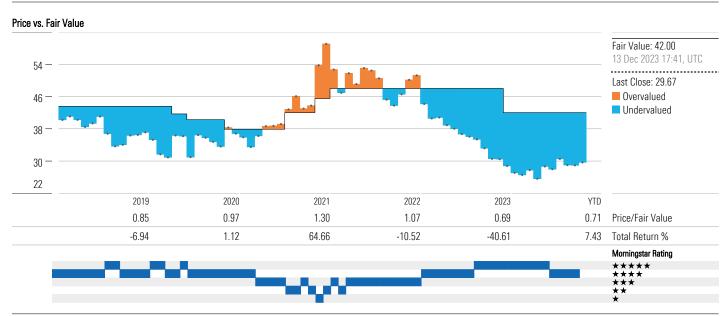
Last Price Fair Value Estimate Price/FVE Economic Moat™ **Equity Style Box** Capital Allocation ESG Risk Rating Assessment¹ Uncertainty 166.32 USD Bil Wide (Large Value Medium Standard **@@@@** 29.67 USD 42.00 USD 0.7117 Oct 2024 2 Oct 2024 05:00, UTC 16 Oct 2024 13 Dec 2023 17:41, UTC



Total Return % as of 16 Oct 2024. Last Close as of 16 Oct 2024. Fair Value as of 13 Dec 2023 17:41, UTC.

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Appendix

Research Methodology for Valuing Companies

Important Disclosure

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The primary analyst covering this company does not own its stock

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

Pfizer's Diverse Portfolio of Drugs and Vaccines Supports a Wide Moat

Business Strategy & Outlook Karen Andersen, CFA, Strategist, 27 Sep 2024

Pfizer's foundation remains solid, based on strong cash flows generated from a basket of diverse drugs. The company's large size confers significant competitive advantages in developing new drugs. This unmatched heft, combined with a broad portfolio of patent-protected drugs, has helped Pfizer build a wide economic moat around its business.

Pfizer's size establishes one of the largest economies of scale in the pharmaceutical industry. In a business where drug development needs a lot of shots on goal to be successful, Pfizer has the financial resources and the established research power to support the development of more new drugs. Also, after many years of struggling to bring out important new drugs, Pfizer is now launching several potential blockbusters in cancer and immunology.

Pfizer's vast financial resources support a leading salesforce. Pfizer's commitment to postapproval studies provides its salespeople with an armamentarium of data for their marketing campaigns. Further, leading salesforces in emerging countries position the company to benefit from the dramatically increasing wealth in nations such as Brazil, India, and China.

Pfizer's 2020 move to divest its off-patent division Upjohn to create a new company (Viatris) in combination with Mylan should drive accelerating growth at the remaining innovative business. With



Last Price29.67 USD
16 Oct 2024

Healthcare

Fair Value Estimate
42.00 USD
13 Dec 2023 17:41, UTC

Price/FVE Market Cap
0.71 166.32 USD Bil

Economic Moat™
Wide

Equity Style Box
Large Value

Uncertainty Medium Capital Allocation Standard ESG Risk Rating Assessment (i) (i) (ii) (ii) (iii) (ii

Sector

Industry

Drug Manufacturers -General

Business Description

Pfizer is one of the world's largest pharmaceutical firms, with annual sales close to \$50 billion (excluding covid-19-related product sales). While it historically sold many types of healthcare products and chemicals, now prescription drugs and vaccines account for the majority of sales. Top sellers include pneumococcal vaccine Prevnar 13, cancer drug Ibrance, and cardiovascular treatment Eliquis. Pfizer sells these products globally, with international sales representing close to 50% of total sales. Within international sales, emerging markets are a major contributor.

limited patent losses and fewer older drugs, Pfizer is poised for steady growth (excluding the more volatile covid-19-related product sales) before a round of major patent losses hit in 2028.

We believe Pfizer's operations can withstand eventual generic competition; its diverse portfolio of drugs helps insulate the company from any one particular patent loss. Following the merger with Wyeth several years ago, Pfizer has a much stronger position in the vaccine industry with pneumococcal vaccine Prevnar. Vaccines tend to be more resistant to generic competition because of their manufacturing complexity and relatively lower prices.

Bulls Say Karen Andersen, CFA, Strategist, 27 Sep 2024

- ▶ Pfizer's pipeline productivity is improving with several successful recent drug launches. In particular, cardiovascular drug Vyndagel is a potential game-changer in the rare-disease arena.
- ▶ Pfizer's strong success in developing a covid-19 vaccine and treatment yielded a massive cash windfall.
- ▶ Pfizer's decision to divest its off-patent division should result in a faster-growing, innovative company.

Bears Say Karen Andersen, CFA, Strategist, 27 Sep 2024

- ► Aggressive cost-cutting in research and development could hurt Pfizer's long-term prospects, given the importance of continued investment in innovation.
- ► Competition is increasing for Prevnar (especially from Merck's new pneumococcal vaccine) and Ibrance (from Novartis' Kisqali).
- ► Covid-19 product declines are creating a drag on growth as the pandemic recedes.

Economic Moat Karen Andersen, CFA, Strategist, 27 Sep 2024

Patents, economies of scale, and a powerful distribution network support Pfizer's wide moat. Pfizer's patent-protected drugs carry strong pricing power that enables the firm to generate returns on invested capital in excess of its cost of capital. The patents give the company time to develop the next generation of drugs before generic competition arises. Additionally, while Pfizer holds a diversified product portfolio, there is some product concentration, with Prevnar representing just over 10% of total sales (excluding covid-19 vaccine sales). However, we don't expect typical generic competition for the vaccine due to complex manufacturing and relatively low prices for the product. Eliquis and Ibrance each represent close to 10% of sales as well. However, we expect new products will mitigate the eventual generic competition of key drugs over the long term. Pfizer's operating structure allows for cost-cutting following patent losses to reduce the margin pressure from lost high-margin drug sales. Overall, Pfizer's established product line creates the enormous cash flows needed to fund the average \$800 million in development costs per new drug. A powerful distribution network sets up the company as a strong partner for smaller drug firms that lack Pfizer's resources.

We think the company does face environmental, social, and governance risks, particularly related to



Last Price Fair Value Estimate Price/FVE Economic Moat™ **Equity Style Box Capital Allocation** ESG Risk Rating Assessment¹ Market Cap Uncertainty 166.32 USD Bil Wide (Large Value Medium Standard **@@@@** 29.67 USD 42.00 USD 0.7117 Oct 2024 16 Oct 2024 13 Dec 2023 17:41, UTC 2 Oct 2024 05:00, UTC Competitors Eli Lilly and Co LLY Merck & Co Inc MRK **GSK PLC** GSK Pfizer Inc PFE Fair Value Fair Value Fair Value **Last Close** 42.00 120.00 2,200.00 916.42 Uncertainty: Medium Uncertainty: Medium Uncertainty: Medium Fair Value Last Close 580.00 **Last Close** 110.42 Last Close Uncertainty: High 29.67 1,496.00 Wide Wide Wide Wide Economic Moat USD USD Currency Fair Value 42.00 13 Dec 2023 17:41, UTC 580.00 8 Aug 2024 17:35, UTC 120.00 25 Apr 2024 20:00, UTC 2.200.00 19 Sep 2022 11:26, UTC 1-Star Price 56.70 899.00 162.00 2.970.00 5-Star Price 29.40 348.00 84.00 1,540.00 Undervalued 16 Oct 2024 16 Oct Fairly Valued 16 Oct 2024 Significantly Significantly Assessment Overvalued 2024 Undervalued 2024 ★★★ 16 Oct 2024 21:33, UTC ★16 Oct 2024 21:37, UTC ★★★16 Oct 2024 21:34, UTC ★★★★★17 Oct 2024 01:36, UTC Morningstar Rating Analyst Karen Andersen, Strategist Karen Andersen, Strategist Karen Andersen, Strategist Jay Lee, Senior Equity Analyst Standard Capital Allocation Exemplary Standard Standard 0.92 Price/Fair Value 0.71 1.58 0.68 Price/Sales 3.01 21.28 4.51 1.72 1.92 6.42 4.25 Price/Book 60.84 21.82 16.94 9.02 Price/Earning 75.49 Dividend Yield 5.63% 0.55% 2.79% 4.01% 168.13 Bil 825.17 Bil 279.89 Bil 6,102.13 Bil Market Cap 25.20 - 33.19547.61 - 972.5399.14 - 134.631,371.40 - 1,823.5052-Week Range Investment Style Large Value Large Growth Large Value Large Value

potential US drug price-related policy reform to increase access by lowering drug prices. Ongoing product governance issues (including litigation related to side effects and patents) also weigh on the company. While we have factored these threats into our analysis, they are not material to our moat rating.

Fair Value and Profit Drivers Karen Andersen, CFA, Strategist, 27 Sep 2024

We are maintaining our fair value estimate at \$42 per share. Following the close of the Seagen acquisition, Pfizer provided 2024 guidance that included covid-19 product guidance of \$8 billion, which was \$5 billion lower than our expectation. Also, Pfizer acknowledged the firm would be unlikely to hit the previous 6% growth-rate guidance from 2020 to 2025 (excluding covid-19 products sales). Despite the falling outlook, the firm reiterated support for the dividend, which we believe is secure and will likely support the stock valuation.



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Fair Value Estimate 42.00 USD 13 Dec 2023 17:41, UTC

Price/FVE 0.71 **Market Cap** 166.32 USD Bil 17 Oct 2024 Economic Moat™
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Equity Style Box

Large Value

Uncertainty Medium Capital Allocation Standard ESG Risk Rating Assessment¹

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2 Oct 2024 05:00. UTC

On the top line, we expect fairly stable sales over the next decade as new products help offset older drugs losing patent protection. On the bottom line, we project a slightly healthier annual growth rate as cost-cutting plans take shape. Pfizer will likely cut \$4 billion in operating costs from mid-2023 to the end of 2024. These cuts should fall to the bottom line rather than be redeployed to other initiatives. The cost cuts are helping the firm adapt to the receding pandemic and falling covid-19 product sales.

We don't model unannounced acquisitions, but acquisitions hold the potential to accelerate the company's growth rate. Over the long term, we believe the more diversified lineup of drugs should reduce the volatility of earnings. We anticipate restructuring efforts will help alleviate some margin pressure in the future, as some high-margin products lose exclusivity. We estimate Pfizer's cost of equity at 7.5% and weighted average cost of capital at 7%, in line with the peer group.

Risk and Uncertainty Karen Andersen, CFA, Strategist, 27 Sep 2024

Pfizer faces generic competition, potential drug pricing policy changes by governments, an increasingly stringent Food and Drug Administration, and stronger managed-care and pharmacy benefit manager negotiating power. New-drug development has become challenging in several disease areas with a more risk-conscious FDA. Additionally, managed-care companies and pharmacy benefit managers have grown during the past two decades into powerful entities that can negotiate lower drug prices. However, we give Pfizer a Medium Morningstar Uncertainty Rating partly based on the low volatility of cash flows from a diverse product portfolio with inelastic demand.

Our uncertainty rating for the firm is not materially affected by environmental, social, or governance risks, although we see access to basic services (tied to potential US policy reform on drug pricing) as the biggest ESG risk that the firm needs to manage.

We model in policy changes around reforms to Medicare that are reflected in the Inflation Reduction Act as the firm has exposure to this patient group. For example, Pfizer's Eliquis (cardiovascular), Ibrance (cancer), and Xtandi (cancer) generate almost one fourth of the firm's total sales (excluding covid-19-related sales), and the drugs have significant exposure to the Medicare channel. Additionally, we assume a more than 50% probability of Pfizer seeing future costs related to product governance ESG risks, such as off-label marketing or litigation related to side effects. We model base-case annual legal costs at close to 1% of non-GAAP net income, at the low end of the peer range based on Pfizer's product portfolio having less exposure to potential litigation.

Capital Allocation Karen Andersen, CFA, Strategist, 27 Sep 2024

We give Pfizer a Standard Capital Allocation Rating. This reflects our belief that the firm possesses a sound balance sheet, a reasonable record of investments, and largely fair shareholder distributions.

We believe Pfizer holds a sound balance sheet with low levels of risk regarding the size of the debt



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Uncertainty Medium Capital Allocation Standard ESG Risk Rating Assessment¹

2 Oct 2024 05:00, UTC

carried, the business cyclicality facing the firm, and the debt maturity outlook. While an argument could be made to increase the leverage of the balance sheet to be more active in investing, we believe the company (along with the majority of firms in the large-cap biopharma industry) should hold ample balance sheet strength to support opportunistic acquisitions as dynamic scientific data emerges that might require relatively quick investment action. Also, a strong balance sheet helps biopharma firms through most product litigation challenges with minimal market concern.

Turning to investments, we believe Pfizer is operating at a reasonable level. The company tends to spend on R&D at about a mid- to high-teens percentage of sales (a little below the industry average of high teens). Solid investment in creating the next generation of drugs has yielded a strong pipeline to offset patent losses. The strong investment in innovative new drugs (largely targeting oncology and immunology) also helps fortify the firm's wide moat and expand returns on invested capital.

On the acquisition and divestment side, Pfizer is increasingly making stronger decisions. The decisions to sell the nutritional and animal healthcare businesses appear to have created value for shareholders several years ago. Also, we like the strategic decision to form a joint venture with GSK on the consumer healthcare front, giving both firms more scale in the marketplace, which was followed by the divestment of this joint venture. The prices for the acquisitions of Seagen (2023), Biohaven (2022), Global Blood Therapeutics (2022), Array (2019), Medivation (2016), and Hospira (2015) all bordered on the high side but look largely reasonable. The failed attempts to acquire AstraZeneca and Allergan are partly concerning, but several factors outside Pfizer's control helped scuttle those deals.

We view Pfizer's dividends and share repurchases as about right. Pfizer has generally targeted close to a 50% payout in dividends as a percentage of normalized earnings, which seems about right for a more mature industry. Further, Pfizer has shown a strong willingness to buy back shares during generally favorable periods.

Albert Bourla became CEO at the beginning of 2019 after holding several positions at Pfizer. Before taking the leadership role, he was the chief operating officer and led the innovative health division. Bourla brings over 25 years of experience at Pfizer to the top position. This vast experience should help his decision-making. One of the first major decisions Bourla made was to divest the off-patent business, combining it with Mylan. The remaining innovative business should be in a stronger position to expand top-line sales. Also, the newly created off-patent business should have increased scale, which is important in the highly competitive generic business. Overall, we view this corporate restructuring as a modest positive that will allow both the innovative and off-patent firms more focus to drive better returns for each segment.

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Equity Style Box

Large Value

Uncertainty Medium Capital Allocation Standard ESG Risk Rating Assessment¹
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2 Oct 2024 05:00. UTC

Pfizer Earnings: Seagen Sales Help Offset Lost Covid Sales as Pipeline Strengthens Damien Conover,

CFA, Sector Director, 30 Jul 2024

We are holding steady to our \$42 fair value estimate for Pfizer following slightly better-than-expected second-quarter results. We continue to view the stock as undervalued, with the market not fully appreciating the firm's cost-cutting and developing pipeline, which reinforce Pfizer's wide moat.

Total sales increased 3% operationally, and we expect slight acceleration of growth in 2025 as the firm laps challenging covid declines that have been partly mitigated by acquired Seagen revenue. We expect continued growth from several growth drivers, including rare disease drug Vyndaqel (up 71%, but with less than 50% market penetration), pain drug Nurtec (up 44%, with significant market potential remaining), and bladder cancer drug Padcev (recently launched with leading efficacy data).

We expect steady growth until 2028 when patent losses will likely increase, but pipeline advancements hold the potential to mitigate pressures. Oral weight loss drug danuglipron is undergoing dose optimization studies and could enter pivotal studies in 2025. Within a projected \$100 billion weight loss market, daniglipron's potential is likely underappreciated. Additionally, Pfizer's rapid advancement of several cancer drugs into phase 3 development opens the door to new blockbusters, including vepdegestrant (breast), sigvotatug vedotin (lung), atirmociclib (breast), and mevrometostat (prostate).

On the vaccine side, Pfizer expects the data from its covid/flu combination later in the year, which should help support over \$5 billion of long-term annual sales of Pfizer's covid-specific vaccine Comirnaty. Also, Pfizer has moved its next-generation pneumococcal vaccine into phase 2 development that should help protect the \$6 billion in annualized Prevnar sales from increasing competition.

On the cost side, Pfizer is tracking well to deliver \$4 billion in savings by the end of 2024, and we expect continued margin improvement into 2025 as the firm cuts previous heavy covid-related investments.

GSK, Pfizer, and Moderna: New RSV Vaccine Guidance Shrinks, but Long-Term Potential Remains

Damien Conover, CFA, Sector Director, 27 Jun 2024

The Centers for Disease Control and Prevention refined its RSV vaccine recommendations to adults aged 75 and older as well as those 60 to 74 years old at higher risk for RSV disease, which is a smaller group than the initial guidance for adults aged 60 and older. However, we don't expect a major impact on the long-term potential for the RSV vaccines from GSK, Pfizer, and Moderna. We are maintaining our fair value estimates and moat ratings for the firms.

Over the next several years, we expect the RSV vaccine recommendations to evolve to include wider patient groups based on strong clinical efficacy that can reduce one of the most prevalent viruses. Further, based on the waning efficacy of the vaccines, we expect the need for the RSV vaccines every other year, which should drive continual demand over the long term. We continue to expect a global



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Price/FVE 0.71 **Market Cap** 166.32 USD Bil 17 Oct 2024 Economic Moat™
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Equity Style Box

Large Value

Uncertainty Medium Capital Allocation Standard **ESG Risk Rating Assessment**(1) (1) (1) (1) (1)

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RSV vaccine market close to \$10 billion annually over the long term.

Importantly, the side effect profile of the RSV vaccines looks favorable based on real-world data. The concerns around the potential adverse side effect of Guillain Barre syndrome, or GBS, from the vaccine should be tempered as the incidence rate of GBS within RSV vaccine use looks similar to the expected rate within the non-RSV vaccine population. We expect increased RSV vaccine utilization as more data confirms the favorable side effect profile of the vaccines.

Pfizer Earnings: Solid Results Supported by Steady Tracking Toward \$4 Billion in Cost Cuts Damien Conover, CFA, Sector Director, 1 May 2024

We are holding steady to our fair value estimate and wide moat rating for Pfizer following first-quarter results that largely matched our expectations. The company is tracking well to meet its goal of \$4 billion in cost cuts by the end of 2024, which should improve operating margins. We believe the market is underappreciating the margin expansion based on the cost cuts, and we view Pfizer as undervalued.

Following overinvestment during the pandemic, Pfizer is reducing costs to adapt to the slowing demand for covid products. While we still expect a tail of close to \$8 billion annually for Pfizer's covid vaccine Comirnaty and treatment Paxlovid, this is down from the over \$50 billion sold in 2022. Following the cost-cutting, we expect operating margin to return to the over 30% range more typical of Pfizer before the pandemic.

On the top line, Pfizer posted 11% operational sales growth, excluding the impact of covid. While the Seagen acquisition accounted for close to half of the growth, we expect Pfizer to continue to post mid-single-digit growth through 2025 before patent losses increase. Importantly, rare-disease drug Vyndaqel (up 66%) is performing well. The drug's increased entrenchment should bode well ahead of the competitive launch of BridgeBio's acoramidis, as we expect low drug switching once a patient starts treatment. Cardiovascular drug Eliquis (up 10%) continues to gain share, but we expect intensifying generics to drive declines by 2026. Pneumococcal vaccine Prevnar (up 7%) benefited from timing of purchases, but we expect pressure to increase as Merck launches a well-positioned competitive vaccine V116 in the adult setting (close to 30% of the market) later this year.

In the pipeline, the phase 3 trial start for breast cancer drug atirmociclib gives Pfizer an opportunity to extend its entrenchment in this area as its first-generation drug Ibrance (down 7%) is facing increasing competition.

Pfizer: Oncology Research and Development Presentation Highlights Next-Generation Blockbusters

Damien Conover, CFA, Sector Director, 1 Mar 2024

We are holding firm to our fair value for Pfizer following the firm's oncology research and development presentation that showed a strong lineup of new potential blockbusters. The wide breadth of Pfizer's



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Price/FVE Market Cap
0.71 166.32 USD Bil

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Uncertainty Capital Allocation
Medium Standard

ESG Risk Rating Assessment¹
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cancer drug pipeline reinforces our undervalued view of the stock, as the market appears to underappreciate the company's pipeline. The strong pipeline also reinforces Pfizer's wide moat rating.

With heavy patent losses erasing close to 15% of 2023 sales by 2028, next-generation drugs will be critical for Pfizer's cash flows, and we expect new oncology drugs will be a key driver of sales. Looking at already approved cancer drugs with long patent lives, we are most bullish on bladder cancer drug Padcev, which has shown excellent overall survival data that supports peak annual sales above \$3 billion, in line with Pfizer's guidance. We expect Padcev combined with the remaining recently acquired Seagen products to generate close to \$7 billion in annual sales by 2028, representing over 10% of Pfizer's 2023 total sales and going a long way to help mitigate Pfizer's patent losses.

On the new-product front, Pfizer holds several major new drugs that offer additional upside to our fair value estimate if late-stage data is positive. We see one of the biggest potential upsides with the next-generation breast cancer drug atirmociclib, which has a similar mechanism of action as Ibrance (generates close \$5 billion in annual sales) but could be safer and more effective. The first phase 3 atirmociclib data could read out by 2026 or earlier. Other potential near-term cancer blockbusters include sigvotatug vedotin (lung cancer) and vepdegestrant (breast cancer), both of which carry relatively novel mechanisms of action and could contribute to sales by 2028.

Pfizer Earnings: Cost-Cutting Remains on Track to Adapt to COVID-19 Product Sales Declines

Damien Conover, CFA, Sector Director, 30 Jan 2024

Pfizer reported fourth-quarter earnings ahead of our expectations, largely due to lower-than-expected research and development spending. However, we don't expect this will continue, so there is no major impact to our fair value estimate. We view the stock as undervalued, with the market likely not fully appreciating the cost-cutting program, recently launched drugs, and the potential of Pfizer's pipeline, which are key factors that support its moat.

Pfizer remains on track to cut at least \$4 billion of costs by the end of 2024. After overestimating demand for Pfizer's COVID-19 vaccine Comirnaty and COVID-19 treatment Paxlovid, we believe its cost structure grew too large, which should enable successful cost-cutting. We expect the firm will produce operating margins above 30% by 2025.

In the quarter, new and core product helped lift total sales by 8% operationally, excluding the significant decline in COVID-19 products. Recently launched RSV vaccine Abrysvo and migraine drug Nurtec posted strong gains and hold significant potential. Also, the Seagen acquisition (closed Dec. 14) slightly helped the sales growth. We expect Seagen's drug portfolio to represent the largest near-term growth driver for Pfizer.

Turning to the larger core products, cardiovascular drugs Vyndaqel and Eliquis are performing well and should continue to post steady gains based on strong efficacy despite increasing competition to



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Equity Style Box
Large Value

Uncertainty Medium Capital Allocation Standard ESG Risk Rating Assessment¹
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Vyndaqel and growing market saturation for Eliquis. However, we expect continued declines for breast cancer drug Ibrance due to strong competitive threats and a flat outlook for pneumococcal vaccine Prevnar due to moderate emerging competition. We project close to \$8 billion in COVID-19-related sales in 2024 (in line with management guidance) despite the pandemic's pullback.

In the pipeline, we see the majority of the strength in products that will likely show only midstage data in 2024, including products targeting weight loss and a combination flu/COVID-19 vaccine.

Pfizer: Cutting Valuation on Lower-Than-Expected 2024 Guidance and Weak COVID-19 Sales

Outlook Damien Conover, CFA, Sector Director, 13 Dec 2023

We are lowering our Pfizer fair value estimate to \$42 from \$47 largely based on Pfizer's lower-than-expected 2024 guidance. Following the close of the Seagen acquisition, Pfizer provided 2024 guidance that included COVID-19 product guidance of \$8 billion, which was \$5 billion lower than our expectation. Also, Pfizer acknowledged the firm would be unlikely to hit the previous 6% growth-rate guidance from 2020 to 2025 (excluding COVID-19 products sales). Despite the falling outlook, the firm reiterated support for the dividend, which we believe is secure and will likely support the stock valuation.

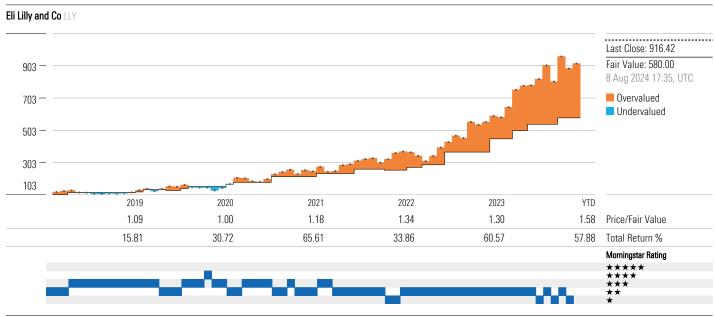
The lower COVID-19 product guidance is the key driver for our lowered fair value. We continue to expect a long-term tail for COVID-19 vaccine Comirnaty and COVID-19 treatment Paxlovid, but we are cutting our projections based on Pfizer's guidance and a trend of lost market share to Moderna seen over the past few months. While there is potential upside to our COVID-19 product sales projections, as Pfizer management may be reacting a bit to missed overly optimistic 2023 COVID-19 sales guidance, we still see the stock as undervalued with the lowered COVID-19 sales projections.

The cost-cutting plans Pfizer set out earlier in the year to adapt to the receding COVID-19 pandemic look on track and should help improve margins in 2024 and 2025. Pfizer will likely cut \$4 billion in operating costs by the end of 2024. These cuts should fall to the bottom line rather than be redeployed to other initiatives. The ability to significantly cut costs and adapt to scale helps increase returns and reinforce the firm's moat.

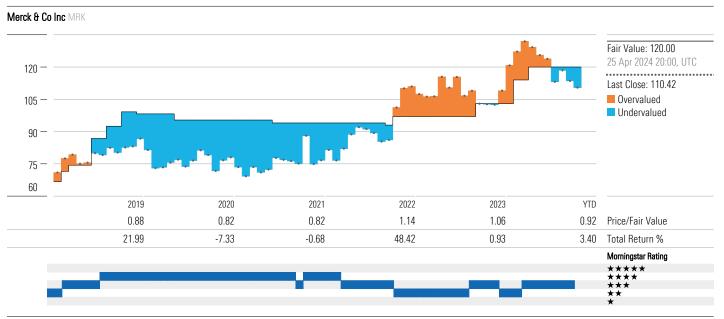
On the Seagen acquisition, the deal is largely closing in line with our expectations. The \$3.1 billion 2024 Seagen sales guidance is largely similar to our expectations. However, the \$0.40 earnings hit expected in 2024 from the deal is slightly worse than our expectations.



Competitors Price vs. Fair Value



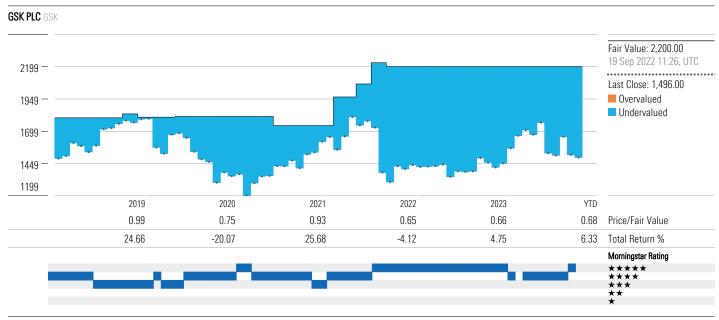
Total Return % as of 16 Oct 2024. Last Close as of 16 Oct 2024. Fair Value as of 8 Aug 2024 17:35, UTC.



Total Return % as of 16 Oct 2024. Last Close as of 16 Oct 2024. Fair Value as of 25 Apr 2024 20:00, UTC



Competitors Price vs. Fair Value



Total Return % as of 16 Oct 2024. Last Close as of 16 Oct 2024. Fair Value as of 19 Sep 2022 11:26, UTC.



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Morningstar H	istorical Summary												
Financials as of 3	0 Jun 2024												
Fiscal Year, ends 31	Dec	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD	TTM
Revenue (USD Bil)		50	49	53	53	41	41	42	81	100	58	28	55
Revenue Growth 9	6	-3.8	-1.5	8.1	-0.5	-22.3	0.2	1.8	95.2	23.4	-41.7	-10.6	-29.2
EBITDA (USD Bil)		19.14	15.32	15.29	19.84	11.06	18.65	13.26	30.79	41.03	9.56	8.35	5.49
EBITDA Margin %		38.6	31.4	29.0	37.8	27.1	45.6	31.8	37.9	40.9	16.3	29.7	9.9
Operating Income	(USD Bil)	13.50	12.98	13.71	14.07	6.73	7.31	8.83	20.24	36.32	3.17	6.46	0.66
Operating Margin	%	27.2	26.6	26.0	26.8	16.5	17.9	21.2	24.9	36.2	5.4	22.9	1.2
Net Income (USD	Bil)	9.14	6.96	7.22	21.31	11.15	16.03	9.16	21.98	31.37	2.12	3.16	-2.60
Net Margin %		18.4	14.2	13.7	40.6	27.3	39.2	22.0	27.0	31.3	3.6	11.2	-4.7
Diluted Shares Ou	tstanding (Mil)	6,424	6,257	6,159	6,058	5,977	5,675	5,632	5,708	5,733	5,643	5,696	5,654
Diluted Earnings P	er Share (USD)	1.42	1.11	1.17	3.52	1.87	2.82	1.63	3.85	5.47	0.37	0.55	-0.46
Dividends Per Sha		1.04	1.12	1.20	1.28	1.36	1.44	1.52	1.56	1.60	1.64	0.84	1.66
Valuation as of 30) Sep 2024												
D: (0.1		2014	2015	2016	2017	2018	2019	2020	2021	2022		Recent Otr	TTM
Price/Sales Price/Earnings		4.0 19.2	4.2 24.3	3.8 32.5	4.2 22.4	4.9 11.0	4.2 13.7	4.3 23.8	4.8 17.2	2.9 9.8	2.4 15.7	3.0 -62.9	3.0 -62.9
Price/Cash Flow		11.6	13.4	13.7	14.2	14.7	16.6	16.5	10.4	11.0	13.7	20.4	20.4
Dividend Yield %		3.34	3.47	3.69	3.53	3.12	3.68	4.13	2.64	3.12	5.7	5.77	5.77
Price/Book		2.5	3.0	3.1	3.6	3.5	3.3	3.1	4.4	3.1	1.7	1.9	1.9
EV/EBITDA		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operating Perform	mance / Profitability as o	of 30 Jun 2024											
Fiscal Year, ends 31	Dec	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD	TTM
ROA %		5.4	4.2	4.3	12.4	6.7	9.8	5.7	13.1	16.6	1.0	1.4	-1.2
ROE %		12.4	10.2	11.6	32.6	16.6	25.3	14.5	31.3	36.3	2.3	3.6	-2.8
ROIC % 8.1			7.1 0.3	7.7 0.3	20.4 0.3	10.8 0.2	15.8 0.3	9.7 0.3	21.5 0.5	26.4 0.5	1.8 0.3	2.8 0.1	-1.0 0.3
Asset Turnover		0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.0	0.0	0.3	0.1	0.3
Financial Leverage Fiscal Year, ends 31		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Recent Otr	TTM
Debt/Capital %		30.7	30.8	33.8	31.4	34.2	35.4	36.0	31.0	25.0	40.5	39.3	1110
Equity/Assets %		42.5	38.7	34.7	41.5	39.8	37.7	41.0	42.5	48.5	39.3	40.6	_
		1.9	2.5	2.7	2.1	3.8	2.7	2.9	1.2	0.8	7.4	8.2	_
EBITDA/Interest E		14.1	12.8	12.9	15.6	8.4	11.9	9.2	23.8	33.1	4.3	5.3	1.9

Financials		-	Estimates		
Fiscal Year, ends 31 Dec 2023	2022	2023	2024	2025	2026
Revenue (USD Mil)	100,330	58,496	60,726	63,476	65,303
Revenue Growth %	23.4	-41.7	3.8	4.5	2.9
EBITDA (USD Mil)	40,780	7,933	21,963	24,547	26,052
EBITDA Margin %	40.7	13.6	36.2	38.7	39.9
Operating Income (USD Mil)	37,272	3,359	11,322	14,085	16,114
Operating Margin %	37.2	5.7	18.7	22.2	24.7
Net Income (USD Mil)	37,348	10,501	14,832	16,799	18,297
Net Margin %	37.2	18.0	24.4	26.5	28.0
Diluted Shares Outstanding (Mil)	5,733	5,643	5,696	5,696	5,696
Diluted Earnings Per Share(USD)	6.51	1.86	2.60	2.95	3.21
Dividends Per Share(USD)	1.61	1.65	1.67	1.70	1.73

Forward Valuation	Estimates							
	2022	2023	2024	2025	2026			
Price/Sales	2.9	2.8	2.8	2.6	2.6			
Price/Earnings	7.9	15.5	11.4	10.1	9.2			
Price/Cash Flow	_	_	_	_	_			
Dividend Yield %	3.1	5.7	5.6	5.7	5.8			
Price/Book	3.1	1.8	1.9	1.9	1.8			
EV/EBITDA	7.0	22.9	10.5	9.4	8.8			

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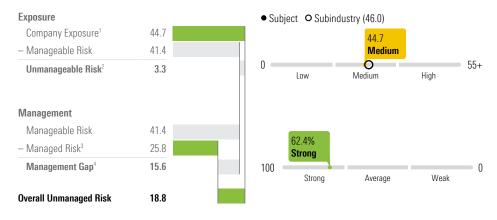


18.83 Low

Last Price Fair Value Estimate Price/FVE Market Cap Economic Moat™ **Equity Style Box Capital Allocation** ESG Risk Rating Assessment¹ Uncertainty 166.32 USD Bil Wide (Large Value Medium Standard **@@@@** 29.67 USD 42.00 USD 0.712 Oct 2024 05:00, UTC 16 Oct 2024 13 Dec 2023 17:41, UTC

ESG Risk Rating Breakdown

ESG Risk Rating



- ► 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 Assessment⁵



Severe









Negligible Low Medium High 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 62.4% 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 Oct 02, 2024. Highest Controversy Level is as of Oct 08, 2024. Sustainalytics Subindustry: Pharmaceuticals. 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 Oct 2024	Peers are selected for	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				
Pfizer Inc	44.7 Medium	0 55+	62.4 Strong	100 0	18.8 Low	0			
Eli Lilly and Co	45.8 Medium	0 — 55+	51.8 Strong	100 - 0	23.6 Medium	0			
GSK PLC	44.5 Medium	0 55+	70.1 Strong	100 0	15.4 Low	0			
Merck & Co Inc	47.5 Medium	0 55+	62.3 Strong	100 - 0	20.0 Low	0			
AbbVie Inc	46.9 Medium	0	47.5 Average	100 - 0	26.1 Medium	0			

Appendix

Historical Morningstar Rating

Pfizer Inc Pi	FE 16 Oct 2024 2	21:33, UTC									
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
★★★★	★★★★	★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Dec 2019	Nov 2019	0ct 2019	Sep 2019	Aug 2019	Jul 2019	Jun 2019	May 2019	Apr 2019	Mar 2019	Feb 2019	Jan 2019
★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★	★★★	★★★	★★★
Eli Lilly and	Co LLY 16 Oct 2	2024 21:37, UTC	,								
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
★★★	★★★	★★★	★★★	★★★	★★★	★★	★★	★★	★★★	★★★	★★★
Dec 2019	Nov 2019	0ct 2019	Sep 2019	Aug 2019	Jul 2019	Jun 2019	May 2019	Apr 2019	Mar 2019	Feb 2019	Jan 2019
★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★	★★	★★
Merck & Co	Inc MRK 16 Oc	et 2024 21:34, U	TC								
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
★★★★	★★★★	★★★	★★★★	★★★	★★★	★★★★	★★★	★★★	★★★	★★★	★★★★
Dec 2019	Nov 2019	0ct 2019	Sep 2019	Aug 2019	Jul 2019	Jun 2019	May 2019	Apr 2019	Mar 2019	Feb 2019	Jan 2019
★★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★	★★



GSK PLC GSK 17 Oct 2024 01:36, UTC

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	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
****	****	****	****	****	****	***	***	***	****	***	***
Dec 2019	Nov 2019	Oct 2019	Sep 2019	Aug 2019	Jul 2019	Jun 2019	May 2019	Apr 2019	Mar 2019	Feb 2019	Jan 2019
***	***	***	***	***	***	****	****	****	****	****	****



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 re-

turns 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-

Morningstar Equity Research Star Rating Methodology





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					

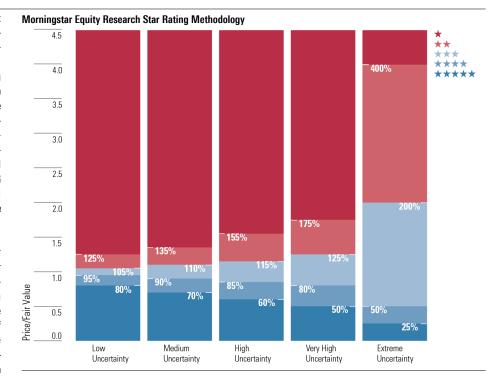
Our uncertainty rating is based on the interquartile range, or the middle 50% of potential outcomes, covering the 25th percentile–75th percentile. This means that when a stock hits 5 stars, we expect there is a 75% chance that the intrinsic value of that stock lies above the current market price. Similarly,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



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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Risk Warning

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