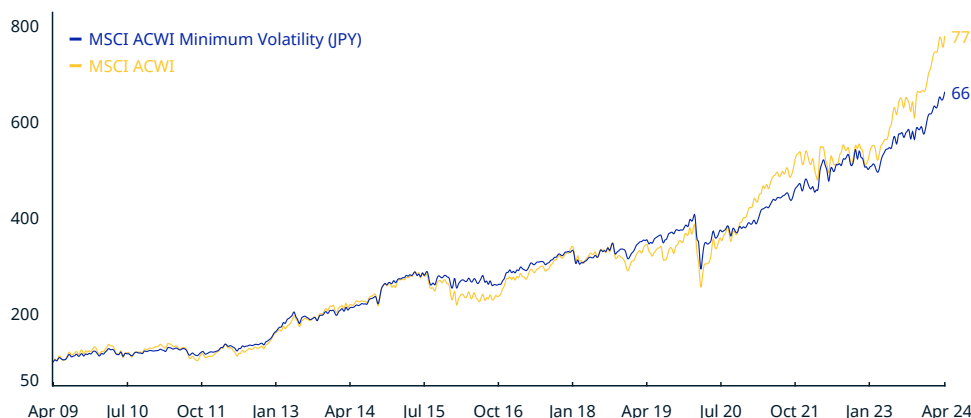


# MSCI ACWI Minimum Volatility (JPY) Index (JPY)

The **MSCI ACWI Minimum Volatility (JPY) Index** aims to reflect the performance characteristics of a minimum variance strategy applied to large and mid cap equities across 23 Developed Markets (DM) and 24 Emerging Markets (EM) countries\*. The index is calculated by optimizing the MSCI ACWI Index, its parent index, in JPY 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 Index.

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

## CUMULATIVE INDEX PERFORMANCE – GROSS RETURNS (JPY) (APR 2009 – APR 2024)



## ANNUAL PERFORMANCE (%)

Year	MSCI ACWI Minimum Volatility (JPY)	MSCI ACWI
2023	15.88	31.22
2022	3.86	-6.00
2021	26.11	32.77
2020	-0.33	10.99
2019	21.71	26.09
2018	-4.10	-11.30
2017	14.59	20.37
2016	5.22	5.18
2015	3.49	-1.51
2014	25.71	19.44
2013	40.35	50.05
2012	24.44	31.26
2011	-0.84	-11.65
2010	-0.12	-1.37

## INDEX PERFORMANCE – GROSS RETURNS (%) (APR 30, 2024)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since May 31, 2001
					3 Yr	5 Yr	10 Yr		
MSCI ACWI Minimum Volatility (JPY)	1.60	8.93	21.60	13.69	16.21	13.30	11.99	9.60	
MSCI ACWI	0.59	12.13	36.40	16.97	18.29	17.85	13.55	8.51	

## FUNDAMENTALS (APR 30, 2024)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.54	18.59	15.95	2.54
1.98	20.52	17.08	2.98

## INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2001 – APR 30, 2024)

	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 ACWI Minimum Volatility (JPY)	0.67	7.70	20.49	11.68	12.70	11.81	1.35	1.05	1.02	0.75	52.34	2007-07-13–2009-03-09
MSCI ACWI	1.00	0.00	2.57	14.87	17.19	16.14	1.21	1.05	0.87	0.53	64.82	2007-07-13–2009-03-09

<sup>1</sup> Last 12 months <sup>2</sup> Based on monthly gross returns data <sup>3</sup> Based on JBA TIBOR 1M from Sep 1 2021 & on ICE LIBOR 1M prior that date

\* DM countries include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the UK and the US. 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 ACWI Minimum Volatility (JPY) Index was launched on Feb 29, 2016. 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.

## INDEX CHARACTERISTICS

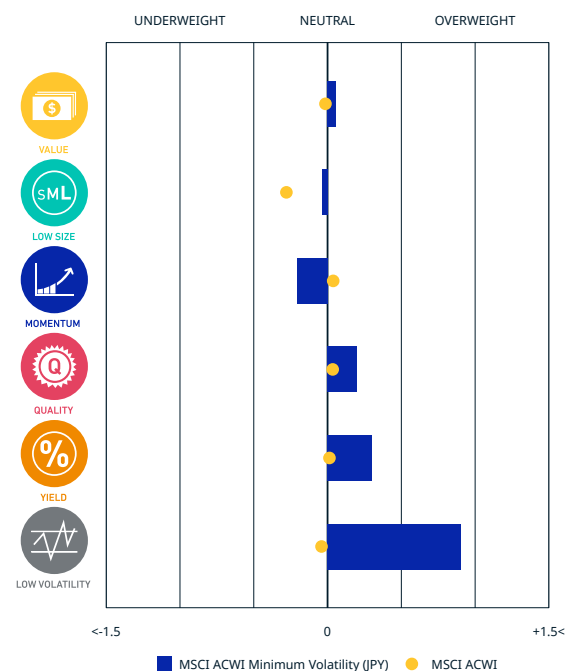
	MSCI ACWI Minimum Volatility (JPY)	MSCI ACWI
<b>Number of Constituents</b>	367	2,840
	<b>Weight (%)</b>	
<b>Largest</b>	1.72	3.95
<b>Smallest</b>	0.04	0.00
<b>Average</b>	0.27	0.04
<b>Median</b>	0.14	0.01

## TOP 10 CONSTITUENTS

	Index Wt. (%)	Parent Index Wt. (%)	Sector
WASTE MANAGEMENT	1.72	0.12	Industrials
MOTOROLA SOLUTIONS	1.49	0.08	Info Tech
T-MOBILE US	1.35	0.12	Comm Svcs
MERCK & CO	1.30	0.47	Health Care
ROPER TECHNOLOGIES	1.29	0.08	Info Tech
REPUBLIC SERVICES	1.27	0.06	Industrials
MCDONALD'S CORP	1.27	0.28	Cons Discr
CENCORA	1.23	0.06	Health Care
DUKE ENERGY CORP	1.20	0.11	Utilities
MCKESSON CORP	1.17	0.10	Health Care
<b>Total</b>	<b>13.28</b>	<b>1.49</b>	

## FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

## MSCI FACTOR BOX



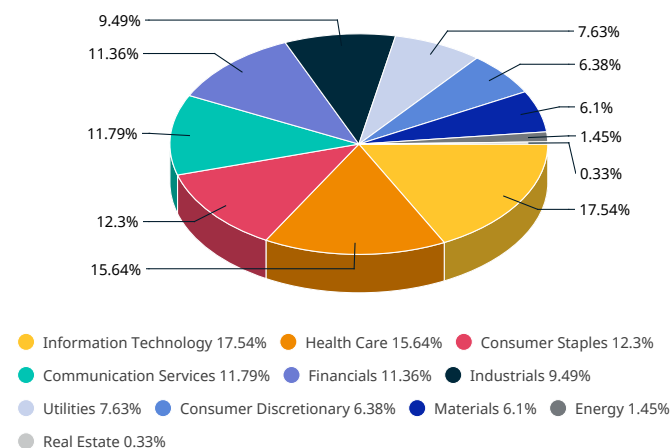
## MSCI FaCS

- 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

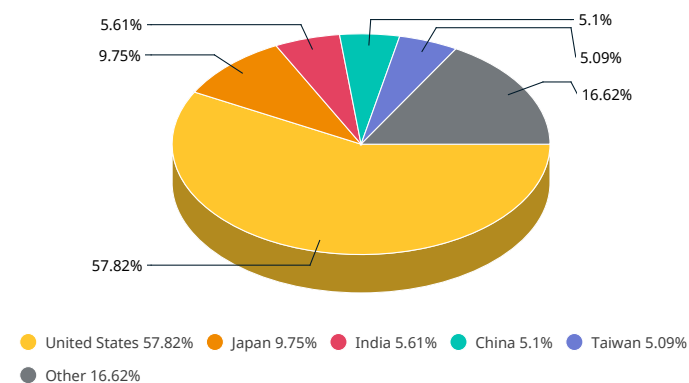
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

Neutral factor exposure (FaCS = 0) represents MSCI ACWI IMI.

## SECTOR WEIGHTS



## COUNTRY WEIGHTS



## MSCI FACTOR BOX AND FaCS FRAMEWORK (Please refer to complete description of the MSCI FaCS methodology [here](#))

MSCI FaCS is a standard method 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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