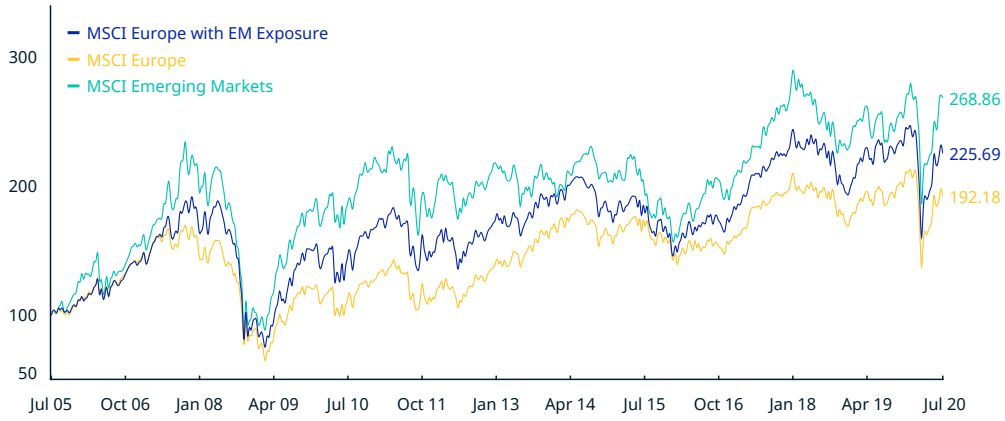
MSCI Europe with EM Exposure Index (USD)

The MSCI Europe with Emerging Markets (EM) Exposure Index is derived from the MSCI Europe Index, its parent index. Following a review of the geographic distribution of revenues for each constituent in the MSCI Europe Index, the companies with the highest proportion of revenues derived from EM countries are selected for the MSCI Europe with EM Exposure Index. With a relatively stable 105 constituents, the index is concentrated on high EM exposure companies in Europe. As a complement to the MSCI Emerging Markets Indexes, investors may consider this index a new benchmark for capturing the sizeable business activity in emerging markets that is conducted by developed markets European* companies.

CUMULATIVE INDEX PERFORMANCE — GROSS RETURNS (USD) (JUL 2005 – JUL 2020)



ANNUAL PERFORMANCE (%)

Year	MSCI Europe with EM Exposure	MSCI Europe	MSCI Emerging Markets
2019	26.68	24.59	18.88
2018	-15.62	-14.32	-14.24
2017	31.32	26.24	37.75
2016	8.77	0.22	11.60
2015	-10.16	-2.34	-14.60
2014	-8.58	-5.68	-1.82
2013	16.41	25.96	-2.27
2012	13.97	19.93	18.63
2011	-11.37	-10.50	-18.17
2010	10.54	4.49	19.20
2009	57.13	36.81	79.02
2008	-48.22	-46.08	-53.18
2007	30.77	14.39	39.82
2006	32.49	34.36	32.55

INDEX PERFORMANCE — GROSS RETURNS (%) (JUL 31, 2020)

					ANNUALIZED							
	1 Mo	3 Mo	1 Yr	YTD	3 Yr	5 Yr	10 Yr	Since May 31, 2002	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI Europe with EM Exposure	4.13	14.42	-2.42	-8.04	1.78	4.26	4.57	6.69	2.82	17.44	19.36	2.26
MSCI Europe	3.88	13.18	-0.78	-9.04	0.88	2.21	5.51	5.79	2.73	15.48	17.01	1.65
MSCI Emerging Markets	9.03	18.02	6.92	-1.52	3.22	6.54	3.69	9.41	2.36	17.39	14.94	1.76

INDEX RISK AND RETURN CHARACTERISTICS (JUL 31, 2020)

		ANNUALIZED STD DEV (%) [2]			SHARPE RATIO [2,3]				MAXIMUM DRAWDOWN	
	Turnover (%) [1]	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2002	(%)	Period YYYY-MM-DD
MSCI Europe with EM Exposure	10.91	16.56	16.01	17.26	0.08	0.26	0.30	0.35	61.99	2008-05-19—2009-03-03
MSCI Europe	2.95	16.26	15.28	16.40	0.03	0.14	0.36	0.32	62.72	2007-10-31—2009-03-09
MSCI Emerging Markets	10.60	18.92	17.96	17.91	0.17	0.37	0.25	0.46	65.14	2007-10-29—2008-10-27

[1] Last 12 months [2] Based on monthly gross returns data [3] Based on ICE LIBOR 1M

* Developed Markets countries in Europe include: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK.

The MSCI Europe with EM Exposure Index was launched on Mar 29, 2012. 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

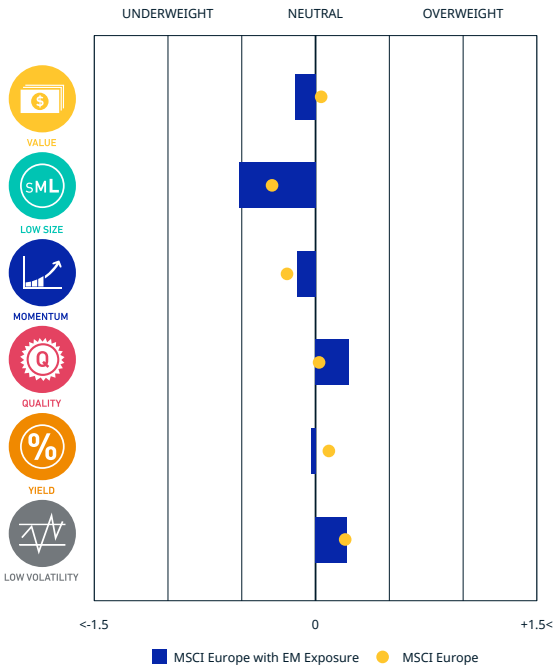
	MSCI Europe with EM Exposure
Number of Constituents	105
	Mkt Cap (USD Millions)
Index	2,890,854.02
Largest	309,602.78
Smallest	1,188.06
Average	27,531.94
Median	12,435.32

TOP 10 CONSTITUENTS

	Country	Float Adj Mkt Cap (USD Billions)	Index Wt. (%)	Sector
NESTLE	CH	309.60	10.71	Cons Staples
ASML HLDG	NL	244.04	8.44	Info Tech
ASTRAZENECA	GB	137.94	4.77	Health Care
LVMH MOET HENNESSY	FR	103.87	3.59	Cons Discr
UNILEVER NV (NL)	NL	95.71	3.31	Cons Staples
RIO TINTO PLC (GB)	GB	94.12	3.26	Materials
DIAGEO	GB	87.65	3.03	Cons Staples
UNILEVER PLC (GB)	GB	79.57	2.75	Cons Staples
ALLIANZ	DE	76.13	2.63	Financials
BHP GROUP (GB)	GB	73.03	2.53	Materials
Total		1,301.67	45.03	

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

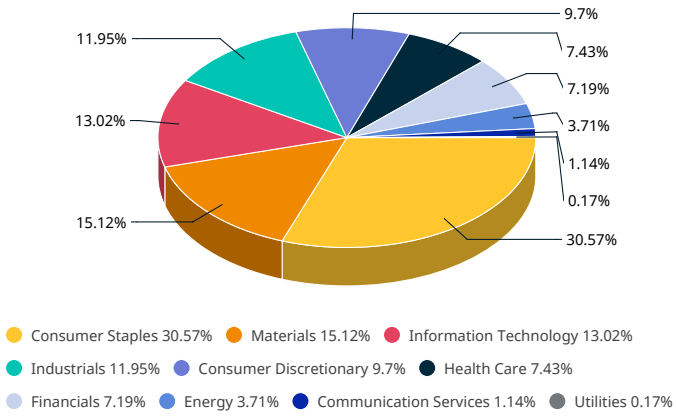
YIELD
Cash Flow Paid Out

LOW VOLATILITY
Lower Risk Stocks

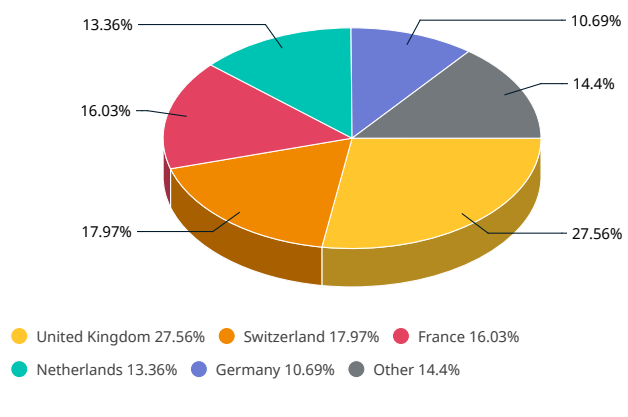
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

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

SECTOR WEIGHTS



COUNTRY WEIGHTS



INDEX METHODOLOGY

The MSCI Economic Exposure Indexes select top-ranked constituents with the highest proportion of revenues derived from a target country (or region). MSCI Economic Exposure Indexes target a fixed number of companies, seeking to attain high exposure to the target country/region while maintaining reasonable market cap coverage. If multiple companies hold comparable rankings the number of constituents may deviate from the fixed number established for the index.

The MSCI Economic Exposure Indexes apply a consistent and transparent methodology for estimating a firm's economic exposure using the geographic distribution of its revenues, despite the many disparities in the way companies report their sales across geographic segments. For each reported geographic revenue segment that includes the target country/region, MSCI applies the latest nominal GDP weights of that target relative to that of the reported geographic segment to determine a "target multiplier" for that revenue segment. For example, to determine an EM multiplier for a company's revenues from "Asia ex Japan", MSCI calculates the GDP weights of all EM countries relative to the combined GDP weight of Asia ex Japan. The exposure of a company to the target country (or region) is then calculated as the weighted average of the percentage of each geographic revenue segment and its target country/region multiplier.

The constituents of the MSCI Economic Exposure Indexes are weighted by the product of their market capitalization and their economic exposure to the target country/region. (The final security level inclusion factor is determined as the ratio of the security level weight and the security level pro forma market cap weight in the related MSCI parent index.) The MSCI Economic Exposure Indexes are rebalanced semi-annually in May and November. Buffer zones (at +/- 20% of the target number of companies) help maintain low index turnover and stability.

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

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 45 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process. To learn more, please visit www.msci.com.