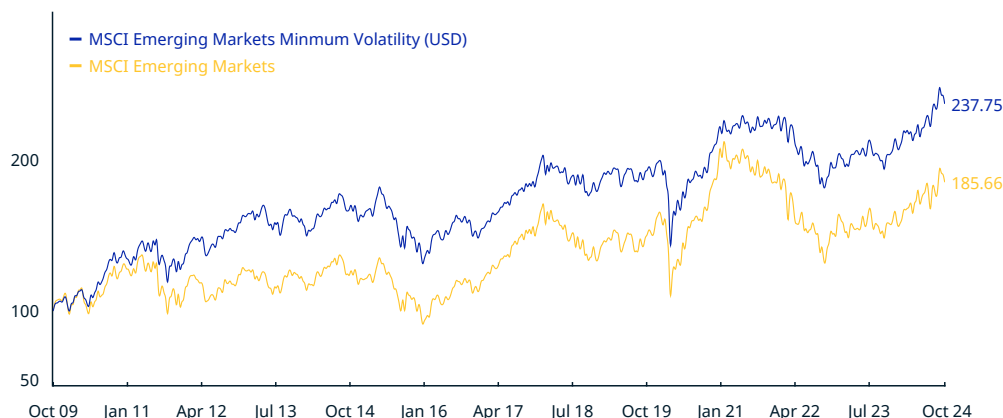


# MSCI Emerging Markets Minimum Volatility (USD) Index (USD)

The **MSCI Emerging Markets (EM) Minimum Volatility (USD) Index** aims to reflect the performance characteristics of a minimum variance strategy applied to large and mid cap equities across 24 Emerging Markets countries\*. The index is calculated by optimizing the MSCI Emerging Markets Index, its parent index, 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 Emerging Markets Index.

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

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (USD) (OCT 2009 – OCT 2024)



## ANNUAL PERFORMANCE (%)

Year	MSCI Emerging Markets Minimum Volatility (USD)	MSCI Emerging Markets
2023	9.33	10.27
2022	-13.59	-19.74
2021	5.92	-2.22
2020	8.25	18.69
2019	8.92	18.88
2018	-5.38	-14.24
2017	27.21	37.75
2016	4.36	11.60
2015	-11.67	-14.60
2014	1.54	-1.82
2013	0.36	-2.27
2012	22.73	18.63
2011	-5.82	-18.17
2010	29.43	19.20

## INDEX PERFORMANCE – GROSS RETURNS (%) (OCT 31, 2024)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since May 31, 1993
					3 Yr	5 Yr	10 Yr		
<b>MSCI Emerging Markets Minimum Volatility (USD)</b>	-4.20	3.48	22.25	11.16	2.03	4.24	3.36	8.44	
<b>MSCI Emerging Markets</b>	-4.32	3.79	25.95	12.17	-0.99	4.35	3.83	6.49	

## FUNDAMENTALS (OCT 31, 2024)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.95	16.15	13.94	1.88
2.57	15.92	12.08	1.84

## INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 1993 – OCT 31, 2024)

	Beta	Tracking Error (%)	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			SHARPE RATIO <sup>2, 3</sup>			Since May 31, 1993	MAXIMUM DRAWDOWN	
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
<b>MSCI Emerging Markets Minimum Volatility (USD)</b>	0.75	7.07	20.96	12.00	13.41	12.56	-0.08	0.20	0.19	0.41	53.70	2007-10-29–2008-10-27
<b>MSCI Emerging Markets</b>	1.00	0.00	5.58	17.81	18.70	17.17	-0.17	0.19	0.20	0.28	65.14	2007-10-29–2008-10-27

<sup>1</sup> Last 12 months <sup>2</sup> Based on monthly gross returns data <sup>3</sup> Based on NY FED Overnight SOFR from Sep 1 2021 & on ICE LIBOR 1M prior that date

\* EM countries include: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Kuwait, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The MSCI Emerging Markets Minimum Volatility (USD) Index was launched on Dec 01, 2009. 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**

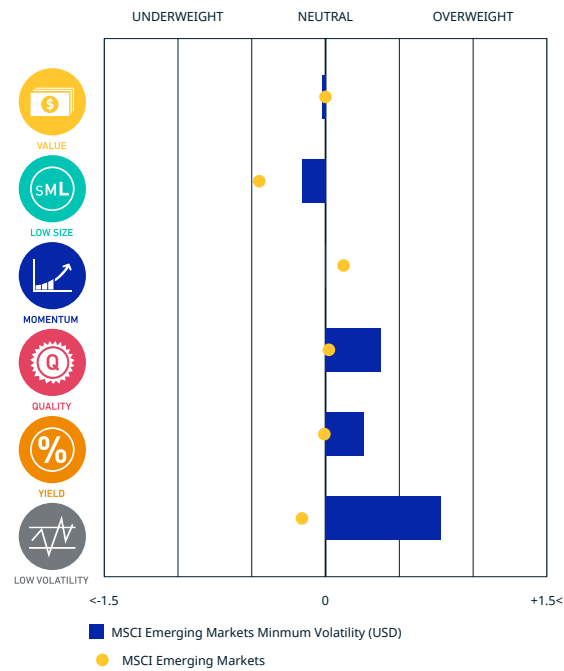
	MSCI Emerging Markets Minimum Volatility (USD)	MSCI Emerging Markets
<b>Number of Constituents</b>	338	1,278
	<b>Weight (%)</b>	
<b>Largest</b>	1.71	10.00
<b>Smallest</b>	0.03	0.00
<b>Average</b>	0.30	0.08
<b>Median</b>	0.16	0.03

**TOP 10 CONSTITUENTS**

	Country	Index Wt. (%)	Parent Index Wt. (%)	Sector
BHARTI AIRTEL	IN	1.71	0.62	Comm Svcs
TAIWAN MOBILE	TW	1.55	0.08	Comm Svcs
TATA CONSULTANCY	IN	1.48	0.54	Info Tech
ADVANCED INFO SERVICE	TH	1.48	0.12	Comm Svcs
AGRI BANK OF CHINA H	CN	1.40	0.17	Financials
CHUNGHWA TELECOM CO	TW	1.40	0.18	Comm Svcs
BANK OF CHINA H	CN	1.34	0.48	Financials
SAUDI TELECOM CO	SA	1.33	0.28	Comm Svcs
HCL TECHNOLOGIES	IN	1.30	0.25	Info Tech
FAR EASTONE TELECOM. CO	TW	1.17	0.06	Comm Svcs
<b>Total</b>		<b>14.15</b>	<b>2.79</b>	

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

**MSCI FACTOR BOX**



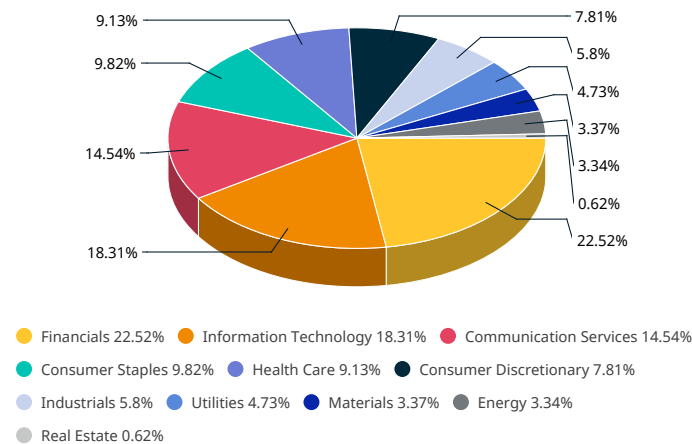
**MSCI FaCS**

- 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

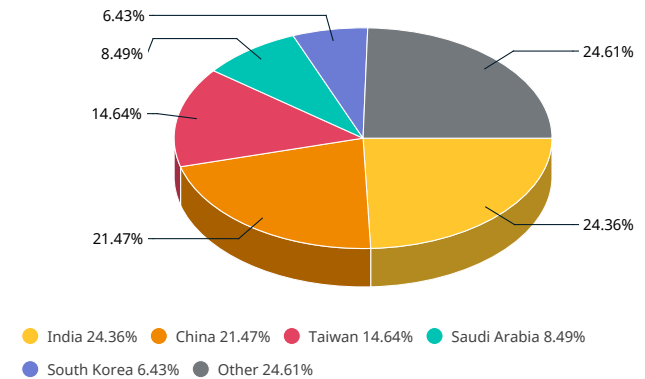
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

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

**SECTOR WEIGHTS**



**COUNTRY WEIGHTS**



**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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