

# Large Cap Global Core Pick List

## February 2019

### Sector Valuations

The market appears fairly valued, with the market-capitalization-weighted average, uncertainty-adjusted price/fair value ratio for S&P 500 index constituents that are under active Morningstar research coverage at 98% as of Jan. 31, up from last month's ratio of 94%.

The S&P 500 rose 5.62% in January, closing at 2,704.10 at the end of the month. On a relative basis, the utilities sector ranked as the most expensive, trading at roughly 107% of fair value. Energy was the cheapest sector, in our opinion, trading at 90% of fair value. Please refer to the table later in the report for more details on sector valuation.

As of Jan. 31, the Global Large Cap Pick List was priced at 82% of fair value. Consumer staples constituents presented the greatest opportunity with a market-capitalization-weighted average price/fair value near 72%. We believe real estate constituents offer the least upside, trading at 92% of fair value.

### Portfolio Commentary: Changes

We made numerous changes to the list this month. Beginning in the communication services sector, we added shares of **Activision Blizzard ATVI** (\$69 fair value estimate). Correspondingly, we removed **Dish Network DISH** (\$43 fair value estimate). Analyst Neil Macker notes:

"We assign Activision a narrow moat. Activision Blizzard is one of the world's largest third-party video game publishers and the firm behind some of the most compelling and lucrative franchises of all time. Over the last 10 years, the video game industry has undergone a number of changes including two console generation transitions; the rise of digital downloads; widespread adoption of mobile games; and the expansion of the free-to-play, or F2P, business model."

In the consumer discretionary sector, we added **Bayerische Motoren Werke BMWYY** (\$44 fair value estimate), **L Brands LB** (\$43.50 fair value estimate), **Nissan Motor NSANY** (\$26 fair value estimate) and **Expedia EXPE** (\$180 fair value estimate) as we removed **Alibaba BABA** (\$240 fair value estimate), **Altaba AABA** (\$98 fair value estimate),

**JD.com JD** (\$36 fair value estimate) and **Lennar LEN** (\$70 fair value estimate). Analyst Jaime Katz details:

"As narrow-moat L Brands attempts to pivot its Victoria's Secret brand, results indicate that the segment's turnaround remains at bay. With recent management changes at the brand and a reassessment to potentially expand the assortment (with opportunities stemming from eyewear, footwear, and swim), we believe the firm is attempting to restore brand equity that has fallen.

"But changes take time, particularly in a competitive retail environment, leaving Victoria's Secret with 6% comp declines in December, in line with our forecast 6% shortfall for the fourth quarter. More concerning is the promotional landscape, which continues to pressure merchandise margin "significantly" at VS, indicating the brand is struggling to resonate with customers as it works through prior inventory disconnects. However, L Brands remains a bifurcated tale, with Bath & Body posting banner comp results, which increased 11% in December (on 4% last year)."

In the energy sector, we omitted **TransCanada TRP** (\$54 fair value estimate) and **Enbridge ENB** (\$47 fair value estimate), while adding **Total TOT** (\$77 fair value estimate) and **Royal Dutch Shell RDS** (\$83 fair value estimate). Analyst Allen Good comments:

"Total stands to meaningfully improve its cash flow generating power in the next several years through peer-leading production growth and operating cost cuts, while already displaying one of the lowest gearing ratios among its peers. Production growth should prove to be a major driver of cash flow growth during the next five years, with Total anticipating averaging volume of growth of about 5% per year through 2022, the highest among its peers. That rate of growth from a major integrated should generally be viewed with skepticism, but given that Total has over 10 projects under construction and a large project queue awaiting final investment decisions, it's feasible, albeit with elevated execution risks, given the size and complexity of those projects."

### Elizabeth Collins, CFA

Global Head of Equity and Corporate Credit Research

### Daniel Rohr, CFA,

Director of Equity Research, North America

### Lorraine Tan, CFA

Director of Equity Research, Asia-Pacific

### Alex Morozov, CFA

Director of Equity Research, Europe

### Patrick Dunn

Director of Global Research Operations

This list surfaces large-cap global stocks within each sector that we believe warrants consideration. Selection criteria are based on uncertainty-adjusted price/fair value ratios. The above-mentioned selection criteria are applied against all constituents of the Morningstar rated universe.

### Important Disclosure

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Turning to the financials sector, we added shares of **Westpac Banking WBK** (\$24 fair value estimate). We dropped **Mitsubishi UFJ Financial Group MUFG** (\$7.12 fair value estimate). Analysts David Ellis and John Likos note:

“We assign a wide moat to Westpac, in recognition of the structural competitive advantages that Australia’s four major banks possess. The four major banks dominate a regulated and rational oligopoly, which bestows strong and durable structural advantages. We believe the economic moats surrounding the major banks are sufficiently wide to ensure global sector-leading returns on equity for the foreseeable future. Central to our moat rating is our confidence in the four institutions’ ability to earn excess returns over the long term. In our opinion, cost advantage is the main source of the wide economic moats for Australia’s four major banks. Intangible assets and switching costs provide important, but less prominent, moat sources. Banking in Australia is a tightly regulated oligopoly, with the four major banks controlling more than 90% of the business and consumer lending markets, plus the vast majority of bank deposits.”

In the healthcare sector, we removed **Fresenius Medical Care FMS** (\$46 fair value estimate) from the list and replaced it with **Bristol-Myers Squibb BMY** (\$65 fair value estimate). Analyst Damien Conover writes:

“In Bristol-Myers Squibb’s fourth-quarter results, total sales matched our and consensus’ expectations while earnings were stronger than expected, but we don’t anticipate any major changes to our fair value estimate based on the results. The earnings beat was partly based on lower-than-expected research and development spending. 2019 guidance was largely in line with our expectations. We continue to view the stock as undervalued, with the Celgene deal creating value from strong Revlimid cash flows and by expanding Bristol’s pipeline, a core pillar in our wide moat rating.”

In the industrials sector, we removed shares of **General Electric GE** (\$13.80 fair value estimate) and **BAE Systems BAESY** (\$33 fair value estimate) and added **ABB ABB** (\$25.40 fair value estimate) and **Emerson Electric EMR** (\$83 fair value estimate). Analysts Joshua Aguilar explains:

“In our view, Emerson Electric is the undisputed powerhouse in process manufacturing on the left side of the Atlantic. After a series of capital allocation missteps several years ago and a burgeoning recovery from declining oil prices, we believe Emerson is poised for several years of positive organic growth. According to 2017 data, the total addressable automation market, both served and unserved, amounts to \$204 billion, including approximately \$140 billion in devices, \$40 billion in control and safety systems, and \$20 billion in asset management.”

In the information technology sector, we added **Qualcomm QCOM** (\$72 fair value estimate), **Microsoft MSFT** (\$130 fair value estimate) and **Qorvo QRVO** (\$86 fair value estimate) as we removed **Applied Materials AMAT** (\$49 fair value estimate), **Alliance Data Systems ADS** (\$21 fair value estimate) and **Salesforce CRM** (\$180 fair value estimate). Analyst Andrew Lange notes:

“In line with our thesis, operating margins continue to expand as Microsoft’s cloud-driven offerings scale. This quarter, overall gross margins were flat year over year as rapidly improving commercial cloud gross margins, which were up 500 basis points year over year, were offset by a mix shift to cloud, which still has gross margins below the corporate average, and higher surface and Xbox hardware within the total revenue mix. Operating margin expanded by 150 basis points year over year, with leverage coming from lower sales and marketing, and general and administrative outlays. We think there is more room to run, as recent historical peaks in gross and operating margins suggest 1,000 and 700 basis points, respectively, of expansion is possible in the coming years according to our model. Next quarter’s guidance for revenue of \$29.4 to \$30.0 billion bracketed consensus and is generally in line with our expectations.”

In the materials sector, we omitted **Nutrien NTR** (\$68 fair value estimate), while adding **Martin Marietta Materials MLM** (\$240 fair value estimate). Analysts Kristoffer Inton and Andrew Lane comment:

“Even at peak production levels, Martin Marietta has more than 50 years of aggregates production at

current reserve levels. In addition, because we do not anticipate the importance of aggregates in construction to diminish, transportation costs to fall, or new quarry permits to become easier to obtain, we think Martin Marietta's competitive advantage is sustainable for more than 10 years. While we think Martin Marietta's aggregates business is moatworthy, we do not think its specialty products business operates with a sustainable competitive advantage."

Turning to the real estate sector, we added shares of **Macerich MAC** (\$59 fair value estimate). We dropped **SL Green Realty SLG** (\$102 fair value estimate, down from \$114 after adjusting for guidance). Analyst Kevin Brown states:

"We are changing our moat rating for Macerich to narrow from none because of its portfolio of high-quality well-located properties that produce its network effect and efficient scale benefits. We recognize the pressure of continued e-commerce growth on traditional brick-and-mortar retail and that the U.S. is significantly over-retailed, but we believe that there will always be demand for high-quality retail locations. Macerich's properties are in many of the best markets—with dense populations and high disposable incomes—and can provide an experience for consumers that is hard for other retail to replicate. Macerich's high-quality properties attract desirable tenants, which in turn makes its properties more attractive to consumers and future tenants. The continued growth of e-commerce is putting significant pressure on traditional brick-and-mortar retail."

## Adjusted Price/Fair Value Ratio

Attractiveness	Lower Bound	Upper Bound	Notes
Cheap	0.000	0.800	Assets are trading at or below Morningstar's "Consider Buying" price.
Undervalued	0.801	0.900	Assets are trading above Morningstar's "Consider Buying" price, but are still at a discount to our fair value estimate.
Fully Valued	0.901	1.100	Assets are trading within a band that is not materially different from Morningstar's fair value estimate.
Overvalued	1.101	1.250	Assets are trading above Morningstar's fair value estimate, but are still below our "Consider Selling" price.
Expensive	1.251	—	Assets are trading at or above Morningstar's "Consider Selling" price.

## Fair Value Per Sector

Sector	S&P Sector Weight (%)	Sector P/V (%)	Pick List P/V (%)
Communication Services	9.75	96.59	84.70
Consumer Discretionary	9.80	95.97	81.36
Consumer Staples	7.04	95.33	72.08
Energy	5.34	90.01	82.16
Financials	12.59	95.22	83.30
Health Care	14.68	102.89	80.66
Industrials	8.81	98.31	85.19
Information Technology	19.51	97.05	85.80
Materials	2.59	98.14	83.25
Real Estate	2.79	104.30	92.42
Utilities	3.11	106.59	87.10

## Largest Negative and Positive Price Movements During January

Company	Ticker	Beg. Price Per Share (USD)	End Price Per Share (USD)	Return (%)
Vodafone Group ADR	VOD	19.28	18.24	-5.39
Siemens ADR	SIEGY	56.08	54.87	-2.16
Dominion Energy	D	71.46	70.24	-1.71
CVS Health	CVS	65.52	65.55	0.05
BT Group ADR	BT	15.20	15.26	0.39
Intel	INTC	46.93	47.12	0.40
Conagra Brands	CAG	21.36	21.64	1.31
Telefonica ADR	TEF	8.46	8.66	2.36
Canon ADR	CAJ	27.60	28.83	4.46
UBS Group	UBS	12.38	12.96	4.68
Hanesbrands	HBI	12.53	14.99	19.63
Stericycle	SRCL	36.69	44.08	20.14
DXC Technology	DXC	53.17	64.12	20.59
Lennar	LEN	39.15	47.42	21.12
Western Digital	WDC	36.97	44.99	21.69
Dish Network Class A	DISH	24.97	30.67	22.83
Alibaba Group Holding ADR	BABA	137.07	168.49	22.92
Alexion Pharmaceuticals	ALXN	97.36	122.96	26.29
General Electric	GE	7.57	10.16	34.21
Celgene	CELG	64.09	88.46	38.02

## Large Cap Global Core Picks (Data as of Jan. 31, 2019)

Company	Ticker	Economic Moat™	Uncertainty Rating	Current Price (USD)	Fair Value (USD)	Adj. Price/Fair Value	Morningstar Rating	Market Cap (USD Mil)	Industry	Relative Attractiveness
<b>Communication Services—Undervalued</b>										
Baidu ADR	BIDU	Wide	High	172.63	322	0.77	★★★★★	60,172.01	Internet Content & Information	Cheap
Vodafone Group ADR	VOD	Narrow	High	18.24	32	0.79	★★★★★	48,565.51	Telecom Services	Cheap
Telefonica ADR	TEF	Narrow	High	8.66	15	0.80	★★★★★	44,690.00	Telecom Services	Cheap
BT Group ADR	BT	Narrow	High	15.26	24	0.82	★★★★	30,245.59	Telecom Services	Undervalued
Activision Blizzard	ATVI	Narrow	High	47.24	69	0.84	★★★★	36,046.52	Electronic Gaming & Multimedia	Undervalued
CBS Class B	CBS	Narrow	High	49.46	71	0.85	★★★★	18,511.52	Media - Diversified	Undervalued
Tencent Holdings ADR	TCEHY	Wide	High	44.61	64	0.85	★★★★	419,985.03	Internet Content & Information	Undervalued
<b>Consumer Discretionary—Undervalued</b>										
Hanesbrands	HBI	Narrow	Medium	14.99	27	0.70	★★★★★	5,407.38	Apparel Manufacturing	Cheap
LKQ	LKQ	Narrow	Medium	26.22	47	0.71	★★★★★	8,343.27	Auto Parts	Cheap
Mattel	MAT	Narrow	High	11.84	21	0.78	★★★★★	4,086.59	Leisure	Cheap
Daimler	DDAIF	None	High	59.33	97	0.81	★★★★★	63,467.30	Auto Manufacturers	Undervalued
Volkswagen ADR	VWAPY	None	High	16.90	27	0.82	★★★★	86,704.07	Auto Manufacturers	Undervalued
Bayerische Motoren Werke ADR	BMWYY	Narrow	High	28.13	44	0.82	★★★★	54,900.78	Auto Manufacturers	Undervalued
L Brands	LB	Narrow	High	27.84	44	0.82	★★★★	7,659.48	Apparel Stores	Undervalued
Volkswagen ADR	VWAGY	None	High	17.37	27	0.83	★★★★	86,704.07	Auto Manufacturers	Undervalued
Nissan Motor ADR	NSANY	None	High	17.07	26	0.83	★★★★	33,247.66	Auto Manufacturers	Undervalued
Expedia Group	EXPE	Narrow	High	119.25	180	0.83	★★★★	17,765.20	Leisure	Undervalued
<b>Consumer Staples—Cheap</b>										
British American Tobacco ADR	BTI	Wide	Low	35.28	59	0.60	★★★★★	80,836.79	Tobacco	Cheap
Anheuser-Busch InBev ADR	BUD	Wide	Low	76.44	118	0.65	★★★★★	149,662.27	Beverages - Brewers	Cheap
Imperial Brands ADR	IMBBY	Wide	Low	33.54	48	0.70	★★★★★	31,684.39	Tobacco	Cheap
Conagra Brands	CAG	Narrow	Medium	21.64	35	0.75	★★★★★	10,509.29	Packaged Foods	Cheap
Philip Morris International	PM	Wide	Low	76.72	102	0.75	★★★★★	119,263.07	Tobacco	Cheap
General Mills	GIS	Wide	Low	44.44	57	0.78	★★★★★	26,519.52	Packaged Foods	Cheap
<b>Energy—Undervalued</b>										
Energy Transfer	ET	None	Medium	14.71	22	0.78	★★★★★	38,497.55	Oil & Gas Midstream	Cheap
Enterprise Products Partners	EPD	Wide	Low	27.67	36	0.78	★★★★★	60,394.25	Oil & Gas Midstream	Cheap
Total ADR	TOT	None	Medium	54.73	77	0.81	★★★★★	143,775.28	Oil & Gas Integrated	Undervalued
Exxon Mobil	XOM	Narrow	Low	73.28	90	0.81	★★★★★	310,253.39	Oil & Gas Integrated	Undervalued
Royal Dutch Shell ADR Class A	RDS.A	Narrow	Medium	61.73	83	0.83	★★★★	254,296.44	Oil & Gas Integrated	Undervalued
Royal Dutch Shell ADR Class B	RDS.B	Narrow	Medium	62.80	83	0.84	★★★★	254,296.44	Oil & Gas Integrated	Undervalued

## Large Cap Global Core Picks (Data as of Jan. 31, 2019)

Company	Ticker	52 Week High	52 Week Low	Total Return YTD (Daily)	Total Return 1-Yr (Daily)	Div. Per Share TTM	Div. Yield % Current	Div. Yield % Forward	EPS Est. Growth % Mean 5-Yr	Forward EPS Est.
<b>Communication Services</b>										
Baidu ADR	BIDU	284.22	153.78	8.85	-30.09	—	—	—	24.90	11.34
Vodafone Group ADR	VOD	32.30	17.70	-5.39	-37.99	1.85	9.54	5.98	9.66	1.28
Telefonica ADR	TEF	10.24	7.70	2.36	-10.87	0.49	5.40	5.26	18.13	0.81
BT Group ADR	BT	18.88	13.53	0.39	-13.48	1.06	6.36	3.87	4.62	1.82
Activision Blizzard	ATVI	84.68	43.71	1.44	-35.82	0.34	0.72	0.72	13.50	2.55
CBS Class B	CBS	59.59	41.38	13.13	-12.90	0.72	1.46	1.46	14.31	5.74
Tencent Holdings ADR	TCEHY	60.00	31.54	13.02	-24.41	0.11	0.26	0.01	17.45	1.42
<b>Consumer Discretionary</b>										
Hanesbrands	HBI	22.65	11.57	19.63	-28.22	0.60	4.00	4.00	3.99	1.80
LKQ	LKQ	42.49	22.74	10.49	-37.62	—	—	—	13.79	2.52
Mattel	MAT	18.03	9.09	18.52	-25.25	0.00	—	—	10.00	0.26
Daimler	DDAIF	92.15	50.64	12.43	-30.39	4.38	7.58	7.58	-6.03	10.20
Volkswagen ADR	VWAPY	44.63	14.97	7.53	-59.49	0.93	5.55	5.55	-3.93	3.44
Bayerische Motoren Werke ADR	BMWYY	38.44	26.05	4.28	-22.07	1.62	5.58	5.58	-0.19	4.58
L Brands	LB	51.71	23.71	8.45	-39.63	2.40	8.62	4.31	4.90	3.15
Volkswagen ADR	VWAGY	22.50	14.70	11.35	-19.75	0.46	2.66	2.66	-3.93	3.44
Nissan Motor ADR	NSANY	21.78	15.28	7.06	-16.05	1.02	5.77	5.86	-5.74	2.77
Expedia Group	EXPE	139.77	98.52	5.86	-5.87	1.22	1.04	1.07	16.19	6.39
<b>Consumer Staples</b>										
British American Tobacco ADR	BTI	68.77	30.67	10.73	-44.29	2.72	7.54	7.70	-16.00	4.20
Anheuser-Busch InBev ADR	BUD	117.06	64.55	16.15	-29.73	4.24	4.32	4.32	6.55	4.72
Imperial Brands ADR	IMBBY	42.09	28.70	9.88	-14.35	2.30	7.20	10.24	7.92	3.54
Conagra Brands	CAG	39.43	20.22	2.31	-40.82	0.85	3.93	3.93	5.23	2.23
Philip Morris International	PM	109.90	64.67	14.92	-24.27	4.42	5.85	5.94	7.18	5.27
General Mills	GIS	59.01	36.42	15.38	-20.67	1.96	4.41	4.41	4.01	3.17
<b>Energy</b>										
Energy Transfer	ET	19.19	11.68	11.36	-12.95	1.21	8.29	8.29	-15.04	1.51
Enterprise Products Partners	EPD	30.05	23.10	14.29	6.43	1.71	6.23	6.29	14.84	1.99
Total ADR	TOT	65.69	49.70	4.89	-0.66	2.95	5.38	5.31	14.06	6.11
Exxon Mobil	XOM	89.25	64.65	7.46	-12.36	3.18	4.41	4.48	4.40	4.83
Royal Dutch Shell ADR Class A	RDS.A	73.86	55.04	5.94	-6.76	3.76	6.09	6.09	14.81	5.87
Royal Dutch Shell ADR Class B	RDS.B	76.99	56.26	4.77	-7.47	3.76	5.99	5.99	14.81	5.87

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Company	Ticker	Economic Moat™	Uncertainty Rating	Current Price (USD)	Fair Value (USD)	Adj. Price/Fair Value	Morningstar Rating	Market Cap (USD Mil)	Industry	Relative Attractiveness
<b>Financials—Undervalued</b>										
American International Group	AIG	None	Medium	43.23	76	0.71	★★★★★	38,243.35	Insurance - Diversified	Cheap
ING Groep ADR	ING	None	Medium	11.87	19	0.76	★★★★★	46,076.35	Banks - Global	Cheap
Credit Suisse Group ADR	CS	Narrow	High	12.11	23	0.76	★★★★★	30,856.84	Banks - Global	Cheap
Capital One Financial	COF	Narrow	Medium	80.59	119	0.78	★★★★★	37,691.94	Credit Services	Cheap
UBS Group	UBS	Narrow	High	12.96	21	0.81	★★★★	48,187.43	Banks - Global	Undervalued
Westpac Banking ADR	WBK	Wide	Medium	17.85	24	0.83	★★★★	61,062.43	Banks - Global	Undervalued
Wells Fargo	WFC	Wide	Medium	48.91	65	0.83	★★★★	224,071.38	Banks - Global	Undervalued
<b>Healthcare—Undervalued</b>										
Allergan	AGN	Wide	Medium	143.98	240	0.73	★★★★★	48,562.43	Drug Manufacturers - Specialty & Generic	Cheap
Cardinal Health	CAH	Wide	Medium	49.97	82	0.74	★★★★★	14,888.13	Medical Distribution	Cheap
McKesson	MCK	Wide	Medium	128.25	210	0.74	★★★★★	24,601.59	Medical Distribution	Cheap
CVS Health	CVS	Narrow	Medium	65.55	96	0.79	★★★★★	84,769.20	Health Care Plans	Cheap
Roche Holding ADR	RHHBY	Wide	Low	33.30	42	0.79	★★★★★	226,382.08	Drug Manufacturers - Major	Cheap
DaVita	DVA	Narrow	Medium	56.13	81	0.80	★★★★★	9,317.58	Medical Care	Cheap
Bayer ADR	BAYRY	Wide	High	19.06	32	0.80	★★★★★	70,896.38	Drug Manufacturers - Major	Cheap
Celgene	CELG	Narrow	Medium	88.46	120	0.82	★★★★	61,943.12	Biotechnology	Undervalued
LabCorp	LH	Narrow	Medium	139.35	184	0.84	★★★★	14,060.42	Diagnostics & Research	Undervalued
Bristol-Myers Squibb	BMJ	Wide	Medium	49.37	65	0.84	★★★★	80,594.78	Drug Manufacturers - Major	Undervalued
Alexion Pharmaceuticals	ALXN	Narrow	High	122.96	172	0.86	★★★★	27,431.96	Biotechnology	Cheap
AmerisourceBergen	ABC	Wide	Medium	83.37	106	0.86	★★★★	17,598.56	Medical Distribution	Undervalued
<b>Industrials—Undervalued</b>										
Stericycle	SRCL	Narrow	High	44.08	83	0.77	★★★★★	3,993.42	Waste Management	Cheap
Siemens ADR	SIEGY	Narrow	Medium	54.87	78	0.81	★★★★	89,100.25	Diversified Industrials	Undervalued
ABB ADR	ABB	Wide	Medium	19.15	25	0.84	★★★★	40,658.88	Diversified Industrials	Undervalued
Fanuc ADR	FANUY	Wide	High	17.04	25	0.84	★★★★	32,646.08	Diversified Industrials	Undervalued
Rolls-Royce Holdings ADR	RYCEY	Narrow	Medium	11.65	15	0.85	★★★★	21,989.87	Aerospace & Defense	Undervalued
Raytheon	RTN	Wide	Medium	164.76	212	0.85	★★★★	46,886.91	Aerospace & Defense	Undervalued
Emerson Electric	EMR	Wide	Medium	65.47	83	0.86	★★★★	40,795.79	Diversified Industrials	Undervalued

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<b>Financials</b>										
American International Group	AIG	64.28	36.16	9.69	-30.37	1.28	2.96	2.96	12.33	4.82
ING Groep ADR	ING	19.89	10.21	11.35	-36.16	0.72	5.95	5.95	7.90	1.64
Credit Suisse Group ADR	CS	19.77	10.23	11.51	-36.04	0.26	2.14	2.14	0.00	1.46
Capital One Financial	COF	104.88	69.90	6.61	-20.94	1.60	1.99	1.99	-0.50	11.06
UBS Group	UBS	20.70	11.61	4.68	-33.03	0.66	5.01	5.01	13.90	1.50
Westpac Banking ADR	WBK	25.24	16.41	2.18	-23.07	1.37	7.75	7.58	2.10	1.76
Wells Fargo	WFC	66.10	43.02	7.12	-22.47	1.60	3.48	3.68	9.10	5.00
<b>Healthcare</b>										
Allergan	AGN	197.00	125.84	7.72	-18.53	2.86	2.00	2.06	12.58	9.11
Cardinal Health	CAH	74.09	42.17	12.04	-27.76	1.88	3.78	3.81	59.29	5.30
McKesson	MCK	174.02	106.11	16.09	-23.19	1.41	1.14	1.22	7.64	14.11
CVS Health	CVS	82.15	60.14	0.81	-14.16	2.00	3.05	3.05	8.98	7.33
Roche Holding ADR	RHHBY	33.31	26.30	7.14	10.91	1.06	3.25	3.25	6.20	2.28
DaVita	DVA	79.11	48.25	9.08	-28.08	—	—	—	15.73	4.53
Bayer ADR	BAYRY	32.93	16.58	8.48	-39.36	0.84	4.27	4.27	6.98	2.08
Celgene	CELG	102.54	58.59	38.02	-12.55	—	—	—	16.56	10.51
LabCorp	LH	190.36	119.38	10.28	-20.14	0.00	—	—	7.36	11.26
Bristol-Myers Squibb	BMY	70.05	44.30	-4.23	-18.56	1.60	3.26	3.32	19.34	4.15
Alexion Pharmaceuticals	ALXN	140.77	92.56	26.29	3.05	—	—	—	17.67	7.83
AmerisourceBergen	ABC	103.04	69.36	12.06	-14.81	1.52	1.85	1.92	7.56	7.46
<b>Industrials</b>										
Stericycle	SRCL	76.73	34.36	20.14	-41.51	—	—	—	8.58	4.26
Siemens ADR	SIEGY	76.59	54.12	1.68	-22.21	2.15	3.92	3.92	3.89	4.89
ABB ADR	ABB	28.24	18.05	0.74	-28.32	0.83	4.31	4.31	11.19	1.48
Fanuc ADR	FANUY	27.81	14.10	13.11	-34.33	0.83	4.67	6.18	2.51	0.70
Rolls-Royce Holdings ADR	RYCEY	14.55	9.50	11.38	-5.92	0.16	1.31	1.01	-21.00	0.37
Raytheon	RTN	229.75	144.27	7.44	-19.48	3.33	2.11	2.11	15.42	11.73
Emerson Electric	EMR	79.70	55.39	9.57	-6.67	1.94	2.97	2.99	9.14	4.05



## Large Cap Global Core Picks (Data as of Jan. 31, 2019)

Company	Ticker	Economic Moat™	Uncertainty Rating	Current Price (USD)	Fair Value (USD)	Adj. Price/Fair Value	Morningstar Rating	Market Cap (USD Mil)	Industry	Relative Attractiveness
<b>Information Technology—Undervalued</b>										
Microchip Technology	MCHP	Wide	Medium	80.37	112	0.81	★★★★★	19,008.28	Semiconductors	Undervalued
Intel	INTC	Wide	Medium	47.12	65	0.82	★★★★	215,055.68	Semiconductors	Undervalued
Qualcomm	QCOM	Narrow	High	49.52	72	0.84	★★★★	59,934.34	Semiconductors	Undervalued
Skyworks Solutions	SWKS	Narrow	High	73.04	105	0.85	★★★★	12,713.33	Semiconductors	Undervalued
DXC Technology	DXC	None	High	64.12	91	0.85	★★★★	17,960.89	Information Technology Services	Undervalued
Canon ADR	CAJ	None	Medium	28.83	36	0.87	★★★★	30,846.18	Business Equipment	Undervalued
Western Digital	WDC	None	Very High	44.99	67	0.87	★★★★	13,021.22	Data Storage	Undervalued
Microsoft	MSFT	Wide	Medium	104.43	130	0.87	★★★★	801,209.25	Software - Infrastructure	Undervalued
Qorvo	QRVO	None	High	65.36	86	0.88	★★★★	8,163.79	Semiconductors	Undervalued
<b>Materials—Undervalued</b>										
Albemarle	ALB	Narrow	High	80.73	130	0.81	★★★★★	8,574.00	Specialty Chemicals	Undervalued
Martin Marietta Materials	MLM	Narrow	High	176.68	240	0.87	★★★★	11,079.97	Building Materials	Undervalued
<b>Real Estate—Fully Valued</b>										
Macerich	MAC	Narrow	High	46.16	59	0.89	★★★★	6,510.91	REIT - Retail	Undervalued
Boston Properties	BXP	None	Medium	131.87	143	0.95	★★★★	20,368.44	REIT - Office	Fully Valued
<b>Utilities—Undervalued</b>										
Dominion Energy	D	Wide	Low	70.24	84	0.84	★★★★	56,758.64	Utilities - Diversified	Undervalued

## Large Cap Global Core Picks (Data as of Jan. 31, 2019)

Company	Ticker	52 Week High	52 Week Low	Total Return YTD (Daily)	Total Return 1-Yr (Daily)	Div. Per Share TTM	Div. Yield % Current	Div. Yield % Forward	EPS Est. Growth % Mean 5-Yr	Forward EPS Est.
<b>Information Technology</b>										
Microchip Technology	MCHP	104.20	60.70	11.75	-14.07	1.45	1.81	1.81	11.54	7.00
Intel	INTC	57.60	42.04	0.40	0.37	1.17	2.55	2.67	6.56	4.54
Qualcomm	QCOM	76.50	48.56	-12.99	-23.88	2.43	4.91	5.01	14.13	4.79
Skyworks Solutions	SWKS	115.98	60.12	8.98	-23.42	1.34	1.92	2.08	10.54	7.38
DXC Technology	DXC	96.75	49.19	20.59	-26.09	0.74	1.17	1.19	6.11	8.73
Canon ADR	CAJ	40.67	26.37	4.46	-26.53	1.51	5.27	5.27	0.05	1.89
Western Digital	WDC	106.96	33.83	21.69	-47.19	2.00	4.45	4.45	-3.48	5.98
Microsoft	MSFT	116.18	83.83	2.82	11.24	1.72	1.65	1.76	12.44	5.15
Qorvo	QRVO	86.84	54.74	7.62	-8.93	—	—	—	9.72	6.18
<b>Materials</b>										
Albemarle	ALB	118.83	71.89	4.75	-26.45	1.33	1.66	1.66	9.29	6.11
Martin Marietta Materials	MLM	238.52	150.75	2.80	-21.76	1.80	1.04	1.09	12.23	9.69
<b>Real Estate</b>										
Macerich	MAC	65.69	40.90	6.65	-23.91	2.96	6.43	6.50	10.23	0.94
Boston Properties	BXP	132.82	107.84	17.17	9.43	3.35	2.65	2.88	6.68	3.13
<b>Utilities</b>										
Dominion Energy	D	77.19	61.53	-1.71	-3.74	3.28	4.76	4.87	6.37	4.24

## Fair Value Changes

Company	Ticker	Old Fair Value (USD)	New Fair Value (USD)	Change (%)
SL Green Realty	SLG	114	102	-10.53
Skyworks Solutions	SWKS	113	105	-7.08
Capital One Financial	COF	127	119	-6.30
Wells Fargo	WFC	67	65	-2.99
Allergan	AGN	245	240	-2.04
TransCanada	TRP	55	54	-1.82
Daimler	DDAIF	98	97	-1.02
General Electric	GE	13.9	13.8	-0.72
Lennar	LEN	68	70	2.94
Celgene	CELG	116	120	3.45

# 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. 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 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: (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 single-point star rating.

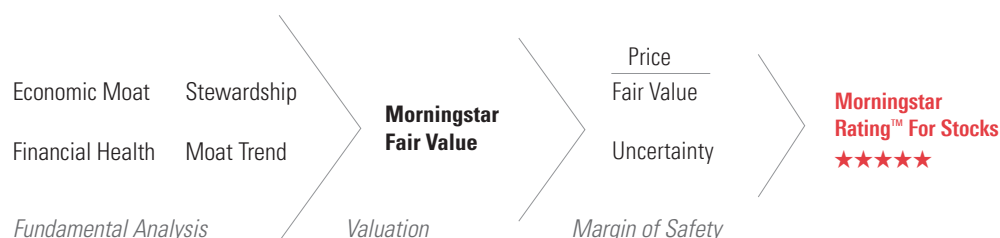
## Economic Moat

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

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

To assess the sustainability of excess profits, analysts perform ongoing assessments of the moat trend. A firm’s moat trend is positive in cases where we think its sources of competitive advantage are growing stronger; stable where we don’t anticipate changes to competitive advantages over the next several years; or negative when we see signs of deterioration.

## Morningstar Equity Research Star Rating Methodology



**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 working-capital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes (EBI) and the net new investment (NNI) to derive our annual free cash flow forecast.

**Stage II: Fade**

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

**Stage III: Perpetuity**

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

value and that any new investment provides a return in line with estimated WACC.

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

**Uncertainty around that fair value estimate**

Morningstar's Uncertainty Rating captures a range of likely potential intrinsic values for a company and uses it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The 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, and other company-specific factors.

Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case, and a 25% probability that the company will perform worse than the bear case. The distance between the bull and bear cases is an important indicator of the uncertainty underlying the fair value estimate.

Our recommended margin of safety widens as our uncertainty of the estimated value of the equity increases. The more uncertain we are about the estimated value of the equity, 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.

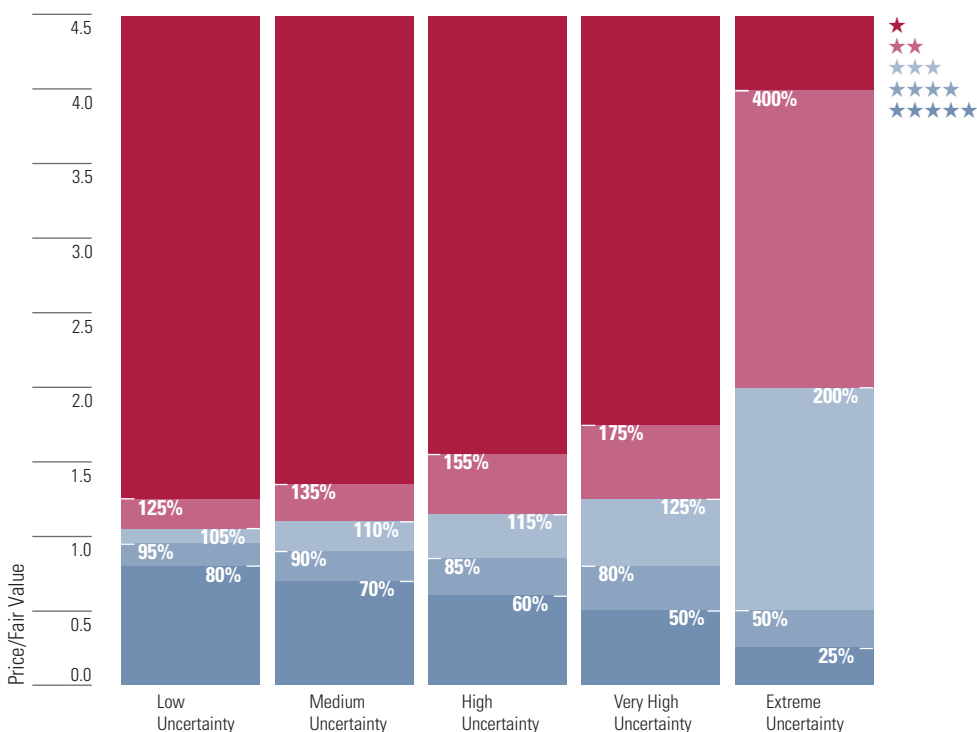
Our uncertainty ratings for our qualitative analysis are low, medium, high, very high, and extreme.

- ▶ Low—margin of safety for 5-star rating is a 20% discount and for 1-star rating is 25% premium.
- ▶ Medium—margin of safety for 5-star rating is a 30% discount and for 1-star rating is 35% premium.
- ▶ High—margin of safety for 5-star rating is a 40% discount and for 1-star rating is 55% premium.
- ▶ Very High—margin of safety for 5-star rating is a 50% discount and for 1-star rating is 75% premium.
- ▶ Extreme—margin of safety for 5-star rating is a 75% discount and for 1-star rating is 300% premium.

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.

### Morningstar Equity Research Star Rating Methodology



### 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 [www.global.morningstar.com/equitydisclosures](http://www.global.morningstar.com/equitydisclosures).

### 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

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

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

The Morningstar Star Ratings for stocks are defined below:

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

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

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

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

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

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