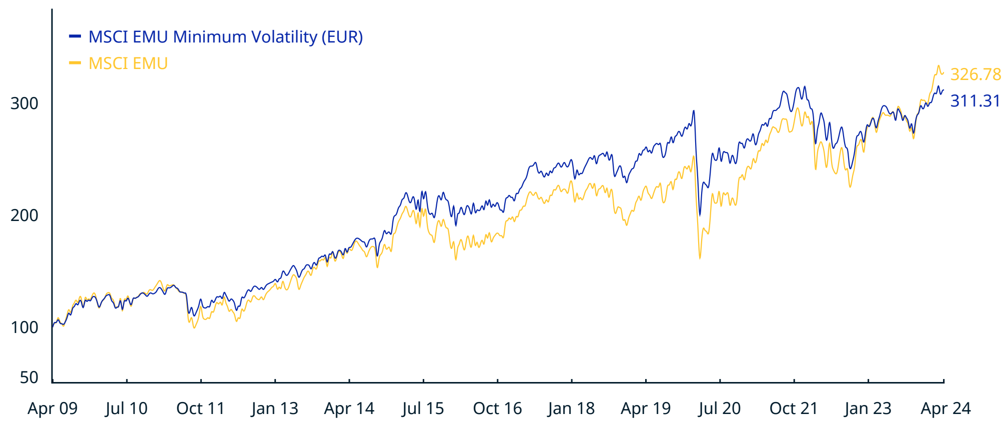
MSCI EMU Minimum Volatility (EUR) Index (EUR)

The **MSCI EMU Minimum Volatility (EUR) Index** aims to reflect the performance characteristics of a minimum variance strategy applied to the large and mid cap representation across the 10 Developed Markets countries in the European Economic and Monetary Union (EMU)*. The index is calculated by optimizing the MSCI EMU 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 EMU Index.

For a complete description of the index methodology, please see Index methodology - MSCI.

CUMULATIVE INDEX PERFORMANCE — NET RETURNS (EUR) (APR 2009 – APR 2024)



ANNUAL PERFORMANCE (%)

Year	MSCI EMU Minimum Volatility (EUR)	MSCI EMU
2023	12.55	18.78
2022	-16.21	-12.47
2021	18.41	22.16
2020	-3.87	-1.02
2019	19.83	25.47
2018	-5.28	-12.71
2017	12.39	12.49
2016	1.71	4.37
2015	15.47	9.81
2014	10.93	4.32
2013	19.72	23.36
2012	13.99	19.31
2011	-5.04	-14.89
2010	1.89	2.40

INDEX PERFORMANCE — NET RETURNS (%) (APR 30, 2024)

					ANNUALIZED			
	1 Mo	3 Mo	1 Yr	YTD	3 Yr	5 Yr	10 Yr	Since Nov 30, 2001
MSCI EMU Minimum Volatility (EUR)	-1.12	3.18	4.82	5.22	3.60	3.62	6.18	5.61
MSCI EMU	-1.92	5.84	12.80	8.14	7.25	7.70	6.79	4.58

FUNDAMENTALS (APR 30, 2024)

	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI EMU Minimum Volatility (EUR)	3.30	18.37	14.79	2.14
MSCI EMU	3.15	14.87	12.85	1.82

INDEX RISK AND RETURN CHARACTERISTICS (NOV 30, 2001 – APR 30, 2024)

				ANNUALIZED STD DEV (%) [2]			SHARPE RATIO [2,3]				MAXIMUM DRAWDOWN	
	Beta	Tracking Error (%)	Turnover (%) [1]	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since Nov 30, 2001	(%)	Period YYYY-MM-DD
MSCI EMU Minimum Volatility (EUR)	0.74	5.97	20.71	12.83	14.40	12.76	0.23	0.28	0.52	0.39	53.07	2007-06-01—2009-03-09
MSCI EMU	1.00	0.00	3.60	15.70	18.29	16.08	0.44	0.47	0.48	0.28	60.13	2007-07-16—2009-03-09

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

* Developed Market countries in the EMU include: Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, Portugal and Spain.

The MSCI EMU 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

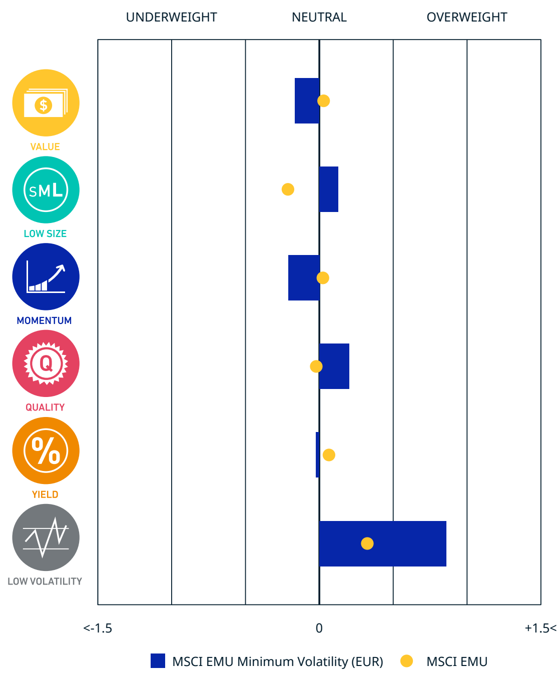
	MSCI EMU Minimum Volatility (EUR)	MSCI EMU
Number of Constituents	121	224
	Weight (%)	
Largest	2.28	6.47
Smallest	0.06	0.04
Average	0.83	0.45
Median	0.80	0.20

TOP 10 CONSTITUENTS

	Country	Index Wt. (%)	Parent Index Wt. (%)	Sector
UCB (GROUPE)	BE	2.28	0.30	Health Care
SAP	DE	1.72	3.42	Info Tech
ASSICURAZIONI GENERALI	IT	1.69	0.45	Financials
INDITEX	ES	1.67	0.90	Cons Discr
FERRARI (IT)	IT	1.65	0.94	Cons Discr
ALLIANZ	DE	1.65	2.01	Financials
THALES	FR	1.62	0.29	Industrials
WOLTERS KLUWER	NL	1.62	0.67	Industrials
BEIERSDORF	DE	1.62	0.27	Cons Staples
SANOFI	FR	1.55	2.04	Health Care
Total		17.07	11.30	

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

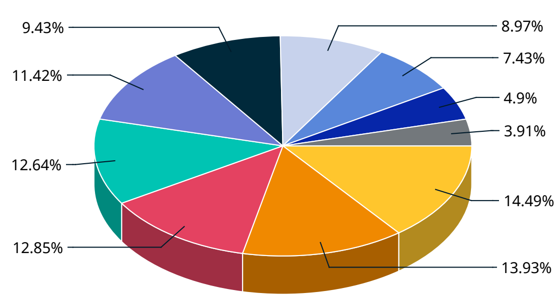
YIELD
Cash Flow Paid Out

LOW VOLATILITY
Lower Risk Stocks

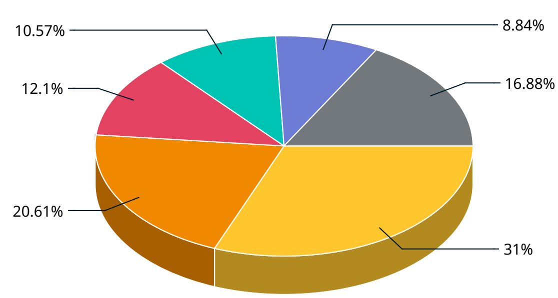
MSCI FaCS provides absolute factor exposures relative to a
broad global index - MSCI ACWI IMI.

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

SECTOR WEIGHTS



COUNTRY WEIGHTS



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.