

# MSCI USA Minimum Volatility (EUR) Index (EUR)

The **MSCI USA Minimum Volatility (EUR) Index** aims to reflect the performance characteristics of a minimum variance strategy applied to the large and mid cap USA equity universe. The index is calculated by optimizing the MSCI USA 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 USA Index.

For a complete description of the index methodology, please see [Index methodology - MSCI](#).

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (EUR) (APR 2009 – APR 2024)



## ANNUAL PERFORMANCE (%)

Year	MSCI USA Min Vol (EUR)	MSCI USA
2023	6.31	22.80
2022	-3.66	-14.18
2021	29.90	36.61
2020	-3.09	11.35
2019	30.48	34.06
2018	5.78	0.31
2017	3.93	7.08
2016	14.94	14.95
2015	16.21	12.86
2014	32.48	29.09
2013	18.75	26.88
2012	9.83	14.35
2011	15.03	5.40
2010	21.41	23.47

## INDEX PERFORMANCE – GROSS RETURNS (%) (APR 30, 2024)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Nov 30, 2001
MSCI USA Min Vol (EUR)	-2.62	2.97	13.75	6.72	9.46	8.72	12.92	7.95
MSCI USA	-3.16	5.89	27.33	9.36	11.67	14.23	15.30	8.09

## FUNDAMENTALS (APR 30, 2024)

Div Yld (%)	P/E	P/E Fwd	P/BV
1.98	21.62	18.02	3.99
1.42	25.06	20.31	4.60

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

	Beta	Tracking Error (%)	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			SHARPE RATIO <sup>2, 3</sup>			Since Nov 30, 2001	MAXIMUM DRAWDOWN	
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI USA Min Vol (EUR)	0.75	6.25	20.12	11.99	13.58	12.35	0.70	0.64	1.03	0.59	41.94	2007-06-01–2009-03-09
MSCI USA	1.00	0.00	2.00	15.66	16.68	14.71	0.70	0.85	1.04	0.52	53.76	2002-03-12–2009-03-09

<sup>1</sup> Last 12 months

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

<sup>3</sup> Based on EMMI EURIBOR 1M from Sep 1 2021 & on ICE LIBOR 1M prior that date

The MSCI USA 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

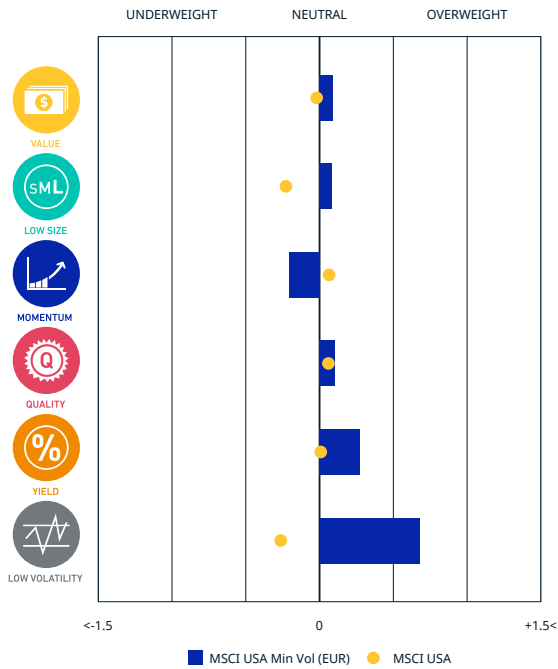
	MSCI USA Min Vol (EUR)	MSCI USA
Number of Constituents	179	612
	Weight (%)	
Largest	1.81	6.23
Smallest	0.05	0.01
Average	0.56	0.16
Median	0.45	0.06

TOP 10 CONSTITUENTS

	Index Wt. (%)	Parent Index Wt. (%)	Sector
BROADCOM	1.81	1.31	Info Tech
WASTE MANAGEMENT	1.72	0.19	Industrials
REPUBLIC SERVICES	1.70	0.10	Industrials
MERCK & CO	1.67	0.74	Health Care
AMPHENOL CORP	1.64	0.16	Info Tech
T-MOBILE US	1.56	0.19	Comm Svcs
WASTE CONNECTIONS	1.56	0.09	Industrials
BERKSHIRE HATHAWAY B	1.55	1.18	Financials
IBM CORP	1.52	0.34	Info Tech
TEXAS INSTRUMENTS	1.51	0.36	Info Tech
Total	16.24	4.68	

FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

MSCI FACTOR BOX



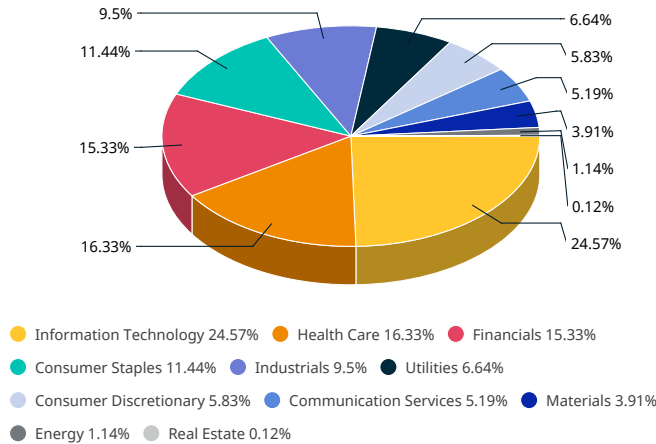
MSCI FaCS

- 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



## 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

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