

MSCI EMU Index (EUR)

The MSCI EMU (European Economic and Monetary Union) Index captures large and mid cap representation across the 10 Developed Markets (DM) countries in the EMU*. With 231 constituents, the index covers approximately 85% of the free float-adjusted market capitalization of the EMU.

CUMULATIVE INDEX PERFORMANCE – NET RETURNS (EUR) (APR 2008 – OCT 2022)



ANNUAL PERFORMANCE (%)

Year	MSCI EMU	MSCI World	MSCI ACWI
2021	22.16	31.07	27.54
2020	-1.02	6.33	6.65
2019	25.47	30.02	28.93
2018	-12.71	-4.11	-4.85
2017	12.49	7.51	8.89
2016	4.37	10.73	11.09
2015	9.81	10.42	8.76
2014	4.32	19.50	18.61
2013	23.36	21.20	17.49
2012	19.31	14.05	14.35
2011	-14.89	-2.38	-4.25
2010	2.40	19.53	20.50
2009	27.32	25.94	30.43

INDEX PERFORMANCE – NET RETURNS (%) (OCT 31, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since Apr 30, 2008	FUNDAMENTALS (OCT 31, 2022)			
					3 Yr	5 Yr	10 Yr	Div Yld (%)		P/E	P/E Fwd	P/BV	
MSCI EMU	7.92	-3.98	-14.96	-16.20	1.70	1.50	6.84	2.89	3.36	13.57	10.96	1.50	
MSCI World	6.24	-3.90	-4.55	-8.03	10.48	9.93	11.93	9.09	2.17	17.39	14.89	2.75	
MSCI ACWI	5.10	-4.72	-6.28	-9.26	9.17	8.76	10.95	8.41	2.33	16.45	14.21	2.53	

INDEX RISK AND RETURN CHARACTERISTICS (OCT 31, 2022)

	Turnover (%) ¹	ANNUALIZED STD DEV (%) ²			SHARPE RATIO ^{2,3}			Since Apr 30, 2008	MAXIMUM DRAWDOWN	
		3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI EMU	2.14	20.71	17.86	15.64	0.21	0.20	0.52	0.24	54.21	2008-05-19–2009-03-09
MSCI World	2.31	17.86	15.78	13.19	0.67	0.71	0.95	0.68	44.89	2008-05-19–2009-03-09
MSCI ACWI	2.62	17.06	15.17	12.76	0.63	0.66	0.90	0.64	45.66	2008-05-19–2009-03-09

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

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

The MSCI EMU Index was launched on Apr 30, 1998. 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

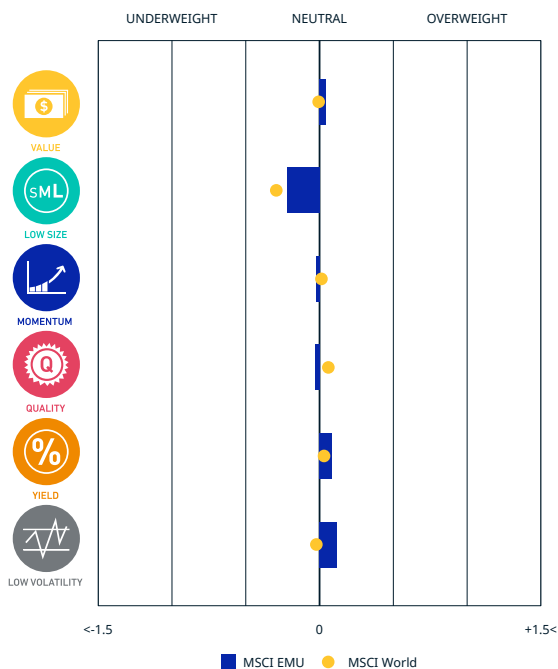
MSCI EMU	
Number of Constituents	231
Mkt Cap (EUR Millions)	
Index	4,132,907.80
Largest	194,294.80
Smallest	277.40
Average	17,891.38
Median	8,882.48

TOP 10 CONSTITUENTS

	Country	Float Adj Mkt Cap (EUR Billions)	Index Wt. (%)	Sector
ASML HLDG	NL	194.29	4.70	Info Tech
LVMH MOET HENNESSY	FR	177.40	4.29	Cons Discr
TOTALENERGIES	FR	136.61	3.31	Energy
SAP	DE	101.99	2.47	Info Tech
SANOFI	FR	99.44	2.41	Health Care
SIEMENS	DE	84.64	2.05	Industrials
L'OREAL	FR	76.77	1.86	Cons Staples
ALLIANZ	DE	74.42	1.80	Financials
SCHNEIDER ELECTRIC	FR	69.59	1.68	Industrials
AIR LIQUIDE	FR	69.18	1.67	Materials
Total		1,084.33	26.24	

FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

MSCI FACTOR BOX



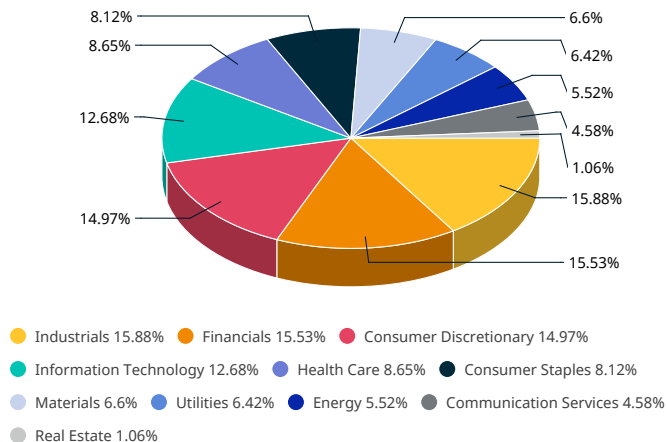
MSCI FaCS

- 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

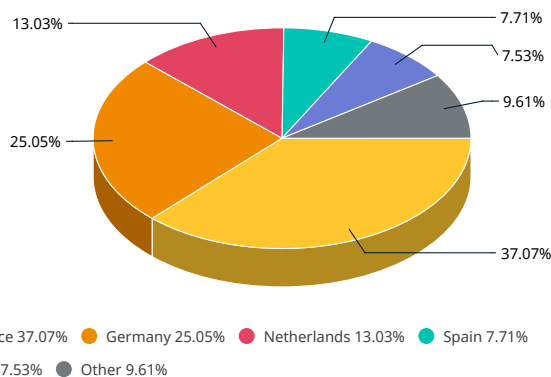
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

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

SECTOR WEIGHTS



COUNTRY WEIGHTS



INDEX FRAMEWORK

The index is based on the [MSCI Global Investable Market Indexes \(GIMI\) Methodology](#) – a comprehensive and consistent approach to index construction that allows for meaningful global views and cross regional comparisons across all market capitalization size, sector and style segments and combinations. This methodology aims to provide exhaustive coverage of the relevant investment opportunity set with a strong emphasis on index liquidity, investability and replicability. The index is reviewed quarterly—in February, May, August and November—with the objective of reflecting change in the underlying equity markets in a timely manner, while limiting undue index turnover. During the May and November semi-annual index reviews, the index is rebalanced and the large and mid capitalization cutoff points are recalculated.

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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