GlaxoSmithKline PLC GSK (NYSE) | ★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
43.67 USD	48.00 USD	33.60 USD	64.80 USD	Medium	Wide	Stable	Standard	A+	Drug Manufacturers

Growing Advair competition is creating a flat growth outlook for Glaxo.

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

Research as of 16 Oct 2014
Estimates as of 16 Oct 2014
Pricing data through 17 Oct 2014
Rating updated as of 17 Oct 2014

Currency amounts expressed with "$" are in U.S. dollars (USD) unless otherwise denoted.

Contents

Investment Thesis 21 Aug 2014

As one of the largest pharmaceutical companies, GlaxoSmithKline has used its vast resources to create the next generation of medicines. The company's innovative new product lineup and expansive list of patent-protected drugs create a wide economic moat, in our opinion.

The magnitude of the company's reach is evidenced by a product portfolio that spans several therapeutic classes, as well as vaccines and consumer goods. The diverse platform insulates the company from problems with any single product. Additionally, the highest revenue generator, Advair, represents close to 20% of total revenue. However, the complexity in approving a generic version of an inhaled drug like Advair will likely hold off significant generic competition well past the drug's 2010 patent expiration, especially in the U.S., where approvals for generic inhaled drugs are particularly difficult. Further, the company's advancement of its next generation respiratory drugs should help the company's maintain its entrenchment in both asthma and chronic obstructive pulmonary disease.

On the pipeline front, Glaxo has shifted from its historical strategies of targeting slight enhancements toward true innovation. The benefits of this strategies are showing up in Glaxo's strong pipeline of respiratory drugs. We expect this focus will improve both approval rates and pricing power.

From a geographic standpoint, Glaxo is strategically branching out from the developed markets into emerging markets. Glaxo's consumer and vaccine segments well positions the firm in these price sensitive markets. While this strategy will likely create some challenges like the potential legal violations that arose in early 2013 in China, we believe the fast-growing emerging markets will help support long-term growth and diversify cash flows beyond developed markets.

Turning to the bottom line, Glaxo continues to implement cost savings initiatives. Since 2012, the company has identified over GBP 3 billion in potential annual cost savings, which should be achieved by 2016. The improved productivity should help mitigate

Vital Statistics

Market Cap (USD Mil)	104,895
52-Week High (USD)	56.73
52-Week Low (USD)	41.91
52-Week Total Return %	-9.4
YTD Total Return %	-14.4
Last Fiscal Year End	31 Dec 2013
5-Yr Forward Revenue CAGR %	-0.9
5-Yr Forward EPS CAGR %	-2.9
Price/Fair Value	0.91

Valuation Summary and Forecasts

Fiscal Year:	2012	2013	2014(E)	2015(E)
Price/Earnings	42.6	14.8	*15.1*	*14.9*
EV/EBITDA	17.0	20.6	*16.0*	*15.9*
EV/EBIT	21.1	25.5	*20.0*	*19.8*
Free Cash Flow Yield %	3.1	4.7	*4.0*	*4.6*
Dividend Yield %	3.6	2.8	*3.5*	*3.3*

Financial Summary and Forecasts (USD Mil)

Fiscal Year:	2012	2013	2014(E)	2015(E)
Revenue	26,431	26,505	*22,961*	*24,328*
Revenue YoY %	-3.5	0.3	*-13.4*	*6.0*
EBIT	6,136	5,904	*6,400*	*6,484*
EBIT YoY %	-30.3	-3.8	*8.4*	*1.3*
Net Income, Adjusted	1,561	5,421	*4,328*	*4,100*
Net Income YoY %	-73.1	247.3	*-20.2*	*-5.3*
Diluted EPS	1.02	3.60	*2.89*	*2.94*
Diluted EPS YoY %	-72.5	253.1	*-19.7*	*1.7*
Free Cash Flow	1,004	8,384	*6,469*	*9,466*
Free Cash Flow YoY %	-79.6	735.5	*-22.8*	*46.3*

Historical/forecast data sources are Morningstar Estimates and may reflect adjustments.

Profile

In the pharmaceutical industry, GlaxoSmithKline ranks as one of the largest companies by market capitalization. The company wields its might across multiple therapeutic classes, including cardiovascular, respiratory, and antiviral, as well as vaccines and consumer products.

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Morningstar Analysis

Valuation, Growth and Profitability 16 Oct 2014

We are reducing our fair value estimate to $48 from $51 per share largely due to the change in currency rates with the dollar strengthening. As a reminder, the fair value estimate for this share class is derived using a model in the firm's reporting currency, and applying the applicable exchange rate for the share. Any differences between the fair value estimate shown in the valuation section and the fair value displayed elsewhere in this report is a function of a more recent exchange rate.

On a more fundamental note, pricing pressure and increased competition in the respiratory area led us to reduce our forecasts for Advair recently. The reduced sales outlook has an amplified impact on earnings given Advair's high margins. Following the completion of the restructuring with Novartis (2015), we forecast average annual sales growth of 2% during the next decade, with new products offsetting patent losses. Further, growth in emerging markets should mitigate the patent losses in developed markets, as brand names are more important in emerging markets and give products a much longer life cycle. Also, steady growth from vaccines and consumer health-care products should reduce the volatility from patent losses in the prescription drug business. We expect steady operating margins over that period as cost-cutting efforts help to offset expansion into lower-margin geographies and lost sales from the high-margin drug Advair. For the discount rate, we estimate Glaxo's weighted average cost of capital at 8%, in line with the company's peer group.

Scenario Analysis

Largely based on the low to medium volatility of cash flows from a diverse and inelastic product portfolio, we rate Glaxo's uncertainty as medium. Our scenario analysis assumes a base-case fair value estimate of $48, a bull case of $59 (25% probability), while our bear case (25% probability) projects a $37 fair value estimate. Relative to our base case, the scenario analysis shows moderate variances, hence our medium uncertainty rating. The key factors affecting the scenario analysis include the degree of competition to the company's leading drug Advair and success of the Glaxo's next-generation respiratory drugs Breo and Anoro. Our bull case assumes minor gains for Advair over the next decade and doubles our projections for Breo and Anoro, while our bear case assumes a quick erosion of Advair sales to both branded and generic competition and failed Breo and Anoro drug launches.

Economic Moat

Glaxo holds a wide economic moat on the basis of patents, a powerful distribution network, economies of scale, and diverse operations. Similar to its peer group, Glaxo's branded drugs hold patent protection that keeps competitors at bay for several years, while the company can charge prices that enable returns on invested capital above its cost. The delay in competition also enables the company to develop the next generation of patent-protected drugs to evergreen its pricing strategy. Not only does Glaxo's powerful distribution network attract small biotech companies that need help marketing drugs, but also very large firms such as Amgen and Roche have partnered with Glaxo for its marketing heft. Glaxo's strong cash flows enable the firm to support the $800 million on average needed to bring a drug to the market. Finally, Glaxo's operations in vaccines and consumer health care products augment its strong competitive advantages in branded drugs, with cost advantages in vaccines and branding power in consumer drugs providing the key moat sources in these smaller business lines.

Moat Trend

GlaxoSmithKline has largely passed its patent cliff and the company's pipeline has improved, which has helped stabilize its moat trend. Further, the complexity in creating generic respiratory drugs, such as its top-selling drug Advair (20% of sales), should continue to limit generic competition. Excluding Advair, Glaxo carries a very diverse portfolio of

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Price/Fair Value Morningstar data as of Oct 17, 2014

drugs without any other drug representing an outsized contribution to sales, which should stabilize returns going forward. Additionally, Glaxo derives more than 25% of sales from emerging markets that tend to be more sensitive to brand recognition, which usually lasts much longer than the defined patent periods on branded drugs in developed markets. In addition, the company's steady consumer and vaccines unit should further help mitigate negative industry headwinds in the drug market, including growing power from managed-care companies (as the size and power of this sector have grown over the past decade) and governments pressing for comparative effectiveness programs and more price negotiations.

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Bulls Say/Bears Say

Bulls Say

- Glaxo's next-generation respiratory drugs should help mitigate both branded and generic competition to the company's top drug, Advair.
- Outside of the potential generic competition to Advair, the company faces only minor near-term patent losses.
- Due to the complexity in creating generic respiratory drugs, a typical severe patent cliff will not likely occur for the company's top drug Advair.

Bears Say

- Even though device patents may hold off generic Advair competition until 2016, these patents are weaker than composition-of-matter patents, which opens the door to generics in the near term, especially in Europe, where regulators seems more willing to approve generic inhaled drugs.
- Pricing pressure from payers is hurting Glaxo's respiratory franchise as competition is increasing from products offering similar benefits as Glaxo's key drugs.
- Glaxo's key vaccines Cervarix and Synflorix lost the first-mover advantage to Merck and Pfizer, respectively.

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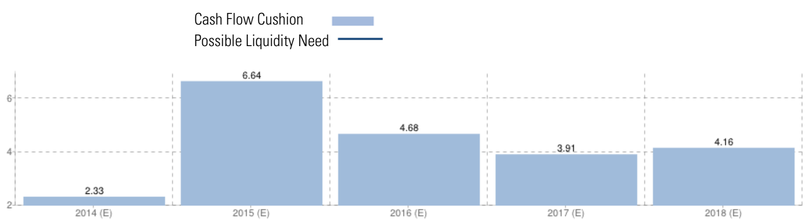
Credit Analysis

Five Year Adjusted Cash Flow Forecast (USD Mil)

	2014(E)	2015(E)	2016(E)	2017(E)	2018(E)
Cash and Equivalents (beginning of period)	5,600	7,457	7,840	8,576	8,838
Adjusted Available Cash Flow	2,768	6,704	1,870	1,911	1,998
Total Cash Available before Debt Service	8,368	14,161	9,711	10,488	10,836
Principal Payments	-2,747	-1,345	-1,345	-1,952	-1,952
Interest Payments	-706	-645	-589	-583	-507
Other Cash Obligations and Commitments	-134	-142	-143	-145	-148
Total Cash Obligations and Commitments	-3,587	-2,131	-2,077	-2,680	-2,606

Cumulative Annual Cash Flow Cushion



Adjusted Cash Flow Summary

	USD Millions	% of Commitments
Beginning Cash Balance	5,600	42.8
Sum of 5-Year Adjusted Free Cash Flow	15,252	116.6
Sum of Cash and 5-Year Cash Generation	20,852	159.4
Revolver Availability	—	—
Asset Adjusted Borrowings (Repayment)	—	—
Sum of Cash, 5-Year Cash Generation, Revolver and Adjustments	20,852	159.4
Sum of 5-Year Cash Commitments	-13,080	—

Credit Rating Pillars–Peer Group Comparison

	GSK	Sector	Universe
Business Risk	2	4.8	5.1
Cash Flow Cushion	6	5.4	6.0
Solvency Score	4	4.3	4.7
Distance to Default	3	3.7	3.8
Credit Rating	A+	BBB+	BBB+

Source: Morningstar Estimates

Note: Scoring is on a scale 1-10, 1 being Best, 10 being Worst

Financial Health & Capital Structure

While operating with a flexible financial position, GlaxoSmithKline's debt leverage remains above most of its large pharmaceutical peers, contributing to its A+ rating. Most of its peers are rated AA- or higher because of their lower debt leverage. By our estimates, those higher-rated pharmaceutical firms operate with gross debt/EBITDA about a turn lower on average than Glaxo and most enjoy net cash positions. Glaxo's gross debt/EBITDA and net debt/EBITDA stood at 2.3 and 1.9 times, respectively, at the end of June. Its EBITDA covered its interest costs by about 11 times on a trailing 12-month basis. We do not believe the firm intends to change its capital structure substantially in the near future, either to improve or weaken it, although contracting profits may continue to weigh on Glaxo's credit profile. The company appears focused on tuck-in, rather than transformative, acquisitions, and we believe Glaxo will use excess cash flow to return cash to shareholders rather than deleverage significantly. During the past 12 months, the firm has paid out more than 75% of free cash flow (GBP 4.8 billion) through its dividend (GBP 3.8 billion). Glaxo management appears committed to growing that dividend, going forward, so most of Glaxo's ongoing free cash flow appears earmarked for shareholder-friendly activities. Also, in 2015, management intends to use cash proceeds from recently announced Novartis transactions to fund GBP 4 billion of share repurchases. In early 2014, Novartis announced a sale of its vaccines business (excluding flu) to Glaxo for up to $7.1 billion in an upfront payment ($5.25 billion) and potential milestones ($1.8 billion). In consumer health, Glaxo has also created a joint venture with Novartis whereby Novartis owns 36.5% of that new venture and has a put option that begins in 2017 and expires in 2034. Novartis also plans to purchase GlaxoSmithKline's oncology products for up to $16 billion in an upfront payment of $14.5 billion and potential milestones of $1.5 billion. Glaxo expects to receive $7.8 billion in aftertax proceeds as a result of these deals with Novartis, which will help fund share repurchases

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Credit Analysis

in 2015. We do not believe Glaxo's credit profile has changed materially based on these deals.

Enterprise Risk

Like all pharmaceutical companies, Glaxo faces risks of drug delays or nonapprovals from regulatory agencies, an increasingly aggressive generic industry, and competition in the pharmaceutical industry. However, specific to Glaxo, generic competition could come at any time for the company's leading drug Advair, which could be detrimental to the company as the drug represents over 20% of the top line and a higher portion of the bottom line because of the drug's high margins.

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Management & Ownership

Management Activity

Name	Position	Shares Held	Report Date*	InsiderActivity
DR. MONCEF M SLAOUI PHD	Chairman, Research & Development,Director	1,939,597	23 Jun 2014	—
SIR ANDREW WITTY	Chief Executive Officer,Director	792,404	11 Jun 2014	—
MR. SIMON DINGEMANS	Chief Financial Officer,Director	163,310	11 Jun 2014	—
SIR CHRISTOPHER CHARLES GENT	Chairman,Director	113,291	02 Apr 2014	—
SIR DERYCK MAUGHAN	Director	74,580	02 Apr 2014	—
DR. DANIEL PODOLSKY	Director	53,390	02 Apr 2014	—
STEPHANIE BURNS	Director	29,478	02 Apr 2014	—
MS. JUDY C. LEWENT	Director	26,134	02 May 2014	—

*Represents the date on which the owner's name, position, and common shares held were reported by the holder or issuer.

Fund Ownership

Top Owners	% of Shares Held	% of Fund Assets	Change (k)	Portfolio Date
Dodge & Cox Stock Fund	0.68	1.28	-8,106	30 Sep 2014
Dodge & Cox International Stock Fund	0.47	0.80	-8,586	30 Sep 2014
AllianzGI NFJ Dividend Value Fund	0.17	2.16	—	31 Aug 2014
T. Rowe Price International Grth & Inc	0.14	1.75	—	30 Jun 2014
Vanguard PrimeCap Fund	0.14	0.40	-1,569	30 Jun 2014
Concentrated Holders				
Danske Invest Engros Aktier	0.01	6.38	12	31 Aug 2014
Delaware Healthcare Fund	0.02	5.87	—	31 Aug 2014
Market Vectors® Pharmaceutical ETF	0.02	4.90	—	16 Oct 2014
Kinetics Medical Fund	—	4.69	—	30 Jun 2014
Ariel International Equity Fund	—	4.59	—	30 Sep 2014

Institutional Transactions

Top 5 Buyers	% of Shares Held	% of Fund Assets	Shares Bought/ Sold (k)	Portfolio Date
NFJ Investment Group LLC	0.25	1.23	5,986	30 Jun 2014
Hotchkis & Wiley Capital Management LLC	0.21	0.94	4,912	30 Jun 2014
Managed Account Advisors LLC	0.18	0.28	2,061	30 Jun 2014
Renaissance Technologies Corp	0.37	1.11	1,860	30 Jun 2014
Allianz Global Investors	0.05	0.27	1,252	30 Jun 2014
Top 5 Sellers				
PRIMECAP Management Company	0.21	0.30	-4,021	30 Jun 2014
Arrowstreet Capital Limited Partnership	0.17	1.09	-2,750	30 Jun 2014
Invesco Advisers, Inc	0.14	0.12	-954	30 Jun 2014
Davenport & Company LLC	—	0.05	-829	30 Sep 2014
Wells Fargo Bank NA	0.21	0.48	-497	30 Jun 2014

Management 02 May 2014

Glaxo selected the president of its European pharmaceutical business, Andrew Witty, to succeed Jean-Pierre Garnier as CEO in May 2008. Witty's leadership in increasing sales in a cost-conscious European environment should be an asset in the U.S., where cost-containment pressures are rising. Further, Witty's experience overseeing operations in Asia signals the firm's interests in expanding its presence in developing countries. Witty has shaken up senior management, bringing in top talent from competing firms and the Food and Drug Administration. Chairman Christopher Gent brings an independent voice to the board, but not much pharmaceutical experience.

We rate Glaxo's stewardship as standard. Over the past few years and under the current CEO, the company has not made many significant external investments, excluding the recent $2.6 billion acquisition of Human Genome Sciences, which appears to be a fair value for the firm. Also, many of the legal claims that the company has settled over the past years have cost the firms billions of dollars, but the related activities stem from management that is no longer at the firm and current management have instilled much better operating practices. Nevertheless, the legal fees have hurt Glaxo's resources to effectively reinvest in the company. On the other hand, even with lower resources, the company's internal pipeline has been growing, suggesting an efficient research and development operation. Lastly, we believe the 2014 restructuring of divisions with Novartis should bode well for Glaxo.

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Analyst Notes

Glaxo Posts Weak 2Q as Pricing Pressures Continue to Weigh on Top Drug Advair 23 Jul 2014

GlaxoSmithKline reported challenging second-quarter results that fell below both our expectations and those of consensus, largely because of continued weakness with top drug Advair. Based on the poor performance, we expect to slightly lower our fair value estimate. However, we don't expect any changes to Glaxo's wide moat rating. Further, the structural changes previously announced (adding Novartis' vaccine and consumer units while selling oncology assets) should better position Glaxo in therapeutic areas where the company holds strong critical mass. Nevertheless, the quarter's weakness in the respiratory unit is concerning and likely led to the company's lowered full-year 2014 guidance (flat earnings growth down from 4-8% growth).

Leading the overall sales contribution at 28% of total sales, the respiratory group's fall of 8% year over year was the primary factor in the company's total sales fall of 4% on the top line and 12% on the bottom line. We believe Advair's high margins caused the amplified decline on the bottom line. Aggressive formulary management largely in the U.S. has pushed Glaxo's respiratory drugs off key insurance platforms, leading to the poor respiratory performance. We expect this trend to continue for the remainder of the year. However, a key outcomes study called SUMMIT should report within a year, and a positive mortality benefit with Glaxo's next-generation respiratory drug Breo would help offset the weakness to Advair. Further, Glaxo's other next-generation drug Anoro has shown statistically significant improvements relative to blockbuster Spiriva, creating another avenue to offset declining Advair sales.

Outside of the respiratory unit, the remaining results in the quarter were largely in line with our expectations. However, marketing expenses were ahead of our expectations and we believe the increased costs are largely supporting the next-generation respiratory drugs.

GlaxoSmithKline Vice President of Investor Relations Tom Curry is scheduled to participate at Morningstar's ninth annual Management Behind the Moat Conference on Sept. 18 in Chicago. Clients interested in a one-on-one meeting with Curry are asked to contact buysidesales@morningstar.com.

Glaxo Posts Weak 1Q as Core Respiratory Franchise Slips on Competitive Pressures 30 Apr 2014

Glaxo reported first-quarter results that fell short of our expectations largely due to weak sales of respiratory drugs. We expect to slightly lower our fair value estimate based on the results due to the importance of the respiratory franchise to Glaxo. However, with strong entrenchment in vaccines and consumer products, we remain confident in the company's wide moat even though traction is slipping in the core respiratory unit.

In the quarter, a 15% decline in the company's top drug Advair (for respiratory disease) weighed on total sales, which fell 2% operationally versus the prior-year period. While some of Advair's decline stemmed from inventory destocking, we believe competitors are gaining market share with slightly more efficacious products and a willingness to cut price to gain coverage by payers. While we expect this negative stocking trend will wane, the pricing environment should remain competitive, and we expect increased generic Advair competition (largely in Europe) in 2015. However, Glaxo is launching a best-in-class group of new respiratory drugs in 2014, which should mitigate some of the expected market share losses.

On the consumer business, supply problems caused flat total sales versus the prior-year period. We expect growth will return by late 2014, following the resolution of supply issues. Also, the recently announced joint venture with Novartis' consumer group should increase the growth

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Analyst Notes

profile of the unit with increased scale and leverage.

Turning to vaccines, despite volatile growth from different geographies, total sales increased 3% year over year. While tendering and inventory changes were negative impacts, we expect steady growth over the long term. Further, the recent Novartis vaccine portfolio purchase (particularly a meningitis vaccine) should increase Glaxo's competitive positioning with payers, which provide incentives to firms with more complete portfolios of vaccines.

The Glaxo and Novartis Deal Strengthens Both Companies, but Novartis' Payment Appears High 22 Apr 2014

Glaxo and Novartis announced a series of partnerships and product swaps with the primary goal for each company to gain scale in key therapeutic areas. Based on our preliminary assessment of the deal, we don't expect significant changes in our fair value estimates or moat ratings for either company. Overall, the transactions strengthen Glaxo's position in vaccines, Novartis' platform in oncology, and both firms' consumer health entrenchment. While the firms lose some diversification of cash flows, we believe both companies gain more back in cost savings and pricing power in the therapeutic areas improved by the deal.

Glaxo's already strong vaccine position grows more so with key assets from Novartis. The addition of the meningococcal vaccine should enable Glaxo to defend against Sanofi's aggressive bundling in the pediatric space. Further, late-stage vaccines should give Glaxo unparalleled breadth against both Sanofi and Merck, making Glaxo a partner of choice for payers. Further the $5.25 billion paid (plus milestones of up to $1.8 billion and royalties) appears to be a good value.

Regarding Novartis, the expansion in oncology with Glaxo's drugs further entrenches Novartis as a leader in cancer. Strategically, oncology is one of the best places for drug companies to target due to strong pricing power and relatively low hurdles for product approvals in this area of unmet medical needs. However, the purchase price of $16 billion seems high based on relatively light current cancer drug sales (just over 1 billion pounds) and modest pipeline rights.

On the last point of the deal, the joint venture of consumer divisions (63.5% GSK and 36.5% NVS) of both companies appears to be a major win-win. While there is some overlap in the wellness space, we expect regulators will not raise any major antitrust issues. The combined entity should be able to drive cost synergies and open the door to expanded market penetration with a more diverse product offering.

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Morningstar Analyst Forecasts

Financial Summary and Forecasts

Fiscal Year Ends in December

Growth (% YoY)	3-Year Hist. CAGR	2011	2012	2013	Forecast 2014	Forecast 2015	5-Year Proj. CAGR
Revenue	-2.3	-3.5	-3.5	0.3	-13.4	6.0	-0.9
EBIT	-14.7	-7.3	-30.3	-3.8	8.4	1.3	2.6
EBITDA	-14.2	-9.4	-27.7	-3.5	9.1	0.9	2.2
Net Income	-5.3	-8.9	-73.1	247.3	-20.2	-5.3	-4.3
Diluted EPS	-3.7	-7.9	-72.5	253.1	-19.7	1.7	-2.9
Earnings Before Interest, after Tax	37.9	130.2	8.4	5.1	-30.9	-0.2	-6.7
Free Cash Flow	16.5	-7.4	-79.6	735.5	-22.8	46.3	-10.9

Profitability	3-Year Hist. Avg	2011	2012	2013	2014	2015	5-Year Proj. Avg
Operating Margin %	25.9	32.1	23.2	22.3	27.9	26.7	26.8
EBITDA Margin %	31.5	38.3	28.7	27.6	34.8	33.1	33.1
Net Margin %	15.9	21.2	5.9	20.5	18.9	16.9	17.4
Free Cash Flow Margin %	17.8	17.9	3.8	31.6	28.2	38.9	24.7
ROIC %	24.8	22.6	25.2	26.7	18.9	23.9	23.1
Adjusted ROIC %	16.0	17.1	14.9	16.0	12.9	13.0	13.7
Return on Assets %	12.2	12.7	11.1	13.0	8.3	9.2	9.7
Return on Equity %	71.0	62.2	66.0	84.9	50.8	92.1	169.4

Leverage	3-Year Hist. Avg	2011	2012	2013	2014	2015	5-Year Proj. Avg
Debt/Capital	0.71	0.65	0.76	0.72	0.74	0.94	0.88
Total Debt/EBITDA	2.11	1.42	2.41	2.49	2.28	2.26	2.23
EBITDA/Interest Expense	11.25	14.82	9.38	9.54	11.32	12.50	13.48

Valuation Summary and Forecasts

	2012	2013	2014(E)	2015(E)
Price/Fair Value	0.89	0.95	—	—
Price/Earnings	42.6	14.8	15.1	14.9
EV/EBITDA	17.0	20.6	16.0	15.9
EV/EBIT	21.1	25.5	20.0	19.8
Free Cash Flow Yield %	3.1	4.7	4.0	4.6
Dividend Yield %	3.6	2.8	3.5	3.3

Key Valuation Drivers

Cost of Equity %	8.0
Pre-Tax Cost of Debt %	3.4
Weighted Average Cost of Capital %	7.7
Long-Run Tax Rate %	21.8
Stage II EBI Growth Rate %	4.5
Stage II Investment Rate %	11.3
Perpetuity Year	20

Additional estimates and scenarios available for download at http://select.morningstar.com.

Discounted Cash Flow Valuation

	USD Mil	Firm Value (%)	Per Share Value
Present Value Stage I	38,957	45.5	8.11
Present Value Stage II	20,054	23.4	4.17
Present Value Stage III	26,530	31.0	5.52
Total Firm Value	**85,541**	**100.0**	**17.80**
Cash and Equivalents	5,600	—	1.17
Debt	-18,245	—	-3.80
Preferred Stock	—	—	—
Other Adjustments	-1,958	—	-0.41
Equity Value	**70,938**	**—**	**14.76**
Projected Diluted Shares	4,805		
Fair Value per Share (USD)	—		

The data in the table above represent base-case forecasts in the company's reporting currency as of the beginning of the current year. Our fair value estimate may differ from the equity value per share shown above due to our time value of money adjustment and in cases where probability-weighted scenario analysis is performed.

GlaxoSmithKline PLC GSK (NYSE) | ★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
43.67 USD	48.00 USD	33.60 USD	64.80 USD	Medium	Wide	Stable	Standard	A+	Drug Manufacturers

Morningstar Analyst Forecasts

Income Statement (USD Mil)

Fiscal Year Ends in December	2011	2012	2013	*Forecast 2014*	*2015*
Revenue	**27,387**	**26,431**	**26,505**	***22,961***	***24,328***
Cost of Goods Sold	7,259	7,894	8,585	*6,563*	*7,444*
Gross Profit	**20,128**	**18,537**	**17,920**	***16,399***	***16,884***
Selling, General & Administrative Expenses	7,956	8,739	8,480	*7,184*	*7,493*
Research & Development	3,678	3,968	3,923	*3,117*	*3,211*
Other Operating Expense (Income)	-309	-306	-387	*-302*	*-305*
Depreciation & Amortization (if reported separately)	—	—	—	—	—
Operating Income (ex charges)	**8,803**	**6,136**	**5,904**	***6,400***	***6,484***
Restructuring & Other Cash Charges	549	-1,256	-1,124	*550*	*250*
Impairment Charges (if reported separately)	—	—	—	*589*	*542*
Other Non-Cash (Income)/Charges	—	—	—	—	—
Operating Income (incl charges)	**8,254**	**7,392**	**7,028**	***5,261***	***5,692***
Interest Expense	707	808	767	*706*	*645*
Interest Income	15	108	386	*95*	*93*
Pre-Tax Income	**7,562**	**6,692**	**6,647**	***4,650***	***5,141***
Income Tax Expense	2,104	1,948	1,019	*1,023*	*1,126*
Other After-Tax Cash Gains (Losses)	—	—	—	—	—
Other After-Tax Non-Cash Gains (Losses)	—	—	—	—	—
(Minority Interest)	-197	-179	-192	*-245*	*-534*
(Preferred Dividends)	—	—	—	—	—
Net Income	**5,261**	**4,565**	**5,436**	***3,383***	***3,481***
Weighted Average Diluted Shares Outstanding	5,028	4,912	4,831	*4,805*	*4,475*
Diluted Earnings Per Share	**1.05**	**0.93**	**1.13**	***0.70***	***0.78***
Adjusted Net Income	5,810	1,561	5,421	*4,328*	*4,100*
Diluted Earnings Per Share (Adjusted)	**1.16**	**0.32**	**1.12**	***0.90***	***0.92***
Dividends Per Common Share	2.17	2.49	2.45	*2.45*	*2.45*
EBITDA	**9,931**	**8,837**	**8,442**	***6,848***	***7,267***
Adjusted EBITDA	**10,480**	**7,581**	**7,318**	***7,987***	***8,059***

GlaxoSmithKline PLC GSK (NYSE) | ★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
43.67 USD	48.00 USD	33.60 USD	64.80 USD	Medium	Wide	Stable	Standard	A+	Drug Manufacturers

Morningstar Analyst Forecasts

Balance Sheet (USD Mil)

Fiscal Year Ends in December

	2011	2012	2013	*Forecast* 2014	*Forecast* 2015
Cash and Equivalents	6,633	4,265	5,600	*7,457*	*7,840*
Investments	—	—	—	—	—
Accounts Receivable	5,576	5,242	5,442	*4,529*	*4,799*
Inventory	3,873	3,969	3,900	*3,416*	*3,875*
Deferred Tax Assets (Current)	—	—	—	—	—
Other Short Term Assets	85	216	285	*285*	*285*
Current Assets	**16,167**	**13,692**	**15,227**	***15,688***	***16,799***
Net Property Plant, and Equipment	8,748	8,776	8,872	*8,872*	*8,404*
Goodwill	3,754	4,359	4,205	*3,230*	*1,358*
Other Intangibles	7,802	10,161	9,283	*7,640*	*4,698*
Deferred Tax Assets (Long-Term)	2,849	2,385	2,084	*2,084*	*2,084*
Other Long-Term Operating Assets	1,150	54	1	*1*	*1*
Long-Term Non-Operating Assets	610	2,048	2,414	*2,414*	*2,414*
Total Assets	**41,080**	**41,475**	**42,086**	***39,928***	***35,759***
Accounts Payable	7,359	8,054	8,317	*6,832*	*7,750*
Short-Term Debt	2,698	3,631	2,789	*2,789*	*2,789*
Deferred Tax Liabilities (Current)	—	—	—	—	—
Other Short-Term Liabilities	4,953	2,130	2,571	*2,571*	*2,571*
Current Liabilities	**15,010**	**13,815**	**13,677**	***12,192***	***13,110***
Long-Term Debt	12,203	14,671	15,456	*15,456*	*15,456*
Deferred Tax Liabilities (Long-Term)	822	1,004	693	*693*	*693*
Other Long-Term Operating Liabilities	626	2,133	2,259	*2,259*	*2,259*
Long-Term Non-Operating Liabilities	3,592	3,105	2,189	*2,189*	*2,189*
Total Liabilities	**32,253**	**34,728**	**34,274**	***32,789***	***33,707***
Preferred Stock	—	—	—	—	—
Common Stock	1,387	1,349	1,336	*1,336*	*1,336*
Additional Paid-in Capital	1,673	2,022	2,595	*2,595*	*2,595*
Retained Earnings (Deficit)	3,370	652	913	*636*	*709*
(Treasury Stock)	—	—	—	*-396*	*-5,556*
Other Equity	1,602	1,787	2,153	*2,153*	*2,153*
Shareholder's Equity	**8,032**	**5,810**	**6,997**	***6,324***	***1,236***
Minority Interest	795	937	815	*815*	*815*
Total Equity	**8,827**	**6,747**	**7,812**	***7,139***	***2,051***

GlaxoSmithKline PLC GSK (NYSE) | ★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
43.67 USD	48.00 USD	33.60 USD	64.80 USD	Medium	Wide	Stable	Standard	A+	Drug Manufacturers

Morningstar Analyst Forecasts

Cash Flow (USD Mil)

Fiscal Year Ends in December	2011	2012	2013	*Forecast 2014*	*Forecast 2015*
Net Income	6,344	4,744	5,628	*3,627*	*4,015*
Depreciation	1,677	871	732	*918*	*973*
Amortization	—	574	682	*668*	*602*
Stock-Based Compensation	—	—	—	—	—
Impairment of Goodwill	—	—	—	—	—
Impairment of Other Intangibles	—	—	—	—	—
Deferred Taxes	—	—	—	—	—
Other Non-Cash Adjustments	—	615	124	—	—
(Increase) Decrease in Accounts Receivable	—	183	16	*913*	*-270*
(Increase) Decrease in Inventory	—	37	-95	*484*	*-459*
Change in Other Short-Term Assets	477	-27	-218	—	—
Increase (Decrease) in Accounts Payable	—	309	518	*-1,485*	*918*
Change in Other Short-Term Liabilities	-2,248	-2,931	-165	—	—
Cash From Operations	**6,250**	**4,375**	**7,222**	***5,126***	***5,779***
(Capital Expenditures)	-923	-1,051	-1,188	*-918*	*-973*
Net (Acquisitions), Asset Sales, and Disposals	-76	-2,235	1,604	*1,950*	*4,680*
Net Sales (Purchases) of Investments	735	1,152	-405	—	—
Other Investing Cash Flows	152	-497	513	—	—
Cash From Investing	**-112**	**-2,631**	**524**	***1,032***	***3,707***
Common Stock Issuance (or Repurchase)	-1,932	-2,137	-919	*-396*	*-5,160*
Common Stock (Dividends)	-3,406	-3,814	-3,680	*-3,660*	*-3,409*
Short-Term Debt Issuance (or Retirement)	37	-816	-1,872	—	—
Long-Term Debt Issuance (or Retirement)	—	4,430	1,913	—	—
Other Financing Cash Flows	-931	-1,014	-1,715	*-245*	*-534*
Cash From Financing	**-6,232**	**-3,351**	**-6,273**	***-4,300***	***-9,103***
Exchange Rates, Discontinued Ops, etc. (net)	-108	-92	-148	—	—
Net Change in Cash	**-202**	**-1,699**	**1,325**	***1,857***	***383***

GlaxoSmithKline PLC GSK (NYSE) | ★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
43.67 USD	48.00 USD	33.60 USD	64.80 USD	Medium	Wide	Stable	Standard	A+	Drug Manufacturers

Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Valuation Analysis

		Price/Earnings			EV/EBITDA			Price/Free Cash Flow			Price/Book			Price/Sales		
Company/Ticker	Price/Fair Value	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)
Pfizer Inc PFE USA	0.93	13.8	12.8	13.2	8.8	8.1	8.4	11.8	13.0	13.9	2.6	2.7	2.6	3.8	3.5	3.6
Merck & Co Inc MRK USA	0.86	14.3	15.6	15.7	10.2	9.8	10.5	14.5	7.8	15.4	2.9	2.7	2.8	3.3	3.6	3.8
AstraZeneca PLC AZN USA	1.17	11.8	16.1	16.7	9.0	10.9	11.2	11.2	18.8	18.1	3.2	3.8	4.0	2.9	3.4	3.5
Average		13.3	14.8	15.2	9.3	9.6	10.0	12.5	13.2	15.8	2.9	3.1	3.1	3.3	3.5	3.6
GlaxoSmithKline PLC GSK US	**0.91**	**14.8**	**15.1**	**14.9**	**20.6**	**16.0**	**15.9**	**21.5**	**24.9**	**21.8**	**18.5**	**16.6**	**84.8**	**4.9**	**4.6**	**4.3**

Returns Analysis

		ROIC %			Adjusted ROIC %			Return on Equity %			Return on Assets %			Dividend Yield %		
Company/Ticker	Last Historical Year Total Assets (Mil)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)
Pfizer Inc PFE USA	172,101 USD	17.4	14.8	14.4	22.3	17.2	17.6	27.9	12.7	14.3	12.3	5.4	6.0	3.4	3.2	3.2
Merck & Co Inc MRK USA	105,645 USD	16.1	28.3	15.4	22.6	35.5	18.1	8.6	26.7	10.6	4.2	13.3	5.7	3.5	3.3	3.2
AstraZeneca PLC AZN USA	55,899 USD	6.8	12.1	13.0	6.1	9.1	9.4	10.5	11.0	12.4	4.5	4.6	5.0	4.6	4.1	4.1
Average		13.4	18.4	14.3	17.0	20.6	15.0	15.7	16.8	12.4	7.0	7.8	5.6	3.8	3.5	3.5
GlaxoSmithKline PLC GSK US	**42,086** USD	**26.7**	**18.9**	**23.9**	**16.0**	**12.9**	**13.0**	**84.9**	**50.8**	**92.1**	**13.0**	**8.3**	**9.2**	**2.8**	**3.5**	**3.3**

Growth Analysis

		Revenue Growth %			EBIT Growth %			EPS Growth %			Free Cash Flow Growth %			Dividend/Share Growth %		
Company/Ticker	Last Historical Year Revenue (Mil)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)	2013	2014(E)	2015(E)
Pfizer Inc PFE USA	51,584 USD	-12.6	-3.2	-1.7	-9.0	5.7	0.3	-4.4	-1.9	-2.9	-12.0	-8.0	-5.4	—	11.1	—
Merck & Co Inc MRK USA	44,033 USD	-6.8	-1.9	-4.2	-23.3	32.6	-7.2	322.2	-0.4	-0.7	-341.2	94.6	-67.4	3.5	—	—
AstraZeneca PLC AZN USA	25,711 USD	-8.1	-1.2	-2.3	-54.4	50.0	-2.0	-26.3	-16.5	-3.8	109.4	-88.9	695.9	-4.7	—	—
Average		-9.2	-2.1	-2.7	-28.9	29.4	-3.0	97.2	-6.3	-2.5	-81.3	-0.8	207.7	-0.6	11.1	—
GlaxoSmithKline PLC GSK US	**26,505** USD	**0.3**	**-13.4**	**6.0**	**-3.8**	**8.4**	**1.3**	**253.1**	**-19.7**	**1.7**	**735.5**	**-22.8**	**46.3**	**-1.9**	**—**	**—**

GlaxoSmithKline PLC GSK (NYSE) | ★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
43.67 USD	48.00 USD	33.60 USD	64.80 USD	Medium	Wide	Stable	Standard	A+	Drug Manufacturers

Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Profitability Analysis

Company/Ticker	Last Historical Year Net Income (Mil)	Gross Margin % 2013	2014(E)	2015(E)	EBITDA Margin % 2013	2014(E)	2015(E)	Operating Margin % 2013	2014(E)	2015(E)	Net Margin % 2013	2014(E)	2015(E)	Free Cash Flow Margin % 2013	2014(E)	2015(E)
Pfizer Inc PFE USA	15,288 USD	81.4	*81.0*	*80.2*	44.2	*44.6*	*43.7*	31.7	*34.6*	*35.3*	29.6	*28.0*	*27.3*	32.1	*27.1*	*25.9*
Merck & Co Inc MRK USA	10,444 USD	61.5	*73.6*	*74.6*	34.2	*39.2*	*38.1*	18.3	*24.8*	*24.0*	23.7	*23.7*	*24.3*	23.0	*46.4*	*24.5*
AstraZeneca PLC AZN USA	6,319 USD	78.4	*78.9*	*77.6*	32.3	*32.5*	*32.5*	14.4	*21.9*	*22.0*	24.6	*20.9*	*20.5*	25.9	*18.0*	*19.1*
Average		73.8	*77.8*	*77.5*	36.9	*38.8*	*38.1*	21.5	*27.1*	*27.1*	26.0	*24.2*	*24.0*	27.0	*30.5*	*23.2*
GlaxoSmithKline PLC GSK US	**5,421** USD	**67.6**	***71.4***	***69.4***	**27.6**	***34.8***	***33.1***	**22.3**	***27.9***	***26.7***	**20.5**	***18.9***	***16.9***	**22.8**	***18.3***	***19.8***

Leverage Analysis

Company/Ticker	Last Historical Year Total Debt (Mil)	Debt/Equity % 2013	2014(E)	2015(E)	Debt/Total Cap % 2013	2014(E)	2015(E)	EBITDA/Interest Exp. 2013	2014(E)	2015(E)	Total Debt/EBITDA 2013	2014(E)	2015(E)	Assets/Equity 2013	2014(E)	2015(E)
Pfizer Inc PFE USA	36,489 USD	47.8	*52.7*	*49.4*	32.4	*34.5*	*33.1*	16.1	*13.1*	*12.6*	1.6	*1.5*	*1.5*	2.3	*2.4*	*2.4*
Merck & Co Inc MRK USA	25,060 USD	50.4	*36.2*	*33.2*	33.5	*26.6*	*24.9*	18.8	*20.1*	*20.1*	1.7	*1.2*	*1.2*	2.1	*1.9*	*1.9*
AstraZeneca PLC AZN USA	10,376 USD	44.7	*45.8*	*48.0*	30.9	*31.4*	*32.4*	16.8	*15.9*	*15.5*	1.3	*1.3*	*1.3*	2.4	*2.4*	*2.5*
Average		47.6	*44.9*	*43.5*	32.3	*30.8*	*30.1*	17.2	*16.4*	*16.1*	1.5	*1.3*	*1.3*	2.3	*2.2*	*2.3*
GlaxoSmithKline PLC GSK US	**18,245** USD	**260.8**	***288.5***	***1,475.8***	**72.3**	***74.3***	***93.7***	**9.5**	***11.3***	***12.5***	**2.5**	***2.3***	***2.3***	**6.0**	***6.3***	***28.9***

Liquidity Analysis

Company/Ticker	Market Cap (Mil)	Cash per Share 2013	2014(E)	2015(E)	Current Ratio 2013	2014(E)	2015(E)	Quick Ratio 2013	2014(E)	2015(E)	Cash/Short-Term Debt 2013	2014(E)	2015(E)	Payout Ratio % 2013	2014(E)	2015(E)
Pfizer Inc PFE USA	176,466 USD	4.70	*3.67*	*4.12*	2.41	*2.18*	*2.30*	2.14	*1.94*	*2.04*	5.38	*5.24*	*5.81*	24.8	*63.0*	*59.2*
Merck & Co Inc MRK USA	155,828 USD	5.84	*8.63*	*7.69*	2.00	*2.83*	*2.51*	1.65	*2.53*	*2.24*	3.87	*12.40*	*9.49*	117.1	*35.7*	*83.9*
AstraZeneca PLC AZN USA	85,627 USD	7.36	*5.10*	*5.68*	1.27	*1.10*	*1.11*	1.15	*0.98*	*0.99*	5.15	*3.60*	*3.98*	140.1	*138.0*	*125.9*
Average		5.97	*5.80*	*5.83*	1.89	*2.04*	*1.97*	1.65	*1.82*	*1.76*	4.80	*7.08*	*6.43*	94.0	*78.9*	*89.7*
GlaxoSmithKline PLC GSK US	**104,895** USD	**1.16**	***1.55***	***1.75***	**1.11**	***1.29***	***1.28***	**0.83**	***1.01***	***0.99***	**2.01**	***2.67***	***2.81***	**67.7**	***108.2***	***97.9***

Research Methodology for Valuing Companies

Components of Our Methodology

- Economic Moat™ Rating
- Moat Trend™ Rating
- Moat Valuation
- Three-Stage Discounted Cash Flow
- Weighted Average Cost of Capital
- Fair Value Estimate
- Scenario Analysis
- Uncertainty Ratings
- Margin of Safety
- Consider Buying/Selling
- Stewardship Rating

The Morningstar Rating for stocks identifies companies trading at a discount or premium to our analysts' assessment of their fair value. A number of components drive this rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's intrinsic value based on a discounted cash-flow model, (3) the margin of safety bands we apply to our Fair Value Estimate, and (4) the current stock price relative to our fair value estimate.

The concept of the Morningstar Economic Moat™ Rating plays a vital role not only in our qualitative assessment of a firm's investment potential, but also in our valuation process. We assign three moat ratings—none, narrow, or wide—as well as the Morningstar Moat Trend™ Rating—positive, stable, or negative—to each company we cover. There are two major requirements for firms to earn either a narrow or wide moat rating: (1) the prospect of earning above-average returns on capital; and (2) some competitive edge that prevents these returns from quickly eroding. The assumptions we make about a firm's moat determine the length of "economic outperformance" that we assume in the latter stages of our valuation model. We also quantify the value of each firm's moat, which represents the difference between a firm's enterprise value and the value of the firm if no future net investment were to occur. Said differently, moat value identifies the value generated by the firm as a result of any future net new investment. Our Moat Trend Rating reflects our assessment of whether each firm's competitive advantage is either getting stronger or weaker, since we think of moats as dynamic, rather than static.

At the heart of our valuation system is a detailed projection of a company's future cash flows. The first stage of our three-stage discounted cash flow model can last from 5 to 10 years and contains numerous detailed assumptions about various financial and operating items. The second stage of our model—where a firm's return on new invested capital (RONIC) and earnings growth rate implicitly fade until the perpetuity year—can last anywhere from 0 years (for no-moat firms) to 20 years (for wide-moat companies). In our third stage, we assume the firm's RONIC equals its weighted average cost of capital, and we calculate a continuing value using a standard

Morningstar Research Methodology for Valuing Companies

Fundamental Analysis	Economic Moat™ Rating	Company Valuation	Fair Value Estimate	Uncertainty Assessment	★★★★★ ★★★★ ★★★ ★★ ★
Analyst conducts company and industry research: ► Financial statement analysis ► Channel checks ► Trade-show visits ► Industry and company reports and journals ► Conference calls ► Management and site visits	Strength of competitive advantage is rated: None, Narrow, or Wide Advantages that confer an economic moat: **High Switching Costs** (Microsoft) **Cost advantage** (Wal-Mart) **Intangible assets** (Johnson & Johnson) **Network Effect** (Mastercard) **Efficient Scale** (Lockheed Martin)	Analyst considers past financial results and focuses on competitive position and future prospects to forecast future cash flows. Assumptions are entered into Morningstar's proprietary discounted cash-flow model.	Analyst uses a discounted cash-flow model to develop a Fair Value Estimate, which serves as the foundation for the Morningstar Rating for stocks.	The analyst then evaluates the range of potential intrinsic values for the company and assigns an Uncertainty Rating: Low, Medium, High, Very High, or Extreme. The Uncertainty Rating determines the margin of safety required before we would recommend the stock. The higher the uncertainty, the wider the margin of safety.	The current stock price relative to Morningstar's Fair Value Estimate, adjusted for uncertainty, determines the Morningstar Rating for stocks. The Morningstar Rating for stocks is updated each evening after the market closes.

Research Methodology for Valuing Companies

Detailed Methodology Documents and Materials*
- Comprehensive Equity Research Methodology
- Uncertainty Methodology
- Cost of Equity Methodology
- Morningstar DCF Valuation Model
- Stewardship Rating Methodology

* Please contact a sales representative for more information.

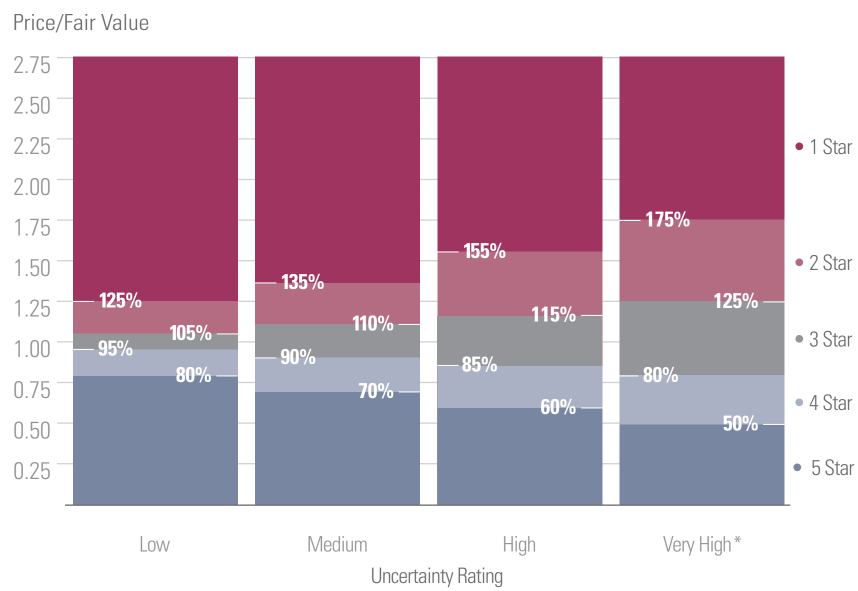
perpetuity formula. In deciding on the rate at which to discount future cash flows, we ignore stock-price volatility. Instead, we rely on a system that measures the estimated volatility of a firm's underlying future free cash flows, taking into account fundamental factors such as the diversity of revenue sources and the firm's fixed cost structure.

We also employ a number of other tools to augment our valuation process, including scenario analysis, where we assess the likelihood and performance of a business under different economic and firm-specific conditions. Our analysts typically model three to five scenarios for each company we cover, stress-testing the model and examining the distribution of resulting fair values.

The Morningstar Uncertainty Rating captures the range of these potential fair values, based on an assessment of a company's future sales range, the firm's operating and financial leverage, and any other contingent events that may impact the business. Our analysts use this range to assign an appropriate margin of safety—or the discount/premium to a fair value we apply in setting our consider buying/consider selling prices. Firms trading below our consider-buying prices receive our highest rating of five stars, whereas firms trading above our consider-selling prices receive our lowest rating of one star.

Our corporate Stewardship Rating represents our assessment of management's stewardship of shareholder capital, with particular emphasis on capital allocation decisions. Analysts consider companies' investment strategy and valuation, financial leverage, dividend and share buyback policies, execution, compensation, related party transactions, and accounting practices. Corporate governance practices are only considered if they've had a demonstrated impact on shareholder value. Analysts assign one of three ratings: "Exemplary," "Standard," and "Poor." Analysts judge stewardship from an equity holder's perspective. Ratings are determined on an absolute basis. Most companies will receive a Standard rating, and this is the default rating in the absence of evidence that managers have made exceptionally strong or poor capital allocation decisions.

Morningstar Margin of Safety and Star Rating Bands



* Occasionally a stock's uncertainty will be too high for us to estimate, in which case we label it Extreme.

Morningstar's Approach to Rating Corporate Credit

- Offers a proprietary measure of the credit quality of companies on our coverage list.
- Encapsulates our in-depth modeling and quantitative work in one letter grade.
- Allows investors to rank companies by each of the four underlying components of our credit ratings, including both analyst-driven and quantitative measures.
- Provides access to all the underlying forecasts that go into the rating, available through our institutional service.

Purpose

The Morningstar Corporate Credit Rating measures the ability of a firm to satisfy its debt and debt-like obligations. The higher the rating, the less likely we think the company is to default on these obligations.

The Morningstar Corporate Credit Rating builds on the modeling expertise of our securities research team. For each company, we publish:

- Five years of detailed pro-forma financial statements
- Annual estimates of free cash flow
- Annual forecasts of return on invested capital
- Scenario analyses, including upside and downside cases
- Forecasts of leverage, coverage, and liquidity ratios for five years
- Estimates of off balance sheet liabilities

These forecasts are key inputs into the Morningstar Corporate Credit Rating and are available to subscribers at select.morningstar.com.

Methodology

We feel it's important to perform credit analysis through different lenses—qualitative and quantitative, as well as fundamental and market-driven. We therefore evaluate each company in four broad categories.

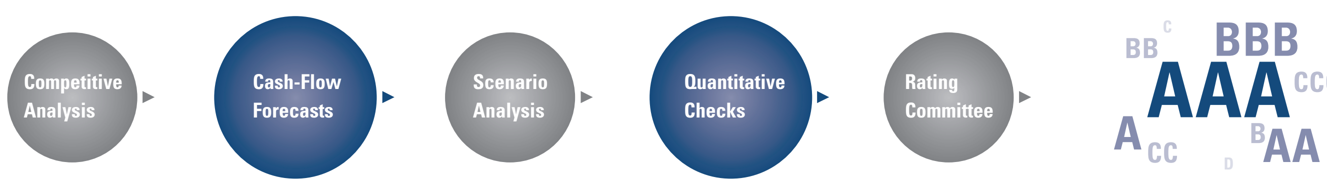
Business Risk

Business Risk captures the fundamental uncertainty around a firm's business operations and the cash flow generated by those operations. Key components of the Business Risk rating include the Morningstar Economic Moat™ Rating and the Morningstar Uncertainty Rating.

Cash Flow Cushion™

Morningstar's proprietary Cash Flow Cushion™ ratio is a fundamental indicator of a firm's future financial health The measure reveals how many times a company's internal cash generation plus total excess liquid cash will cover its debt-like contractual commitments over the next five years. The Cash Flow Cushion acts as a predictor of financial distress, bringing to light potential refinancing, operational, and liquidity risks inherent to the firm.

Morningstar Research Methodology for Determining Corporate Credit Ratings



Competitive Analysis

Analyst conducts company and industry research:

- Management interviews
- Conference calls
- Trade show visits
- Competitor, supplier, distributor, and customer interviews
- Assign Economic Moat™ Rating

Cash-Flow Forecasts

Analyst considers company financial statements and competitive dynamics to forecast future free cash flows to the firm.

Analyst derives estimate of Cash-Flow Cushion™.

Scenario Analysis

Analysts run bull and bear cases through the model to derive alternate estimates of enterprise value.

Based on competitive analysis, cash-flow forecasts, and scenario analysis, the analyst assigns Business Risk.

Quantitative Checks

We gauge a firm's health using quantitative tools supported by our own backtesting and academic research.

- Morningstar Solvency Score™
- Distance to Default

Rating Committee

Senior personnel review each company to determine the appropriate final credit rating.

- Review modeling assumptions
- Approve company-specific adjustments

AAA	Extremely Low Default Risk
AA	Very Low Default Risk
A	Low Default Risk
BBB	Moderate Default Risk
BB	Above Average Default Risk
B	High Default Risk
CCC	Currently Very High Default Risk
CC	Currently Extreme Default Risk
C	Imminent Payment Default
D	Payment Default
UR	Under Review
UR+	Positive Credit Implication
UR-	Negative Credit Implication

Morningstar's Approach to Rating Corporate Credit

The advantage of the Cash Flow Cushion ratio relative to other fundamental indicators of credit health is that the measure focuses on the future cash-generating performance of the firm derived from Morningstar's proprietary discounted cash flow model. By making standardized adjustments for certain expenses to reflect their debt-like characteristics, we can compare future projected free cash flows with debt-like cash commitments coming due in any particular year. The forward-looking nature of this metric allows us to anticipate changes in a firm's financial health and pinpoint periods where cash shortfalls are likely to occur.

Morningstar Solvency Score™

The Morningstar Solvency Score™ is a quantitative score derived from both historical and forecasted financial ratios. It includes ratios that focus on liquidity (a company's ability to meet short term cash outflows), profitability (a company's ability to generate profit per unit of input), capital structure (how does the company finance its operations), and interest coverage (how much of profit is used up by interest payments).

Distance to Default

Morningstar's quantitative Distance to Default measure ranks companies on the likelihood that they will tumble into financial distress. The measure is a linear model of the percentile of a firm's leverage (ratio of Enterprise Value to Market Value), the percentile of a firm's equity volatility relative to the rest of the universe and the interaction of these two percentiles. This is a proxy methodology for the common definition of Distance to Default which relies on option-based pricing models. The proxy has the benefit of increased breadth of coverage, greater simplicity of calculation, and more predictive power.

For each of these four categories, we assign a score, which we then translate into a descriptive rating along the scale of Very Good / Good / Fair / Poor / Very Poor.

Overall Credit Rating

The four component ratings roll up into a single preliminary credit rating. To determine the final credit rating, a credit committee of at least five senior research personnel reviews each preliminary rating.

We review credit ratings on a regular basis and as events warrant. Any change in rating must be approved by the Credit Rating Committee.

Investor Access

Morningstar Corporate Credit Ratings are available on Morningstar.com. Our credit research, including detailed cash-flow models that contain all of the components of the Morningstar Corporate Credit Rating, is available to subscribers at select.morningstar.com.

GlaxoSmithKline PLC GSK (NYSE) | ★★★★

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
43.67 USD	48.00 USD	33.60 USD	64.80 USD	Medium	Wide	Stable	Standard	A+	Drug Manufacturers

The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic value. Five-star stocks sell for the biggest risk-adjusted discount whereas one-star stocks trade at premiums to their intrinsic value. Based on a fundamentally focused methodology and a robust, standardized set of procedures and core valuation tools used by Morningstar's Equity Analysts, four key components drive the Morningstar Rating: 1. Assessment of the firm's economic moat, 2. Estimate of the stock's fair value, 3. Uncertainty around that fair value estimate and 4. Current market price. Further information on Morningstar's methodology is available from http://global.morningstar.com/equitydisclosures.

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