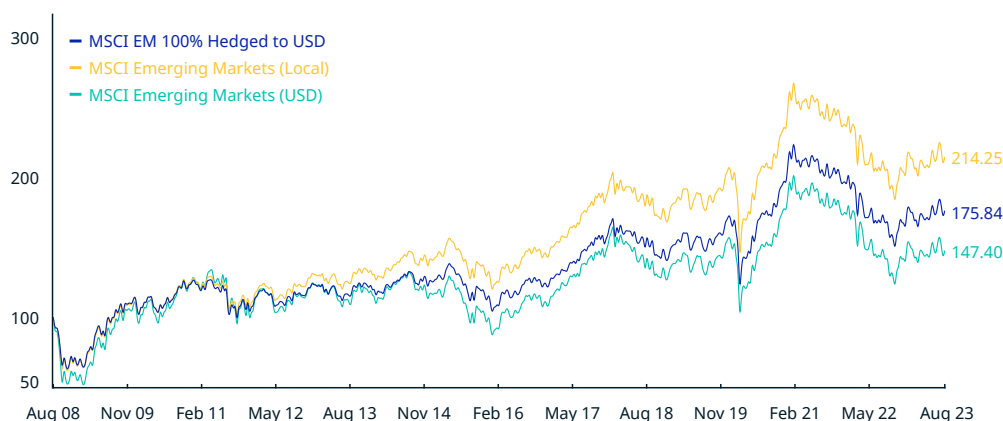


# MSCI Emerging Markets 100% Hedged to USD Index (USD)

The MSCI Emerging Markets (EM) 100% Hedged to USD Index represents a close estimation of the performance that can be achieved by hedging the currency exposures of its parent index, the MSCI EM Index, to the USD, the "home" currency for the hedged index. The index is 100% hedged to the USD by selling each foreign currency forward at the one-month Forward weight. The parent index is composed of large and mid cap stocks across 24 Emerging Markets (EM) countries\* and its local performance is calculated in different currencies.

## CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD) (AUG 2008 – AUG 2023)



## ANNUAL PERFORMANCE (%)

Year	MSCI EM 100% Hedged to USD	MSCI Emerging Markets (Local)	MSCI Emerging Markets (USD)
2022	-16.28	-15.54	-20.09
2021	-1.33	-0.19	-2.54
2020	19.58	19.12	18.31
2019	17.70	18.05	18.42
2018	-10.34	-10.07	-14.57
2017	28.56	30.55	37.28
2016	7.50	9.69	11.19
2015	-8.22	-5.76	-14.92
2014	2.08	5.17	-2.19
2013	0.59	3.44	-2.60
2012	14.01	16.99	18.22
2011	-14.39	-12.74	-18.42
2010	12.27	14.10	18.88
2009	60.55	62.29	78.51

## INDEX PERFORMANCE – NET RETURNS (%) (AUG 31, 2023)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Dec 29, 2000
MSCI EM 100% Hedged to USD	-4.62	3.89	2.66	6.03	-0.05	2.44	4.28	6.77
MSCI Emerging Markets (Local)	-4.68	3.84	2.32	5.95	0.63	2.82	5.57	8.71
MSCI Emerging Markets (USD)	-6.16	3.47	1.25	4.55	-1.39	0.98	2.99	7.43

## INDEX RISK AND RETURN CHARACTERISTICS (DEC 29, 2000 – AUG 31, 2023)

	ANNUALIZED STD DEV (%) <sup>1</sup>			SHARPE RATIO <sup>1,2</sup>			Since Dec 29, 2000	MAXIMUM DRAWDOWN	
	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI EM 100% Hedged to USD	14.46	15.81	13.39	-0.04	0.12	0.29	0.37	56.10	2007-10-29–2008-10-27
MSCI Emerging Markets (Local)	14.37	15.86	13.41	0.00	0.15	0.39	0.48	57.97	2007-10-29–2008-10-27
MSCI Emerging Markets (USD)	17.86	19.20	17.12	-0.08	0.06	0.19	0.37	65.25	2007-10-29–2008-10-27

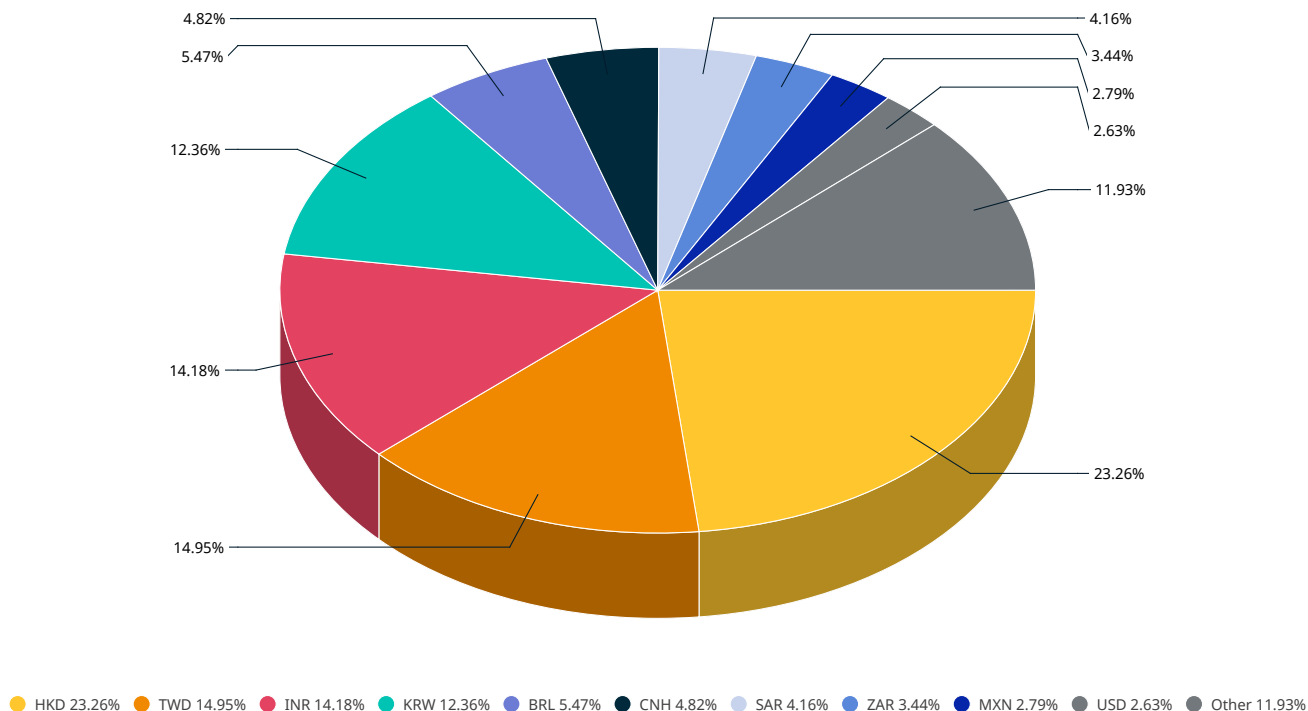
<sup>1</sup> Based on monthly net returns data

<sup>2</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 100% Hedged to USD Index was launched on Jul 02, 2012. 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.

**CURRENCY WEIGHTS ( AUG 31, 2023 )**



**INDEX FRAMEWORK**

The MSCI Hedged Indexes hedge each foreign currencies in the parent index back to a "home" currency by selling each foreign currency forward at the one-month Forward rate. The amount of forwards sold on the last business day of the month corresponds to the market cap weight of the securities in the parent index that are quoted in each currency as of the close of two business days before the first calendar day of the following month. The amount hedged is kept constant over the whole month.

There are two components to a MSCI Hedged Index return: 1) the performance of the unhedged index in the home currency; and, 2) the Hedge Impact (aimed to represent the gain or loss on the Forward contracts) in the home currency. For example, if a US-based investor were to invest in the MSCI EAFE Index, the calculation would combine the unhedged MSCI EAFE index return in US dollars (USD) with the performance impact of hedging the currency exposure of the 12 other foreign currencies of the MSCI EAFE Index relative to the USD.

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](#).

**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](http://www.msci.com).

The information contained herein (the "Information") may not be reproduced or disseminated in whole or in part without prior written permission from MSCI. The Information may not be used to verify or correct other data, to create indexes, risk models, or analytics, or in connection with issuing, offering, sponsoring, managing or marketing any securities, portfolios, financial products or other investment vehicles. Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. None of the Information or MSCI index or other product or service constitutes an offer to buy or sell, or a promotion or recommendation of, any security, financial instrument or product or trading strategy. Further, none of the Information or any MSCI index is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. The Information is provided "as is" and the user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF MSCI INC. OR ANY OF ITS SUBSIDIARIES OR ITS OR THEIR DIRECT OR INDIRECT SUPPLIERS OR ANY THIRD PARTY INVOLVED IN THE MAKING OR COMPILING OF THE INFORMATION (EACH, AN "MSCI PARTY") MAKES ANY WARRANTIES OR REPRESENTATIONS AND, TO THE MAXIMUM EXTENT PERMITTED BY LAW, EACH MSCI PARTY HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING ANY OF THE FOREGOING AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT SHALL ANY OF THE MSCI PARTIES HAVE ANY LIABILITY REGARDING ANY OF THE INFORMATION FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR ANY OTHER DAMAGES EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES. The foregoing shall not exclude or limit any liability that may not be applicable law be excluded or limited.

© 2023 MSCI Inc. All rights reserved.

