

# U.S. Large Cap Pick List

## June 2023

This pick list highlights constituents of the Morningstar US Large Cap Index that we believe offer investors the best risk-adjusted return prospects. Because the list is intended to be a source of idea generation rather than a model portfolio, the number of picks we make in each sector reflects our coverage count in that sector rather than our view as to whether the sector offers relatively greater or fewer buying opportunities. The number of picks in each sector is recalibrated annually to reflect substantial changes in our coverage and our respective benchmark.

The Morningstar US Large Cap Index increased 1.4% in May, closing the month at 17,289.3. From a bottom-up perspective, the market appears fully valued. The average stock in the Morningstar US Markets Large Cap Index traded at a 6% discount to our fair value estimate as of May 31, up from a 3% discount at the end of April.

On a relative basis, the technology sector was the most

expensive, with the median technology stock trading equal to our fair value estimate. The typical communication services stock offered the greatest discount, priced at a 23% discount to our fair value estimate.

As of May 31, the median constituent of the U.S. Large Cap Pick List traded at a 22% discount to our fair value estimate. The typical communication services picks were the cheapest priced at a 37% discount to our fair value estimate. We made 13 additions to the list this month from communication services, consumer, financial services, healthcare, industrials, real estate, technology, and utilities. On the financial services list, AT&T is priced at a 37% discount to our fair value estimate, making it the cheapest of this month's additions.

**Daniel Rohr, CFA**

Head of Global Equity Research

**Jeffrey Stafford, CFA**

Director of Equity Research, North America

### U.S. Large Cap Picks

Company	Ticker	Industry	Exchange/ Currency	Market Cap (Mil)	Morningstar Rating	Economic Moat	Uncertainty Rating	Fair Value Estimate	Price	Price/Fair Value
<b>Basic Materials</b>										
Corteva	CTVA	Agricultural Inputs	XNYS\USD	38025	★★★★	Wide	Medium	70.00	53.49	0.76
Ecolab	ECL	Specialty Chemicals	XNYS\USD	46993	★★★★	Wide	Medium	210.00	165.05	0.79
<b>Communication Services</b>										
Verizon Communications	VZ	Telecom Services	XNYS\USD	149788	★★★★★	Narrow	Low	57.00	35.63	0.63
★ AT&T	T	Telecom Services	XNYS\USD	112454	★★★★★	Narrow	Medium	25.00	15.73	0.63
<b>Consumer Cyclical</b>										
General Motors	GM	Auto Manufacturers	XNYS\USD	45054	★★★★★	None	High	78.00	32.41	0.42
↓ Ford Motor	F	Auto Manufacturers	XNYS\USD	48009	★★★★	None	High	19.00	12.00	0.63
Nike	NKE	Footwear & Accessories	XNYS\USD	161783	★★★★	Wide	High	138.00	105.26	0.76
↑ Booking Holdings	BKNG	Travel Services	XNAS\USD	92658	★★★★	Narrow	High	3130.00	2508.78	0.80
Amazon.com	AMZN	Internet Retail	XNAS\USD	1237193	★★★	Wide	High	137.00	120.58	0.88
★ Hilton Worldwide Holdings	HLT	Lodging	XNYS\USD	36021	★★★★	Narrow	Medium	152.00	136.12	0.90
Marriott International	MAR	Lodging	XNAS\USD	50903	★★★	Narrow	Medium	184.00	167.80	0.91
<b>Consumer Defensive</b>										
↑ Kraft Heinz	KHC	Packaged Foods	XNAS\USD	46905	★★★★	None	Medium	53.00	38.22	0.72
↓ Estee Lauder Companies	EL	Household & Personal Products	XNYS\USD	65775	★★★★	Wide	Medium	253.00	184.03	0.73
↓ Target	TGT	Discount Stores	XNYS\USD	60432	★★★★	None	Medium	165.00	130.93	0.79
Altria Group	MO	Tobacco	XNYS\USD	79291	★★★★	Wide	Medium	52.00	44.42	0.85
★ Philip Morris International	PM	Tobacco	XNYS\USD	139713	★★★	Wide	Medium	103.00	90.01	0.87
Constellation Brands	STZ	Beverages - Wineries & Distilleries	XNYS\USD	44520	★★★★	Wide	Medium	274.00	242.97	0.89

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<b>Energy</b>										
SLB	SLB	Oil & Gas Equipment & Services	XNYS\USD	61047	★★★★	Narrow	High	56.00	42.83	0.76
↓ Phillips 66	PSX	Oil & Gas Refining & Marketing	XNYS\USD	42036	★★★	Narrow	High	109.00	91.61	0.84
Cheniere Energy	LNG	Oil & Gas Midstream	XASE\USD	33958	★★★★	Wide	Medium	161.00	139.77	0.87
Williams Companies	WMB	Oil & Gas Midstream	XNYS\USD	34913	★★★	Narrow	Medium	32.00	28.66	0.90
<b>Financial Services</b>										
PayPal Holdings	PYPL	Credit Services	XNAS\USD	69208	★★★★★	Narrow	High	135.00	62.03	0.46
↓ U.S. Bancorp	USB	Banks - Regional	XNYS\USD	45834	★★★★★	Wide	Medium	53.00	29.90	0.56
↓ Truist Financial	TFC	Banks - Regional	XNYS\USD	40584	★★★★★	Narrow	High	54.00	30.47	0.56
↓ Citigroup	C	Banks - Diversified	XNYS\USD	86280	★★★★★	None	Medium	73.00	44.32	0.61
PNC Financial Services Group	PNC	Banks - Regional	XNYS\USD	46229	★★★★★	Narrow	Medium	175.00	115.83	0.66
Wells Fargo	WFC	Banks - Diversified	XNYS\USD	149376	★★★★★	Wide	Medium	58.00	39.81	0.69
Bank of America	BAC	Banks - Diversified	XNYS\USD	221463	★★★★	Wide	Medium	37.00	27.79	0.75
* Prudential Financial	PRU	Insurance - Life	XNYS\USD	28722	★★★★	None	Medium	105.00	78.69	0.75
* MetLife	MET	Insurance - Life	XNYS\USD	37946	★★★★	None	Medium	63.00	49.55	0.79
<b>Healthcare</b>										
CVS Health	CVS	Healthcare Plans	XNYS\USD	87216	★★★★★	Narrow	Medium	113.00	68.03	0.60
↑ Cigna Group	CI	Healthcare Plans	XNYS\USD	73202	★★★★	Narrow	Medium	344.00	247.41	0.72
Centene	CNC	Healthcare Plans	XNYS\USD	34249	★★★★	Narrow	Medium	87.00	62.41	0.72
IQVIA Holdings	IQV	Diagnostics & Research	XNYS\USD	36536	★★★★	Narrow	Medium	268.00	196.91	0.73
Medtronic PLC	MDT	Medical Devices	XNYS\USD	110138	★★★★	Wide	Medium	112.00	82.76	0.74
* Agilent Technologies	A	Diagnostics & Research	XNYS\USD	34166	★★★★	Wide	Medium	151.00	115.67	0.77
Pfizer	PFE	Drug Manufacturers - General	XNYS\USD	214635	★★★★	Wide	Medium	48.00	38.02	0.79
* Becton and Dickinson	BDX	Medical Instruments & Supplies	XNYS\USD	68663	★★★★	Narrow	Medium	306.00	241.76	0.79
<b>Industrials</b>										
3M	MMM	Conglomerates	XNYS\USD	51477	★★★★	Wide	High	127.00	93.31	0.73
Emerson Electric	EMR	Specialty Industrial Machinery	XNYS\USD	44394	★★★★	Wide	Medium	103.00	77.68	0.75
↑ Johnson Controls International PLC	JCI	Building Products & Equipment	XNYS\USD	40960	★★★★	Narrow	Medium	72.00	59.70	0.83
Honeywell International	HON	Conglomerates	XNAS\USD	127544	★★★★	Wide	Medium	225.00	191.60	0.85
General Dynamics	GD	Aerospace & Defense	XNYS\USD	56014	★★★★	Wide	Medium	240.00	204.18	0.85
↓ Norfolk Southern	NSC	Railroads	XNYS\USD	47390	★★★★	Wide	Medium	239.00	208.18	0.87
* Raytheon Technologies	RTX	Aerospace & Defense	XNYS\USD	134630	★★★★	Wide	Medium	106.00	92.14	0.87
Paychex	PAYX	Staffing & Employment Services	XNAS\USD	37861	★★★	Wide	High	120.00	105.02	0.88
<b>Real Estate</b>										
Crown Castle	CCI	REIT - Specialty	XNYS\USD	49096	★★★★	Narrow	Medium	140.00	113.21	0.81
* American Tower	AMT	REIT - Specialty	XNYS\USD	85957	★★★★	Narrow	Medium	225.00	184.44	0.82

Data as of May 31, 2023. | ↑ = Upgrade, ↓ = Downgrade, \* = Addition

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Company	Ticker	Industry	Exchange/ Currency	Market Cap (Mil)	Morningstar Rating	Economic Moat	Uncertainty Rating	Fair Value Estimate	Price	Price/Fair Value
<b>Technology</b>										
Uber Technologies	UBER	Software - Application	XNYSUSD	76764	★★★★	Narrow	Very High	68.00	37.93	0.56
Fidelity National Information Services	FIS	Information Technology Services	XNYSUSD	32329	★★★★★	Narrow	Medium	83.00	54.57	0.66
↓ Snowflake	SNOW	Software - Application	XNYSUSD	53893	★★★★	None	Very High	231.00	165.36	0.72
NXP Semiconductors NV	NXPI	Semiconductors	XNASUSD	46520	★★★★	Narrow	Medium	225.00	179.10	0.80
* Qualcomm	QCOM	Semiconductors	XNASUSD	126339	★★★★	Narrow	High	140.00	113.41	0.81
↑ Autodesk	ADSK	Software - Application	XNASUSD	42700	★★★★	Wide	Medium	240.00	199.39	0.83
* Fiserv	FISV	Information Technology Services	XNASUSD	69281	★★★★	Narrow	Medium	135.00	112.23	0.83
* Intuit	INTU	Software - Application	XNASUSD	117379	★★★★	Wide	Medium	503.00	419.12	0.83
Cisco Systems	CSCO	Communication Equipment	XNASUSD	202408	★★★★	Wide	Medium	56.00	49.67	0.89
<b>Utilities</b>										
Duke Energy	DUK	Utilities - Regulated Electric	XNYSUSD	68811	★★★★	Narrow	Low	105.00	89.29	0.85
* Dominion Energy	D	Utilities - Regulated Electric	XNYSUSD	42031	★★★★	Narrow	Medium	59.00	50.28	0.85
American Electric Power	AEP	Utilities - Regulated Electric	XNASUSD	42784	★★★★	Narrow	Low	97.00	83.11	0.86

Data as of May 31, 2023. | ↑ = Upgrade, ↓ = Downgrade, \* = Addition

## New Picks Commentary

### Communication Services

#### AT&T | Michael Hodel

##### Bulls Say

- Following a period of investment, AT&T will hold a nationwide 5G wireless network with deep spectrum behind it and a fiber network capable of reaching nearly one fourth of the U.S.
- AT&T has the scale to remain a strong wireless competitor over the long term. With three dominant carriers, industry pricing should be more rational going forward.
- Combining wireless and fixed-line networks with new technologies and deep expertise makes AT&T a force in enterprise services.

##### Bears Say

- The cost of maintaining dominance in the wireless industry by controlling spectrum has been exceptionally high over the years. AT&T has spent \$40 billion over the past three years for licenses with few prospects for incremental revenue.
- Advancing technology will eventually swamp AT&T's wireless business, enabling a host of firms to enter the market, further commoditizing this service.
- AT&T's massive debt load will catch up with it. Even after spinning off Warner with a huge amount of debt, AT&T carries far higher leverage than it has historically and its dividend payout remains high.

### Consumer

#### Hilton Worldwide Holdings | Dan Wasiolek

##### Bulls Say

- Hilton's current mid-single-digit share of hotel industry rooms is set to increase, as the company controls about 15%-20% of the rooms under construction in the global hotel industry pipeline.
- Hilton is well-positioned to benefit from the increasing presence of next-generation travelers through emerging lifestyle brands Spark, Home2, Curio, Canopy, Tru, Tapestry Collection, Motto, and Tempo.
- Hilton has a strong loyalty program, with 158 million members as of March 31, which constitutes 62% of total room nights.

##### Bears Say

- Recent brand launches from competing hotel operators and home and vacation rental platforms present an increasing competitive threat, and the advancement of technology and its use by next-generation travelers increase the access and awareness of these properties.
- Hilton's U.S. hotels represent the majority of total EBITDA, exposing the company to an economic downturn in the U.S. to a greater extent than competitors.
- The extent and duration of inflation presents a material risk to near-term demand for Hilton.

#### Philip Morris International | Philip Gorham

##### Bulls Say

- With 23% global market share (excluding the U.S. and China), this is the largest publicly traded tobacco company by volume. Scale, customer loyalty to Marlboro, and addictive products give it meaningful pricing power.
- Successful commercialization of IQOS in the U.S. is not being priced into the stock and would represent an entirely incremental volume for PMI, which generates no other sales in the U.S.
- Cigarette loyalty tends to be strongest in the highest-price segments, and with its positioning skewed to premium brands, PMI is well-positioned to benefit.

##### Bears Say

- Fat tail risks still exist for the tobacco companies, in the form of litigation and draconian regulatory controls.
- With most of its net sales derived in foreign currencies and about one fourth of its input costs in dollars, a strengthening of the U.S. dollar can have a material negative impact on earnings growth.
- A great deal is still undetermined about the tax and regulatory environment of cigarette alternatives, which could play a significant role in the future profitability of the business.

## Financial Services

### Prudential Financial | Suryansh Sharma

#### Bulls Say

- The company will be a net beneficiary of rising interest rates in the long run as it can reinvest its maturing fixed income securities at a higher yield.
- Prudential has clearly laid out plans to reduce exposure to riskier products like variable annuities with minimum guarantees and has increased investments in segments with steadier cash flows like the investment management business.
- The regulatory uncertainty surrounding the nonbank SIFI designation and the fiduciary rule appears to be resolved in the company's favor.

### MetLife | Suryansh Sharma

#### Bulls Say

- MetLife's leading market positions in various international markets (particularly Asia and Latin America) provide opportunities for growth.
- MetLife's strategy has reduced exposure to riskier products like variable annuities with minimum guarantees and has increased investments in segments with steadier cash flows like the group benefits business.
- The company will be a net beneficiary of rising interest rates in the long run as it can reinvest its maturing fixed income securities at a higher yield.

#### Bears Say

- Prudential offers a wide range of complex insurance products that exposes it to underwriting, investment, capital market, and interest-rate risks thereby making it difficult to predict the company's overall risk exposure, especially during periods of economic turbulence.
- The market for life insurance and income-based retirement products is competitive and commoditized, and it is difficult for companies to find value-accretive growth.
- The company acquired AssuranceIQ at a rich valuation and we believe that the revenue and accretion targets may not be achieved.

#### Bears Say

- Unlike its peers, MetLife has a smaller asset-management business, which typically generates strong returns and higher operating margins.
- MetLife offers a wide range of complex insurance products that exposes it to underwriting, investment, capital market, and interest-rate risks, making it difficult to predict the company's overall risk exposure, especially during periods of economic turbulence.
- The market for life insurance and income-based retirement products is competitive and commoditized, and it is difficult for companies to find value-accretive growth.

## Healthcare

### Agilent Technologies | Julie Utterback

#### Bulls Say

- Agilent's innovation engine and cost control efforts have been on display through strong growth and margin expansion since spinning out its electronic measurement business Keysight in November 2014.
- As a well-established leader in many of its core markets, regulatory concerns and customer familiarity with Agilent's instrumentation and services can make market share gains for competitors difficult.
- Agilent continues to increase its exposure to the sticky biopharmaceutical end market, including recent acquisitions in the emerging cell analysis field.

#### Bears Say

- Due to its dependence on one-time sales and its exposure to some cyclical end markets, Agilent's financial results may weaken during uncertain times.
- Chinese government initiatives, particularly in the food market, constrained growth in that key country in fiscal 2019, and regulatory initiatives like that may affect demand for Agilent's tools in that country, which represents about 20% of sales, in the near and long term.
- Agilent's increasing appetite for acquisitions adds some uncertainty around the magnitude of its economic profitability in the long run.

**Becton and Dickinson | Alex Morozov****Bulls Say**

- BD's surgery business delivered strong performance since the pandemic waned.
- BD reinvested its testing windfall into research and development in key areas, which will likely lead to elevated growth (relative to its historic levels) going forward.
- The Embecta spinoff is a positive development for BD in terms of its growth opportunities.

**Bears Say**

- While BD passed on some price hikes, it isn't able to offset inflationary pressures entirely.
- Currency will be a massive headwind in the upcoming year.
- The Alaris recall could be a meaningful setback for the BD's market-leading pump franchise.

**Industrials****Raytheon Technologies | Nicolas Owens****Bulls Say**

- Pratt & Whitney's placement on the A320 family and A220 aircraft should substantially increase the company's installed base of engines in coming years, unlocking decades of high-margin servicing revenue.
- The missile and missile defense segment makes products that are prioritized by the National Defense Strategy, which should lead to consistent growth.
- Raytheon Technologies is well-balanced between commercial aerospace and defense, which would partially insulate the firm from a downturn in either segment.

**Bears Say**

- One of the driving factors behind the breakup of United Technologies was to create more focused businesses. While the combined Raytheon Technologies is more focused on aerospace and defense, it is still large and difficult to manage.
- Boeing and Airbus have taken increasing interest in compressing the margins of their component suppliers, such as Collins Aerospace.
- It could take years for airlines to recover from the economic carnage caused by COVID-19, and the virus could lead to changed consumer behavior that would be unfavorable for the airline industry.

**Real Estate****American Tower | Matthew Dolgin****Bulls Say**

- Carrier investment in towers will have to continue as mobile data usage continues to grow rapidly. Greater use of the "Internet of Things," 5G, and video content should keep this trend in place for years to come.
- Wireless network development in many of American Tower's international markets is a decade behind the U.S. and will require massive tower investment by carriers as they transition to 4G and then 5G.
- With its acquisition of CoreSite, American Tower is the best-positioned full-service infrastructure provider for multi-access edge computing.

**Bears Say**

- Technological advances and the move to 5G will allow carriers to use fewer towers. Coupled with the rolling off of Sprint contracts and further carrier consolidation internationally, sales growth could slow relative to historical results.
- Emerging Latin American, Indian, and African markets will not gain sufficient prosperity to support growth in data usage and network development on par with the recent trajectory.
- In acquiring CoreSite, American Tower overpaid for a business that will offer few synergies and required American Tower to increase its financial risk.

## Technology

### Fiserv | Brett Horn

#### Bulls Say

- The bank technology business is very stable, characterized by high amounts of recurring revenue and long-term contracts.
- The ongoing shift toward electronic payments has created and will continue to create room for acquirers to see solid growth without stealing share from each other.
- First Data's growth had accelerated before the merger as it worked past its financial issues, and the business now has access to greater resources under Fiserv's roof.

#### Bears Say

- Since it was built through acquisitions, Fiserv has to maintain multiple core processing platforms, which could limit margins and hamper the quality of its offerings.
- Fiserv's bank technology operations are tied to a mature industry and almost entirely domestic, which limits its growth prospects.
- First Data underperformed peers over the past decade, and a focus on cost reduction could perpetuate that underperformance.

### Intuit | Julie Bhusal Sharma

#### Bulls Say

- Intuit's tax revenue should climb at a healthy rate as the company's solutions intersect with the assisted tax-filing base.
- QuickBooks should continue to see revenue growth from Intuit's growing ecosystem capabilities.
- Operating expenses should decrease as a percentage of revenue as the company realizes synergies between links among once disparate offerings and benefits from scale.

#### Bears Say

- Some countries outside of the U.S. automatically generate citizens' tax files. If the U.S. adopted a similar program, Intuit's TurboTax business could face material headwinds.
- Intuit could receive pressure from the IRS to include once premium features in its free tax-filing software, weakening premium software sales.
- Intuit's switching costs could erode as software providers also catering to small businesses enter the accounting space--offering compelling reasons for QuickBooks customers to change vendors.

### Qualcomm | Brian Colello

#### Bulls Say

- Qualcomm collects royalty income on the majority of 3G, 4G, and 5G handsets sold, as it holds virtually all essential patents used in these networks.
- Barring legal or regulatory challenges, Qualcomm should continue to generate an extremely lucrative stream of royalty revenue on virtually every smartphone sold in the years ahead.
- Qualcomm is the clear market leader in wireless chips, with a leading market share position in 5G chipsets and relationships with every prominent smartphone maker. It has leveraged this expertise into the automotive and Internet of Things end markets.

#### Bears Say

- Qualcomm's chip business faces a host of challenges, from potential share loss at Samsung and Apple, to some of its customers developing mobile processor IP and design expertise in-house.
- Qualcomm's licensing business has faced regulatory scrutiny in the U.S., Taiwan, China, South Korea, and other regions. The biggest threat facing Qualcomm is a negative ruling that states its royalties should not be based on the full price of the phone.
- Qualcomm needs to diversify beyond smartphones, which may be challenging as a host of competitors are attempting a similar strategy.

## Utilities

### Dominion Energy | Andrew Bischof

#### Bulls Say

- Dominion Energy operates in high-growth Virginia, which should provide large investment opportunities.
- Growth capital investments focused on renewable energy and carbon reduction could top \$70 billion over the next 15 years.
- Public support for renewable energy and Virginia legislation under a previous governor have resulted in clean energy investment opportunities.

#### Bears Say

- Political and regulatory pressure has increased in Virginia, Dominion's most important service territory.
- Management's decision to initiate a strategic review without providing a desired outcome or direction has increased uncertainty.
- We expect lower earnings in 2023 and 2024 due to likely asset divestitures and a reset in regulated earnings. Dominion's low near-term earnings and dividend growth throughout our forecast leaves it with one of the lowest total return profiles in the industry.



## Pick List Deletions

Company	Ticker	Industry	Exchange/ Currency	Market Cap (Mil)	Morningstar Rating	Economic Moat	Uncertainty Rating	Fair Value Estimate	Price	Price/Fair Value
Charles Schwab	SCHW	Capital Markets	XNYS\USD	94227	★★★★★	Wide	High	70.00	52.24	0.75
Capital One Financial	COF	Credit Services	XNYS\USD	35632	★★★★★	Narrow	High	140.00	97.30	0.70
Illumina	ILMN	Diagnostics & Research	XNAS\USD	31976	★★★★★	Narrow	High	269.00	205.56	0.76
Gilead Sciences	GILD	Drug Manufacturers - General	XNAS\USD	101612	★★★★★	Wide	Medium	97.00	82.21	0.85
Sysco	SYF	Food Distribution	XNYS\USD	38994	★★★	Narrow	Medium	82.00	76.74	0.94
Lowe's Companies	LOW	Home Improvement Retail	XNYS\USD	124173	★★★	Wide	Medium	218.00	207.83	0.95
Public Storage	PSA	REIT - Industrial	XNYS\USD	51436	★★★	None	Medium	326.00	294.83	0.90
Advanced Micro Devices	AMD	Semiconductors	XNAS\USD	144348	★★★★★	Narrow	High	115.00	89.37	0.78
ServiceNow	NOW	Software - Application	XNYS\USD	91767	★★★★★	Wide	High	600.00	459.42	0.77
VMware	VMW	Software - Infrastructure	XNYS\USD	54409	★★★★★	Narrow	High	161.00	125.03	0.78
General Electric	GE	Specialty Industrial Machinery	XNYS\USD	110181	★★★	Narrow	High	110.00	98.97	0.90
Comcast	CMCSA	Telecom Services	XNAS\USD	173590	★★★★★	Wide	Medium	60.00	41.37	0.69
NextEra Energy	NEE	Utilities - Regulated Electric	XNYS\USD	155399	★★★	Narrow	Medium	82.00	76.63	0.93

Data as of May 31, 2023.

# Research Methodology for Valuing Companies

## Overview

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

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

Four key components drive the Morningstar rating:

- our assessment of the firm's economic moat.
- our estimate of the stock's fair value.
- our uncertainty around that fair value estimate.
- the current market price.

This process ultimately culminates in our single-point star rating.

## Economic Moat

The Morningstar Economic Moat Rating is a structural feature that Morningstar believes positions a firm to earn durable excess profits over a long period of time, with excess profits defined as returns on invested capital above our estimate of a firm's cost of capital. The economic moat rating is not an indicator of the investment performance of the investment highlighted in this report. Narrow-moat companies are those that Morningstar believes are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those that Morningstar believes will earn excess returns for 10 years, with excess returns more likely than not to remain for at least 20 years. Firms without a moat, including those that have a substantial threat of value destruction-related risks related to environmental, social, and governance; industry disruption; financial health; or other idiosyncratic issues, are more susceptible to competition.

Morningstar has identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

## Fair Value Estimate

Each stock's fair value is estimated by using a proprietary discounted cash flow model, which assumes that the stock's value is equal to the total of the free cash flows of the company is expected to generate in the future, discounted back to the present at the rate commensurate with the riskiness of the cash flows. As with any DCF model, the ending value is highly sensitive to Morningstar's projections of future growth.

## Fair Value Uncertainty

The Morningstar Uncertainty Rating represents the analysts' ability to bound the estimated value of the shares in a company around the fair value estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, exposure to material ESG risks, and other company-specific factors. Based on these factors, analysts classify the stock into one of several uncertainty levels: Low, Medium, High, Very High, or Extreme. 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.

**Market Price**

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

**Morningstar Rating for Stocks**

The Morningstar Rating for Stocks is a forward-looking, analyst-driven measure of a stock's current price relative to the analyst's estimate of what the shares are worth. Stock star ratings indicate whether a stock, in the equity analyst's educated opinion, is cheap, expensive, or fairly priced. To rate a stock, analysts estimate what they think it is worth (its "fair value"), using a detailed, long-term cash flow forecast for the company. A stock's star rating depends on whether its current market price is above or below the fair value estimate. Those stocks trading at large discounts to their fair values receive the highest ratings (4 or 5 stars). Stocks trading at large premiums to their fair values receive lower ratings (1 or 2 stars). A 3-star rating means the current stock price is close to the analyst's fair value estimate.

**Risk Warning**

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