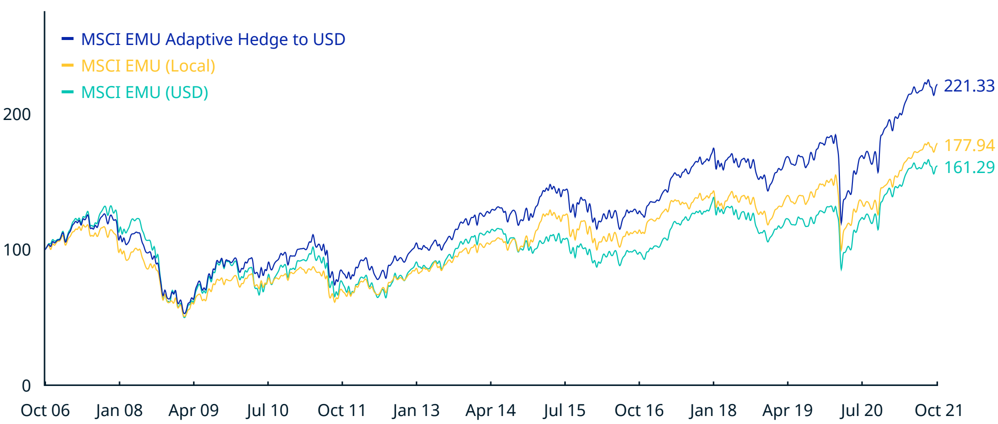
MSCI EMU Adaptive Hedge to USD Index (USD)

The MSCI EMU Adaptive Hedge to USD Index represents a close estimation of the performance that can be achieved by hedging the currency exposure of its parent index, the MSCI EMU Index, to the USD, the "home" currency for the hedged index. The parent index is composed of large and mid-cap stocks across 10 Developed Markets (DM) countries*. The hedge ratio is the ratio (proportion) of each currency weight in the index that will be hedged each month and is calculated as the average of the four indicator-level hedge ratios calculated for each of the four currency indicators (Value, Momentum, Carry and Volatility).

CUMULATIVE INDEX PERFORMANCE — NET RETURNS (USD) (OCT 2006 – OCT 2021)



ANNUAL PERFORMANCE (%)

Year	MSCI EMU Adaptive Hedge to USD	MSCI EMU (Local)	MSCI EMU (USD)
2020	4.72	-1.00	7.89
2019	26.29	25.45	23.20
2018	-11.95	-12.75	-16.90
2017	22.37	12.63	28.06
2016	1.25	4.33	1.34
2015	6.02	9.82	-1.42
2014	1.06	4.32	-8.39
2013	25.48	23.36	28.94
2012	19.98	19.31	21.17
2011	-12.60	-14.89	-17.64
2010	2.60	2.40	-4.25
2009	34.91	27.32	31.41
2008	-44.75	-44.85	-47.57
2007	15.49	7.82	19.55

INDEX PERFORMANCE — NET RETURNS (%) (OCT 29, 2021)

					ANNUALIZED			
	1 Mo	3 Mo	1 Yr	YTD	3 Yr	5 Yr	10 Yr	Since Dec 31, 2002
MSCI EMU Adaptive Hedge to USD	4.05	2.07	43.11	15.95	12.91	11.59	10.05	9.22
MSCI EMU (Local)	4.10	3.06	43.73	20.36	11.72	9.38	9.66	6.87
MSCI EMU (USD)	3.95	0.58	42.79	13.85	12.52	10.56	7.63	7.42

INDEX RISK AND RETURN CHARACTERISTICS (DEC 31, 2002 – OCT 29, 2021)

	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, 2002	(%)	Period YYYY-MM-DD
MSCI EMU Adaptive Hedge to USD	20.49	17.40	16.06	0.64	0.65	0.63	0.50	61.00	2007-10-31—2009-03-09
MSCI EMU (Local)	19.11	16.32	15.03	0.62	0.56	0.64	0.40	60.13	2007-07-16—2009-03-09
MSCI EMU (USD)	21.32	18.59	17.71	0.61	0.57	0.46	0.38	64.66	2007-10-31—2009-03-09

[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

* Developed Market countries in the EMU include: Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, Portugal and Spain.

The MSCI EMU Adaptive Hedge to USD Index was launched on Nov 13, 2015. Data prior to the launch date is back-tested data (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 METHODOLOGY

The construction details of the MSCI Adaptive Hedge Indexes are the same as for the MSCI Hedged Indexes with the difference being the portion of each currency exposure to be hedged every month. In the MSCI Hedged Indexes the full weight of each currency is hedged by selling a 1-month forward of each currency proportional to its weight. In the MSCI Adaptive Hedge Indexes, the level of hedging for each currency is determined by rules which consider signals from a combination of four currency indicators: Value, Momentum, Carry and Volatility.