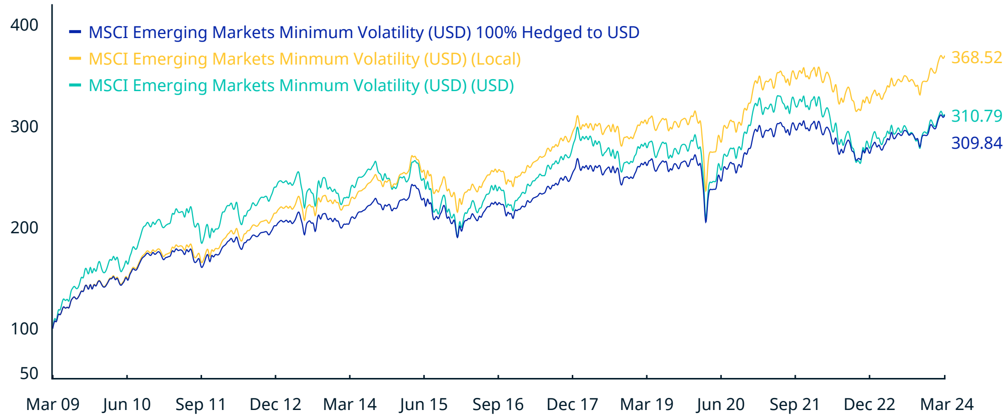
# MSCI Emerging Markets Minimum Volatility (USD) 100% Hedged to USD Index (USD)

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

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

## CUMULATIVE INDEX PERFORMANCE — NET RETURNS (USD) (MAR 2009 – MAR 2024)




## ANNUAL PERFORMANCE (%)

| Year | MSCI Emerging Markets Minimum Volatility (USD) 100% Hedged to USD | MSCI Emerging Markets Minmum Volatility (USD) (Local) | MSCI Emerging Markets Minmum Volatility (USD) (USD) |
|---|---|---|---|
| 2023 | 9.22 | 9.53 | 8.91 |
| 2022 | -9.14 | -8.57 | -13.95 |
| 2021 | 6.32 | 7.51 | 5.55 |
| 2020 | 6.37 | 6.52 | 7.79 |
| 2019 | 7.73 | 7.83 | 8.48 |
| 2018 | -2.38 | -2.43 | -5.77 |
| 2017 | 19.14 | 19.95 | 26.73 |
| 2016 | 2.92 | 4.62 | 3.90 |
| 2015 | -5.81 | -3.96 | -12.05 |
| 2014 | 4.73 | 6.91 | 1.10 |
| 2013 | 4.42 | 6.90 | -0.05 |
| 2012 | 17.37 | 20.54 | 22.24 |
| 2011 | -2.47 | -0.65 | -6.18 |
| 2010 | 20.95 | 22.36 | 28.89 |

## INDEX PERFORMANCE — NET RETURNS (%) (MAR 29, 2024)

| | | | | | ANNUALIZED | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 Mo | 3 Mo | 1 Yr | YTD | 3 Yr | 5 Yr | 10 Yr | Since Dec 31, 2004 |
| **MSCI Emerging Markets Minimum Volatility (USD) 100% Hedged to USD** | 0.40 | 3.37 | 9.89 | 3.37 | 1.65 | 3.36 | 4.07 | 7.94 |
| **MSCI Emerging Markets Minmum Volatility (USD) (Local)** | 0.53 | 3.78 | 10.56 | 3.78 | 2.38 | 3.91 | 4.96 | 9.01 |
| **MSCI Emerging Markets Minmum Volatility (USD) (USD)** | -0.14 | 1.78 | 7.54 | 1.78 | -0.70 | 2.08 | 2.73 | 7.48 |

## INDEX RISK AND RETURN CHARACTERISTICS (DEC 31, 2004 – MAR 29, 2024)

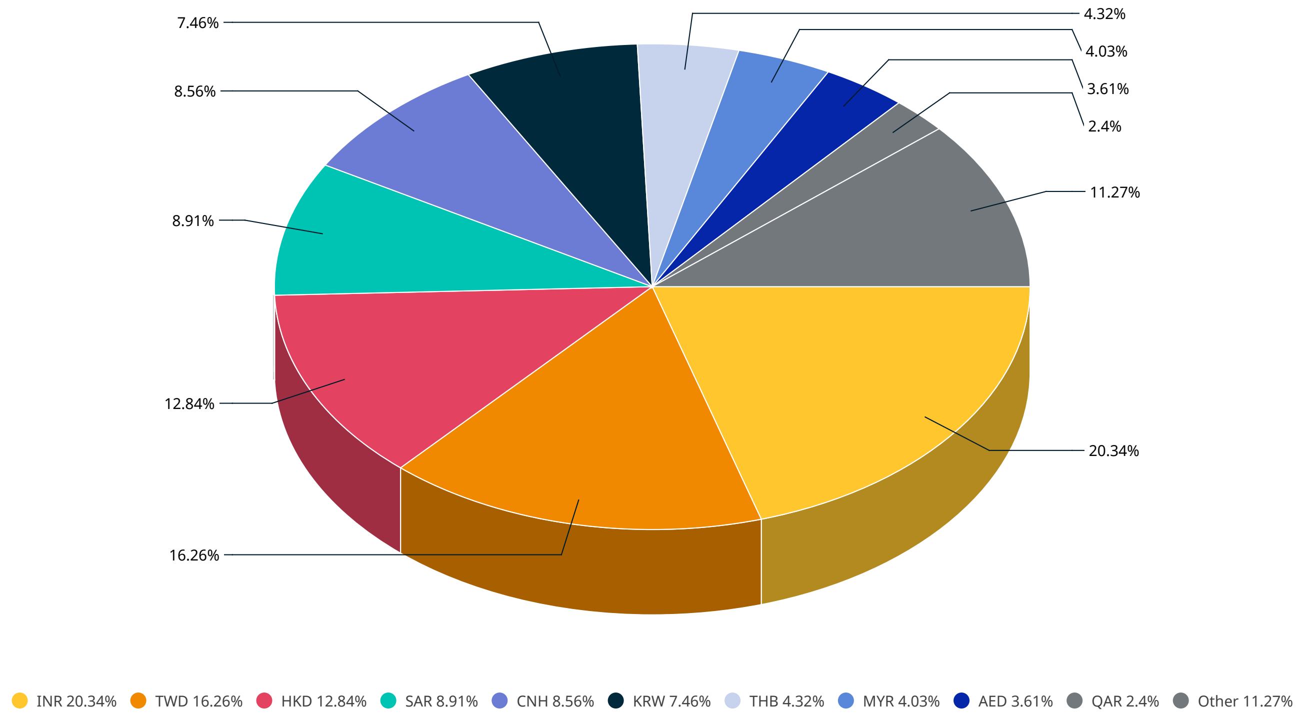
| | ANNUALIZED STD DEV (%) [1] | | | SHARPE RATIO [1,2] | | | | MAXIMUM DRAWDOWN | |
|---|---|---|---|---|---|---|---|---|---|
| | 3 Yr | 5 Yr | 10 Yr | 3 Yr | 5 Yr | 10 Yr | Since Dec 31, 2004 | (%) | Period YYYY-MM-DD |
| **MSCI Emerging Markets Minimum Volatility (USD) 100% Hedged to USD** | 8.71 | 10.63 | 9.41 | -0.07 | 0.17 | 0.32 | 0.56 | 44.91 | 2007-10-29—2008-10-27 |
| **MSCI Emerging Markets Minmum Volatility (USD) (Local)** | 8.73 | 10.67 | 9.44 | 0.01 | 0.22 | 0.41 | 0.64 | 46.43 | 2007-10-29—2008-10-27 |
| **MSCI Emerging Markets Minmum Volatility (USD) (USD)** | 11.60 | 13.31 | 12.43 | -0.23 | 0.07 | 0.16 | 0.43 | 53.91 | 2007-10-29—2008-10-27 |

* 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) 100% Hedged to USD Index was launched on Aug 25, 2015. 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.

[1] Based on monthly net returns data
[2] Based on NY FED Overnight SOFR from Sep 1 2021 & on ICE LIBOR 1M prior that date

## CURRENCY WEIGHTS ( MAR 29, 2024 )




## 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.