

MSCI Europe Minimum Volatility (EUR) Index (EUR)

The MSCI Europe Minimum Volatility (EUR) Index aims to reflect the performance characteristics of a minimum variance strategy applied to the large and mid cap equity universe across the European Developed Markets (DM) countries*. The index is calculated by optimizing the MSCI Europe Index, its parent index, in EUR for the lowest absolute risk (within a given set of constraints). Historically, the index has shown lower beta and volatility characteristics relative to the MSCI Europe Index.

CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (EUR) (MAY 2007 – MAY 2022)



ANNUAL PERFORMANCE (%)

Year	MSCI Europe Min Vol (EUR)	MSCI Europe
2021	22.23	25.85
2020	-3.37	-2.82
2019	23.82	26.88
2018	-3.41	-10.00
2017	9.56	10.88
2016	-1.98	3.22
2015	16.07	8.78
2014	15.83	7.40
2013	17.24	20.51
2012	12.80	18.09
2011	3.84	-7.51
2010	9.53	11.75
2009	21.38	32.55
2008	-34.53	-43.29

INDEX PERFORMANCE – GROSS RETURNS (%) (MAY 31, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since Dec 31, 1998
					3 Yr	5 Yr	10 Yr	Since Dec 31, 1998	
MSCI Europe Min Vol (EUR)	-3.31	-0.80	4.11	-8.09	6.36	4.94	9.53	6.83	
MSCI Europe	-0.57	-0.07	3.71	-6.16	9.17	5.74	9.55	4.98	

FUNDAMENTALS (MAY 31, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
3.11	20.52	17.40	2.51
3.16	15.24	12.67	1.91

INDEX RISK AND RETURN CHARACTERISTICS (DEC 31, 1998 – MAY 31, 2022)

	Beta	Tracking Error (%)	Turnover (%) ¹	ANNUALIZED STD DEV (%) ²			SHARPE RATIO ^{2,3}			Since Dec 31, 1998	MAXIMUM DRAWDOWN	
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI Europe Min Vol (EUR)	0.68	6.57	20.01	12.99	11.29	10.67	0.58	0.53	0.94	0.52	50.03	2007-06-01–2009-03-09
MSCI Europe	1.00	0.00	1.90	16.10	14.34	12.93	0.66	0.49	0.79	0.30	58.22	2007-07-16–2009-03-09

¹ Last 12 months ² Based on monthly gross returns data ³ Based on EMMI EURIBOR 1M from Sep 1 2021 & on ICE LIBOR 1M prior that date

* DM 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 Minimum Volatility (EUR) Index was launched on Jun 28, 2011. Data prior to the launch date is back-tested test (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

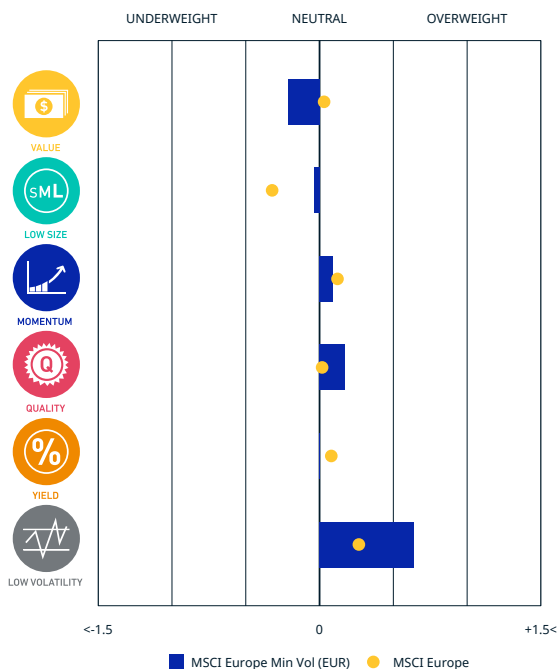
	MSCI Europe Min Vol (EUR)	MSCI Europe
Number of Constituents	157	429
	Weight (%)	
Largest	1.95	3.53
Smallest	0.03	0.01
Average	0.64	0.23
Median	0.50	0.11

TOP 10 CONSTITUENTS

	Country	Index Wt. (%)	Parent Index Wt. (%)	Sector
NOVARTIS	CH	1.95	2.04	Health Care
SANOFI	FR	1.87	1.24	Health Care
SWISSCOM	CH	1.84	0.16	Comm Svcs
NATIONAL GRID	GB	1.78	0.55	Utilities
NOVO NORDISK B	DK	1.69	1.91	Health Care
DEUTSCHE TELEKOM	DE	1.68	0.68	Comm Svcs
NESTLE	CH	1.61	3.53	Cons Staples
ROCHE HOLDING INHABER	CH	1.61	0.13	Health Care
HSBC HOLDINGS (GB)	GB	1.57	1.40	Financials
GSK	GB	1.52	1.13	Health Care
Total		17.12	12.78	

FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

MSCI FACTOR BOX



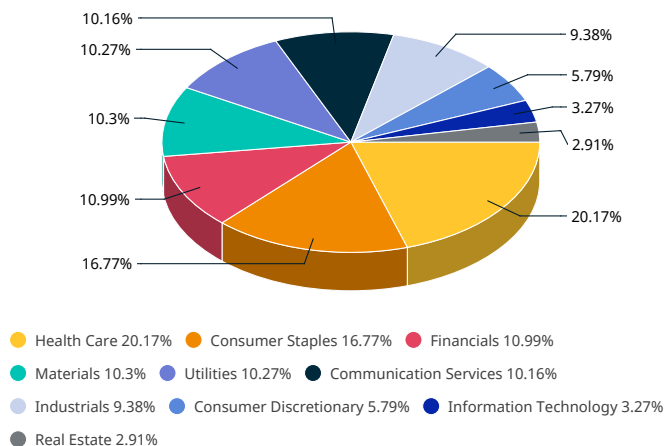
MSCI FaCS

- 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

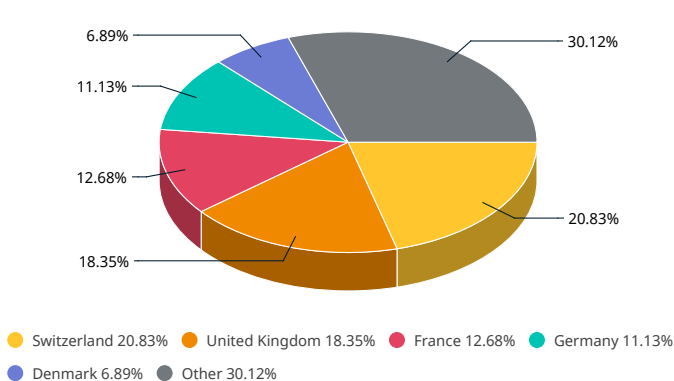
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

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

SECTOR WEIGHTS



COUNTRY WEIGHTS



INDEX FRAMEWORK

The [MSCI Minimum Volatility Indexes](#) are designed to provide the lowest return variance for a given covariance matrix of stock returns. Each MSCI Minimum Volatility Index is calculated using Barra Optimizer to optimize a given MSCI parent index for the lowest absolute volatility with a certain set of constraints. These constraints help maintain index replicability and investability and include index turnover limits, for example, along with minimum and maximum constituent, sector and/or country weights relative to the parent index. Each Minimum Volatility Index is rebalanced (or is re-optimized) semi-annually in May and November. Indexes may also be optimized for various currencies.

This summary is provided for illustrative purposes only and does not include all material elements of the index or its methodology. For a complete description of the index methodology, please see [Index methodology - MSCI](#).

MSCI FACTOR BOX AND FaCS FRAMEWORK (Please refer to complete description of the MSCI FaCS methodology [here](#))

MSCI FaCS is a standard method 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.

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