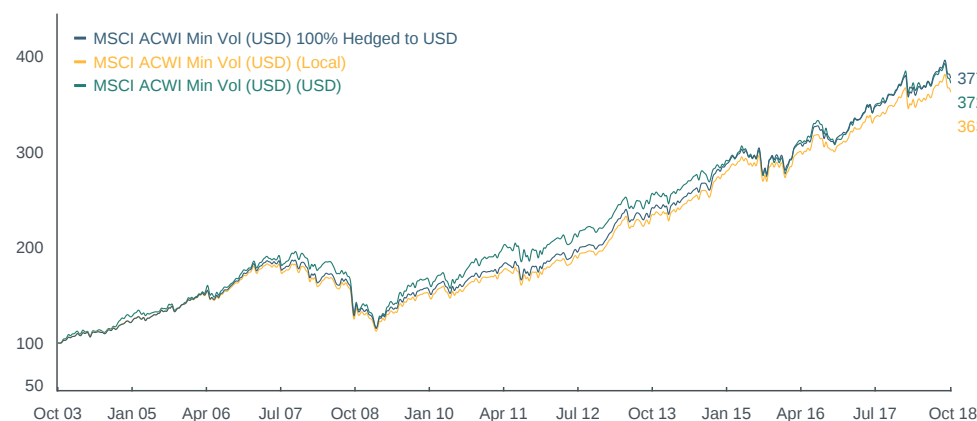


MSCI ACWI MINIMUM VOLATILITY (USD) 100% HEDGED TO USD INDEX (USD)

The MSCI ACWI 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 ACWI 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 23 Developed Markets (DM) countries and 24 Emerging Market (EM) countries* around the world. 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 ACWI Minimum Volatility Index.

CUMULATIVE INDEX PERFORMANCE - NET RETURNS (USD) (OCT 2003 – OCT 2018)



ANNUAL PERFORMANCE (%)

Year	MSCI ACWI Min Vol (USD) 100% Hedged to USD	MSCI ACWI Min Vol (USD) (Local)	MSCI ACWI Min Vol (USD) (USD)
2017	16.02	15.49	17.93
2016	7.64	7.37	7.43
2015	4.97	5.07	2.76
2014	15.13	15.33	10.95
2013	20.65	20.94	16.90
2012	10.64	10.84	10.06
2011	5.33	5.33	5.34
2010	11.11	10.84	14.32
2009	14.75	14.33	17.16
2008	-24.73	-24.99	-25.56
2007	3.99	2.87	6.95
2006	22.89	21.36	24.89
2005	15.04	14.57	8.89
2004	17.32	17.66	21.63

INDEX PERFORMANCE — NET RETURNS (%) (OCT 31, 2018)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Dec 29, 2000
MSCI ACWI Min Vol (USD) 100% Hedged to USD	-4.23	-1.38	4.93	2.31	8.46	9.32	10.53	7.29
MSCI ACWI Min Vol (USD) (Local)	-4.31	-1.55	4.28	1.77	8.01	9.11	10.39	7.13
MSCI ACWI Min Vol (USD) (USD)	-4.70	-2.21	3.61	0.49	8.12	7.75	10.20	7.64

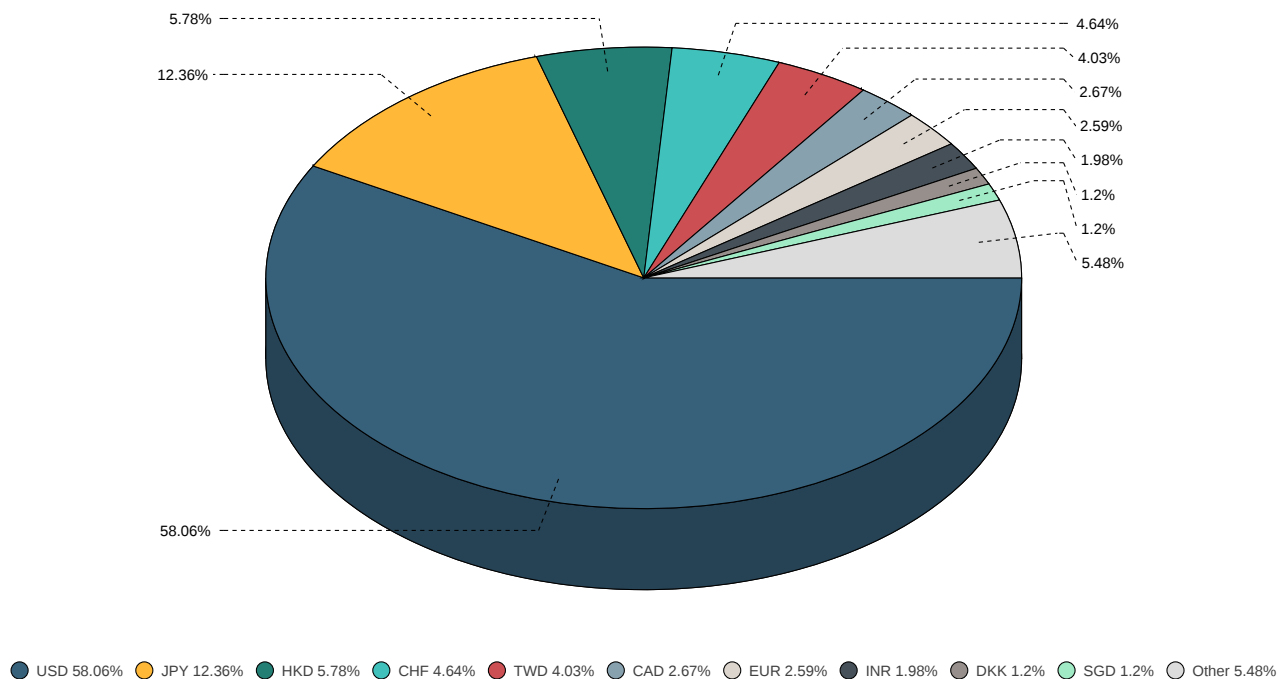
INDEX RISK AND RETURN CHARACTERISTICS (DEC 29, 2000 – OCT 31, 2018)

	ANNUALIZED STD DEV (%) ¹			SHARPE RATIO ^{1, 2}			Since Dec 29, 2000	MAXIMUM DRAWDOWN (%)	PERIOD YYYY-MM-DD
	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr			
MSCI ACWI Min Vol (USD) 100% Hedged to USD	6.55	7.10	8.34	1.11	1.19	1.18	0.63	40.39	2007-10-11—2009-03-09
MSCI ACWI Min Vol (USD) (Local)	6.55	7.12	8.36	1.05	1.16	1.17	0.62	40.83	2007-06-01—2009-03-09
MSCI ACWI Min Vol (USD) (USD)	7.69	7.98	9.87	0.92	0.89	0.98	0.60	42.41	2007-10-31—2009-03-09

* DM countries include: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Sweden, Switzerland, the UK and the US. EM countries include: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The MSCI ACWI Minimum Volatility (USD) 100% Hedged to USD Index was launched on Aug 25, 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.

CURRENCY WEIGHTS (OCT 31, 2018)



INDEX METHODOLOGY

The MSCI Minimum Volatility Indexes are designed to provide the lowest return variance for a given covariance matrix of stock returns. Each MSCI Minimum Volatility Index is calculated using Barra Optimizer to optimize a given MSCI parent index for the lowest absolute volatility with a certain set of constraints. These constraints help maintain index replicability and investability and include index turnover limits, for example, along with minimum and maximum constituent, sector and/or country weights relative to the parent index. Each Minimum Volatility Index is rebalanced (or is re-optimized) semi-annually in May and November. Indexes may also be optimized for various currencies.

To hedge the currency risk in the MSCI Minimum Volatility Indexes, each foreign currency in the index is hedged back to a home currency (e.g., EUR) by notionally “selling” each currency forward at the one-month forward rate at the end of each month. To construct investable and replicable indexes, MSCI calculates the performance of Hedged Indexes using foreign currency weights and corresponding foreign currency notional amounts as of two business days before the first calendar day of the following month.

ABOUT MSCI

For more than 40 years, MSCI’s research-based indexes and analytics have helped the world’s leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research. Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research. MSCI serves 99 of the top 100 largest money managers, according to the most recent P&I ranking. For more information, visit us at 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.

© 2018 MSCI Inc. All rights reserved.