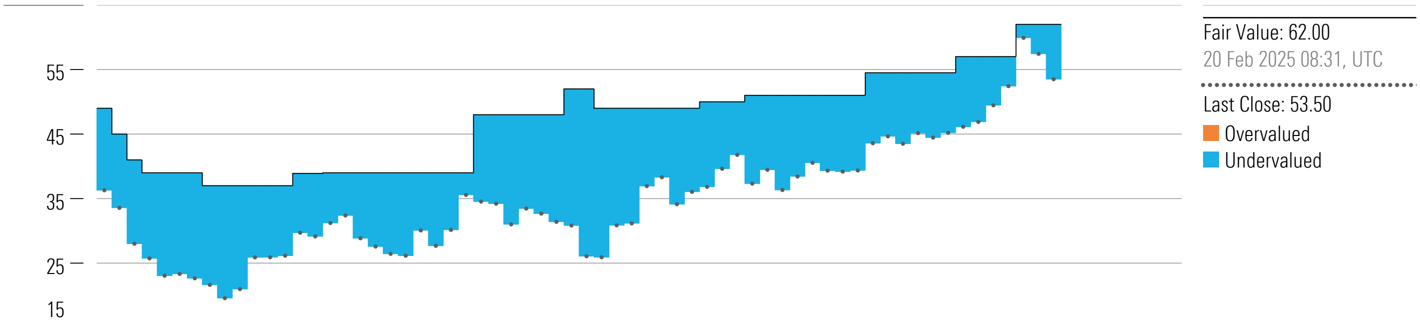
Morningstar Equity Analyst Report | Report as of 3 Apr 2025 23:52, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC.

HSBC Holdings PLC ADR HSBC ★★★★ 3 Apr 2025 21:39, UTC

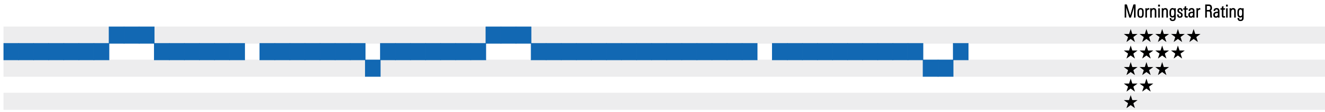
Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
53.50 USD 3 Apr 2025	62.00 USD 20 Feb 2025 08:31, UTC	0.86	189.43 USD Bil 3 Apr 2025	None	Large Value	Medium	Standard	2 Apr 2025 05:00, UTC

Price vs. Fair Value



	2020	2021	2022	2023	2024	YTD	
	0.70	0.77	0.64	0.79	0.87	0.86	Price/Fair Value
	-33.72	20.61	7.83	38.61	32.10	11.81	Total Return %

Morningstar Rating



Total Return % as of 03 Apr 2025. Last Close as of 03 Apr 2025. Fair Value as of 20 Feb 2025 08:31, UTC.

Contents

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

HSBC Is a Global Bank With Largest Operations in Hong Kong and the UK

Business Strategy & Outlook Michael Makdad, Senior Equity Analyst, 20 Feb 2025

HSBC has evolved from a global bank, where two decades ago half of its capital was deployed outside the United Kingdom and Hong Kong, to a somewhat more geographically focused group centred mainly on these two markets, with a few other strong geographies such as the Middle East. After the 2008 global financial crisis, stricter regulations both globally (the Basel III framework) and specifically in the UK have made it more difficult to generate excess normalized returns from a global footprint, in our view, as regulators in each jurisdiction demand that significant capital be allocated locally, to protect local depositors and the governments that insure them.

Given HSBC's dominant position in Hong Kong, we think that its operations there benefit from an economic moat due to cost advantage—benefits that extend in part to other Asian operations under the Hong Kong-based entity, Hongkong Shanghai Bank. The UK operations (the bulk of which the Asian entity added in 1992 when it bought Midland Bank and transferred its global headquarters to London from Hong Kong) may have been somewhat moaty historically but have failed to consistently generate economic returns since the global financial crisis. In 2018, HSBC ringfenced its retail operations in the UK from its London-based institutional business into Birmingham-based HSBC UK Bank. The regulatory requirement for ringfencing may have been part of the reason for poor returns in the UK in the late 2010s, but we believe it's still unclear whether the UK business has sufficient cost advantage in the UK

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Sector	Industry
Financial Services	Banks - Diversified

Business Description

Established in 1865 in Hong Kong, London-based HSBC is one of the largest banks in the world, with assets of USD 3 trillion and 40 million customers worldwide. It operates in around 60 countries with more than 200,000 full-time staff. The United Kingdom and Hong Kong are its two largest markets. The bank offers retail, commercial and institutional banking, global banking and markets, wealth management, and private banking.

market to be moaty.

A key issue for HSBC has been pressure from activist investors in Hong Kong, including its 9% shareholder Ping An Insurance, to consider splitting the Asian operations from the rest of the bank to improve returns. Following improved returns in the past several years, this pressure has abated somewhat and Ping An may reduce its stake, but we think the key will be whether HSBC can maintain the recent profit improvement when the global interest-rate cycle becomes less favorable for net interest income.

Bulls Say Michael Makdad, Senior Equity Analyst, 20 Feb 2025

- HSBC has cost advantages and significant intangible assets in its core market of Hong Kong that help it generate strong earnings there even when the local economy is weaker.
- HSBC benefits from growing trade linkages between Greater China and Southeast Asia.
- Wealth management offers a growth opportunity for HSBC in Asia.

Bears Say Michael Makdad, Senior Equity Analyst, 20 Feb 2025

- HSBC has operations in many jurisdictions around the world, including some where it is a secondary player and doesn't enjoy the same advantages that it does in core markets like Hong Kong.
- Given HSBC's global reach, the bank is classified as a globally systematically important bank and is required to hold an extra 2% capital buffer.
- Geopolitical tensions and a trend toward derisking may make the combination of HSBC's Asian operations and its European ones less cohesive than in the past.

Economic Moat Michael Makdad, Senior Equity Analyst, 20 Feb 2025

We believe that HSBC does not enjoy an economic moat overall.

The group's business in Hong Kong is moaty, in our view, with a return on risk-weighted assets of more than 5% significantly exceeding the group level. This is based on HSBC's funding cost advantage in the local market, where it has long been the largest bank. Sticky retail deposits in Hong Kong not only help fund local loans but also help to fund trading activities that generate noninterest income.

In the past, Morningstar had assigned moat ratings to HSBC in part due to the value to clients with cross-border financing needs of its extensive global footprint, which has few rivals in the number of countries it reaches. However, not only have capital requirements tightened globally after the 2008 financial crisis introduced the Basel III regulatory framework, but costs to comply with increasing know-your-customer rules from various jurisdictions have risen. Citibank, which previously shared some similarities with HSBC in terms of global reach, has seen its returns decline compared with pre-2008 and opted to sell out of most of its Asian markets. Standard Chartered, another geographically dispersed UK-domiciled bank with large operations in Hong Kong, also saw returns decline significantly after the

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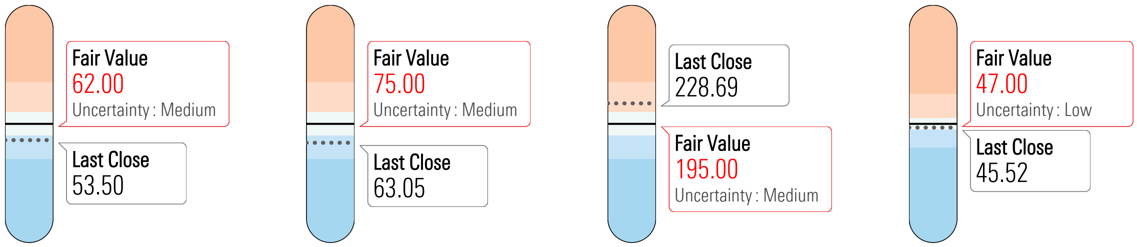
Competitors



	HSBC Holdings PLC ADR HSBC	Citigroup Inc C	JPMorgan Chase & Co JPM	DBS Group Holdings Ltd D05
Economic Moat	None	None	Wide	Narrow
Currency	USD	USD	USD	SGD
Fair Value	62.00 20 Feb 2025 08:31, UTC	75.00 5 Feb 2025 00:36, UTC	195.00 24 Jan 2025 21:20, UTC	47.00 10 Feb 2025 10:18, UTC
1-Star Price	83.70	101.25	263.25	58.75
5-Star Price	43.40	52.50	136.50	37.60
Assessment	Undervalued 3 Apr 2025	Undervalued 3 Apr 2025	Overvalued 3 Apr 2025	Fairly Valued 3 Apr 2025
Morningstar Rating	★★★★3 Apr 2025 21:39, UTC	★★★★3 Apr 2025 21:39, UTC	★★3 Apr 2025 21:36, UTC	★★★3 Apr 2025 10:35, UTC
Analyst	Michael Makdad, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst	Suryansh Sharma, Senior Equity Analyst	Michael Makdad, Senior Equity Analyst
Capital Allocation	Standard	Standard	Exemplary	Exemplary
Price/Fair Value	0.86	0.84	1.17	0.97
Price/Sales	3.18	1.68	4.18	5.82
Price/Book	1.25	0.71	2.12	1.88
Price/Earning	8.86	11.47	13.53	11.47
Dividend Yield	5.69%	3.08%	1.95%	4.64%
Market Cap	189.43 Bil	118.67 Bil	639.44 Bil	129.56 Bil
52-Week Range	39.42—61.88	53.51—84.74	179.20—280.25	32.15—46.97
Investment Style	Large Value	Large Value	Large Value	Large Blend

early 2010s.

Though not quite as large as some of its peers, HSBC is one of the leading banks in the United Kingdom, and Morningstar also previously assessed that its position in the UK had some moaty attributes, noting its ability to gain market share when other UK banks were more negatively affected by the global financial crisis. However, the introduction of the bank levy in the UK has increased costs and HSBC's returns in the UK in recent years have mostly been below its cost of capital.

Fair Value and Profit Drivers Michael Makdad, Senior Equity Analyst, 20 Feb 2025

Our fair value estimate is USD 62 per ADR and represents a 2025 price/book ratio of 1.22 times. We assume a cost of equity of 9.5%. We forecast annual reported net interest income remaining around $33 billion to $34 billion from 2025 to 2027, as loan growth of 1% to 2% is offset by flat to slightly narrower net interest margins. Noninterest income is expected to grow at around 2% to 3% per year. We assume credit costs of 37 basis points of loans throughout our forecast horizon. We assume that HSBC pays out around 50% of its core earnings as dividends and buys back between 1.5% and 2.0% of its shares every year.

Risk and Uncertainty Michael Makdad, Senior Equity Analyst, 11 Oct 2024

We assign a Morningstar Uncertainty Rating of Medium to HSBC. It is vulnerable to US-China trade tensions, such as if different jurisdictions require it to comply with mutually contradictory rules in such a way that hurts its ability to conduct business profitably, but its business in Hong Kong is quite stable and its results historically have been less volatile than those of many other global banks. The UK business is also not particularly risky relative to some other banks, in our view.

We see potential policies impeding global trade as the highest risk to commercial and global banking markets. These would reduce HSBC's trade finance revenue and advisory services as capital markets weaken.

Historically, the bank was able to leverage its strength at times of financial crisis to strategically acquire troubled banks, as was the case for Marine Midland in the US in 1980 and Midland in the UK. However, its strength also makes it a prime candidate for governments to request HSBC to bail out troubled banks, as feared by the bank in the UK during the global financial crisis in 2008.

Capital Allocation Michael Makdad, Senior Equity Analyst, 11 Oct 2024

We assign HSBC a Standard Morningstar Capital Allocation Rating based on its sound balance sheet, fair investments, and appropriate shareholder distribution.

Historically, HSBC has been relatively acquisitive, with large purchases such as the successful Midland deal in the early 1990s that catapulted the group to among the largest banks in the UK and the less successful Household nonbank purchase in the US in 2002 that resulted in subprime loan losses several years later. We believe its strategic imperative now leans more to divestments of noncore geographies and operations than to large new acquisitions. We think HSBC's track record here is fair, including sales of its Canada operation, French retail banking business, and others, none of which were easy to achieve regulatory signoff to complete.

HSBC has been making large shareholder distributions in the past few years as its earnings improved, which we view as appropriate.

Analyst Notes Archive

HSBC Earnings: Fair Value Estimate Raised on Staff Reduction Plan; Buybacks to Continue Michael Makdad,Senior Equity Analyst,20 Feb 2025

HSBC plans to cut staff expenses 8% by 2026 and announced an additional $2 billion buyback (1% of market cap), to be completed by April. Why it matters: We expect slightly lower profit in 2025 due to one-time severance expenses, but forecast profit growth in 2026 as the reduction boosts net profit by about 4% in future. The cost-cutting is positive, but we see limited room for top-line growth in the next few years. Loan demand in HSBC's key market of Hong Kong remains weak and average net interest margins across the group are unlikely to return to 2023 levels due to lower interest rates in Europe. HSBC continues to conduct large share repurchases and its recent stock price increase above 1.0 times book value is unlikely to deter further buyback announcements. The shares have risen 15% year to date and now trade around 1.12 times forecast 2025 book value. The bottom line: We raise our fair value estimate for HSBC's Hong Kong-listed shares by 8% to HKD 96 and for its London-listed shares by 12% to GBX 980, implying around 10% upside. The primary factors driving our increased fair value are the cost reductions (which management assures will not hit revenue) and a higher path for US dollar interest rates than we previously anticipated. For HSBC to achieve a substantial premium to book value, we believe further structural changes would be needed. However, given the complexity of HSBC's operations, we think it’s prudent for management to focus on medium-term efficiency gains rather than more disruptive overhauls. Between the lines: We believe the organizational simplification introduced by CEO Georges Elhedery since his appointment in September 2024 has the potential to drive greater efficiency than the 4% boost to net profit from staff reductions alone. By removing duplicate roles from matrix management and simplifying accountability, these changes are intended to speed up decision-making, increase revenue opportunities, and reduce costs.

HSBC Earnings: Smooth CEO Transition, but Big Changes Ahead; We Raise Our Fair Value Estimate by 5% Michael Makdad,Senior Equity Analyst,29 Oct 2024

HSBC reported solid third-quarter results. There were no major surprises, although the group announced another $3 billion buyback, bringing its total 2024 buybacks to nearly 7% of shares outstanding. Why it matters: The announcement was the first since Georges Elhedery became CEO on Sept. 2 and follows a broad structural overhaul announced on Oct. 22. We believe the overhaul will help HSBC simplify its sprawling global operations and cut costs as global interest rates decline (see our Oct. 22 note). HSBC plans to outline details in February 2025 when it reports full-year results and after Pam Kaur becomes CFO. HSBC's ability to continue delivering solid quarterly results even as net interest margins shrink, while not a major surprise, nonetheless increases our confidence in the profit outlook for the bank. The bottom line: We raise our fair value estimates by 5% to HKD 89 for the Hong Kong-listed shares, GBX 878 for the London shares, and $57 for the US ADRs, implying 22%-24% upside. Key stats: HSBC delivered an annualized return on tangible equity of 15.5%, even as net interest margin narrowed to 1.46% from 1.62% in the prior quarter, thanks to strong life insurance results and wealth fee growth. Coming up: HSBC will provide more information in February 2025 on how the structural overhaul is expected to benefit expense containment, without resulting in too much revenue attrition. The changes could lead to higher near-term costs and lower profits in 2025, but HSBC said it expects a payback quickly. The combination of what is currently five geographical regions into only two should lead to reductions in duplicated senior management roles. Elhedery stressed that the reorganisation is not a prelude to a breakup into separate banks for the United Kingdom and Hong Kong, but is a simplification that builds on the changes made under retiring CEO Noel Quinn, such as the sale of operations in Canada, France, and elsewhere.

HSBC: Overhaul of Business Segments Should Help Cut Costs, Improve Accountability; FVEs Unchanged Michael Makdad,Senior Equity Analyst,22 Oct 2024

HSBC Holdings reorganized its reporting lines into four businesses, with group functions to be realigned to support the new structure. The four businesses are 1) Hong Kong, 2) United Kingdom, 3) corporate and institutional banking, and 4) international wealth and premier banking.Why it matters: We have viewed HSBC's sprawling global operations as too complex, a key reason why we downgraded the group to no-moat in 2023. Today's announcement to clearly separate Hong Kong and the UK retail bank into their own businesses is positive, in our view. We expect the changes to boost accountability for each of the businesses, identifying underperforming areas more clearly. The breakout of earnings contribution from Hong Kong from the contributions of other businesses may help address Asian shareholders' concerns that some global businesses were detracting from the robust profits HSBC generates in Hong Kong.The bottom line: We're keeping our existing forecasts, fair value estimates, and no-moat rating. We already anticipate cost reductions under new CEO Georges Elhedery will help HSBC limit increases in its cost/income ratio despite global inflation and narrowing net interest margins in coming years. There's a 24% upside to our fair value estimates of HKD 84.80 and GBX 836 per share, which value HSBC at 1.2 times current book value and 7 times 2024 earnings.Between the lines: Besides the Hong Kong business and the UK ring-fenced bank, the other two new business structures also simplify HSBC's strategic focus, in our view. One of them will focus on global wholesale banking, such as cross-border transaction banking and capital markets, in the UK (the wholesale business outside the ring-fenced bank), Europe, and the Americas. We see opportunities for efficiency gains from cutting overlaps. The other will focus on expanding the international wealth-management business, particularly in Asia and the Middle East.

Hong Kong and Singapore Banks: Change of Coverage Analyst; No Moats for Hong Kong Banks Michael Makdad,Senior Equity Analyst,11 Oct 2024

We transfer coverage of seven Hong Kong and Singapore banking groups to a new primary analyst. Why it matters: We downgrade the moat ratings and Capital Allocation Ratings of two Hong Kong banks that we previously saw as moaty and exemplary allocators. We reduce Uncertainty Ratings for four banks. We assign no-moat ratings to BOC Hong Kong or Hang Seng Bank, aligning them with HSBC and Standard Chartered. Our Capital Allocation Ratings for BOCHK and Hang Seng are now Standard. Standard Chartered's Morningstar Uncertainty Rating is revised to Medium from High, and the

Uncertainty Ratings for Singaporean banks DBS, Oversea Chinese Banking Corp, and United Overseas Bank are revised to Low from Medium. The bottom line: Excluding the London-listed shares of HSBC, down 4% to GBX 836 on foreign exchange, and Standard Chartered, for which we raise our respective fair value estimates by 5% to GBX 957 and 9% to HKD 97, our fair values are intact. Standard Chartered is the only bank with significant forecast revisions. Our fair value of HKD 33 makes BOCHK the most attractive, with 29% upside. There's 24% upside to HSBC's fair values of GBX 836 and HKD 84.8 (unchanged), and 19% upside for UOB to SGD 38. Standard Chartered has 16% upside to our new fair values. Hang Seng Bank, DBS, and OCBC have 13%-14% upside to our unchanged respective fair values of HKD 110, SGD 44, and SGD 17. Big picture: Our removal of moat ratings from the two Hong Kong banks that still had them, which follows our downgrade of HSBC to no-moat in 2023, reflects growing macro risk factors for the Hong Kong market. The gap between falling interest rates in China and high USD rates prompts some borrowers to seek funding in renminbi, not from Hong Kong banks. Banks' HKD funding cost advantages become less useful. Our base case still foresees BOCHK and Hang Seng Bank generating returns above cost of equity. However, we can't say this is more likely than not 10 years out or that major risks are absent.

HSBC Earnings: Good Results and $3 Billion Additional Buyback but No Major Surprises Lorraine Tan, CFA,Director,31 Jul 2024

We maintain our fair value estimates of GBX 872 and HKD 84.8 per share ($54.5 per ADR) for HSBC Holdings, more than 20% above current prices and around 0.83 times 2024 book value.Second-quarter return on equity, or ROE, came in at 13.7% while return on tangible equity, or RoTE, came in at 16.3%, similar to the levels in the same quarter a year earlier and somewhat above our estimate of HSBC's cost to equity. HSBC, which had already guided for mid-teens RoTE excluding notable items in 2024, now guides for the percentage to remain in the mid-teens for full-year 2025 as well. Although anticipated cuts to interest rates may pressure net interest margins, the combination of HSBC's structural hedge that has reduced its downside rate sensitivity, plus possible reacceleration in commercial loan growth, once rates become more attractive to borrowers, seem likely to support net interest income, or NII, in 2025. HSBC raised its guidance for 2024 banking NII to $43 billion from its previous guidance of "at least $41 billion." On the noninterest income side, overall fees remained flat, but the wealth business outperformed, driven by growth in Asia. We expect high-single-digit growth in Wealth to continue into 2025 assuming financial markets do not turn unfavorable.HSBC reaffirmed it will limit expense growth to around 5% this year, and said it sees credit costs in a range of 30 to 40 basis points despite an increasing trend in nonperforming loans in Hong Kong primarily driven by commercial real estate, given the highly collateralised nature of many of the loans.With limited loan growth for now, HSBC announced an additional $3 billion share buyback for the coming quarter, bringing year-to-date total buybacks to $8 billion, compared with full-year 2023 buybacks of $7 billion, which reduced share count by 3.7%.

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HSBC Earnings: Higher-for-Longer Interest Rates; Raising Fair Value Estimate Lorraine Tan, CFA,Director,30 Apr 2024

We lift our fair value estimate for HSBC to GBP 872 per share (HKD 84.80, $54.50 per ADR) from GBP 850 (HKD 80.00, $51.00) following first-quarter 2024 results that reflected solid noninterest income growth. Its net interest margin of 1.63% is also tracking our expectation comfortably, particularly with interest rates looking to stay high into second-half 2024. HSBC's share price is reacting positively to the results as well as the announced ordinary dividend of $0.10 per share, a special dividend of $0.21 per share, and a share buyback of $3 billion for the second quarter. We remain buyers of HSBC.Our 2024 core earnings forecast is largely unchanged, but we lift 2025 and 2026 earnings forecasts by 5% and 6% respectively. We nudge our 2024 NIM assumption to 1.62% from 1.61% and we raise it for 2025 and 2026 by 3 basis points and 2 basis points to 1.53% and 1.46%, respectively, to reflect a more gradual deterioration in the lending margin now that we push our interest-rate cut expectation to second-half 2024. In addition, we lift our assumed growth rate for HSBC's noninterest income to 6% in 2024 from 5%. HSBC's March-quarter noninterest income jumped 19.5% year on year as the bank saw continued strength in wealth management segment activities. However, we suspect that growth rates may taper off as the year progresses.Separately and surprisingly, CEO Noel Quinn is retiring. We don't think this necessarily implies any difficulty for HSBC in the future with the bank on firmer footing and focused in regions and areas where it has market leadership. Cost-cutting and sales of noncore assets have largely been completed.

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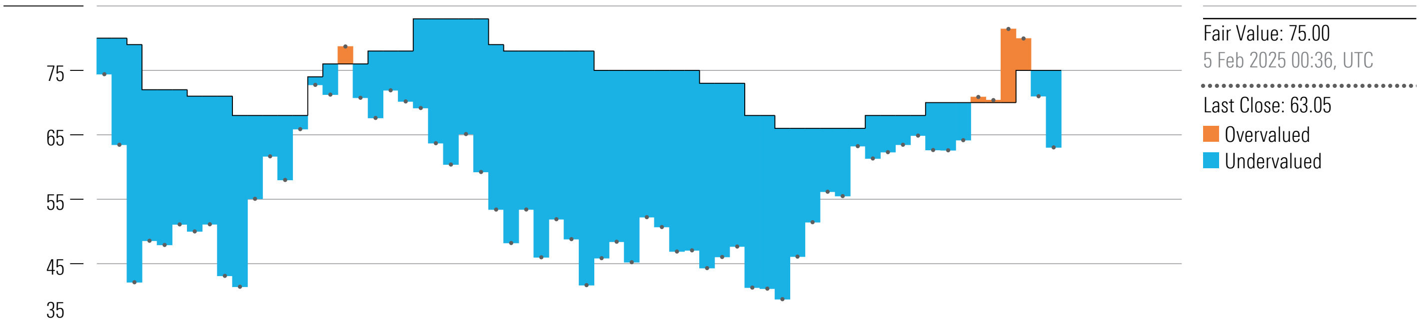
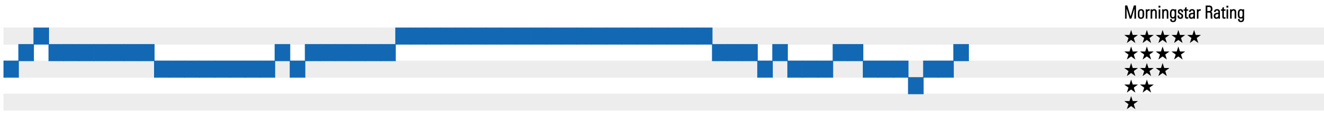
Competitors Price vs. Fair Value

Citigroup Inc C

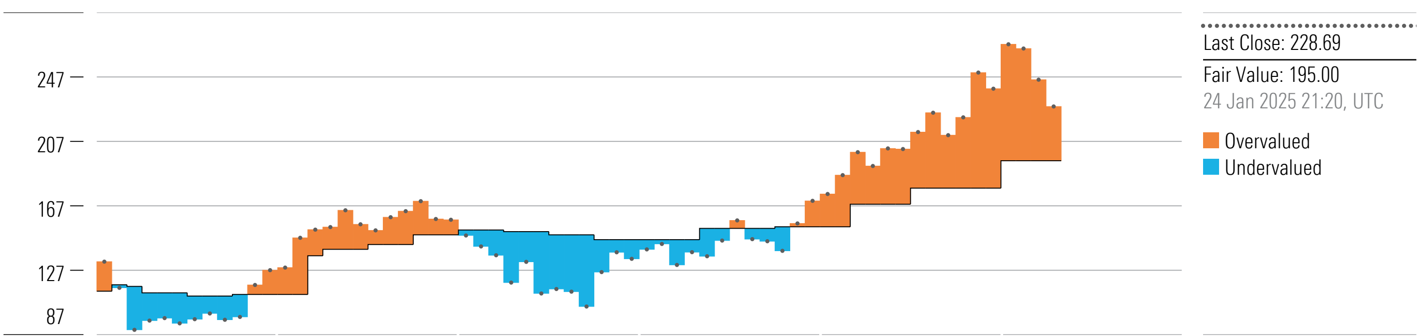


	2020	2021	2022	2023	2024	YTD	
	0.91	0.73	0.60	0.78	1.01	0.84	Price/Fair Value
	-20.27	1.25	-21.73	18.33	41.08	-9.63	Total Return %

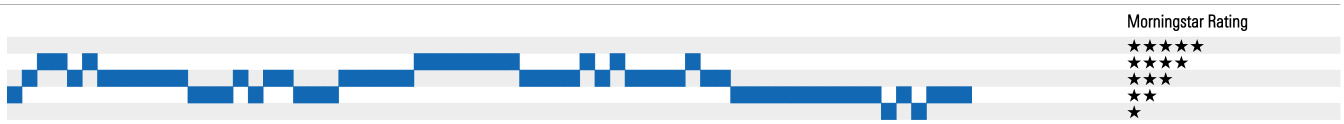


Total Return % as of 03 Apr 2025. Last Close as of 03 Apr 2025. Fair Value as of 5 Feb 2025 00:36, UTC.

JPMorgan Chase & Co JPM



	2020	2021	2022	2023	2024	YTD	
	1.13	1.06	0.92	1.10	1.35	1.17	Price/Fair Value
	-6.26	27.53	-12.79	29.87	43.63	-4.08	Total Return %



Total Return % as of 03 Apr 2025. Last Close as of 03 Apr 2025. Fair Value as of 24 Jan 2025 21:20, UTC.

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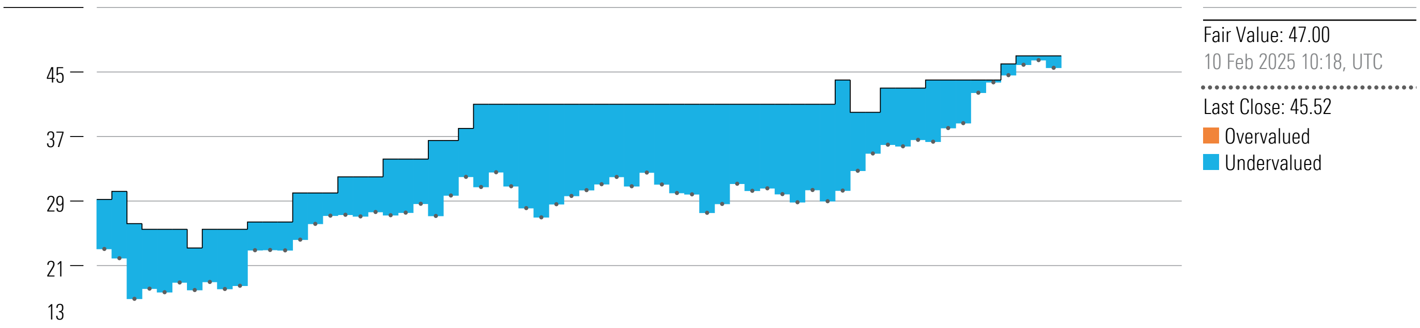
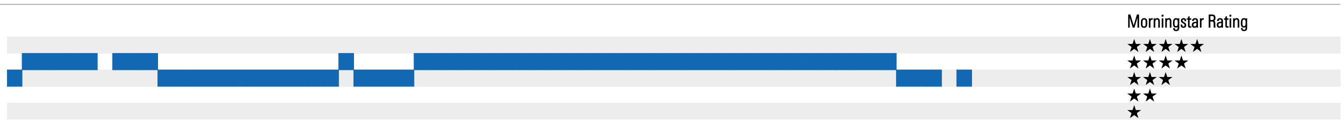
Competitors Price vs. Fair Value

DBS Group Holdings Ltd D05



	2020	2021	2022	2023	2024	YTD
Price/Fair Value	0.96	0.89	0.83	0.81	0.99	0.97
Total Return %	1.43	33.49	8.27	5.28	50.89	4.12



Total Return % as of 03 Apr 2025. Last Close as of 03 Apr 2025. Fair Value as of 10 Feb 2025 10:18, UTC.

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Morningstar Valuation Model Summary

Financials as of 20 Feb 2025	Actual			Forecast				
Fiscal Year, ends 31 Dec	2022	2023	2024	2025	2026	2027	2028	2029
Net Interest Income (USD Mil)	30,377	35,796	32,733	32,473	33,064	33,788	34,590	35,412
Non Interest Income (USD Mil)	20,243	30,262	33,121	34,029	34,838	35,666	36,516	37,386
Total Pre-Provision Revenue (USD Mil)	50,620	66,058	65,854	66,503	67,902	69,454	71,106	72,798
Provision for Loan Losses (USD Mil)	3,584	3,447	3,414	3,461	3,514	3,602	3,710	3,821
Operating Expenses (USD Mil)	32,701	32,070	33,043	35,534	35,355	35,323	36,383	37,474
Operating Income (USD Mil)	17,058	30,348	32,309	30,398	32,011	33,597	34,172	34,757
Net Income Available to Common Stockholders (USD Mil)	15,559	23,533	23,979	22,366	23,587	24,787	25,209	25,636
Adjusted Net Income (USD Mil)	14,346	22,432	22,917	21,272	22,461	23,627	24,013	24,405
Weighted Average Diluted Shares Outstanding (Mil)	19,906	19,373	18,462	17,743	17,410	17,106	16,828	16,575
Earnings Per Share (Diluted) (USD)	0.72	1.16	1.24	1.20	1.29	1.38	1.43	1.47
Adjusted Earnings Per Share (Diluted) (USD)	0.72	1.16	1.24	1.20	1.29	1.38	1.43	1.47
Dividends Per Share (USD)	0.32	0.61	0.87	0.61	0.65	0.70	0.72	0.74

Margins & Returns as of 20 Feb 2025		Actual			Forecast					
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Avg
Net Interest Margin %	1.2	1.1	1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Efficiency Ratio %	54.4	64.6	48.6	50.2	53.4	52.1	50.9	51.2	51.5	51.8
Provision as % of Loans	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Growth & Ratios as of 20 Feb 2025		Actual			Forecast					
	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Avg
Net Interest Income Growth %	7.3	14.7	17.8	-8.6	-0.8	1.8	2.2	2.4	2.4	1.6
Non Interest Income Growth %	12.8	-12.2	49.5	9.5	2.7	2.4	2.4	2.4	2.4	2.5
Total Pre-Provision Revenue Growth %	—	2.2	30.5	-0.3	1.0	2.1	2.3	2.4	2.4	—
Operating Expenses Growth %	—	0.3	-1.9	3.0	7.5	-0.5	-0.1	3.0	3.0	—
Operating Income Growth %	—	-9.8	77.9	6.5	-5.9	5.3	5.0	1.7	1.7	—
Net Income Growth %	22.0	11.8	51.2	1.9	-6.7	5.5	5.1	1.7	1.7	—
Earnings Per Share Growth %	25.6	15.1	60.7	7.2	-3.4	7.6	7.1	3.3	3.2	3.5

Valuation as of 20 Feb 2025	Actual			Forecast				
	2022	2023	2024	2025	2026	2027	2028	2029
Price/Earning	8.7	7.0	8.0	8.9	8.3	7.8	7.5	7.3
Price/Book	—	—	—	—	—	—	—	—
Price/Tangible Book	0.8	1.0	1.2	1.2	1.1	1.1	1.0	0.9
Dividend Yield %	6.5	6.2	6.2	5.7	6.1	6.5	6.7	6.9
Dividend Payout %	43.9	51.7	68.0	50.4	49.9	50.2	50.1	49.9

Operating Performance / Profitability as of 20 Feb 2025	Actual			Forecast				
Fiscal Year, ends 31 Dec	2022	2023	2024	2025	2026	2027	2028	2029
ROA %	0.5	0.8	0.8	0.7	0.8	0.8	0.8	0.8
ROE %	8.3	13.0	13.0	11.9	12.1	12.2	12.0	11.7
Return on Tangible Equity %	9.5	14.9	14.9	13.6	13.8	13.9	13.5	13.1

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HSBC Holdings PLC ADR HSBC ★★★★ 3 Apr 2025 21:39, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
53.50 USD 3 Apr 2025	62.00 USD 20 Feb 2025 08:31, UTC	0.86	189.43 USD Bil 3 Apr 2025	None	Large Value	Medium	Standard	2 Apr 2025 05:00, UTC

Financial Leverage (Reporting Currency)	Actual			Forecast				
Fiscal Year, ends 31 Dec	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Equity/Assets %	6.0	6.1	6.1	6.2	6.4	6.5	6.6	6.7

Forecast Revisions as of	2025		2026		2027	
Prior data as of	**Current**	**Prior**	**Current**	**Prior**	**Current**	**Prior**
Fair Value Estimate Change (Trading Currency)	62.00	—	—	—	—	—
Net Interest Income (USD Mil)	32,473	33,009	33,064	33,859	33,788	33,950
Total Pre-Provision Revenue (USD Mil)	66,503	68,467	67,902	69,105	69,454	69,901
Operating Income (USD Mil)	30,398	34,351	32,011	33,514	33,597	32,807
Net Income (USD Mil)	—	—	—	—	—	—
Earnings Per Share (Diluted) (USD)	1.20	1.40	1.29	1.39	1.38	1.34
Adjusted Earnings Per Share (Diluted) (USD)	1.20	1.40	1.29	1.39	1.38	1.34
Dividends Per Share (USD)	0.61	0.94	0.65	0.70	0.70	0.68

Key Valuation Drivers as of 20 Feb 2025	
Cost of Equity %	9.0
Stage II Net Income Growth Rate %	4.0
Stage II Incremental ROIC %	12.0
Perpetuity Year	11

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

Discounted Cash Flow Valuation as of 20 Feb 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	**217,304**
Projected Diluted Shares	17,569
Fair Value per Share (USD)	**62.00**

Morningstar Equity Analyst Report | Report as of 3 Apr 2025 23:52, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NEW YORK STOCK EXCHANGE, INC.

HSBC Holdings PLC ADR HSBC ★★★★ 3 Apr 2025 21:39, UTC

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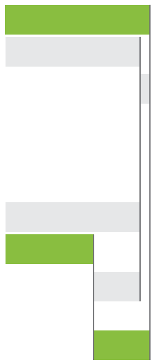
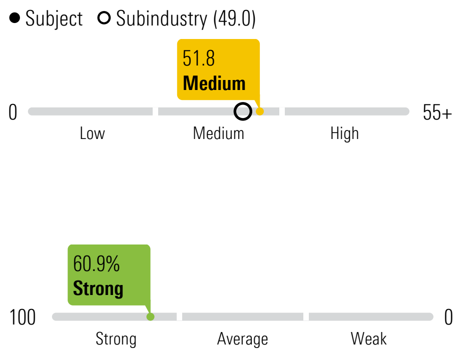
53.50 USD 3 Apr 2025	62.00 USD 20 Feb 2025 08:31, UTC	0.86	189.43 USD Bil 3 Apr 2025	None	Large Value	Medium	Standard	2 Apr 2025 05:00, UTC

ESG Risk Rating Breakdown

Exposure	
Company Exposure[1]	51.8
– Manageable Risk	48.3
Unmanageable Risk[2]	**3.5**
Management	
Manageable Risk	48.3
– Managed Risk[3]	29.4
Management Gap[4]	**18.9**
Overall Unmanaged Risk	**22.4**

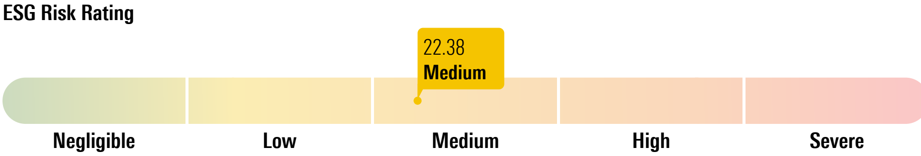




- Exposure represents a company's vulnerability to ESG risks driven by their business model
- Exposure is assessed at the Subindustry level and then specified at the company level
- Scoring ranges from 0-55+ with categories of low, medium, and high-risk exposure

- 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 60.9% 4. Management Gap assesses risks that are not managed, but are considered manageable 5. ESG Risk Rating Assessment = Overall Unmanaged Risk = Management Gap plus Unmanageable Risk

ESG Risk Rating Assessment[5]

ESG Risk Rating is of Apr 02, 2025. Highest Controversy Level is as of Mar 08, 2025. Sustainalytics Subindustry: Diversified Banks. Sustainalytics provides Morningstar with company ESG ratings and metrics on a monthly basis and as such, the ratings in Morningstar may not necessarily reflect current Sustainalytics' scores for the company. For the most up to date rating and more information, please visit: sustainalytics.com/esg-ratings/.

Peer Analysis 02 Apr 2025

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

Company Name	Exposure		Management		ESG Risk Rating	
HSBC Holdings PLC	51.8 | Medium	0 – 55+	60.9 | Strong	100 – 0	22.4 | 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+
DBS Group Holdings Ltd	43.2 | Medium	0 – 55+	62.2 | Strong	100 – 0	18.0 | Low	0 – 40+
—	— | —	0 – 55+	— | —	100 – 0	— | —	0 – 40+

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Appendix
Historical Morningstar Rating

HSBC Holdings PLC ADR HSBC 3 Apr 2025 21:39, 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 3 Apr 2025 21:39, 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 3 Apr 2025 21:36, UTC

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

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

Research Methodology for Valuing Companies

Overview

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

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

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

1. Economic Moat

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

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

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

2. Estimated Fair Value

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

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

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

Stage II: Fade

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

Stage III: Perpetuity

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

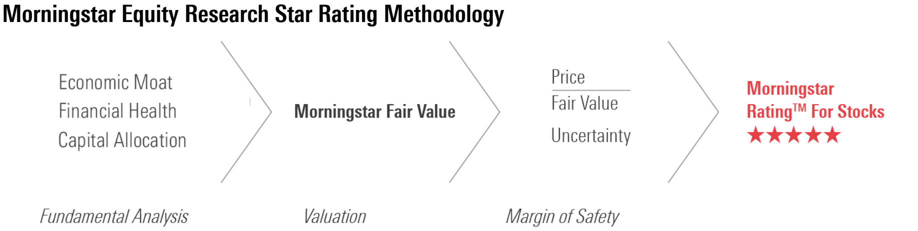
Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return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

3. Uncertainty Around That Fair Value Estimate

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

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

Morningstar Equity Research Star Rating Methodology



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Research Methodology for Valuing Companies

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

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

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

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

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

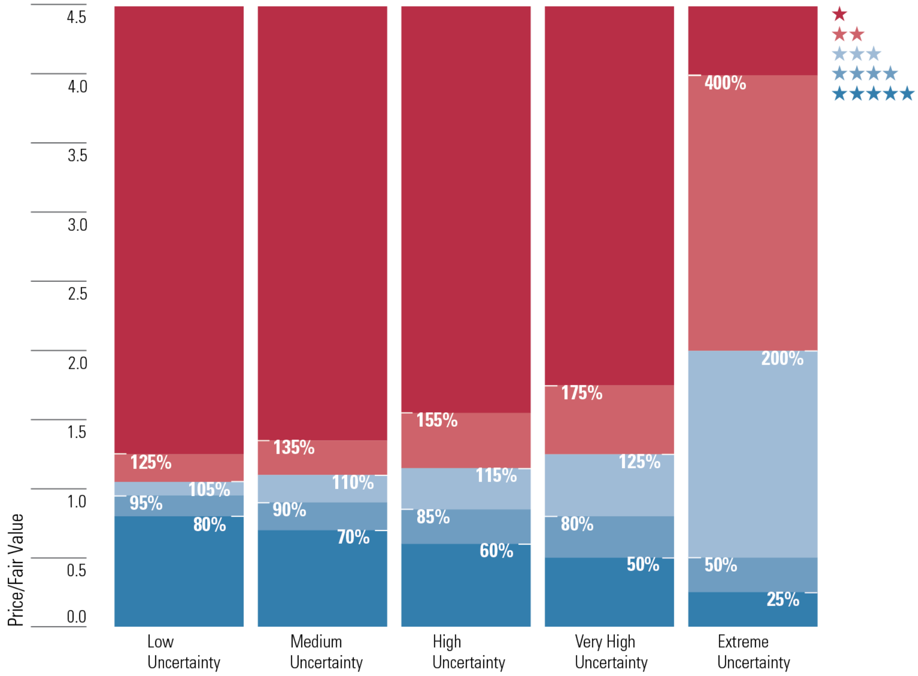
4. Market Price

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

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

Morningstar Star Rating for Stocks

Morningstar Equity Research Star Rating Methodology



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

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

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

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

The Morningstar Star Ratings for stocks are defined below:

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

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

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

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

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

Other Definitions

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

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

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

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

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