

Total Return % as of 23 Apr 2025. Last Close as of 23 Apr 2025. Fair Value as of 24 Apr 2025 14:14, UTC.

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Berkshire's Diversified Portfolio and Large Cash Hoard Make It a Safe Haven in Uncertain Markets

Business Strategy & Outlook Greggory Warren, CFA, Strategist, 24 Apr 2025

While Berkshire's operating businesses have generally provided the firm with a narrow moat on a combined basis, it has been the company's and management's ability to produce additional excess returns from the cash flows thrown off by its disparate operations that had historically pushed our moat rating into wide territory. That moat rating, however, became increasingly harder to justify, not just because CEO Warren Buffett's ultimate departure will likely damp future investment returns, but because we continue to see slippage in some of the moat sources that support the economic moats in a few of its main operating businesses.

Unfortunately, Berkshire's track record of finding ways to invest the excess cash provided by its operating subsidiaries into projects that have on average earned more than its cost of capital has gotten thinner over the years. Berkshire has not only been fighting with the sheer size and scale of its operations, which have required larger and larger deals (or stock investments) to be meaningful (especially with an increasingly constricted opportunity set) but has had to contend with a growing cache of private capital chasing deals that might have been attractive to Berkshire (and with less acquisition discipline than management has generally brought to the table), as well as the ultimate longevity of Buffett.

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Last Price 788,799.00 USD 23 Apr 2025	Fair Value Estimate 730,500.00 USD 24 Apr 2025 14:14, UTC	Price/FVE 1.08	Market Cap 1.13 USD Tril 24 Apr 2025	Economic Moat™ ऒarrow	Equity Style Box	Uncertainty Low	Capital Allocation Exemplary	ESG Risk Rating Assessment ¹
Sector	Industry		That's not to sa	y Berkshire won't	be able to put mo	ney to work	in value-creating	projects. It's just that
Financial Services	s Insurance - Diver	sified	the burge and e	rowing sums of a	opital the firm mu	at dool with	vill ultimataly lim	nit ita ability ta gaparata

Business Description

Berkshire Hathaway is a holding company with a wide array of subsidiaries engaged in diverse activities. The firm's core business segment is insurance, run primarily through Geico, Berkshire Hathaway Reinsurance Group, and Berkshire Hathaway Primary Group. Berkshire has used the excess cash thrown off from these and its other operations over the years to acquire Burlington Northern Santa Fe (railroad), Berkshire Hathaway Energy (utilities and energy distributors), and the companies that make up its manufacturing, service, and retailing operations (which include five of Berkshire's largest noninsurance pretax earnings generators: Precision Castparts, Lubrizol, Clayton Homes, Marmon, and IMC/ISCAR). The conglomerate is unique in that it is run on a completely decentralized basis. the huge and growing sums of capital the firm must deal with will ultimately limit its ability to generate outsize returns. While we expect the company to continue to have sufficient competitive advantages to garner an economic moat, we feel that many of the contributors to its narrow moat from its operating companies have been diminishing. Although we see the potential for Berkshire to get back on track through more directed operational efficiencies, as well as some financial engineering, neither of which were happening on Buffett's watch, none of this will take place until after he departs.

Bulls Say Greggory Warren, CFA, Strategist, 24 Apr 2025

- Book value per share, which is a good proxy for measuring changes in Berkshire's intrinsic value, increased at an estimated 18.3% CAGR during 1965-2024, compared with a 10.4% annualized return for the S&P 500 TR Index.
- Berkshire's stock performance has generally been solid, increasing at a 14.9% (11.7%) CAGR during 2020-24 (2015-24), compared with a 14.5% (13.1%) average annual return for the S&P 500 TR Index.
- At the end of 2024, Berkshire had \$171 billion in insurance float. The cost of the firm's float has been negative for much of the past two decades.

Bears Say Greggory Warren, CFA, Strategist, 24 Apr 2025

- Given its size, Berkshire's biggest hurdle continues to be its ability to consistently find deals that not only add value but are large enough to be meaningful.
- Another big issue facing the firm is the longevity of CEO Warren Buffett (who turns 95 in August 2025), especially following the death of longtime managing partner Charlie Munger in November of 2023.
- Berkshire's insurance business faces competitive and highly cyclical markets that occasionally produce large losses, and several of its noninsurance operations are economically sensitive and focused on US markets.

Economic Moat Greggory Warren, CFA, Strategist, 24 Apr 2025

We've historically believed that Berkshire's economic moat is more than just a sum of its parts, although the parts that make up the whole are moaty in their own regard. The insurance operations—Geico, Berkshire Hathaway Reinsurance Group, and Berkshire Hathaway Primary Group—remain important contributors to the overall business. Not only are they expected to account for 46% of Berkshire's pretax earnings on average the next five years (and 51% of our firmwide valuation), but they are overcapitalized (maintaining a larger-than-normal equity investment portfolio for a property and casualty insurer).

They also generate low-cost float, which is the temporary cash holdings that arise from premiums being collected in advance of future claims. This allows Berkshire to generate returns on these funds with assets that are commensurate with the duration of the business being underwritten. And they have tended to come at little to no cost to Berkshire, given the company's proclivity for generating



Last Price 788,799.00 USD 23 Apr 2025	730,500.00 USD 1.08 1.1			pital Allocation ESG Risk Rating Assessmen emplary 2 Apr 2025 05:00, UTC	
Competitors					
	Berkshire Hathaway Inc Class A BRK.A	Allstate Corp ALL	Markel Group Inc MKL	Progressive Corp PGR	
	Last Close 788,799.00 Fair Value 730,500.00 Uncertainty: Low	Last Close 194.73 Fair Value 149.00 Uncertainty : Medium	Last Close 1,796.68 Fair Value 1,630.00 Uncertainty : Medium	Last Close 265.03 Fair Value 183.00 Uncertainty : Medium	
Economic Moat	Narrow	C None	C None	Narrow	
Currency	USD	USD	USD	USD	
Fair Value	730,500.00 24 Apr 2025 14:14, UTC	C 149.00 10 Mar 2025 21:29, UTC	1,630.00 4 Mar 2025 17:12, UTC	183.00 12 Mar 2025 14:21, UTC	
1-Star Price	913,125.00	201.15	2,200.50	247.05	
5-Star Price	584,400.00	104.30	1,141.00	128.10	
Assessment	Overvalued 23 Apr 2025	Overvalued 23 Apr 2025	Fairly Valued 23 Apr 2025	Overvalued 23 Apr 2025	
Morningstar Rating	★★24 Apr 2025 14:17, UTC	★★23 Apr 2025 21:26, UTC	★★★23 Apr 2025 21:26, UTC	★23 Apr 2025 21:26, UTC	
Analyst	Greggory Warren, Strategist	Brett Horn, Senior Equity Analyst	Brett Horn, Senior Equity Analyst	Brett Horn, Senior Equity Analyst	
Capital Allocation	Exemplary	Standard	Standard	Exemplary	
Price/Fair Value	1.08	1.31	1.10	1.45	
Price/Sales	2.68	0.81	1.40	1.98	
Price/Book	1.75	2.65	1.41	5.37	
Price/Earning	12.74	11.34	9.01	17.87	
Dividend Yield	0.00%	1.93%	0.00%	1.85%	
Market Cap	1,134.47 Bil	51.63 Bil	22.84 Bil	155.37 Bil	
52-Week Range	596,421.02-808,029.50	156.66-212.91	1,433.06 — 2,063.68	201.34-292.99	
Investment Style	Large Blend	Mid Growth	Mid Blend	Large Blend	

underwriting gains the past several decades.

That said, we don't believe the insurance industry is particularly conducive to the development of maintainable competitive advantages. While there are some high-quality firms in the industry (with Berkshire having some of the best operators in the segments where it competes), the product that insurers sell is basically a commodity, with excess returns difficult to achieve on a consistent basis. Buyers of insurance are not inclined to pay a premium for brands, and the products themselves are easily replicable.

Competition among insurance firms is fierce, and participants have been known to slash prices or undercut competitors to gain market share. Insurance is also one of the few industries where the cost of goods sold (signified by claims) may not be known for years, providing an incentive for companies to sacrifice long-term profitability in favor of near-term growth. In reinsurance, this dynamic can be even

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788,799.00	730,500.00 USD	1.08	1.13 USD Tril	🙄 Narrow	📕 Large Blend	Low	Exemplary	00000
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more pronounced, as losses in this business tend to be large in nature and may not be realized for many years after a policy is written.

That said, insurers can develop maintainable cost advantages by either focusing on less commodified areas of the market or developing efficient and/or scalable distribution platforms. What they can't do is develop a competitive advantage through investing, even when gains are the result of the investing prowess of someone like Warren Buffett. We believe insurers that consistently achieve positive underwriting profitability are better bets in the long run, as insurance profitability tends to be more durable than investment gains.

Given the growth of its auto insurance operations over the years, Geico has become one of the largest generators of earned premiums for Berkshire. The strength of the auto insurer's direct-selling operations has made it the third largest US private passenger auto insurance underwriters, responsible for 11.6% of written premiums last year, compared with the industry leader State Farm at 18.9%.

Much like its closest competitor, Progressive (which accounted for 16.7% of written premiums in the US during 2024), Geico has set itself apart by its scale in the direct-response channel. While scaling is typically difficult for insurance companies, personal line insurers like Geico and Progressive have done a better job of spreading fixed costs over a wider base, as their business models do not require as much human capital and specialized underwriters as other insurance lines.

Given the similarity in their auto insurance operations, with both firms at the forefront of the ongoing shift into direct business from agent-derived business, as well as the level of each insurer's underwriting profitability the past decade — with Geico expected to produce an average annual combined ratio, including the impact of hurricanes and other natural disasters, of 88.3% during 2025-29 compared with Progressive at 92.5% with its direct operations (and 92.1% for all of its personal auto lines). We believe Geico, much like Progressive, has a narrow economic moat.

AAs for Berkshire's reinsurance arm, we believe BHRG has at best a narrow economic moat around its business. For a premium, reinsurers assume all or part of an insurance or reinsurance policy written by another insurer. While any insurance company can provide reinsurance, a handful of larger companies—Munich Re, Swiss Re, Berkshire Hathaway, Hannover Re, and Scor—hold sway over the lion's share of global reinsurance premiums underwritten. These policies often contain large, long-tail risks that when priced appropriately can generate favorable long-term returns.

That said, reinsurers compete almost exclusively on price and capital strength, making it almost impossible to build structural cost advantages. Losses in the reinsurance market are also lumpy and may not be realized for years after a policy is underwritten, magnifying the importance of disciplined and accurate underwriting. While Berkshire believes its catastrophe and supercatastrophe underwriting can generate solid long-term results, the volatility of these business lines, which have the potential to



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subject the firm to especially large losses, tends to be high.

Although we don't normally view reinsurers as benefiting from favorable competitive positions, there are some specialty lines where a long history of underwriting incidence and/or unique relationships have allowed a firm to build a maintainable competitive advantage. We believe Berkshire's reinsurance operations are unique. The company's overall balance sheet strength makes it capable of taking on large amounts of supercatastrophe underwriting (covering events like terrorism and natural catastrophes) that few companies have the capacity to endure, allowing them to name their price.

Berkshire has also historically had the luxury of walking away from business when appropriate premiums cannot be obtained, something its publicly traded peers cannot always do. While underwriting profitability has been less consistent because of the nature of the risks BHRG is underwriting, the company sticks with reinsurance, even if it proves to be unprofitable from time to time, because it generates float that can be invested for longer periods of time than short-tail business lines like auto insurance.

BHPG has been Berkshire's most profitable insurance business the past two decades, and we believe the segment has developed a narrow economic moat. What is even more remarkable about this is that BHPG is a conglomeration of more than a handful of different insurance operations, including Berkshire Hathaway Specialty Insurance, Berkshire Hathaway Homestate Companies, MedPro Group, Berkshire Hathaway GUARD Insurance Companies, National Indemnity's primary group, and US Liability Insurance Company. These entities offer commercial insurance coverage as varied as healthcare malpractice, workers' compensation, automobile, general liability, property, and various specialty coverages for small, medium, and large clients.

By focusing more on specialty lines that require extensive experience or unique relationships to underwrite effectively, BHPG has been able to put together a continuous record of solid earned premium growth and underwriting profitability, which is a rarity in the insurance business; most P&C insurers are willing to take underwriting losses from time to time in order to generate earned premium growth, believing that they can make up the difference with investment gains.

Of the more than 75 noninsurance businesses that make up Berkshire's remaining businesses, Burlington Northern Santa Fe and Berkshire Hathaway Energy are lumped together under the railroad, utilities, and energy segment in Berkshire's financial statements. While their contribution to pretax earnings and our own fair value estimate for the firm is now overshadowed by the manufacturing, service, and retailing segment, they are far more transparent than the company's other operating segments. On a combined basis, BNSF and BHE are expected to generate 23% of Berkshire's pretax earnings on average the next five years and contribute 20% to our firmwide fair value estimate.

The most interesting thing about these two businesses is that neither was a major contributor to

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Berkshire's pretax earnings over a decade ago. Buffett's shift into such debt-heavy capital-intensive businesses as railroads and utilities represented a marked departure from many of Berkshire's other acquisitions over the years, which tended to require less ongoing capital investment, had little to no debt, and produced higher returns on average. That said, had Buffett focused more on buying assetlight companies with fewer capital investment needs, this would have left his successors with even greater amounts of cash on the balance sheet to deal with.

During 2015-24, Berkshire generated an average of \$20.6 billion annually in free cash flow. The amount of excess cash Buffett would have needed to find a home for would have been more than 50% higher had Berkshire purchased similar-size companies to BNSF and BHE with similar cash flow profiles that were not investing \$11.2 billion annually on average in their combined property and equipment the past decade.

With BNSF, which was acquired in full in February 2010, Berkshire picked up a Class I railroad operator — an industry designation for a large operator with an extensive system of interconnected rails, yards, terminals, and expansive fleets of motive power and rolling stock. We believe that all the major North American Class I railroads benefit from colossal barriers to entry due to their established, practically impossible-to-replicate networks of rights of way and continuously welded steel rail. While barges, ships, aircraft, and trucks also haul freight, railroads are by far the lowest-cost option when no waterway connects the origin and destination, especially for freight with low value per unit weight.

Customers also have few choices and thus wield limited buyer power, with most Class I railroads operating as duopolies (and some being a monopoly supplier) to end clients in many markets. This provides the major North American Class I railroads with efficient scale. Believing that operators like BNSF will continue to leverage their competitive advantages of low cost and efficient scale to generate returns on invested capital in excess of the firm's cost of capital, we have awarded them wide moat ratings.

We think Berkshire Hathaway Energy is endowed with a narrow economic moat. Buffett built up this business through investments in MidAmerican Energy (supplanting a 76% equity stake taken in 2000 with additional purchases that finally lifted Berkshire's interest to 100% last year), PacifiCorp (acquired in full in 2005), NV Energy (acquired in full in 2013), and AltaLink (acquired in full in 2014). While BHE has picked up pipeline assets, which have wide-moat characteristics, most of its revenue, profitability, and ongoing capital investment is driven by its three main US regulated utilities: MidAmerican Energy, PacifiCorp, and NV Energy.

We do not believe regulated utilities can establish more than a narrow economic moat, even with their difficult-to-replicate networks of power generation, transmission, and distribution. This is because their rates and returns are set by state and federal regulators. That said, we feel BHE has benefited greatly



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from being part of Berkshire's larger consolidated tax return, as well as from not paying a dividend to the parent company (with most of its publicly traded peers paying out as much as 60% of earnings as dividends annually). This has allowed BHE to invest far more capital (more than \$20 billion the past decade) in renewables than it could have on a stand-alone basis.

Berkshire's manufacturing, service, and retailing operations are now one of the largest contributors to pretax earnings, expected to account for 31% of pretax earnings on average annually the next five years (and 28% of our estimate of the company's fair value). Given the lack of transparency into these operations, getting a handle on the profitability and economic moats of the wide array of businesses is the segment is difficult at best. Unlike BNSF and BHE, both of which file quarterly and annual reports with the Securities and Exchange Commission, there is little financial information available on the firms in the manufacturing, service, and retailing segment.

That said, given Buffett's penchant for acquiring companies with consistent earnings power, generating above-average returns on capital, holding little debt, and are run by solid management teams, we believe many of the businesses in the segment are endowed with narrow economic moats. During 2024, the five largest companies (on a pretax earnings basis) in the MSR segment—Precision Castparts, Lubrizol, Clayton Homes, Marmon, and IMC/ISCAR—accounted for around half of pretax earnings. Each of these subsidiaries, by our estimates, has a narrow economic moat. When combined with the next five largest subsidiaries—Shaw Industries, Forest River, Johns Manville, TTI, and MiTek—this collection of businesses accounted for around 70% of the MSR segment's pretax earnings last year, with a moat rating overall that skews to the narrow end of the spectrum.

With Buffett preferring to run Berkshire on a decentralized basis, the managers of the company's operating subsidiaries have been empowered to make their own business decisions. In most cases, the managers running these subsidiaries are the same individuals who sold their businesses to Buffett and Berkshire in the first place, leaving them with a vested interest in the businesses they run. Barring a truly disruptive event in their industries, we expect these firms to continue to have the same advantages that attracted Buffett to them in the first place.

That does not mean that there won't be subsidiaries whose competitive advantages diminish over time (exemplified by the demise of the textile manufacturer that Berkshire Hathaway derives its own name from). It's just that the large collection of moaty firms that reside in Berkshire's MSR operations is more likely to maintain a narrow economic moat in aggregate, even as a few firms along the way succumb to changing competitive dynamics in their industries.

That said, the decentralization in Berkshire's operations (on top of a less-than-adequate level of transparency for many of its operating companies) leaves the firm a bit exposed to ESG-related risks. Overall management is generally weak at diversified conglomerates like Berkshire, because firms that

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USD 23 Apr 2025	24 Api 2025 14:14, 010		2174912020					2 Api 2023 03.00, 010

have been constructed in this way tend to face challenges in terms of applying suitable systems for managing their ESG risks across the entire company, especially given (in Berkshire's case more than any other conglomerate) the diverse nature of the products and services that they offer.

While Berkshire's operating businesses have generally provided the firm with a narrow moat on a combined basis, it has been the company's and management's ability to produce additional excess returns from the cash flows thrown off by its disparate operations that had historically pushed our moat rating into wide territory. That said, it became increasingly harder to justify that moat rating, not just because Buffett's ultimate departure will likely damp future investment returns, but because we have continued to see slippage in some of the moat sources that support the economic moats in a few of its main operating businesses.

Berkshire's track record of finding ways to invest the excess cash provided by its operating subsidiaries into projects that have on average earned more than its cost of capital has gotten thinner over the years. The firm has not only been fighting with the sheer size and scale of its operations, which have required larger and larger deals (or stock investments) to be meaningful (especially with an increasingly constricted opportunity set) but has had to contend with a growing cache of private capital chasing deals that might have been attractive to Berkshire (and with less acquisition discipline than management has generally brought to the table), as well as the ultimate longevity of its CEO.

That's not to say Berkshire won't be able to put money to work in value-creating projects. Rather, the huge and growing sums of capital the firm must deal with will ultimately limit its ability to generate outsize returns. While we expect the company to continue to have sufficient competitive advantages to maintain a narrow economic moat, we feel that many of the contributors to its economic moat from its operating companies have been diminishing. Although we see the potential for Berkshire to get back on track through more directed operational efficiencies, as well as some financial engineering, neither of which were happening on Buffett's watch, none of this will take place until after he departs.

Fair Value and Profit Drivers Greggory Warren, CFA, Strategist, 24 Apr 2025

We've increased our fair value estimate for Berkshire Hathaway to \$730,500 per Class A share from \$700,000 to reflect changes in our forecasts for the company's operating businesses and insurance investment portfolio since our last update. Our new fair value estimate is equivalent to 1.49 and 1.38 times our estimates for Berkshire's book value per share, respectively, at the end of 2025 and 2026. For some perspective, during the past five (10) years the shares have traded at an average of 1.49 (1.46) times trailing calendar year-end book value per share. We use a 9.0% cost of equity in our valuation and assume that at the very least Berkshire pays the required 15% corporate alternative minimum tax on adjusted financial statement income.

Our fair value estimate is derived using a sum-of-the-parts methodology, valuing each of Berkshire's four



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operating segments separately and adding them back together for our firmwide estimate. After reviewing our projections for 2025-29, including updating the value of the insurance investment portfolio, we've increased our valuation for Berkshire's insurance operations to \$381,400 per Class A share (from \$366,600).

While some of this was due to adjustments to earned premium growth and underwriting profitability, most of it was tied to expected changes in the value of the investment portfolio, as well as yield, over the next five years. Our forecast assumes earned premium growth of 9.7% on average annually during 2024-28 (compared with 7.6% and 7.9%, respectively, during 2020-24 and 2015-24), aided by price hardening in commercial property and casualty lines, as well as improved pricing and earned premium growth at Geico.

We expect the insurance operations to post an average annual combined ratio of 91.9% during 2025-29 (an improvement from 95.2% and 96.8%, respectively, on average annually during 2020-24 and 2015-24), primarily driven by profitability improvements tied to price hardening, as well as improvements at Geico. We also expect the insurance investment portfolio (including market gains/losses and additional investments) to expand at a 7.5% CAGR during 2025-29.

Our valuation of Berkshire's railroad operations has increased to \$88,100 per Class A share (from \$84,400 previously), with our forecast assuming carload volumes increase at a 2.1% CAGR during 2025-29, with freight revenue expanding 5.3% on average annually. We also expect BNSF's operating ratio to reach 64.9% at the end of 2029 (compared with 65.6% and 65.8% on average annually during 2020-24 and 2015-24, respectively). Our fair value estimate reflects a nearly 10% discount to Union Pacific on a forecast EV/EBITDA basis, which we feel is appropriate given the lag in BNSF's operating performance relative to its closest peer.

Our fair value estimate for Berkshire's utilities/energy division has increased to \$59,600 per Class A share (from \$57,200 previously), which represents a slight premium to forecast EV/EBITDA multiples for most other large regional regulated utilities. Our forecast assumes continued constructive rate case outcomes, with adjusted EBITDA for the firm's regulated US utilities expanding 4%-6% annually on average during 2025-29. We also include continued annual charges for West Coast wildfire litigation in our valuation.

As for Berkshire's manufacturing, service, and retail operations (which includes Pilot Travel Centers), we've increased our fair value estimate to \$201,400 per Class A share (from \$191,800 previously). Our forecast assumes average annual revenue growth of 3.7% during 2025-29 (which is conservative relative to historical performance). We also expect to see pretax operating margins of 8.3% on average annually (down from 8.6% and 8.5% on average annually during 2020-24 and 2015-24, respectively, due primarily to the inclusion of Pilot Travel Centers' extremely low-margin business in overall results).

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Our bull-case fair value estimate of \$913,125 per Class A share assumes Berkshire's insurance segment premium growth and underwriting profits, as well as returns for its investment portfolio, come in higher than our expectations. We also assume stronger economic growth, with Berkshire's two noninsurance segments — manufacturing, service, and retailing and railroad, utilities, and energy — benefiting. We also expect Berkshire to put more capital to work in acquisitions and other investments than in our base case.

Our downside case fair value estimate of \$584,400 per Class A share assumes Berkshire's insurance segment does not perform as well as we are projecting in our base case, with Geico continuing its downward trajectory, and softer pricing in the property and casualty market affecting results for both BHRG and BHPG. We also assume growth at Berkshire's two main noninsurance segments stalls, with faltering economic growth torpedoing the firm's more economically sensitive operations.

Risk and Uncertainty Greggory Warren, CFA, Strategist, 24 Apr 2025

Our Morningstar Uncertainty Rating for Berkshire is Low. We do not consider any environmental, social, or governance issues that exist to be material enough to affect our uncertainty rating. This is due to the firm's lower exposure to some of the main ESG risks inherent to the industries where it competes. Berkshire has, however, tended to score lower on governance issues because of the makeup of its board and board committees, the unequal voting structure of its Class A and Class B shares, and its lack of engagement and opaqueness on governance issues.

Berkshire faces the risk that insurance claims exceed loss reserves or that material impairments affect its investment portfolio. Several of the firm's key businesses—insurance, energy generation and distribution, and rail transport—operate in industries subject to higher degrees of regulatory oversight, which could affect future business combinations, as well as the setting of rates charged to customers. Many of the company's noninsurance operations are exposed to the cyclicality of the US economy, with results suffering during economic slowdowns.

Berkshire is exposed to foreign currency, equity price, and credit default risk through its various investments and operating companies. While derivative contracts underwritten by the company could affect the firm's earnings and capital position, especially during more volatile markets, substantially all these contracts have expired (starting in 2019 and continuing to do so until 2025), with the exposure to losses in the future being relatively insignificant.

Following the death of Charlie Munger in November 2023, Berkshire's main key employee risk rests with CEO Warren Buffett, who has been responsible for almost the firm's investment and capital-allocation decisions. With Buffett turning 95 in August 2025, it is increasingly likely that our valuation horizon will exceed his life span, with the quality of investment returns and capital allocation likely being affected.

Capital Allocation Greggory Warren, CFA, Strategist, 24 Apr 2025

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Last Price 788,799.00 USD	Fair Value Estimate 730,500.00 USD 24 Apr 2025 14:14, UTC	Price/FVE 1.08	Market Cap 1.13 USD Tril 24 Apr 2025	Economic Moat™	Equity Style Box	Uncertainty Low	Capital Allocation Exemplary	ESG Risk Rating Assessment ¹ ()()()()()() 2 Apr 2025 05:00, UTC
23 Apr 2025								

Warren Buffett has been chair and CEO of Berkshire Hathaway since 1970. Ajit Jain and Greg Abel have served as vice chairs of the firm's insurance and noninsurance operations, respectively, since January 2018. Berkshire has two classes of common stock, with Class B shares holding 1/1,500th of the economic rights of Class A shares and 1/10,000th of the voting rights. Buffett is Berkshire's largest shareholder, with a 30.4% voting stake and a 14.4% economic interest as of March 2025.

Our Capital Allocation Rating for Berkshire is Exemplary. This rating assesses management efficacy in three key areas: balance sheet health, investment efficacy, and shareholder distributions. We view Berkshire's balance sheet as more than sound (with the insurer's liquid investments generally exceeding regulatory benchmarks by more than 2 times), capital investment decisions are fair (with credit given for investing in more competitively advantaged businesses and staying disciplined with its underwriting and investment options—offset somewhat by stubbornness when it comes to adopting/updating technology to enhance risk assessment and improve operations), and the current capital return strategy is appropriate (although we would lower our assessment if the firm pared back share buybacks when we consider the shares to be attractively valued—especially since Berkshire does not pay a dividend).

Buffett has consistently aligned his own interests with those of shareholders, with Berkshire's economic moat enhanced by the success he has had melding the firm's financial strength and underwriting ability with his own investment acumen. That said, we feel like the firm has stagnated a bit over the past decade or so as annual returns on book value, while exceeding the company's cost of capital, have drifted below the returns of the S&P 500 TR Index. For much of that time Berkshire has struggled to consistently find enough suitable investments to keep its cash balances — which were \$321.4 billion at the end of 2024 — from expanding, with the returns on those cash balances being meager in what had been an historically low-interest-rate environment for much of the past decade.

Meanwhile, several of its larger investments—such as the Kraft Foods merger with Heinz (2014-15) and the Precision Castparts acquisition (2015-16)—have not lived up to expectations. Even so, returns for each of the company's operating segments have generally exceeded our estimates of their cost of capital by a comfortable margin, with Berkshire tending to pursue deals and investments that can generate 10%-12% annual returns.

Even though Buffett has tried to discourage investors from focusing on book value per share growth, we still view it as a good gauge for assessing changes in intrinsic value—that is, until such time that Berkshire buys back a ton of its own common stock in a relatively short period of time. Absent share repurchases, we would expect the firm to increase book value per share at a high-single- to low-double-digit rate—just above our estimate of its cost of capital—in most years.

With the company's operating businesses managed on a decentralized basis, eliminating the need for layers of management control, and pushing responsibility for each business down to the subsidiary level, Buffett has historically focused on managing the firm's investments and capital-allocation

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Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat [™]	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
788,799.00 USD	730,500.00 USD 24 Apr 2025 14:14, UTC	1.08	1.13 USD Tril 24 Apr 2025	Warrow	📕 Large Blend	Low	Exemplary	() () () () () 2 Apr 2025 05:00, UTC
23 Apr 2025								

decisions. If Berkshire's next CEO is expected to do nothing more than act as a caretaker for the business, tending to the needs of the managers of the different subsidiaries, overseeing the actions of the investment managers handling the company's investment portfolio, and dealing with capitalallocation decisions and risk assessments along the way, then we are comfortable with Greg Abel, who was announced as the heir apparent following the company's 2021 annual meeting.

Once there is a more permanent shift in top management, we would expect Berkshire to be more open to initiating a dividend, as well as potentially accelerating the return of capital to shareholders via share repurchases. During the past 26 calendar quarters, the company has repurchased close to \$78 billion worth of its common stock, equivalent to \$3.0 billion per quarter on average. We expect to see a slightly higher pace of quarterly repurchase activity on average during 2025-29, after the company has pulled back meaningfully on buybacks the past couple of years.

With the firm coming into 2025 with an estimated \$280 billion in dry powder, and valuations not quite where they need to be for many of the types of quality assets Buffett would prefer to acquire outright, we expect the bulk of the company's excess capital allocation to be focused on stock and bond investments (including T-Bills) and share repurchases in the near to medium term.

Analyst Notes Archive

Berkshire Hathaway Earnings: Insurance Underwriting and Investment Income Lift Q4 Results Greggory Warren, CFA,Strategist,22 Feb 2025

Narrow-moat Berkshire Hathaway reported adjusted fourth-quarter operating results that were in our range of expectations. We are leaving our fair value estimates of \$700,000 per Class A share and \$467 per Class B share in place. Fourth-guarter and full-year revenue, including unrealized and realized gains/ losses from investment portfolios, declined 22.1% and 3.4%, respectively, to \$101.5 billion and \$424.2 billion, from \$130.2 billion and \$439.3 billion in the year-ago periods. Excluding the impact of investment gains/losses and other adjustments, fourth-quarter operating revenue increased 1.6% year over year to \$94.9 billion, and full-year OR increased 1.9% year over year to \$371.4 billion.Operating earnings, exclusive of investment gains/losses, increased 71.3% (27%) year over year to \$14.5 billion (\$47.4 billion) during the December quarter (full year). Insurance underwriting results continued to be strong, and the company benefited from a large increase in investment income, given its increased ownership in Treasury bills during the year. When including the impact of the investment gains/losses, reported operating earnings declined 47.6% (7.5%) during the fourth quarter (full year) to \$19.7 billion (\$89 billion).Book value per share, which still serves as a decent proxy for measuring changes in intrinsic value, increased 1% sequentially and 16% year over year to \$451,507 from \$446,906 and \$389,372 at the end of September 2024 and December 2023, respectively.Berkshire repurchased \$2.9 billion of its own common stock during 2024 (but none in the third and fourth quarters) and committed \$3.9 billion (\$2.9 billion in cash and the remainder in Class B shares) to buy out the noncontrolling interests in



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788,799.00 USD 23 Apr 2025	730,500.00 USD 24 Apr 2025 14:14, UTC	1.08	1.13 USD Tril 24 Apr 2025	🙄 Narrow	Large Blend	Low	Exemplary	() () () () () 2 Apr 2025 05:00, UTC

Berkshire Hathaway Energy in the fourth quarter. The company closed out the fourth quarter with a record \$321.4 billion in cash and cash equivalents, up from \$310.3 billion at the end of September 2024, and by our estimates had around \$279.9 billion in dry powder.

Berkshire Hathaway: BofA Sales Were Mostly Known; New Money Buy of Constellation Brands Greggory Warren, CFA, Strategist, 15 Feb 2025

Narrow-moat Berkshire Hathaway reported a mixture of changes for its equity investment portfolio in the fourth guarter, with net sales coming in at \$6.2 billion (relative to \$127.4 billion in the first nine months of 2024) based on the insurer's most recent 13-F filing. The biggest change in the December quarter was the sale of an additional 117.4 million shares of Bank of America for an estimated \$5.1 billion. We knew about the sale of 31.4 million shares that took place before the middle of October, but the other 86.1 million shares that were sold during the guarter were not disclosed, despite the insurer holding a nearly 10% stake in the bank.Berkshire has been selling shares of Bank of America since the start of July 2024, offloading 34% of its stake in the back half of the year and raising close to \$15 billion in the process (and locking in a \$10 billion gain). The insurer also sold 40.6 million shares of Citigroup for an estimated \$2.7 billion, 46.3 million shares of Nu Holdings for an estimated \$555 million, 0.8 million shares of Charter Communications for an estimated \$277 million, and 1.7 million shares of Capital One Financial for an estimated \$271 million. Other sales/dispositions included 0.9 million shares of Liberty Formula One Series C, 0.3 million shares of T-Mobile, and 0.3 million shares of Louisiana-Pacific. Berkshire also eliminated its stakes in Ulta Beauty, as well as its two market trackers — the SPDR S&P 500 ETF and the Vanguard S&P 500 ETF. As for purchases during the quarter, Berkshire picked up 5.6 million shares of Constellation Brands in an estimated \$1.3 billion new money buy, while adding 1.1 million shares to its Domino's Pizza stake for an estimated \$469 million, 8.9 million shares of Occidental Petroleum for \$409 million, 12.3 million shares of Sirius XM for \$297 million, 0.5 million shares of VeriSign for an estimated \$90 million, and 0.2 million shares of Pool Corporation for an estimated \$70 million.

Berkshire Hathaway: Apple and B of A Sales Were Known; New Money Buys Included Domino's and Pool Greggory Warren, CFA,Strategist, 15 Nov 2024

Narrow-moat Berkshire Hathaway reported a mixture of major and minor changes for its equity investment portfolio in the third quarter, with net sales coming in at \$35.6 billion relative to \$92.3 billion in the first half of 2024 based on the insurer's most recent 13F and 10-0 filings. The biggest change in the September quarter was the sale of an additional 100.0 million shares of Apple for \$23 billion. This followed Berkshire's sale of 505.6 million shares of the tech giant's common stock in the first half of 2024 for \$94 billion. By our calculations, the gains on this year's sales of Apple were about \$95 billion.Berkshire has been selling shares of Bank of America since the start of July 2024, offloading 23% of its stake in the third quarter and raising close to \$10 billion in the process (and locking in a \$6 billion



Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat [™]	Equity Style Box	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
788,799.00 USD 23 Apr 2025	730,500.00 USD 24 Apr 2025 14:14, UTC	1.08	1.13 USD Tril 24 Apr 2025	Narrow	Large Blend	Low	Exemplary	() () () () () 2 Apr 2025 05:00, UTC

gain). Even with additional shares since the start of the fourth quarter, Berkshire still holds 766.3 million shares of B of A, equal to a 10.0% stake in the bank.Berkshire also eliminated its stake in Floor & Decor (4.0 million shares for an estimated \$440 million), nearly eliminated its stake in Ulta Beauty (0.7 million shares for an estimated \$275 million), and trimmed holdings in Charter Communications (selling one fourth of its stake for an estimated \$315 million), NU Holdings (19% for an estimated \$275 million), and Capital One Financial (7% for an estimated \$100 million).Purchases were either limited to additions to existing holdings — Heico (adding 5,445 shares for an estimated \$100 million) and Pool (0.4 million shares for an estimated \$140 million).The insurer ended September 2024 with \$266.4 billion of reportable equity holdings in its second-quarter 13F filing, down 4.9% from reportable equity holdings of \$280.0 billion at the end of the second quarter.Correction (Feb. 7, 2025): Berkshire added 5,445 shares of Heico, not 5,445 million.

Berkshire Hathaway Earnings: Insurance Results Come Back to Earth; Share Repurchases Nonexistent Greggory Warren, CFA,Strategist,2 Nov 2024

With narrow-moat-rated Berkshire Hathaway reporting adjusted third-guarter operating results that were more or less in our range of expectations for the guarter, we are leaving our \$700,000 (\$467) per Class A (B) share fair value estimate in place. Third-guarter (year-to-date) revenue, including unrealized and realized gains/losses from Berkshire's investment portfolios, increased 78.9% (4.4%) to \$113.5 billion (\$322.8 billion) from \$63.4 billion (\$309.2 billion) in the year-ago period(s). Excluding the impact of investment gains/losses and other adjustments, third-quarter (year-to-date) operating revenue declined 0.2% (increased 2.0%) year over year to \$93.7 billion (\$183.5 billion). Operating earnings, exclusive of investment gains/losses, decreased 6.2% (increased 14.0%) year over year to \$10.1 billion (\$32.9 billion) during the September quarter (first nine months of the year) as insurance underwriting results were negatively affected by both accrued losses tied to Hurricane Helene, as well as a reassessment of claims liabilities at GUARD insurance companies, during the third quarter. When including the impact of the investment gains/losses, reported operating earnings increased to \$26.3 billion (\$69.3 billion) from negative \$12.8 billion (positive \$58.6 billion) in the prior year's period(s).Book value per share, which still serves as a decent proxy for measuring changes in Berkshire's intrinsic value, increased 6.7% sequentially and 23.0% year over year to \$446,906 (from \$418,806 and \$363,413 at the end of June 2024 and September 2023, respectively). The company closed out the third quarter with a record \$325.2 billion in cash and cash equivalents, up from \$276.9 billion at the end of June 2024 (due primarily to \$36.1 billion of net sales from its stock holdings as free cash flow turned negative during the quarter). Berkshire, by our estimates, had around \$282.4 billion in dry powder on hand at the start of the fourth quarter of 2024.

Berkshire Hathaway: Lowering Moat Rating to Narrow From Wide; Raising Fair Value Estimate 9%

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23 Apr 2025								

Greggory Warren, CFA, Strategist, 21 Oct 2024

We've increased our fair value estimate for Berkshire Hathaway to \$700,000 (\$467) per Class A (B) share to reflect our updated forecast for the company's operating businesses and investment portfolio. Much like how our fair value estimate is derived using a sum-of-the-parts methodology, valuing each of Berkshire's operating segments — insurance, railroads, utilities/energy, and manufacturing, service, and retailing — separately and adding them up to arrive at our firmwide estimate, our moat rating comes from assessing the qualitative and quantitative attributes of each division and combining them with any benefits from ongoing capital reallocation. Berkshire's operating businesses have generally provided the firm with a narrow moat on a combined basis, with the company's and management's ability to produce additional excess returns from the cash flows thrown off by its disparate operations historically pushing our moat rating into wide territory. That said, we've seen more signs of slippage in the railroad business, as well as increased litigation exposure for the utilities/energy business, which have put downward pressure on excess returns for the noninsurance operations. Meanwhile, price hardening in the property and casualty market, more manageable catastrophe losses, and robust investment returns (all of which may not repeat themselves) have masked years of poor performance from Geico. Berkshire's size has also made it difficult to find deals or investments that can add significant value, due to increased competition from private capital as well as the company's constricted opportunity set, diminishing the benefits from ongoing capital allocation. With the firm also unlikely to replicate the historical advantages of having CEO Warren Buffett overseeing investments once he departs, it has gotten harder for us to see Berkshire generating excess returns consistently beyond the next decade, leading us to lower our moat rating for the firm to narrow from wide.

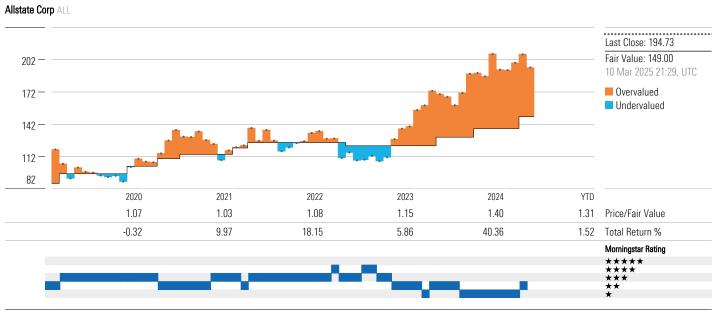
Analyzing the Implications of Self-Driving Cars for the Auto Insurance Industry Brett Horn, CFA,Senior Equity Analyst,23 Sep 2024

Autonomous vehicles could have profound positive and negative impacts on the auto insurance industry. Self-driving cars could massively reduce accidents by eliminating human errors and, in the long run, could shift the liability from drivers to manufacturers, making personal auto insurance obsolete. We believe that fully autonomous vehicles are closer than most people think from a technology perspective, but the period from technological development to mass adoption is significantly higher than the market anticipates. In our most aggressive adoption scenario, we think most cars on the road could be automated to a level where insurance is largely unnecessary within 20 years. We don't think investors should discount auto insurance stocks based on this risk today. But with the group trading at a hefty premium to historical book multiples, from a long-term perspective, we question whether current valuations are justified for businesses that might become obsolete.

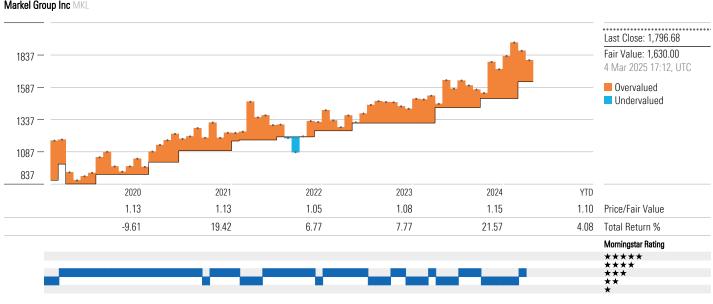
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Competitors Price vs. Fair Value



Total Return % as of 23 Apr 2025. Last Close as of 23 Apr 2025. Fair Value as of 10 Mar 2025 21:29, UTC



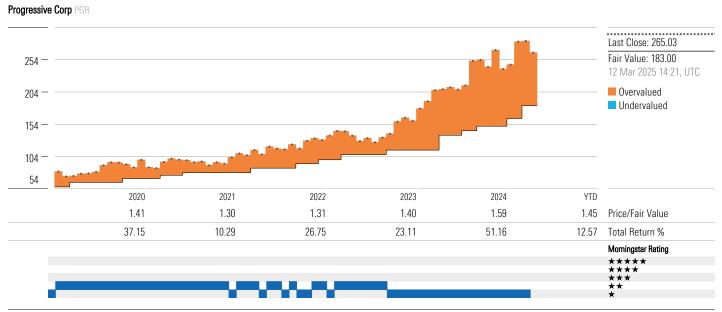
Markel Group Inc MKL

Total Return % as of 23 Apr 2025. Last Close as of 23 Apr 2025. Fair Value as of 4 Mar 2025 17:12, UTC.

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Competitors Price vs. Fair Value



Total Return % as of 23 Apr 2025. Last Close as of 23 Apr 2025. Fair Value as of 12 Mar 2025 14:21, UTC

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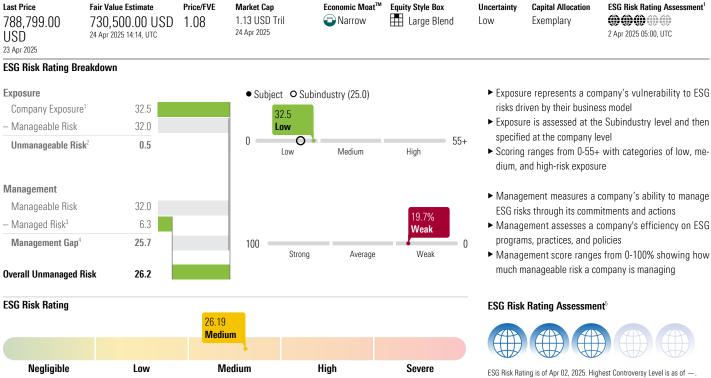
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Morningstar Valuatio	on Model Summ	ary										
Financials as of 24 Apr 20	25			Actual			Forecast					
Fiscal Year, ends 31 Dec				2022	2023	2024	2025	2026	2027	2028	2029	
Net Earned Premiums (1.0	0 Mil)			74,576	83,403	88,257	97,299	105,800	116,749	127,149	140,050	
Net Investment Income (1.	.00 Mil)			7,734	11,619	16,812	21,015	19,389	20,725	19,146	19,853	
Total Revenue (1.00 Mil)				14,411	169,877	157,868	121,914	151,589	103,525	159,495	142,928	
Expenses (1.00 Mil)				74,853	77,134	77,360	86,402	96,701	113,256	118,402	131,492	
Net Income (1.00 Mil)				-48,206	73,137	63,101	27,232	43,087	-7,639	32,258	8,978	
Adjusted Net Income (1.00) Mil)			-22,759	96,223	88,995	43,628	47,862	44,557	51,132	54,456	
Weighted Average Diluted	I Shares Outstandin	g (Mil)		1	1	1	1	1	1	2	2	
Earnings Per Share (Dilute	d) (1.00)			-32,818.31	50,478.40	43,889.79	18,767.28	29,470.26	-5,117.42	21,360.39	5,904.16	
Adjusted Earnings Per Sha	re (Diluted) (1.00)			-15,494.16	66,411.99	61,900.09	30,066.63	32,736.81	29,848.54	33,858.82	35,813.14	
Dividends Per Share (1.00)				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Margins & Returns as of	24 Apr 2025			Actual			Forecast					
			3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Avg
Investment Yield % Growth & Ratios as of 24	Apr 2025		2.6	1.8 Actual	2.7	3.2	3.5 Forecast	3.3	3.1	2.5	2.3	2.9
Glowin d hallos as 0124	Арі 2025		3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Avg
Net Earned Premium Grow	rth %		8.3	7.4	11.8	5.8	10.3	8.7	10.4	8.9	10.2	9.7
Net Investment Income Gr	owth %		43.8	36.6	50.2	44.7	25.0	-7.7	6.9	-7.6	3.7	4.1
Total Revenue Growth %			327.0	-90.6	1078.8	-7.1	-22.8	24.3	-31.7	54.1	-10.4	2.7
Net Income Growth %			-145.4	-170.9	-251.7	-13.7	-56.8	58.2	-117.7	-522.3	-72.2	-142.2
Adjusted Net Income Grow			-218.5	-125.3	-522.8	-7.5	-51.0	9.7	-6.9	14.8	6.5	-5.4
Earnings Per Share Growth			-146.6	-172.9	-253.8	-13.1	-57.2	57.0	-117.4	-517.4	-72.4	-141.5
Adjusted Earnings Per Sha			-220.5	-126.0	-528.6	-6.8	-51.4	8.9	-8.8	13.4	5.8	-141.5
Valuation as of 24 Apr 202	25			Actual	0000		Forecast	0000	0007	0000	0000	
Price/Earning				2022 -30.3	2023 8.2	2024 11.0	2025 26.2	2026 24.1	2027 26.4	2028 23.3	2029 22.0	
Price/Book					-	—		_				
Price/Tangible Book					_					_		
Dividend Yield %												
Dividend Payout %				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Operating Performance /	Profitability as of 2	24 Apr 2025		Actual			Forecast					
Fiscal Year, ends 31 Dec				2022	2023	2024	2025	2026	2027	2028	2029	
ROA %				-8.7	12.6	9.6	3.9	5.9	-0.9	3.4	0.9	
ROE %				_	_	_	_	_	_	_	_	
ROTE %				24.2	-16.8	24.3	16.9	6.7	9.7	-1.4	5.0	



Last Price 788,799.00 USD 23 Apr 2025	Fair Value Estimate 730,500.00 USD 24 Apr 2025 14:14, UTC	Price/FVE 1.08	Market Cap 1.13 USD T 24 Apr 2025		ic Moat™ row	Equity Styl		icertainty W	Capital Allocation Exemplary	ESG Risk ()) () 2 Apr 2025	
Financial Leverag	e (Reporting Currency)			Actual			Forecast				
Fiscal Year, ends 31	Dec			2022	2023	2024	2025	2026	2027	2028	2029
Equity/Assets %				49.9	53.6	59.7	58.2	62.3	65.8	68.8	70.8
Forecast Revision	s as of			_			_		_		
Prior data as of 21 0	ct 2024			Current		Prior	Curre	nt	Prior	Current	Prior
Fair Value Estimate	e Change (Trading Currency)			730,500.00	70	0,000.00		_	—	_	—
Net Earned Premiu	ım (1.00 Mil)			97,299		89,485	105,8)0	97,350	116,749	106,850
Total Revenue (1.0	0 Mil)			121,914		103,960	151,5	39	111,575	103,525	120,125
Net Income (1.00 M	√lil)			27,232		18,206	43,0	37	16,237	-7,639	13,190
Earnings Per Share Adjusted Earnings Dividends Per Shar	Per Share (Diluted) (1.00)			18,767.28 30,066.63 0.00		12,617.01 29,336.88 0.00	29,470.1 32,736.1 0.1	31	11,562.56 29,079.00 0.00	-5,117.42 29,848.54 0.00	30,020.29
Key Valuation Dri	vers as of 24 Apr 2025			Discounted Cash F	low Val	uation as o	f 24 Apr 2025				
Cost of Equity % Average Forward 5 Average Forward 5 Stage II Net Incom Stage II Increment Perpetuity Year	5 Yr ROE, Excluding Goodwill e Growth Rate %	90 60	 00000.0 00000.0	Present Value Stage Present Value Stage Present Value of the Other Adjustments Equity Value	e II	uity					1.00 Mil -52,527 156,762 486,955 431,119 1,022,310
Additional estimates and so	cenarios available for download at https:	//pitchbook.com/		Projected Diluted SI	nares						1
				Fair Value per Share	(USD)						730,500.00

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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 19.7% 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 is of Apr 02, 2025. Highest Controversy Level is as of —. Sustainalytics Subindustry: —. 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 f	rom the company's Sustainalyti	cs-defined Subindustry	/ and are displayed based on th	e closest market cap va	lues
Company Name	Exposure		Management		ESG Risk Rating	
Berkshire Hathaway Inc	32.5 Low	0 — 55+	19.7 Weak	100 — 0	26.2 Medium	0 — 40+
Markel Group Inc	40.1 Medium	0 55+	35.6 Average	100 — 0	26.5 Medium	0 40+
Progressive Corp	40.8 Medium	0 55+	55.6 Strong	100 — 0	19.3 Low	0 — 40+
Allstate Corp	45.9 Medium	0 55+	48.7 Average	100 — 0	24.7 Medium	0 — 40+
_	- -	0 55+	- -	100 0	- -	0 40+

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Appendix Historical Morningstar Rating

Berkshire Hathaway Inc Class A BRK.A 23 Apr 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	0ct 2024	Sep 2024	Aug 2024	Jul 2024	Jun 2024	May 2024	Apr 2024	Mar 2024	Feb 2024	Jan 2024
★★★	★★★	★★★	★★	★★	★★★	★★★	★★★	★★★★	★★★	★★★	★★★★
Dec 2023	Nov 2023	0ct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
★★★★	★★★★	★★★★	★★★★	★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Dec 2022	Nov 2022	0ct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022
★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★	★★★★	★★★★	★★★	★★★	★★★	★★★
Dec 2021	Nov 2021	0ct 2021	Sep 2021	Aug 2021	Jul 2021	Jun 2021	May 2021	Apr 2021	Mar 2021	Feb 2021	Jan 2021
★★★	★★★★	★★★★	★★★★	★★★	★★★	★★★	★★★	★★★	★★★★	★★★	★★★
Dec 2020	Nov 2020	0ct 2020	Sep 2020	Aug 2020	Jul 2020	Jun 2020	May 2020	Apr 2020	Mar 2020	Feb 2020	Jan 2020
★★★★	★★★★	★★★★	★★★	★★★	★★★★	★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★

Allstate Corp ALL 23 Apr 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	0ct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
★★	★★	★★★	★★★	★★★★	★★★★	★★★	★★★	★★★	★★★★	★★★	★★★
Dec 2022	Nov 2022	0ct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022
★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★	★★★	★★★
Dec 2021	Nov 2021	0ct 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
★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★	★★

Markel Group Inc MKL 23 Apr 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
***	***	***	***	***	***	***	***	***	***	**	**

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Progressive Corp PGR 23 Apr 2025 21:26, UTC

$ +$ \star <											
* *	Dec 2025 —	Nov 2025 —	Oct 2025 —	Sep 2025 —	Aug 2025 —	Jul 2025 —	Jun 2025 —	May 2025 —	Apr 2025 ★		Jan 2025 ★
* *					0			, ,			Jan 2024 ★
** *					0						Jan 2023 ★★
** <					0			, ,			Jan 2022 ★
					0			,			Jan 2021 ★★
					0			,			Jan 2020 ★

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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 de-



rive 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-

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

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

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

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

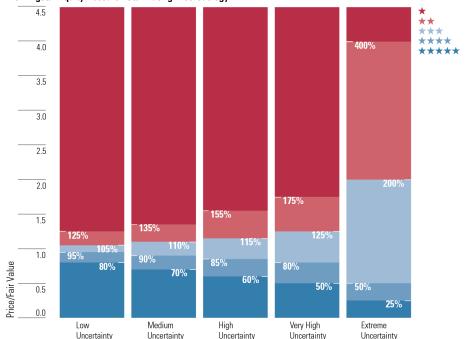
Our uncertainty rating is based on the interquartile range, or the middle 50% of potential outcomes, covering the 25th percentile–75th percentile. This means that when a stock hits 5 stars, we expect there is a 75% chance that the intrinsic value of that stock lies above the current market price. Similarly,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

4. Market Price

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

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

Morningstar Star Rating for Stocks



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 ad-

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

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

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

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

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

Other Definitions

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

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

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Morningstar Equity Research Star Rating Methodology



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

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

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

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

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

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

Sustainalytics analyzes over 1,300 data points to assess a company's exposure to and management of ESG risks. In other words, ESG Risk Ratings measures a company's unmanaged ESG Risks represented as a quantitative score. Unmanaged Risk is measured on an open-ended scale starting at zero (no risk) with lower scores representing less unmanaged risk and, for 95% of cases, the unmanaged ESG Risk score is below 50.

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

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

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