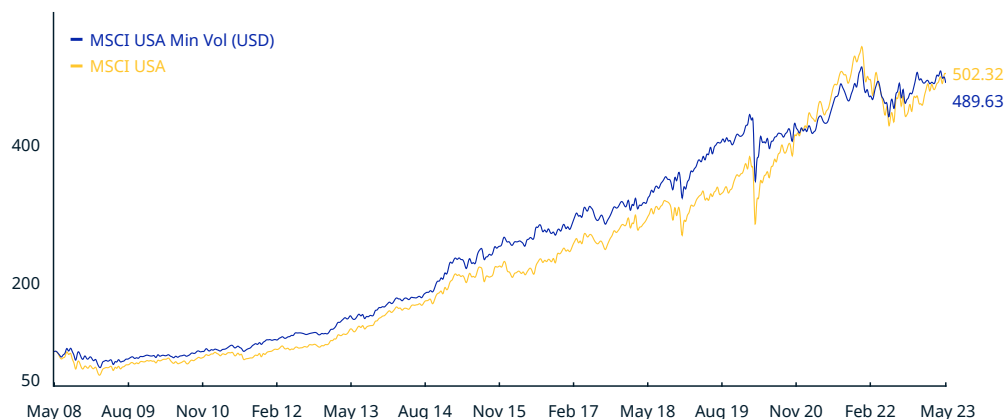


# MSCI USA Minimum Volatility (USD) Index (CAD)

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

## CUMULATIVE INDEX PERFORMANCE – NET RETURNS (CAD) (MAY 2008 – MAY 2023)



## ANNUAL PERFORMANCE (%)

Year	MSCI USA Min Vol (USD)	MSCI USA
2022	-3.11	-14.02
2021	19.40	25.38
2020	3.25	18.61
2019	20.67	24.26
2018	9.95	3.51
2017	10.63	13.23
2016	6.04	7.06
2015	25.83	20.75
2014	26.20	22.85
2013	32.72	40.63
2012	7.76	12.78
2011	14.71	3.87
2010	7.89	8.78
2009	-0.24	7.22

## INDEX PERFORMANCE – NET RETURNS (%) (MAY 31, 2023)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since May 31, 1988
					3 Yr	5 Yr	10 Yr		
MSCI USA Min Vol (USD)	-3.09	1.21	5.87	-0.45	5.79	8.83	12.73	9.96	
MSCI USA	0.82	5.25	9.94	9.93	11.39	11.36	14.38	10.25	

## FUNDAMENTALS (MAY 31, 2023)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.03	21.05	17.51	4.22
1.60	22.03	18.60	4.06

## INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 1988 – MAY 31, 2023)

	Beta	Tracking Error (%)	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			MAXIMUM DRAWDOWN	
				3 Yr	5 Yr	10 Yr	(%)	Period YYYY-MM-DD
MSCI USA Min Vol (USD)	0.75	5.99	20.31	11.64	11.76	10.88	38.84	2007-02-07–2009-03-05
MSCI USA	1.00	0.00	2.28	14.32	14.65	12.37	56.50	2000-08-31–2009-03-05

<sup>1</sup> Last 12 months

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

The MSCI USA Minimum Volatility (USD) Index was launched on Jun 02, 2008. 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**

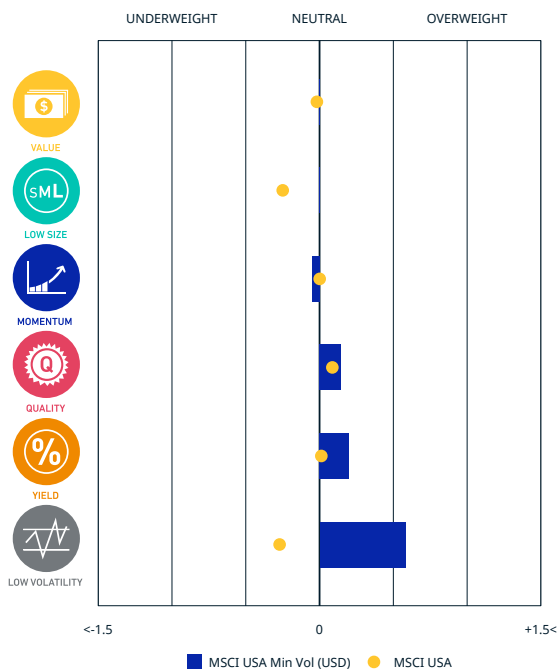
	MSCI USA Min Vol (USD)	MSCI USA
<b>Number of Constituents</b>	164	625
	Weight (%)	
<b>Largest</b>	1.63	7.63
<b>Smallest</b>	0.04	0.00
<b>Average</b>	0.61	0.16
<b>Median</b>	0.43	0.06

**TOP 10 CONSTITUENTS**

	Index Wt. (%)	Parent Index Wt. (%)	Sector
MERCK & CO	1.63	0.76	Health Care
REPUBLIC SERVICES	1.63	0.08	Industrials
MICROSOFT CORP	1.61	6.30	Info Tech
ORACLE CORP	1.61	0.46	Info Tech
CISCO SYSTEMS	1.60	0.55	Info Tech
BERKSHIRE HATHAWAY B	1.57	1.13	Financials
LILLY (ELI) & COMPANY	1.55	0.94	Health Care
PEPSICO	1.54	0.68	Cons Staples
WASTE MANAGEMENT	1.54	0.18	Industrials
TEXAS INSTRUMENTS	1.52	0.43	Info Tech
<b>Total</b>	<b>15.81</b>	<b>11.51</b>	

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

**MSCI FACTOR BOX**



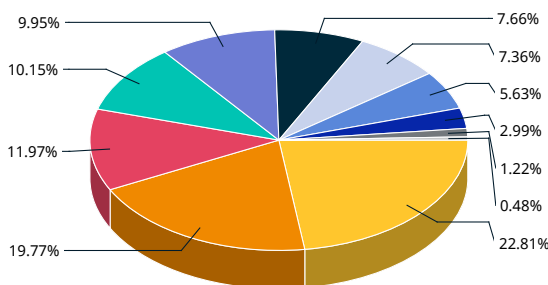
**MSCI FaCS**

- 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**



- Information Technology 22.81%
- Health Care 19.77%
- Consumer Staples 11.97%
- Financials 10.15%
- Industrials 9.95%
- Utilities 7.66%
- Communication Services 7.36%
- Consumer Discretionary 5.63%
- Materials 2.99%
- Real Estate 1.22%
- Energy 0.48%

## INDEX FRAMEWORK

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.

This summary is provided for illustrative purposes only and does not include all material elements of the index or its methodology. For a complete description of the index methodology, please see [Index methodology - MSCI](#).

## 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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