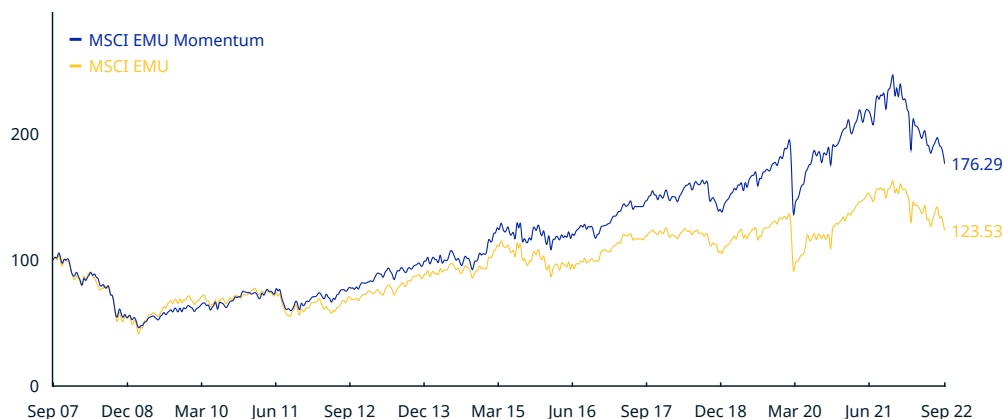


# MSCI EMU Momentum Index (EUR)

The MSCI EMU Momentum Index is based on MSCI EMU, its parent index, which includes large and mid cap stocks across 10 Developed Markets (DM) countries in the EMU\*. It is designed to reflect the performance of an equity momentum strategy by emphasizing stocks with high price momentum, while maintaining reasonably high trading liquidity, investment capacity and moderate index turnover.

## CUMULATIVE INDEX PERFORMANCE – NET RETURNS (EUR) (SEP 2007 – SEP 2022)



## ANNUAL PERFORMANCE (%)

Year	MSCI EMU Momentum	MSCI EMU
2021	21.23	22.16
2020	9.52	-1.02
2019	30.35	25.47
2018	-6.88	-12.71
2017	16.17	12.49
2016	4.35	4.37
2015	16.85	9.81
2014	4.89	4.32
2013	22.24	23.36
2012	23.22	19.31
2011	-10.09	-14.89
2010	17.16	2.40
2009	14.20	27.32
2008	-45.61	-44.85

## INDEX PERFORMANCE – NET RETURNS (%) (SEP 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since Dec 31, 1998
					3 Yr	5 Yr	10 Yr		
MSCI EMU Momentum	-5.90	-6.21	-21.28	-26.01	0.94	3.34	8.72	6.36	
MSCI EMU	-6.31	-4.52	-17.96	-22.35	-0.45	0.45	6.20	3.01	

## FUNDAMENTALS (SEP 30, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
3.92	10.93	9.47	1.45
3.58	12.59	10.17	1.38

## INDEX RISK AND RETURN CHARACTERISTICS (DEC 31, 1998 – SEP 30, 2022)

	Beta	Tracking Error (%)	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			SHARPE RATIO <sup>2,3</sup>			Since Dec 31, 1998	MAXIMUM DRAWDOWN	
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI EMU Momentum	0.79	8.96	111.28	16.57	15.06	13.59	0.17	0.32	0.71	0.38	61.36	2000-03-06–2003-03-12
MSCI EMU	1.00	0.00	2.14	20.22	17.55	15.47	0.10	0.14	0.49	0.18	60.88	2000-03-31–2003-03-12

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

\*DM countries include: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal and Spain.

The MSCI EMU Momentum Index was launched on Dec 11, 2013. 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**

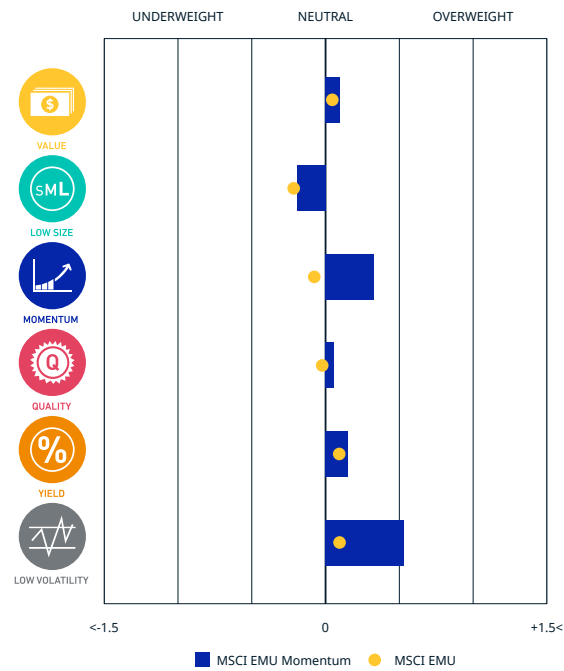
	MSCI EMU Momentum	MSCI EMU
<b>Number of Constituents</b>	69	230
<b>Weight (%)</b>		
<b>Largest</b>	5.29	4.61
<b>Smallest</b>	0.20	0.01
<b>Average</b>	1.45	0.43
<b>Median</b>	0.89	0.22

**TOP 10 CONSTITUENTS**

	Country	Index Wt. (%)	Parent Index Wt. (%)	Sector
TOTALENERGIES	FR	5.29	3.13	Energy
DEUTSCHE TELEKOM	DE	4.66	1.48	Comm Svcs
AIR LIQUIDE	FR	4.58	1.61	Materials
SANOFI	FR	4.43	2.34	Health Care
BAYER	DE	4.23	1.22	Health Care
ALLIANZ	DE	4.11	1.73	Financials
IBERDROLA	ES	4.02	1.49	Utilities
DEUTSCHE BOERSE	DE	3.05	0.84	Financials
PERNOD RICARD	FR	2.93	1.04	Cons Staples
WOLTERS KLUWER	NL	2.82	0.69	Industrials
<b>Total</b>		<b>40.11</b>	<b>15.56</b>	

**FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN**

**MSCI FACTOR BOX**



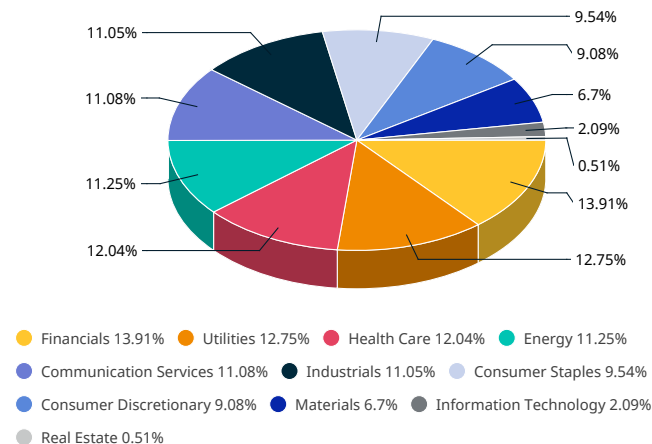
**MSCI FaCS**

- 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

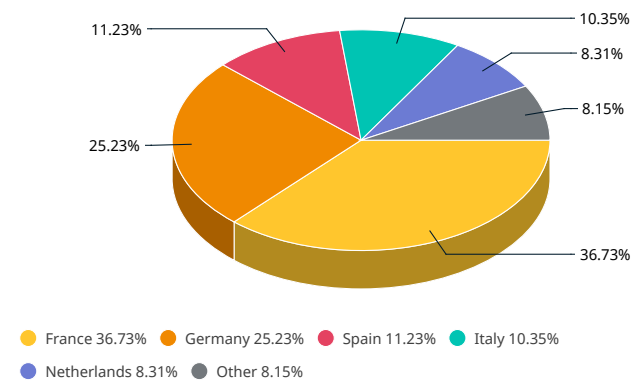
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

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

**SECTOR WEIGHTS**



**COUNTRY WEIGHTS**



## INDEX FRAMEWORK

A momentum value is determined for each stock in the MSCI parent index by combining the stock's recent 12-month and 6-month local price performance. This momentum value is then risk-adjusted to determine the stock's momentum score. A fixed number of securities with the highest momentum scores are included in each MSCI Momentum Index, generally covering about 30% of the parent index market cap. Constituents are weighted by the product of their momentum score and their market cap. Constituent weights for broad [MSCI Momentum Indexes](#) are capped at 5%. The indexes are rebalanced semiannually; in addition, ad hoc rebalancing may occur, triggered by spikes in market volatility.

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

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