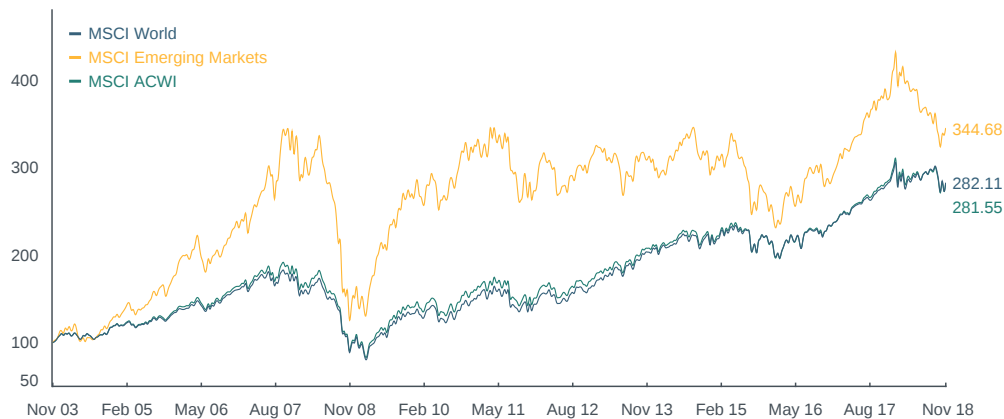


# MSCI WORLD INDEX (USD)

The MSCI World Index captures large and mid cap representation across 23 Developed Markets (DM) countries\*. With 1,634 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

## CUMULATIVE INDEX PERFORMANCE - NET RETURNS (USD) (NOV 2003 – NOV 2018)



## ANNUAL PERFORMANCE (%)

Year	MSCI World	MSCI Emerging Markets	MSCI ACWI
2017	22.40	37.28	23.97
2016	7.51	11.19	7.86
2015	-0.87	-14.92	-2.36
2014	4.94	-2.19	4.16
2013	26.68	-2.60	22.80
2012	15.83	18.22	16.13
2011	-5.54	-18.42	-7.35
2010	11.76	18.88	12.67
2009	29.99	78.51	34.63
2008	-40.71	-53.33	-42.19
2007	9.04	39.42	11.66
2006	20.07	32.14	20.95
2005	9.49	34.00	10.84
2004	14.72	25.55	15.23

## INDEX PERFORMANCE — NET RETURNS (%) (NOV 30, 2018)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Dec 29, 2000
MSCI World	1.14	-5.77	0.14	-1.20	8.50	6.67	10.89	4.89
MSCI Emerging Markets	4.12	-5.45	-9.09	-12.24	9.41	1.90	9.13	8.85
MSCI ACWI	1.46	-5.73	-0.98	-2.55	8.57	6.16	10.65	5.00

## FUNDAMENTALS (NOV 30, 2018)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.53	17.54	14.48	2.33
2.86	12.51	10.64	1.55
2.57	16.78	13.92	2.21

## INDEX RISK AND RETURN CHARACTERISTICS (NOV 30, 2018)

	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			SHARPE RATIO <sup>2, 3</sup>			Since Dec 29, 2000	MAXIMUM DRAWDOWN (%)	Period YYYY-MM-DD
		3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr			
MSCI World	2.19	9.47	10.16	14.15	0.79	0.61	0.77	0.28	57.82	2007-10-31—2009-03-09
MSCI Emerging Markets	6.84	14.78	15.15	19.36	0.60	0.15	0.52	0.43	65.25	2007-10-29—2008-10-27
MSCI ACWI	2.61	9.73	10.34	14.45	0.78	0.56	0.74	0.29	58.38	2007-10-31—2009-03-09

<sup>1</sup> Last 12 months

<sup>2</sup> Based on monthly net returns data

<sup>3</sup> Based on ICE LIBOR 1M

\* DM countries include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the UK and the US.

The MSCI World Index was launched on Mar 31, 1986. Data prior to the launch date is back-tested data (i.e. calculations of how the index might have performed over that time period had the index existed). There are frequently material differences between back-tested performance and actual results. Past performance -- whether actual or back-tested -- is no indication or guarantee of future performance.

## INDEX CHARACTERISTICS

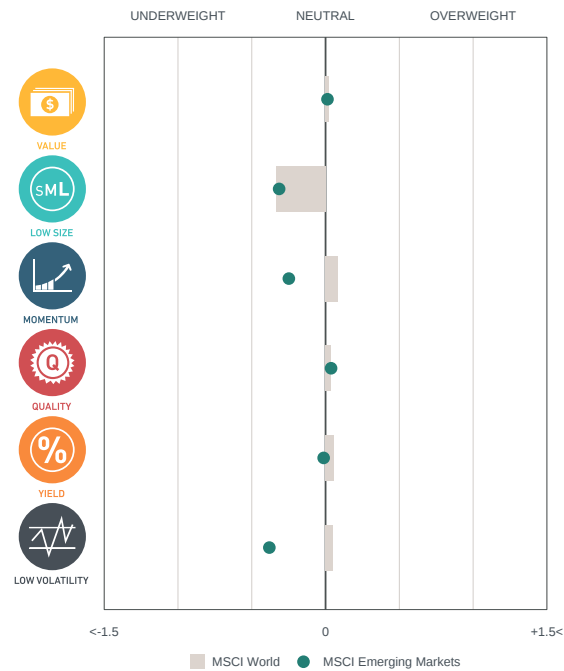
MSCI World	
Number of Constituents	1,634
Mkt Cap ( USD Millions)	
Index	38,848,656.54
Largest	877,745.34
Smallest	781.87
Average	23,775.19
Median	9,887.37

## TOP 10 CONSTITUENTS

	Float Adj Mkt Cap ( USD Billions)	Index Wt. (%)	Sector
APPLE	877.75	2.26	Info Tech
MICROSOFT CORP	809.39	2.08	Info Tech
AMAZON.COM	697.10	1.79	Cons Discr
JOHNSON & JOHNSON	394.01	1.01	Health Care
JPMORGAN CHASE & CO	378.58	0.97	Financials
ALPHABET C	343.71	0.88	Info Tech
FACEBOOK A	337.27	0.87	Info Tech
EXXON MOBIL CORP	336.59	0.87	Energy
ALPHABET A	331.40	0.85	Info Tech
BERKSHIRE HATHAWAY B	279.08	0.72	Financials
Total	4,784.87	12.32	

## FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

### MSCI FACTOR BOX



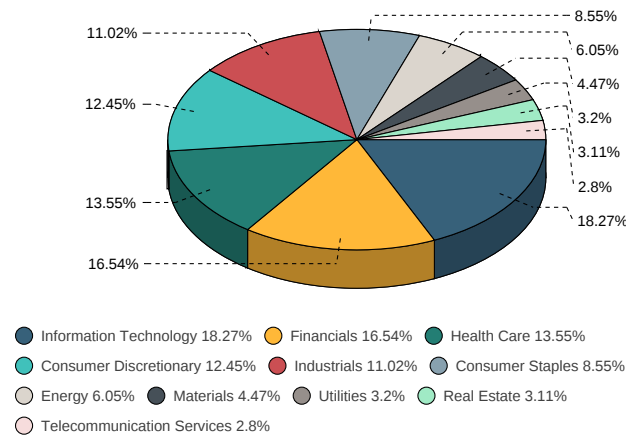
### MSCI FaCS

- VALUE**  
Relatively Inexpensive Stocks
- LOW SIZE**  
Smaller Companies
- MOMENTUM**  
Rising Stocks
- QUALITY**  
Sound Balance Sheet Stocks
- YIELD**  
Cash Flow Paid Out
- LOW VOLATILITY**  
Lower Risk Stocks

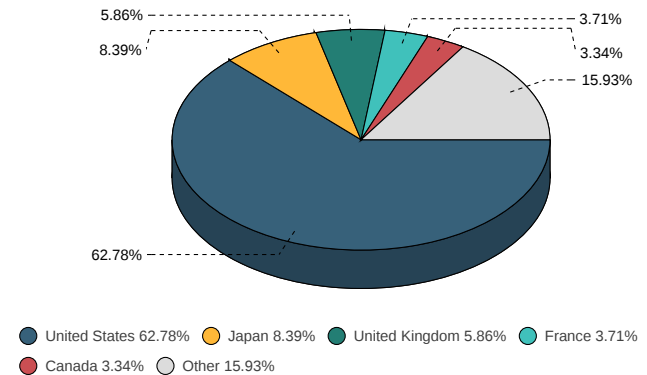
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

Neutral factor exposure (FaCS = 0) represents MSCI ACWI IMI.

## SECTOR WEIGHTS



## COUNTRY WEIGHTS



## INDEX METHODOLOGY

The index is based on the [MSCI Global Investable Indexes \(GIMI\) Methodology](#)—a comprehensive and consistent approach to index construction that allows for meaningful global views and cross regional comparisons across all market capitalization size, sector and style segments and combinations. This methodology aims to provide exhaustive coverage of the relevant investment opportunity set with a strong emphasis on index liquidity, investability and replicability. The index is reviewed quarterly—in February, May, August and November—with the objective of reflecting change in the underlying equity markets in a timely manner, while limiting undue index turnover. During the May and November semi-annual index reviews, the index is rebalanced and the large and mid capitalization cutoff points are recalculated.

## FACTOR BOX AND FaCS METHODOLOGY

MSCI FaCS is a standard method ([MSCI FaCS Methodology](#)) for evaluating and reporting the Factor characteristics of equity portfolios. MSCI FaCS consists of Factor Groups (e.g. Value, Size, Momentum, Quality, Yield, and Volatility) that have been extensively documented in academic literature and validated by MSCI Research as key drivers of risk and return in equity portfolios. These Factor Groups are constructed by aggregating 16 factors (e.g. Book-to-Price, Earnings/Dividend Yields, LT Reversal, Leverage, Earnings Variability/Quality, Beta) from the latest Barra global equity factor risk model, GEMLT, designed to make fund comparisons transparent and intuitive for use. The MSCI Factor Box, which is powered by MSCI FaCS, provides a visualization designed to easily compare absolute exposures of funds/indexes and their benchmarks along 6 Factor Groups that have historically demonstrated excess market returns over the long run.

## ABOUT MSCI

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