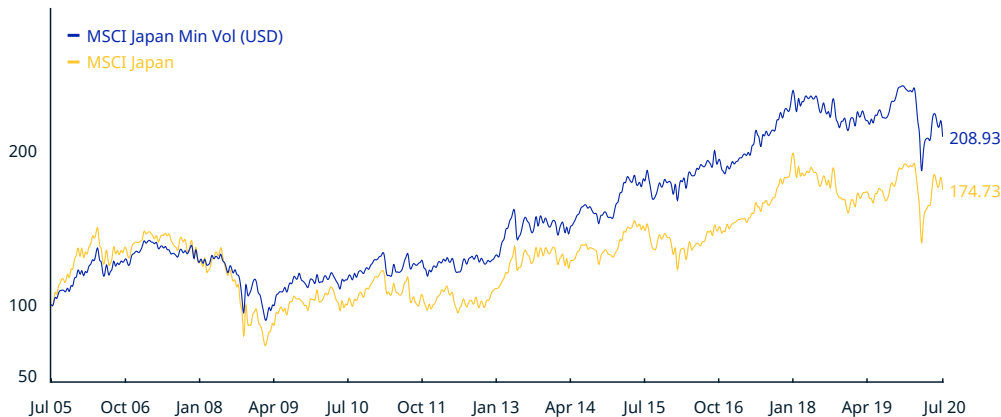


# MSCI Japan Minimum Volatility (USD) Index (USD)

The MSCI Japan Minimum Volatility (USD) Index aims to reflect the performance characteristics of a minimum variance strategy applied to the large and mid cap Japan equity universe. The index is calculated by optimizing the MSCI Japan Index, its parent index, in USD 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 Japan Index.

## CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD) (JUL 2005 – JUL 2020)



## ANNUAL PERFORMANCE (%)

Year	MSCI Japan Min Vol (USD)	MSCI Japan
2019	12.44	19.61
2018	-5.44	-12.88
2017	20.52	23.99
2016	2.84	2.38
2015	16.60	9.57
2014	1.36	-4.02
2013	20.06	27.16
2012	3.14	8.18
2011	-3.56	-14.33
2010	14.72	15.44
2009	-2.83	6.25
2008	-12.77	-29.21
2007	-0.82	-4.23
2006	13.43	6.24

## INDEX PERFORMANCE – NET RETURNS (%) (JUL 31, 2020)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since May 31, 2001
					3 Yr	5 Yr	10 Yr		
MSCI Japan Min Vol (USD)	-3.79	-0.55	-5.35	-13.01	-0.05	2.65	5.95	4.16	
MSCI Japan	-1.59	4.23	1.33	-8.60	1.74	3.02	5.55	2.80	

## FUNDAMENTALS (JUL 31, 2020)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.51	15.46	19.33	1.17
2.51	15.67	16.66	1.22

## INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2001 – JUL 31, 2020)

	Beta	Tracking Error (%)	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			SHARPE RATIO <sup>2,3</sup>			Since May 31, 2001	MAXIMUM DRAWDOWN	
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI Japan Min Vol (USD)	0.73	6.70	20.26	10.29	10.73	11.10	-0.13	0.18	0.51	0.26	39.68	2007-02-27–2009-03-12
MSCI Japan	1.00	0.00	2.43	13.25	13.53	13.34	0.06	0.19	0.42	0.15	53.17	2006-05-08–2009-03-10

<sup>1</sup> Last 12 months

<sup>2</sup> Based on monthly net returns data

<sup>3</sup> Based on ICE LIBOR 1M

The MSCI Japan Minimum Volatility (USD) Index was launched on Feb 18, 2014. 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 CHARACTERISTICS

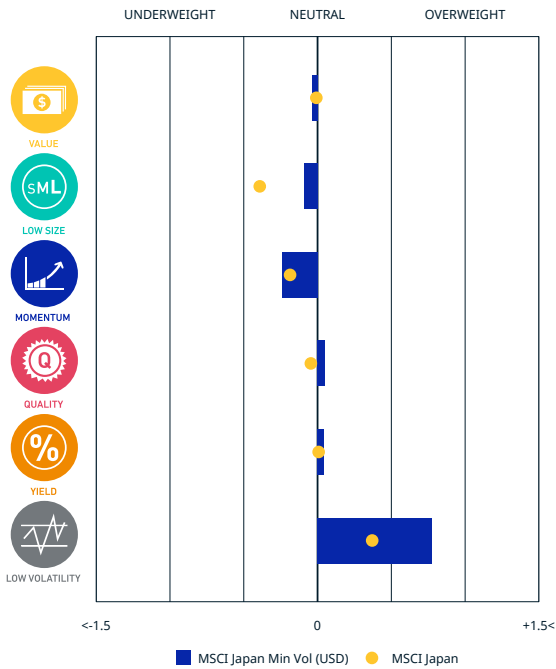
	MSCI Japan Min Vol (USD)	MSCI Japan
<b>Number of Constituents</b>	163	320
<b>Weight (%)</b>		
<b>Largest</b>	2.00	3.81
<b>Smallest</b>	0.04	0.04
<b>Average</b>	0.61	0.31
<b>Median</b>	0.49	0.16

### TOP 10 CONSTITUENTS

	Index Wt. (%)	Parent Index Wt. (%)	Sector
NITORI HOLDINGS CO	2.00	0.54	Cons Discr
CHUGAI PHARMACEUTICAL CO	1.65	0.92	Health Care
TOYO SUISAN KAISHA	1.58	0.16	Cons Staples
KDDI	1.56	1.55	Comm Svcs
NTT CORP	1.56	0.91	Comm Svcs
SOFTBANK CORP	1.56	0.78	Comm Svcs
SECOM CO	1.54	0.55	Industrials
NEC CORP	1.53	0.42	Info Tech
KEYENCE CORP	1.48	2.33	Info Tech
NTT DOCOMO	1.47	0.98	Comm Svcs
<b>Total</b>	<b>15.93</b>	<b>9.15</b>	

### FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

#### MSCI FACTOR BOX



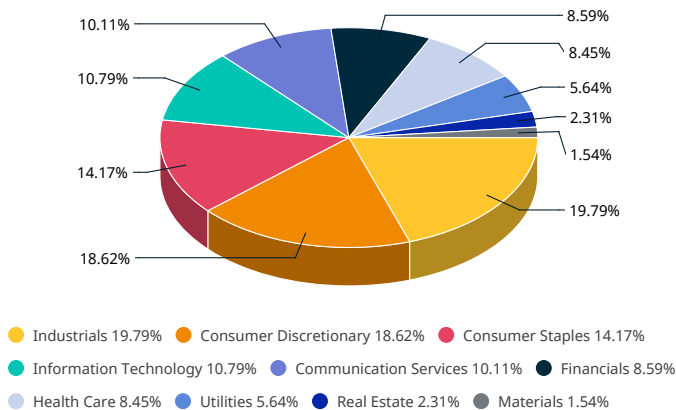
#### MSCI FaCS

- 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



## 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.

## FACTOR BOX AND FaCS METHODOLOGY

MSCI FaCS is a standard method ([MSCI FaCS Methodology](#)) 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

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