

# Nations<sup>®</sup> Low Volatility Index

NATIONS<sup>®</sup>

INDEXES

## Index Description

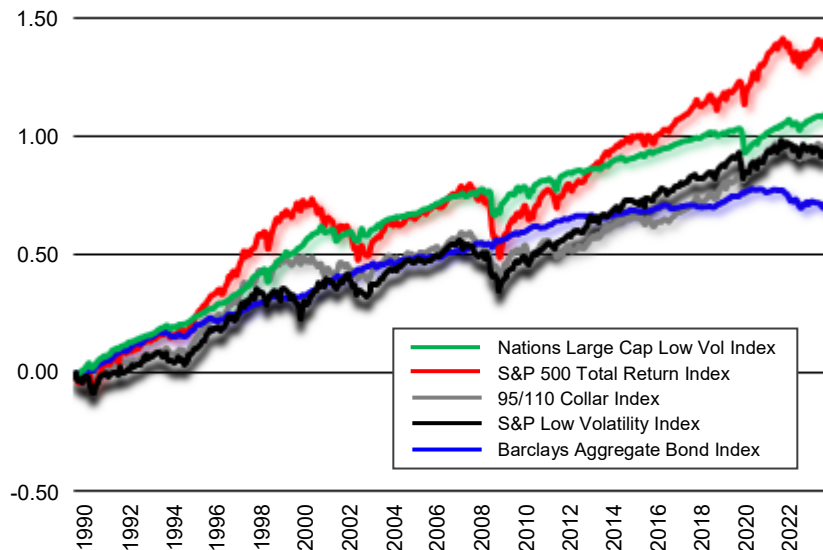
The Nations Large Cap Low Volatility<sup>™</sup> Index provides significant downside protection and less volatility in a mainstream investment product. The Index seeks to experience volatility equal to approximately half that of the S&P 500 while generating consistent returns; the Nations Low Volatility Index has generated negative returns in only three of the thirty-two years since calculation began and its Sharpe ratio is substantially better than rival indexes.

The Nations Large Cap Low Volatility<sup>™</sup> Index uses an enhanced option collar methodology that is vastly superior to existing lower volatility products since it takes systematic advantage of alternative risk premia which are economically robust and enjoy a long history of superior risk adjusted returns. Existing low volatility products use reactive strategies that rely on historical data. Nations Low Volatility Indexes use a forward-looking strategy.

## Nations Option Data<sup>1</sup>

Implied Volatility of Call Option Sold	16.65%
Implied Volatility of Put Option Bought	17.23%
Implied Volatility of Put Option Sold	21.28%
Realized Volatility	15.78%
Monthly Call Option Volatility Premium as % of S&P	0.099%
Call Option Distance From Market at Initiation	0.412%
Protective Put Distance From Market at Initiation	0.096%

## Comparative Historical Performance



	Nations Low Volatility	S&P 500 Total Return	95-110 Collar	S&P Low Volatility	Barclays Aggreg. Bond
Compound Annual Return					
2023	9.59%	26.29%	18.25%	-1.84%	5.53%
3 Year	7.82%	10.00%	5.73%	3.59%	-3.31%
5 Year	4.25%	15.69%	11.80%	6.08%	1.10%
10 Year	5.05%	12.03%	8.68%	6.57%	1.81%
Since Inception <sup>2</sup>	7.73%	10.21%	6.92%	6.61%	5.11%
Average Annualized Standard Deviation of Monthly Returns					
2023	3.03%	14.74%	12.00%	11.56%	8.49%
3 Year	8.70%	18.68%	12.71%	16.06%	5.77%
5 Year	7.24%	17.16%	11.91%	13.87%	4.94%
10 Year	5.46%	13.42%	9.71%	11.72%	3.94%
Since Inception <sup>2</sup>	6.36%	13.56%	9.97%	10.85%	3.64%
Average Annual Sharpe Ratio					
2023	0.94	1.33	0.96	-0.74	-0.14
3 Year	0.84	0.94	0.79	0.03	-0.09
5 Year	0.83	0.94	0.89	0.48	0.16
10 Year	1.57	1.61	1.27	0.88	0.50
Since Inception <sup>2</sup>	1.63	1.09	0.71	0.74	0.95

Better Ideas. Better Indexes.<sup>®</sup>

## A Comparison of Existing Low Volatility Products

Existing low volatility products use one of three generic strategies:

- The PowerShares Low Volatility ETF (SPLV) is based on the S&P Low Volatility Index. It holds the 100 stocks in the S&P 500 Index that were least volatile over the past year;
- VictoryShares US Multi-Factor Minimum Volatility ETF (VSMV) uses a screening model based on historical data to identify stocks which are less correlated;
- A number of ETFs use simple, and historically expensive, option hedging strategies to reduce volatility.

The Nations Low Volatility methodology is superior to these existing approaches:

- The S&P Low Volatility methodology simply selects stocks that experienced lower volatility over the previous 12 months without regard to sector or outlook for the next 12 months. SPLV suffers from sector bias; 18% of the index is in the utility sector with another 24% in the consumer staples sector<sup>3</sup>;
- The VictoryShares methodology uses historical data to pick stocks which have been less correlated in the past without any regard for potential future correlation;
- Simple downside hedging using index put options tends to be very expensive and consume most of a portfolio's annual return or generate protection only after a substantial decline.

<sup>1</sup> Monthly averages since inception

<sup>2</sup> Inception: 12/31/1989

<sup>3</sup> All as of 12/29/2023

## The Nations Low Volatility Index Outperforms the S&P Low Volatility Index<sup>2</sup>

**The Nations Low Volatility Index is the real low volatility index:**

**Average Annualized Standard Deviation of Monthly Returns:**

Nations Low Volatility Index:	6.36%
S&P Low Volatility Index:	10.85%

**The Nations Index enjoys this lower volatility despite superior returns:**

**Compound Annual Return:**

Nations Low Volatility Index:	7.73%
S&P Low Volatility Index:	6.61%

**The Nations Index is less correlated to the volatility of the broad market:**

**Beta Since Inception:**

Nations Low Volatility Index:	0.37
S&P Low Volatility Index:	0.62

**The Nations Low Volatility Index suffers smaller drawdowns:**

**Maximum Drawdown Since Inception:**

Nations Low Volatility Index:	22.44%
S&P Low Volatility Index:	38.53%

	Nations Low Volatility	S&P 500 Total Return	95-110 Collar (CLL)	S&P Low Volatility	Barclays Aggreg. Bond
Avg. Annual Return <sup>3</sup> (1990-2022)	8.09%	11.73%	7.67%	7.35%	5.26%
Median Annual Return <sup>3</sup> (1990-2022)	7.40%	14.38%	6.49%	7.18%	5.73%
Annualized Sortino Ratio	0.929	0.918	0.785	0.622	1.127
Annualized Stutzer Ratio <sup>2</sup>	0.617	0.548	0.044	0.382	0.613
Value of \$1 Invested on 12/31/1989	\$ 12.56	\$ 27.22	\$ 9.72	\$ 8.81	\$ 5.44
Beta	0.37	1.00	0.64	0.62	0.05
Alpha	3.87%	-0.01%	0.26%	0.41%	4.59%
Skew	-187.06%	-0.532	-17.29%	-65.55%	-0.266
Kurtosis	1430.96%	0.973	-24.70%	144.76%	1.447
R <sup>2</sup> to S&P 500	0.470	-	0.819	0.617	0.038
Up Capture Ratio	42.52	-	69.70	62.54	16.18
Down Capture Ratio	22.57	-	71.18	61.57	-5.11
Maximum Drawdown	22.44%	50.95%	35.47%	38.53%	17.18%

Performance of an index is not illustrative of any particular investment. Index returns quoted represent past performance which is no guarantee of future results.

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