

MSCI Emerging + Frontier Markets Index (USD)

The MSCI Emerging + Frontier Markets (EFM) Index captures large and mid cap representation across 25 Emerging Markets (EM) countries and 28 Frontier Markets (FM) countries*. With 1,483 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD) (NOV 2007 – NOV 2022)



ANNUAL PERFORMANCE (%)

Year	MSCI EFM	MSCI Emerging Markets	MSCI Frontier Markets
2021	-2.33	-2.54	19.73
2020	18.02	18.31	1.43
2019	18.45	18.42	17.99
2018	-14.61	-14.57	-16.41
2017	37.15	37.28	31.86
2016	10.98	11.19	2.66
2015	-14.90	-14.92	-14.46
2014	-1.78	-2.19	6.84
2013	-1.84	-2.60	25.89
2012	17.94	18.22	8.85
2011	-18.44	-18.42	-18.73
2010	19.06	18.88	23.75
2009	75.13	78.51	11.61
2008	-53.28	-53.33	-54.15

INDEX PERFORMANCE – NET RETURNS (%) (NOV 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since May 31, 2002	FUNDAMENTALS (NOV 30, 2022)			
					3 Yr	5 Yr	10 Yr	Div Yld (%)		P/E	P/E Fwd	P/BV	
MSCI EFM	14.71	-1.86	-17.51	-19.03	0.08	-0.45	2.14	7.52	3.39	12.44	na	1.61	
MSCI Emerging Markets	14.83	-1.78	-17.43	-18.95	0.14	-0.42	2.07	7.71	3.37	12.47	11.49	1.61	
MSCI Frontier Markets	5.19	-8.67	-24.12	-25.24	-1.79	-1.58	3.59	6.17	4.52	9.91	na	1.66	

INDEX RISK AND RETURN CHARACTERISTICS (NOV 30, 2022)

	Turnover (%) ¹	ANNUALIZED STD DEV (%) ²			SHARPE RATIO ^{2,3}			Since May 31, 2002	MAXIMUM DRAWDOWN	
		3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI EFM	5.71	20.90	18.78	16.61	0.07	0.00	0.16	0.39	64.00	2007-10-29–2008-10-27
MSCI Emerging Markets	5.59	20.98	18.89	16.76	0.08	0.01	0.16	0.39	65.25	2007-10-29–2008-10-27
MSCI Frontier Markets	16.86	19.40	16.69	14.31	-0.03	-0.08	0.26	0.35	67.47	2008-01-15–2009-03-03

¹ Last 12 months

² Based on monthly net returns data

³ 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, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. FM countries include: Bahrain, Bangladesh, Burkina Faso, Benin, Croatia, Estonia, Guinea-Bissau, Iceland, Ivory Coast, Jordan, Kenya, Lithuania, Kazakhstan, Mauritius, Mali, Morocco, Niger, Nigeria, Oman, Pakistan, Romania, Serbia, Senegal, Slovenia, Sri Lanka, Togo, Tunisia and Vietnam.

The MSCI Emerging + Frontier Markets Index was launched on Feb 07, 2008. 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

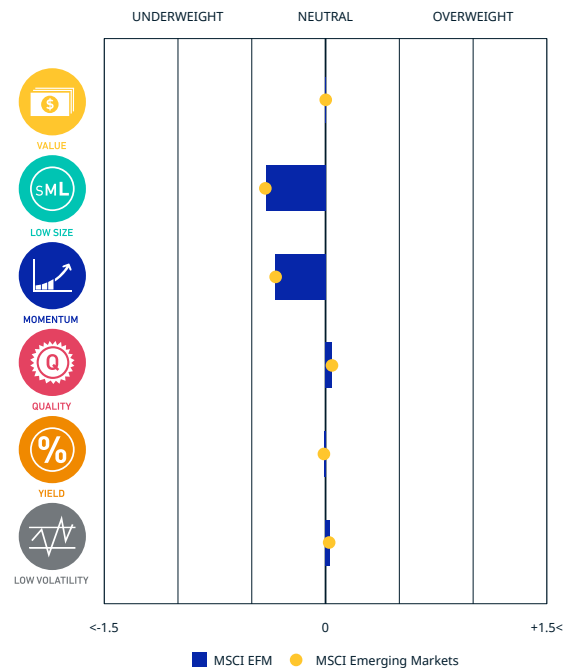
	MSCI EFM
Number of Constituents	1,483
Mkt Cap (USD Millions)	
Index	6,446,456.44
Largest	390,564.53
Smallest	22.55
Average	4,346.90
Median	1,643.95

TOP 10 CONSTITUENTS

	Country	Float Adj Mkt Cap (USD Billions)	Index Wt. (%)	Sector
TAIWAN SEMICONDUCTOR MFG	TW	390.56	6.06	Info Tech
TENCENT HOLDINGS LI (CN)	CN	229.88	3.57	Comm Srvc
SAMSUNG ELECTRONICS CO	KR	225.24	3.49	Info Tech
ALIBABA GRP HLDG (HK)	CN	155.40	2.41	Cons Discr
RELIANCE INDUSTRIES	IN	102.11	1.58	Energy
MEITUAN B	CN	92.31	1.43	Cons Discr
INFOSYS	IN	67.58	1.05	Info Tech
VALE ON	BR	65.18	1.01	Materials
JD.COM (HK)	CN	60.45	0.94	Cons Discr
ICICI BANK	IN	60.20	0.93	Financials
Total		1,448.91	22.48	

FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

MSCI FACTOR BOX



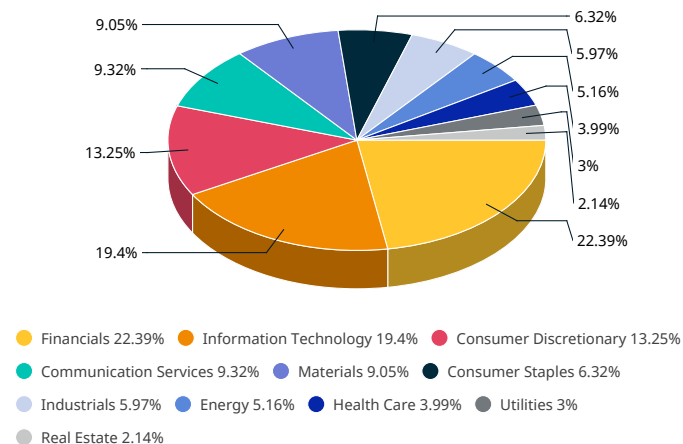
MSCI FaCS

- 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

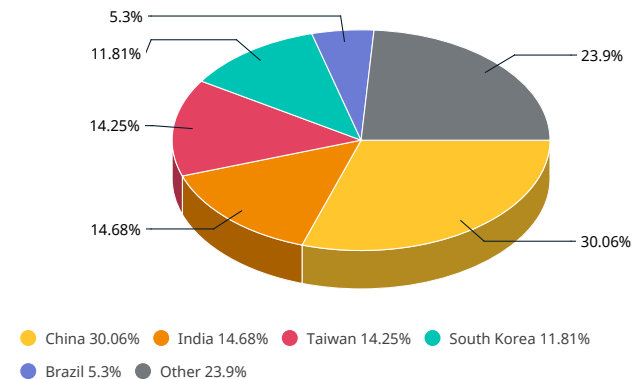
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

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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