# Nations<sup>®</sup> Large Cap Better Beta<sup>®</sup> Bull Index

#### **N**ations®

INDEXES

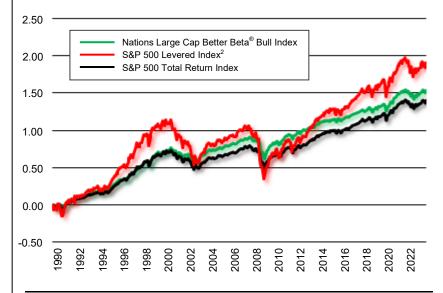
## Index Description

The Nations<sup>®</sup> Large Cap Better Beta<sup>®</sup> Bull Index is a significantly improved methodology for achieving levered index returns. It measures the return of an option-levered index which seeks to generate approximately 200% of the return of the reference index with a cap on appreciation, while returning only 100% of any decline in the reference index for monthly periods from option initiation to option expiration. The Index accomplishes this by overlaying a 1x2 call option spread (long 1 at-themoney call, short 2 out-of-the-money calls) on a long position in the reference index.

The Index is a significant improvement over existing levered indexes:

- The Nations Better Beta<sup>®</sup> Bull Index generates superior riskadjusted returns;
- The Nations Better Beta<sup>®</sup> Bull Index levers gains with a cap but does not lever losses;
- The Nations Better Beta<sup>®</sup> Bull Index generates levered returns without borrowing or margin costs;
- Monthly<sup>1</sup> returns for Nations Better Beta<sup>®</sup> Bull Indexes are not impacted by compounding, a significant problem for existing levered products. Compounding means returns for existing vehicles can differ significantly from expectations. Monthly<sup>1</sup> returns for Nations Better Beta<sup>®</sup> Bull Indexes vs. the reference index are knowable.





	Nations Better Beta <sup>®</sup> Bull Index	S&P 500 Levered <sup>2</sup> Index	S&P 500 Total Return Index
Compound Annual R	eturn		
2023	26.51%	49.12%	26.29%
3 Year	9.13%	14.71%	10.00%
5 Year	15.18%	25.40%	15.69%
10 Year	11.18%	19.99%	12.03%
Since Inception <sup>3</sup>	11.16%	14.08%	10.21%
Average Annualized	Standard Deviation of N	Monthly Returns	
2023	13.66%	29.93%	14.74%
3 Year	17.34%	38.18%	18.68%
5 Year	15.92%	34.91%	17.16%
10 Year	12.29%	27.31%	13.42%
Since Inception <sup>3</sup>	12.90%	27.34%	13.56%
Average Annual Sha	rpe Ratio		
2023	1.45	1.42	1.33
3 Year	1.10	0.94	0.94
5 Year	1.01	0.96	0.94
10 Year	1.70	1.67	1.61
Since Inception <sup>3</sup>	1.33	1.10	1.09

Logical Leverage<sup>®</sup>

#### Effects of Compounding

The effect of compounding on a 2x levered fund is generally greater than twice the impact of compounding on an equivalent unlevered investment. As a result, the longer-term return of a levered fund can differ significantly from two-times the return of its underlying index.

For example, an investor who began with \$100 in a levered fund that rises 20% one day and declines 20% the next day would have \$96, or a 4% loss, while the unlevered index would have experienced a 1% loss and levered fund investors might expect a 2% loss. The fund would have experienced twice the loss many investors would expect.

For the levered benchmark, this annual effect has exceeded 500 basis points ten times, while averaging 278 basis points, from 1990 to 2023.

### Option Data<sup>4</sup>

Frequency of Long Call Expiring In-the-Money	58.33%
Frequency of Short Calls Expiring In-the-Money	40.44%
Frequency of S&P Exceeding the Appreciation Cap	21.81%
ATM Call Option Distance From Market at Initiation	0.413%
OTM Call Option Distance From Market at Initiation	2.162%
Monthly Average Appreciation Cap	4.056%
Monthly Net Premium Generated as % of Portfolio	0.144%

<sup>1</sup> From option initiation to expiration

As calculated by Nations Indexes Inception, 12/31/1989

3

- 4 Monthly averages since inception
- All as of 12/29/2023

## 70 Nations Large Cap Better Beta Bull Index of Occurrences Since Initiation<sup>3</sup> 60 S&P 500 Levered Index<sup>2</sup> 50 S&P 500 Total Return Index 40

Histogram of Monthly Results

30

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	200		ha		
-25% -20% -15	5% -10% -5% Uncl	n +5% +10% +15%	% +20% +25%		
	Monthly	Return			
	Nations Better Beta <sup>®</sup> Bull Index	S&P 500 Levered <sup>2</sup> Index	S&P 500 Total Return Index		
Avg. Annual Return⁵ (1990-2023)	12.42%	20.68%	11.73%		
Annualized Sortino Ratio	1.033	0.837	0.918		
Annualized Stutzer Ratio	0.619	0.502	0.548		
Value of \$1 Invested on 12/31/89	\$ 36.44	\$ 88.10	\$ 27.22		
Beta	0.93	2.02	1.00		
Alpha	1.59%	-3.99%	-0.01%		
Skew	-60.47%	-50.85%	-53.25%		
Kurtosis	145.17%	103.13%	97.28%		
R <sup>2</sup> to S&P 500	0.920	0.998	-		
Up Capture Ratio	96.86	189.59	-		
Down Capture Ratio	89.76	213.58	-		
Maximum Drawdown	49.17%	84.02%	50.95%		

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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