investment advisory, brokerage, financial planning, lending, private banking, and fiduciary services to high-net-worth clients primarily through its network of financial advisors. The bank had about \$1 trillion in assets under advisory as of 2024.

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 shows 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, although they carry higher risks. For instance, if a bank buys a large block of shares, it may have

Wells Fargo & CoWFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD	69.00 USD	1.15	258.71 USD Bil	Wide	Large Value	Medium	Standard	
27 Jun 2025	10 Jun 2025 23:54, UTC		27 Jun 2025					4 Jun 2025 05:00, UTC

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 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 sheet, like 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. While certain elements in Wells Fargo's investment banking businesses benefit from intangible assets, we do not award intangible asset moat source to the business on a consolidated basis, given the segment's limited contribution to total firm profit.

Wealth Management:

Wells Fargo provides products related to wealth management, trust and fiduciary products, and private banking in its wealth and investment management segment. Wells Fargo'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 suggests that advisors can lose as much as 19% of client assets if they switch firms. We believe that the moats within the wealth management business are generally stronger than within a typical asset management business.

Retail and Commercial Banking:

We argue that bank moats are derived primarily from two sources: cost advantages and switching costs. We see cost advantages as stemming from three primary factors: a low cost deposit base, excellent operating efficiency, and conservative underwriting, with regulatory costs being a final factor that must also be considered.

We think that Wells Fargo's biggest competitive advantage is its high-quality deposit franchise, especially in the retail banking business. The bank funds a materially higher portion of its liabilities with deposits when compared with its other money-center rivals. Wells Fargo funded more than 80% of its liabilities with deposits (that are generally cheaper), compared with around 65% at larger rivals like JPMorgan and Bank of America at year-end 2024. Wells Fargo's overall deposit market share is attractive, with some of the highest market share and market coverage among all US banks. As a result, the bank has the third-highest deposit share in the US, with a wide gap between Wells Fargo and the fourth-largest player (which is roughly 50% of Wells' size). The bank has been consistently losing

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

deposit share during the past several years due to the asset cap, but the asset cap has also forced the bank to prioritize higher-quality cheaper deposits. We think that the bank should be able to grow its deposit base in line with the industry now since the asset cap has been lifted. Wells Fargo's cost of interest-bearing deposits has consistently been lower than the industry average, indicative of an advantaged deposit franchise. Importantly, we view the bank's deposit base as likely to remain advantageous in the future as well.

Wells Fargo's operating efficiency has generally been close to or better than peers in most years until 2015, but this changed in recent years due to the extra expenses associated with the bank's regulatory issues and its asset cap. Legal accruals, remediation charges, and the need to build out a more robust internal controls system have weighed on the expense base. In addition to these extra costs, the impediment of not being able to grow its balance sheet has been putting material pressure on the bank. In a normal setting, the bank's balance sheet and core expense base continue to grow in line with inflation, but with an asset cap in place, Wells' core expense base had grown every year, but its balance sheet had essentially remained flat for the last seven years. This explains the constant need to undergo continuous efficiency initiatives. Due to these reasons, lifting of the asset cap is a material upside for the bank in terms of its future efficiency outlook. Overall, we anticipate that the bank will eventually work through its regulatory issues and will return to an operating position that won't put it at a disadvantage, eroding its moat.

In addition to this, we would like to highlight that Wells Fargo has a much higher exposure to certain business lines, such as wealth 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. For context, the bank's consumer, commercial, and corporate banking segments reported an average efficiency ratio of 64%, 49%, and 46%, respectively, during 2023 and 2024. However, its wealth management business reported a much higher average efficiency ratio of 83% during the same period. The bank's consolidated efficiency ratio is negatively impacted by its business mix, but the efficiency ratio of the bank's core banking functions is decent, especially given the asset cap context.

We believe that Wells Fargo also benefits from economies of scope, with its broad product assortment increasing customer lifetime value and allowing it to spend more to acquire customers. This factor applies primarily to the banks with the largest distributional scale and the largest breadth of products. We think scale will matter more and more over time, given the new phase of banking we are entering, where technological changes are occurring faster and are more impactful than ever before and can be deployed across singular, integrated platforms. Therefore, we see only more advantages for the largest banks when it comes to operating efficiency in the future. With Wells Fargo's tech budget, the bank will be able to maintain higher levels of investment while maintaining similar levels of efficiency. The bank

Wells Fargo & CoWFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

is quite sensitive to rates, and therefore the rate cycle will play a role in its efficiency, but through the cycle, we see good enough efficiency for the bank, although it will take years to see what a reborn Wells Fargo is capable of on this front. We project the efficiency ratio (defined as operating expenses/revenue) of the bank to improve to the low sixties in the terminal year of our forecast, compared with the elevated levels seen in recent years. Wells Fargo will probably not be advantaged in terms of efficiency for many years, but the bank should be in line with the industry in terms of efficiency ratio after adjusting for its business mix.

Turning to underwriting, we believe that Wells Fargo maintains a disciplined underwriting culture that contributes to its durable cost advantage. Wells Fargo fared better than many of its peers during the great financial crisis. The bank had actively steered away from the most risky mortgage products, and its business model was much less heavily reliant on capital markets and trading activities. The bank's largest exposure came from the 2008 acquisition of Wachovia. Even so, despite the acquisition of a troubled Wachovia and the bank's higher concentration in consumer lending and real estate in general, Wells performed exceptionally, outperforming peers during the period. Overall, we are encouraged by the bank's history of above-average underwriting and risk-taking ability and believe the underwriting culture has probably remained positive since the crisis, despite the bank's other operational issues. Wells Fargo's credit costs (net charge-offs as a percentage of loans) have consistently been lower than the US banking industry during the last two decades, showcasing its risk-averse culture and its advantage in underwriting. The bank has been investing aggressively in data analytics and tech to improve its underwriting, and we think that it should continue to maintain an advantage in underwriting loans.

Banks primarily earn moats because of their cost advantages, but the competitive positioning of a particular bank can be reinforced by its ability 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. In banking, where many of the products are commodified to a large degree, getting potential clients into your banking platform (where it helps to have more products in more places) and then keeping them there (where more products equates to higher switching costs) matters a lot, and we see Wells Fargo being able to pull this off. Banks with deep customer relationships spanning multiple products can generate higher-than-average 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. 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,

Wells Fargo & Co

WFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

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 fintech 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 like 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 for US banks 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 type 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:

Overall, we believe the bank's key advantage comes from its scale in certain fixed-cost, fixed-platform businesses, as well as the breadth of products it can offer to clients. This contributes to economies of scale and scope and creates switching costs for customers as they use the bank for more and more products. The bank has consistently been one of the top issuers of debit cards and is also in the top 10 for credit card balances in the US. The card space is a highly competitive space and has consolidated over time, but it's still a good and profitable business if one can establish a footprint, and while Wells Fargo certainly isn't one of the most dominant players here, it has nonetheless managed to establish a competitive franchise. The same trend of increased competition, increased digitalization, and the need to bring a full suite of products to the marketplace is also occurring for other consumer-based, mass-market products. Payments and other technology investments bleed over into the corporate payments space, where Wells' treasury and payments management platform has helped the bank maintain an excellent share in the commercial market, particularly with middle-market business clients. As a result, when we think about the long term and which banks will be able to put together the most complete consumer and commercial banking platforms, we think Wells Fargo will be one.

Wells Fargo & CoWFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

While all of these segments are strong on their own, we believe there are advantages to combining them under one banking roof. While the cross-selling strategy was poorly implemented in the past, leading to regulatory issues that have persisted longer than most people thought, we don't believe the overall idea of being able to expand a customer base with more products per customer is fundamentally flawed. The key is healthy implementation and execution. With that in mind, on the consumer side Wells Fargo can cross-sell multiple products, providing advantaged pricing to key customer segments, and spread the overall costs of customer acquisition across more revenue streams. On the commercial side, similar dynamics apply; the bank can offer a complete package with a national scale that few can compete with while sending out armies of bankers to existing and new markets in an effort to win new business and maintain local relationships. In Wells Fargo's wealth management operations, while scale isn't necessarily a huge advantage, we do believe these segments can help contribute to economies of scope. The bank is able to be a one-stop shop, offering investing and advisory capabilities along with more traditional banking services to the same client base. Many of these seemingly separate capabilities have natural overlap, such as advising clients on selling their business and then helping them manage the large wealth inflow. A bigger 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. The largest banks will be able to spend the most on technology and will have access to unique data on the largest client bases, and Wells Fargo is no exception. We believe Wells' ability for higher investment in tech platforms that can scale, as well as its access to customer data on millions of households, should bolster the bank's advantages over the longer run. Large US banks 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. Wells Fargo, with its vast technology budget 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 US money-center banks that would be most difficult to replicate for its smaller rivals.

Conclusion:

We believe the US banking system has improved over the last 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 Wells Fargo must compete with a variety of regional and community banks as well as large money-center institutions, although this fragmentation has gradually

Wells Fargo & CoWFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

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 last 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.

Wells Fargo is large enough to be considered a global systemically important bank, although it has the lowest GSIB surcharge of the Big Four money-center banks, which includes Wells Fargo, JPMorgan, Bank of America, and Citigroup. 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 return on tangible equity, or 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 Wells Fargo has earned an average ROTE of about 12.5% in the past 10 years, which is significantly above our 9.0% cost of equity for the bank despite the asset cap. We project that the bank should be able to earn a ROTE of around 14.3% in our mid-cycle forecast year, given its scale and expected resolution of regulatory concerns. In the case of Wells Fargo, we clearly have both quantitative and qualitative evidence of an economic moat and are confident about the bank's ability to maintain durable excess returns, underpinning our wide moat rating.

Fair Value and Profit Drivers Suryansh Sharma, Senior Equity Analyst, 10 Jun 2025

We are increasing our fair value estimate for Wells Fargo to \$69 per share from \$65 per share after the asset cap was lifted recently. The fair value was lifted due to the time value of money, pull-forward in cost savings, and slightly higher 2025 growth due to the timing of the asset cap removal. This fair value estimate is equivalent to 1.65 times the reported tangible book value per share as of the first quarter of 2025.

We have slightly revised our near-term growth assumptions due to asset cap removal and project growth in average earning assets to pick up in the second half of 2025. We acknowledge there is a higher degree of uncertainty related to projecting net interest income, or NII, for Wells, given its unique balance sheet dynamics. Having said this, we expect net interest margin, or NIM, to compress slightly to around 2.70% in 2025 from 2.74% in 2024, as interest rates head lower and the bank remains asset-

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

sensitive. We also expect loan growth to remain muted as rates remain relatively high in the upcoming year. Overall, NIM compression and modest growth in loan and deposit balances lead to a NII growth of about 1% in 2025.

The headwinds associated with the bank's asset sensitivity continue to play out in 2026 and 2027, as we project the federal-funds rate to reach 2.50% by the end of 2027. Lower interest rates result in NIM of 2.66% in 2026. The NIM compression in 2025 and 2026 is offset by some balance sheet growth. Ultimately, we expect NII to grow at a healthy clip after the impacts of the current interest rate cycle completely play out.

Investment banking revenue has recovered strongly in recent quarters but mortgage-related fees have remained depressed due to higher rates. 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. Growth in deposit and lending-related fees should remain muted in the coming year given the expectations of slower deposit and loan growth. Meanwhile, we expect the asset management business of the bank to have materially slower growth in future years given the current asset valuations. Overall, we project a 2.5% noninterest revenue compounded annual growth rate in the next 10 years.

A key part of our thesis remains that Wells Fargo will be successful in cutting expenses. In both 2021 and 2022, the bank managed to meet our expense expectations. The original guidance for 2023 of \$50.2 billion (excluding operating losses) was what we were expecting, but that guidance crept higher as the year progressed with the firm finally ending the year with a core expense base of \$51.5 billion (excluding operating losses, FDIC special assessment, and nonrecurring severance expenses). The core expense base for the bank has faced some upward pressure in 2024 due to higher revenue-linked compensation, but expense growth should fall in line in 2025. In the medium term, savings from cost-cutting initiatives should be offset by higher technology spending and inflationary pressure. We think that the bank will eventually bring its efficiency ratio back down to roughly 61%, but this will take several more years of expense cuts.

Our projections produce a terminal return on tangible equity of roughly 14.3%, in excess of the bank's 9% cost of equity but below management's 15% long-term target.

Risk and Uncertainty Suryansh Sharma, Senior Equity Analyst, 10 Jun 2025

An investment in Wells Fargo entails a large amount of regulatory and macroeconomic risk. For Wells, the cost of compliance is high, the bank is large and complex, and is clearly a prime target of regulators seeking fines and litigants seeking compensation for alleged misdeeds. From a macroeconomic perspective, Wells Fargo's profitability will be materially affected by the interest-rate cycles and the effects of credit and debt cycles, all of which are outside management's control. Most lines of business

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

at Wells are economically sensitive. In addition, the bank is subject to the Federal Reserve's annual stress test. Depending on the results of that review, Wells may be subject to capital return restrictions. If it were required to hold more capital, returns on equity could be affected.

Because Wells is in turnaround mode, there is also higher operational risk. Banking is a business of trust, and damage to the bank's brand could result in the permanent loss of customers or force the bank to compete harder on price. The asset cap has been lifted but it is important for the bank to keep its guard up with respect to regulatory issues in future.

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 most product governance and social risks as manageable, although Wells is a perfect example of how much damage can be done when these issues spiral out of control. Banks also lend to certain sectors that can come under more scrutiny at times, like gun manufacturers or energy. Commercial banks don't directly have a large environmental footprint, and governance practices are in line with most companies.

We assign Wells Fargo a Morningstar Uncertainty Rating of Medium.

Capital Allocation Suryansh Sharma, Senior Equity Analyst, 10 Jun 2025

We assign Wells Fargo a Capital Allocation Rating of Standard. While capital investment decisions had been poor for years, there is gathering evidence that those decisions are improving.

In our opinion, the Wells Fargo's balance sheet is sound, its capital investment decisions have been poor for years but have improved more recently to standard, and its capital return strategy is appropriate. We view the bank's current common equity Tier 1 ratio of 11.1% as appropriate. The company's capital investments had been poor for years, as the bank did not make the necessary investments in internal risk monitoring and operational controls, thereby destroying material shareholder value, but we think there is gathering evidence that the company has improved here.

The approval of the restructuring plans in February 2021, along with certain acknowledgments from the Office of the Comptroller of the Currency in its fine of Wells (such as a much smaller scope of issues identified), the settlement with the Consumer Financial Protection Bureau, and the lifting of certain consent orders all pointed to the fact that Wells was making good progress on the regulatory front. This culminated when asset cap was finally removed in June 2025 after several years of persistent efforts by the management. Improvements in expenses and actually hitting expense targets also point to a new day for the bank.

We assess the company's capital return strategy as appropriate. Wells Fargo, like most banks, prioritizes organic investment, returns some capital through dividends, and uses extra capital for share repurchases. Wells did have to cut its dividend due to coronavirus-era restrictions, but with an updated

Wells Fargo & Co

WFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

dividend policy the current plan seems appropriate.

The issues at the bank over the past several years are many. The bank submitted unsatisfactory resolution plans to the Fed multiple times, has been unable to get past its multiple scandals, and was placed under an unprecedented asset cap from the Fed. Under CEO John Stumpf, the bank did a poor job of maintaining a proper sales culture in the bank and did not make the proper investments in risk monitoring or internal controls. With a poor performance in front of Congress, it was the right move for Stumpf to step down in 2016. Tim Sloan faced a difficult tenure as Stumpf's successor, and it does not appear he made much progress with cleaning up the bank while he was in charge.

We believe it is fair to place at least some responsibility for the bank's previous sales practices—and living will deficiencies—on Sloan, as he had worked as the bank's COO, CFO, and chief administrative officer during years when sales abuses were occurring on some level. It also appears that little progress was made under his watch on reforming the bank, with Sloan often presenting a misleading picture to the public about what was actually going on. For example, guiding that the asset cap would probably be removed at the beginning of 2019 now appears laughable.

We believe Charles Scharf has brought a more realistic and effective tenure for Wells Fargo, and capital allocation throughout the bank has improved. Indeed, Scharf has made a number of notable hires, changed the reporting structure, gotten rid of noncore business units, and has executed on many opportunities for cost-cutting, although that has slowed recently. Most importantly, Scharf has been able to make great progress on the regulatory front. So far we are seeing tangible signs of progress that were missing in the past, such as past consent orders being allowed to expire and the asset cap being lifted.

Analyst Notes Archive

Wells Fargo: Positive News, as Asset Cap Lifted Earlier Than Expected; Shares Still Expensive Sean Dunlop, CFA,Director,4 Jun 2025

Wells Fargo announced that the Federal Reserve has lifted the bank's asset cap, in place since 2018, after it satisfactorily achieved the regulators' required conditions for board effectiveness and improvements in operational risk and compliance programs. Shares rose 1%-2% in aftermarket trading.Why it matters: The related consent order was the last major hurdle for the bank on the regulatory front, as it had cleared up some of its smaller consent orders within the last few months. We had previously believed that it might take until 2026 to resolve the final consent order. The firm has been limited to a \$1.95 trillion balance sheet since 2018, and was the first bank in the history of the United States to face an asset cap, imposed in response to governance and risk management deficiencies. Now that this has been lifted, the bank can begin expanding its balance sheet. This asset cap limited Wells Fargo's growth significantly, and caused it to experience share losses to close rivals.

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

For example, JPMorgan and Bank of America increased their collective deposit market share by roughly 110 basis points since 2018, while Wells Fargo's share declined by about 230 basis points. The bottom line: We expect to raise our \$65 per share fair value estimate for wide-moat-rated Wells Fargo by a low-single-digit percentage, reflective of a pull-forward in cost savings and slightly higher 2025 growth due to the timing of the asset cap removal. Shares still look expensive. We think management will save a significant portion of the \$1.1 billion in operating losses it provided in guidance from clearing up this final consent order, partially offset by the restricted share awards that will be distributed to full-time employees. We also forecast slightly higher balance sheet growth as a result of a lifted asset cap, although the overall banking industry is facing loan growth headwinds and hesitant customers from a turbulent economic environment that Wells is not immune to.

US Banks: Digitization, Data, and AI Are Changing the US Banking Landscape Like Never Before

Suryansh Sharma, Senior Equity Analyst, 19 May 2025

Advancing capabilities in digitization, data analytics, and artificial intelligence are starting to have a profound impact on banks. Physical branches no longer define banking as technology affects not only how banks operate but also how they interact with customers, manage risk, and drive growth. Why it matters: Technological advancements have powered substantial productivity improvements across the US banking industry over the past two decades, and the impacts of tech adoption will become much more pronounced in the upcoming decade. Tech investments are increasing rapidly, with leading banks allocating as much as 20% of their noninterest expenses on technology-related spending. While tech spending varies significantly across banks, investing in core enabling tech like digitization has become a key requirement. The bottom line: Fintechs will limit their share to particular areas within banking, and we are skeptical of the argument that these firms will disrupt legacy banking through their superior technological prowess, given the high barriers to success and heavy tech investments by incumbents in recent years. There are competing arguments related to the impact of tech adoption on banks. One dominant view is that tech adoption should improve the efficiency of the entire banking industry thereby improving profits for everyone. We believe that tech adoption will improve efficiency but most of the benefits would be passed on to consumers in the long run. There would certainly be winners and losers in this race. We argue that economies of scale and scope are more important than ever for banks in this era. Big picture: We have tried to identify banks best positioned to leverage their tech capabilities to improve their efficiency and gain market share over the next decade. Bank of America and U.S. Bancorp are our preferred picks given their technological readiness and current valuation.

Wells Fargo Earnings: Encouraging Progress on Regulatory Front, but Economic Uncertainty Abounds

Suryansh Sharma, Senior Equity Analyst, 11 Apr 2025

Wells Fargo reported a middling first-quarter performance, with earnings of \$1.39 per share, equating to an annualized return of tangible equity of 13.6%. The bank displayed progress on the regulatory front,

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

but the macroeconomic impact of the tariff policy will remain front and center for the bank. Why it matters: The impact of tariff-related disruptions didn't show up in the first quarter, but we think that the impacts will be much more visible in the second. We were somewhat surprised to see that the bank had not increased its allowance for loan losses during the quarter. Lackluster results on the NII side, down 6% on a year-over-year basis, had an impact on the bank's first-quarter profitability. The impact of lower rates on floating rate assets, unfavorable change in deposit mix, and lower loan balances drove the uninspiring performance. The bank has been doing an impressive job at expense control, which will be key for the bank to achieve its profitability targets. Core expenses were flattish on a year-over-year basis as the bank was able to carve out efficiencies and was able to invest in technology and other strategic areas. The bottom line: We intend to maintain our \$65 per share fair value estimate for wide-moat-rated Wells Fargo after incorporating first-quarter results and believe that shares are about fairly valued even after the sharp correction. We were skeptical about the rally in US bank stocks after the US presidential election, given the lack of clarity 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. Coming up: It is difficult to predict the precise timeline of the asset-cap removal, but the bank seems to be making great progress. Five consent orders were closed out in the first quarter, bringing the total to 11 since 2019. Wells Fargo is now closer to its asset cap being lifted than it ever was.

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.

Wells Fargo & CoWFC★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

Wells Fargo Earnings: Shares Rise 6% on Encouraging 2025 NII and Expense GuidanceSuryansh

Sharma,Senior Equity Analyst,15 Jan 2025

Wells Fargo ended the year with a good set of numbers, resulting in fourth-quarter earnings of \$1.43 per share, equating to an annualized ROTE of 13.9%. The 2025 guidance was particularly encouraging with projections of NII close to bottoming out and flattish expense growth in the upcoming year. Why it matters: Shares jumped around 6% on good results driven by strength in the fee income franchise and a promising outlook for 2025. Net interest income, or NII, improved slightly on a sequential basis, but the key highlight for us was the continued momentum in fee income streams like asset management, trading, and investment banking, which led to a fee income growth of 11% on a year-over-year basis. 2025 NII is expected to be 1%-3% higher than 2024, implying a growth of 3%-5% from annualized NII in the current quarter. Management projects expenses to be around \$54.2 billion in 2025 compared with \$54.6 billion in the current year. Key stats: Management expects to achieve \$2.4 billion of efficiency savings, \$0.7 billion of lower operating losses, and \$0.5 billion of lower severance expenses in 2025, which are partially offset by \$0.6 billion of higher revenue-related expenses and \$1.8 billion of targeted investment spending. The bottom line: We plan on increasing our \$60 per share fair value estimate for wide-moat-rated Wells Fargo by a mid- to high-single-digit percentage after incorporating fourth-quarter results and believe that shares are slightly overvalued. Expense control in the upcoming years is key for the bank to achieve its target of 15% return on tangible equity. We are glad the bank is able to carve out efficiencies and is able to invest in technology and other strategic areas while keeping its expense base flat. Coming up: It is difficult to predict the precise timeline of the asset cap removal, but the bank seems to be making good progress. Asset cap removal remains a key monitorable for Wells Fargo and could be a material positive for the stock.

US Banks Election Impact: Tailwinds From Softer Regulation, More M&A, and Steepening Yield

CurveMaoyuan 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

Wells Fargo & Co

WFC★★

27 Jun 2025 21:30, UTC

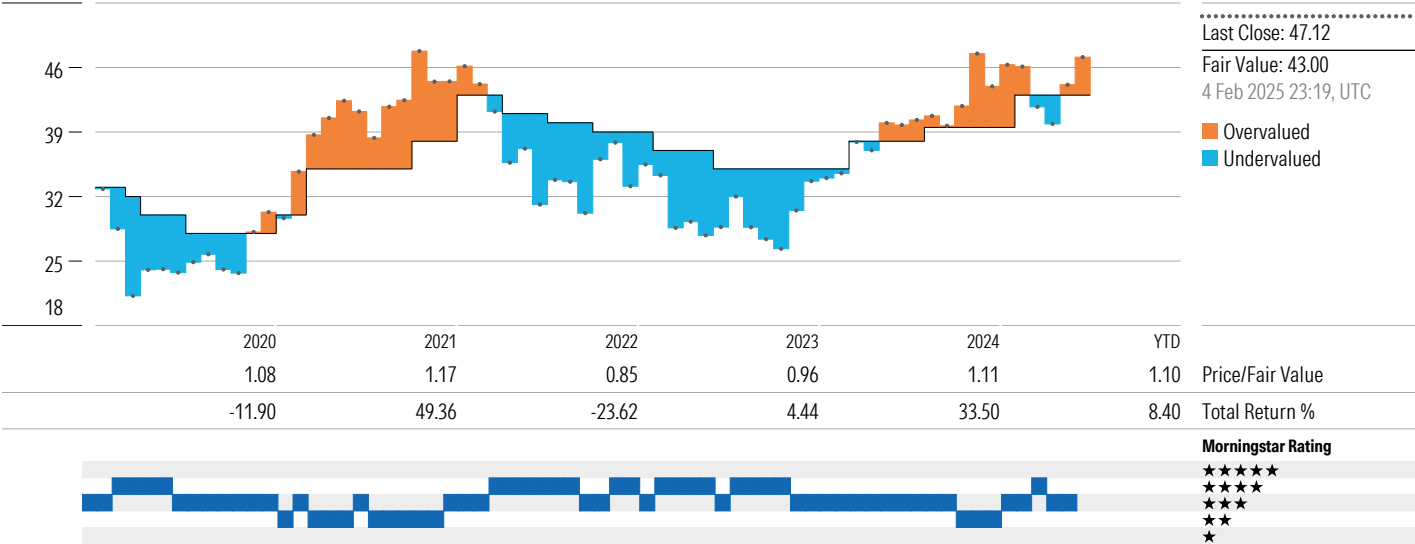
Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	 Wide	 Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

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. ■■■

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

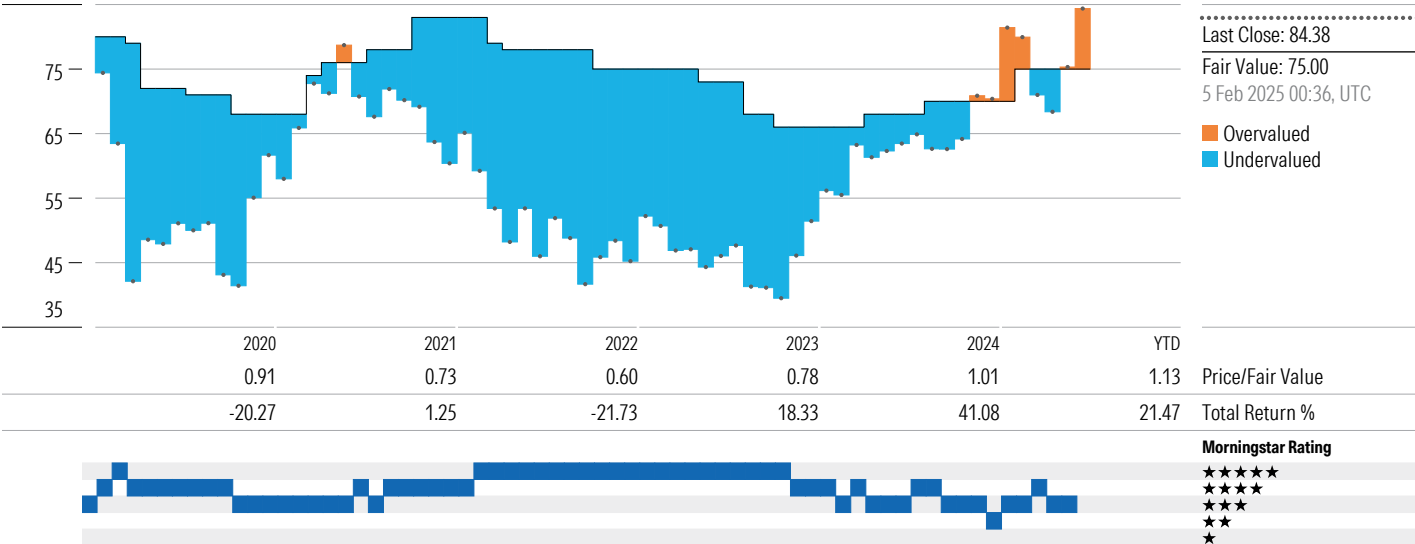
Competitors Price vs. Fair Value

Bank of America Corp BAC



Total Return % as of 27 Jun 2025. Last Close as of 27 Jun 2025. Fair Value as of 4 Feb 2025 23:19, UTC.

Citigroup Inc C



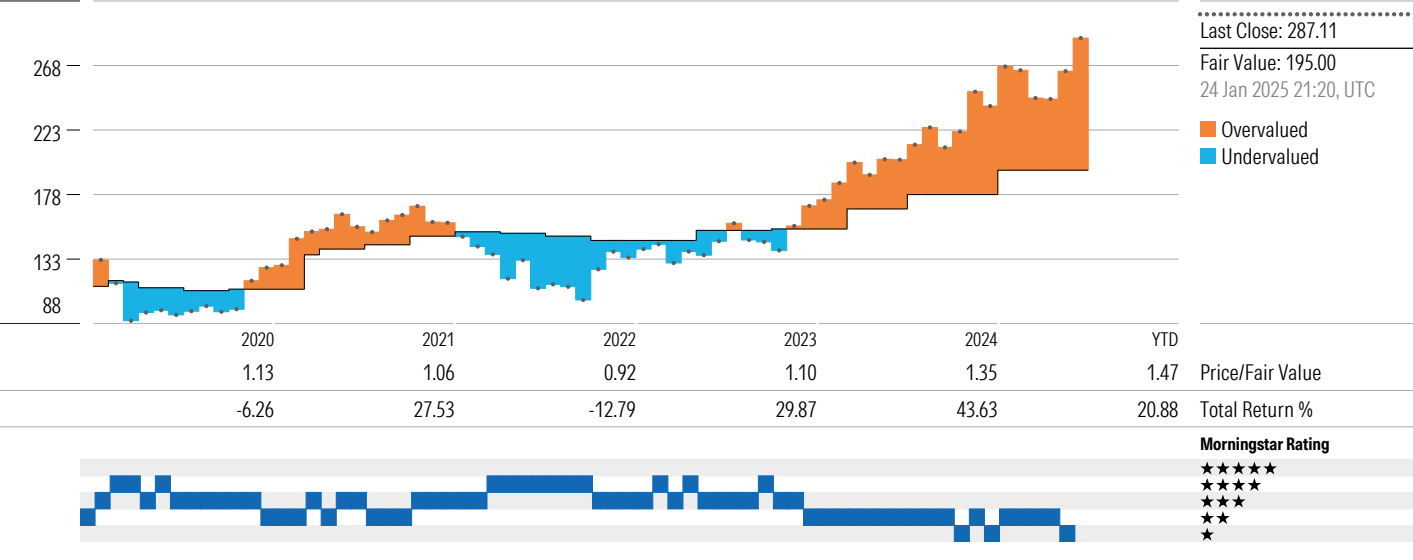
Total Return % as of 27 Jun 2025. Last Close as of 27 Jun 2025. Fair Value as of 5 Feb 2025 00:36, UTC.

Wells Fargo & CoWFC★★

27 Jun 2025 21:30, UTC

Competitors Price vs. Fair Value

JPMorgan Chase & CoJPM



Total Return % as of 27 Jun 2025. Last Close as of 27 Jun 2025. Fair Value as of 24 Jan 2025 21:20, UTC.

Wells Fargo & Co WFC ★★

27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

Morningstar Valuation Model Summary

Financials as of 10 Jun 2025

Fiscal Year, ends 31 Dec	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Net Interest Income (USD Mil)	44,950	52,375	47,676	48,468	48,639	51,168	54,681	56,814
Non Interest Income (USD Mil)	29,490	30,653	34,470	33,121	33,526	34,321	35,434	36,536
Total Pre-Provision Revenue (USD Mil)	74,440	83,028	82,146	81,588	82,165	85,489	90,115	93,350
Provision for Loan Losses (USD Mil)	1,534	5,399	4,334	4,715	5,521	4,899	5,597	5,661
Operating Expenses (USD Mil)	57,282	55,562	54,598	54,304	55,272	56,521	57,840	59,149
Operating Income (USD Mil)	15,624	22,067	23,214	22,570	21,372	24,069	26,678	28,540
Net Income Available to Common Stockholders (USD Mil)	13,182	19,142	19,722	19,312	18,367	20,575	22,714	24,248
Adjusted Net Income (USD Mil)	12,067	17,982	18,606	18,182	17,222	19,416	21,541	23,060
Weighted Average Diluted Shares Outstanding (Mil)	3,837	3,720	3,468	3,400	3,278	3,187	3,063	2,963
Earnings Per Share (Diluted) (USD)	3.14	4.83	5.37	5.35	5.25	6.09	7.03	7.78
Adjusted Earnings Per Share (Diluted) (USD)	3.14	4.83	5.37	5.35	5.25	6.09	7.03	7.78
Dividends Per Share (USD)	1.10	1.30	1.50	1.50	1.58	1.83	2.25	2.49

Margins & Returns as of 10 Jun 2025

Fiscal Year, ends 31 Dec	Actual				Forecast				
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029 5 Year Avg
Net Interest Margin %	2.8	2.6	3.1	2.7	2.8	2.7	2.8	2.9	2.9
Efficiency Ratio %	70.4	77.6	67.3	66.3	65.6	66.3	65.1	63.3	62.5
Provision as % of Loans	0.4	0.2	0.6	0.5	0.5	0.6	0.5	0.5	0.5

Growth & Ratios as of 10 Jun 2025

Fiscal Year, ends 31 Dec	Actual				Forecast				
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029 5 Year Avg
Net Interest Income Growth %	10.0	25.6	16.5	-9.0	1.7	0.4	5.2	6.9	3.9
Non Interest Income Growth %	-1.2	-17.5	3.9	12.5	-3.9	1.2	2.4	3.2	3.1
Total Pre-Provision Revenue Growth %	—	4.1	11.5	-1.1	-0.7	0.7	4.1	5.4	3.6
Operating Expenses Growth %	—	6.4	-3.0	-1.7	-0.5	1.8	2.3	2.3	2.3
Operating Income Growth %	—	-48.1	44.5	8.0	1.9	-4.9	12.0	10.4	6.8
Net Income Growth %	-2.8	-38.8	45.2	3.0	-2.1	-4.9	12.0	10.4	6.8
Earnings Per Share Growth %	2.8	-36.4	53.7	11.0	-0.4	-1.7	16.0	15.4	10.7

Valuation as of 10 Jun 2025

Fiscal Year, ends 31 Dec	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Price/Earning	13.1	10.2	13.1	14.9	15.1	13.1	11.3	10.2
Price/Book	—	—	—	—	—	—	—	—
Price/Tangible Book	1.3	1.4	1.9	2.0	1.9	1.7	1.6	1.5
Dividend Yield %	2.6	2.1	2.0	1.9	2.0	2.3	2.8	3.1
Dividend Payout %	34.7	26.7	27.6	27.7	29.6	29.6	31.6	31.6

Operating Performance / Profitability as of 10 Jun 2025

Fiscal Year, ends 31 Dec	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
ROA %	0.7	1.0	1.0	1.0	0.9	1.0	1.1	1.1
ROE %	7.2	10.5	10.8	10.5	9.7	10.6	11.3	11.8
Return on Tangible Equity %	9.3	14.0	14.3	13.8	12.6	13.7	14.6	15.1

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price 79.50 USD 27 Jun 2025	Fair Value Estimate 69.00 USD 10 Jun 2025 23:54, UTC	Price/FVE 1.15	Market Cap 258.71 USD Bil 27 Jun 2025	Economic Moat™  Wide	Equity Style Box  Large Value	Uncertainty Medium	Capital Allocation Standard	ESG Risk Rating Assessment¹  4 Jun 2025 05:00, UTC
---	---	--------------------------	--	---	--	------------------------------	---------------------------------------	---

Financial Leverage (Reporting Currency)	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Fiscal Year, ends 31 Dec								
Equity/Assets %	9.6	9.6	9.3	9.6	9.6	9.6	9.6	9.6
Forecast Revisions as of	2025		2026		2027			
	Current	Prior	Current	Prior	Current	Prior		
Prior data as of								
Fair Value Estimate Change (Trading Currency)	69.00	—	—	—	—	—	—	—
Net Interest Income (USD Mil)	48,468	48,293	48,639	48,099	51,168	50,400		
Total Pre-Provision Revenue (USD Mil)	81,588	81,414	82,165	81,625	85,489	84,721		
Operating Income (USD Mil)	22,570	22,395	21,372	20,865	24,069	23,339		
Net Income (USD Mil)	—	—	—	—	—	—		
Earnings Per Share (Diluted) (USD)	5.35	5.34	5.25	5.15	6.09	5.93		
Adjusted Earnings Per Share (Diluted) (USD)	5.35	5.34	5.25	5.15	6.09	5.93		
Dividends Per Share (USD)	1.50	1.50	1.58	1.55	1.83	1.78		

Key Valuation Drivers as of 10 Jun 2025

Cost of Equity %	9.0
Stage II Net Income Growth Rate %	3.0
Stage II Incremental ROIC %	11.0
Perpetuity Year	20

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

Discounted Cash Flow Valuation as of 10 Jun 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	237,489
Projected Diluted Shares	3,529
Fair Value per Share (USD)	69.00

Wells Fargo & Co WFC ★★ 27 Jun 2025 21:30, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
79.50 USD 27 Jun 2025	69.00 USD 10 Jun 2025 23:54, UTC	1.15	258.71 USD Bil 27 Jun 2025	Wide	Large Value	Medium	Standard	 4 Jun 2025 05:00, UTC

ESG Risk Rating Breakdown

Exposure

Company Exposure¹	58.6
- Manageable Risk	54.7
Unmanageable Risk²	3.9

Management

Manageable Risk	54.7
- Managed Risk³	24.9
Management Gap⁴	29.7

Overall Unmanaged Risk 33.7

● Subject ○ Subindustry (49.0)



- 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 45.6% 4. Management Gap assesses risks that are not managed, but are considered manageable 5. ESG Risk Rating Assessment = Overall Unmanaged Risk = Management Gap plus Unmanageable Risk

ESG Risk Rating Assessment⁵



ESG Risk Rating is of Jun 04, 2025. Highest Controversy Level is as of Jun 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 04 Jun 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
Wells Fargo & Co	58.6 High 0 —●— 55+	45.6 Average 100 —●— 0	33.7 High 0 —●— 40+
Bank of America Corp	53.0 Medium 0 —●— 55+	59.1 Strong 100 —●— 0	23.8 Medium 0 —●— 40+
Citigroup Inc	53.3 Medium 0 —●— 55+	69.5 Strong 100 —●— 0	18.9 Low 0 —●— 40+
JPMorgan Chase & Co	53.7 Medium 0 —●— 55+	52.9 Strong 100 —●— 0	27.3 Medium 0 —●— 40+
—	— — 0 —●— 55+	— — 100 —●— 0	— — 0 —●— 40+

Appendix

Historical Morningstar Rating

Wells Fargo & Co WFC 27 Jun 2025 21:30, 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 27 Jun 2025 21:26, UTC

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

Citigroup Inc C 27 Jun 2025 21:26, UTC

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

JPMorgan Chase & Co JPM 27 Jun 2025 21:24, UTC

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

Research Methodology for Valuing Companies

Overview

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

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

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

1. Economic Moat

The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that allows a firm to sustain excess profits over a

long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

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

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

2. Estimated Fair Value

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

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

In this stage, which can last five to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in working capital accounts, and capital spending. Based on these projections, we calculate earnings before interest,

after taxes (EBI) and the net new investment (NNI) to derive our annual free cash flow forecast.

Stage II: Fade

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

Stage III: Perpetuity

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

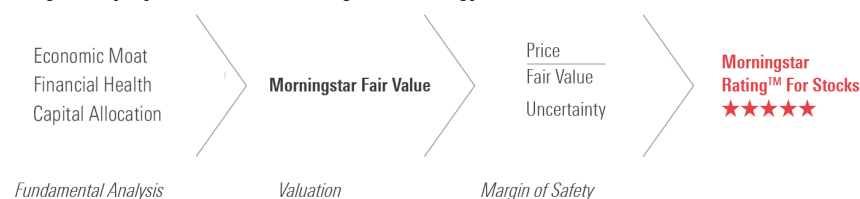
Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return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

3. Uncertainty Around That Fair Value Estimate

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

Our Uncertainty Rating is meant to take into account anything that can increase the potential dispersion of future

Morningstar Equity Research Star Rating Methodology



Research Methodology for Valuing Companies

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

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

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

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

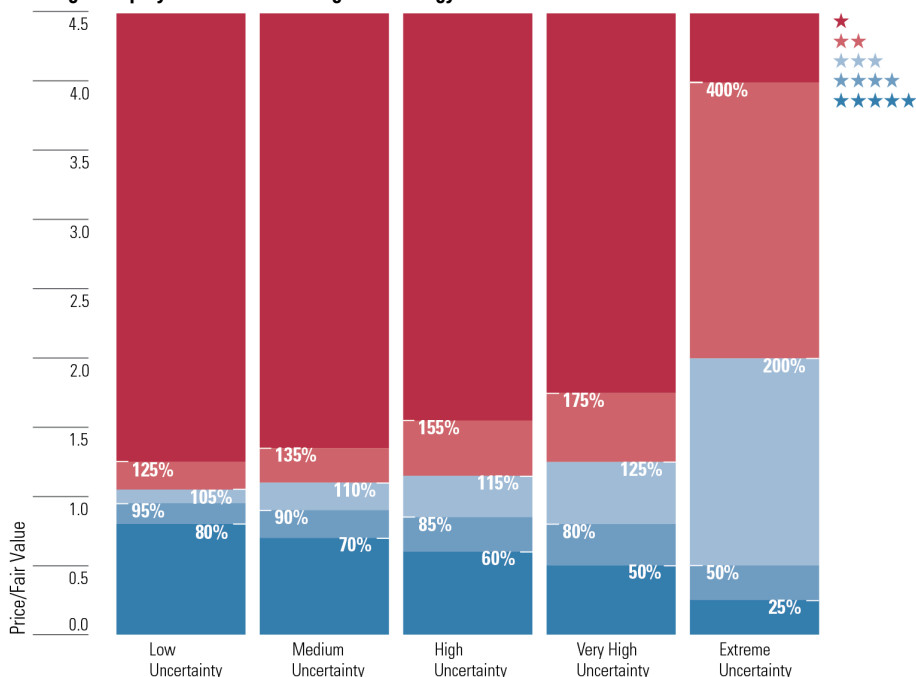
Our uncertainty rating is based on the interquartile range, or the middle 50% of potential outcomes, covering the 25th percentile–75th percentile. This means that when a stock hits 5 stars, we expect there is a 75% chance that the intrinsic value of that stock lies above the current market price. Similarly,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

4. Market Price

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

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

Morningstar Equity Research Star Rating Methodology



Morningstar Star Rating for Stocks

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

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

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

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

The Morningstar Star Ratings for stocks are defined below:

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

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

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

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

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

Other Definitions

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

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments,

Research Methodology for Valuing Companies

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

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

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

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

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

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

Sustainalytics analyzes over 1,300 data points to assess a company's exposure to and management of ESG risks. In other words, ESG Risk Ratings measures a company's unmanaged ESG Risks represented as a quantitative score.

Unmanaged Risk is measured on an open-ended scale starting at zero (no risk) with lower scores representing less unmanaged risk and, for 95% of cases, the unmanaged ESG Risk score is below 50.

Based on their quantitative scores, companies are grouped into one of five Risk Categories (negligible, low, medium, high, severe). These risk categories are absolute, meaning that a 'high risk' assessment reflects a comparable degree of unmanaged ESG risk across all subindustries covered.

The ESG Risk Rating Assessment is a visual representation of Sustainalytics ESG Risk Categories on a 1 to 5 scale. Companies with Negligible Risk = 5 Globes, Low Risk = 4, Medium Risk = 3 Globes, High Risk = 2 Globes, Severe Risk = 1 Globe. For more information, please visit sustainalytics.com/esg-ratings/

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

Risk Warning

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

General Disclosure

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

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

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

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

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

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

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

Research Methodology for Valuing Companies

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

Conflicts of Interest

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

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

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

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

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

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

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

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

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

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

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

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

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

Research Methodology for Valuing Companies

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

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

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

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

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

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

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