

# Nations<sup>®</sup> Better Beta<sup>®</sup> Bull

Nations<sup>®</sup>

INDEXES

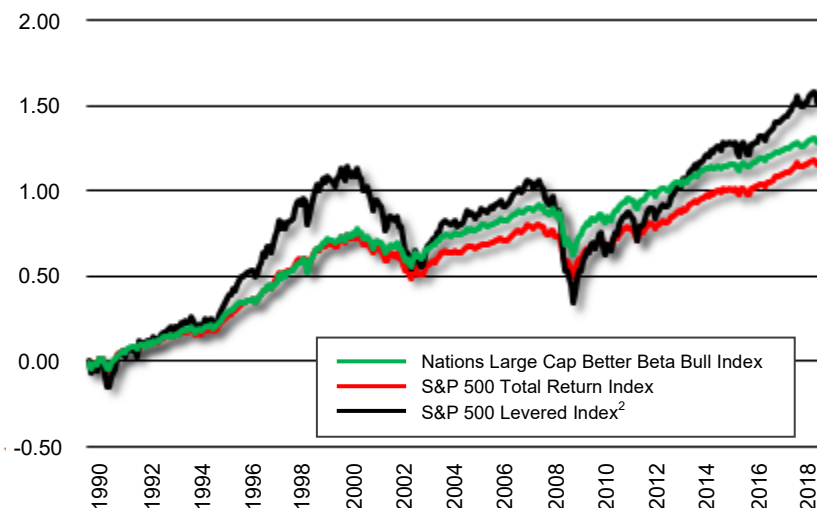
## Index Description

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. The Index accomplishes this by overlaying a 1x2 call option spread (long 1 at-the-money 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 risk-adjusted 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.

## Comparative Historical Performance



	Nations Better Beta Bull	S&P 500 Levered <sup>2</sup>	S&P 500 Total Return	Barclays Aggreg. Bond	30 Day T-Bill
<b>Compound Annual Return</b>					
2018	-5.168%	-13.876%	-4.384%	0.011%	1.845%
3 Year	7.390%	15.093%	9.257%	2.056%	0.974%
5 Year	7.318%	14.245%	8.494%	2.521%	0.638%
10 Year	13.139%	23.548%	13.119%	3.477%	0.351%
Since Inception <sup>3</sup>	10.476%	12.138%	9.287%	5.816%	2.728%
<b>Average Annualized Standard Deviation of Monthly Returns</b>					
2018	14.110%	30.626%	15.329%	3.116%	0.094%
3 Year	8.426%	19.868%	9.850%	2.783%	0.059%
5 Year	9.108%	20.850%	10.294%	2.716%	0.074%
10 Year	12.142%	25.852%	12.795%	2.738%	0.052%
Since Inception <sup>3</sup>	12.322%	25.894%	12.889%	3.358%	0.101%
<b>Average Annual Sharpe Ratio</b>					
2018	-0.50	-0.51	-0.41	-0.59	-
3 Year	2.51	2.03	2.02	0.61	-
5 Year	1.86	1.55	1.56	0.90	-
10 Year	1.65	1.52	1.52	1.32	-
Since Inception <sup>3</sup>	1.33	1.07	1.14	1.07	-

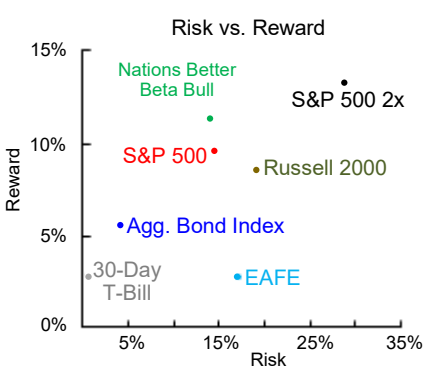
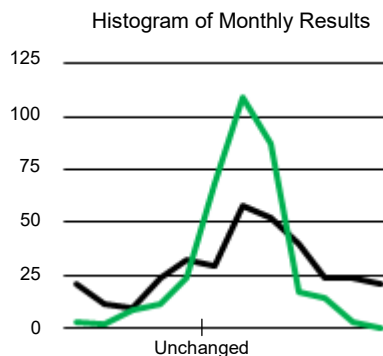
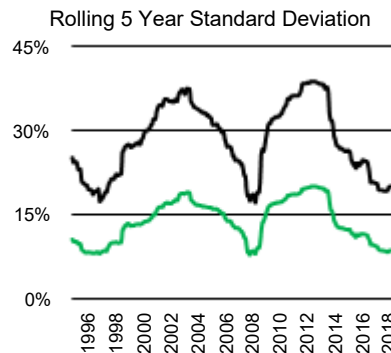
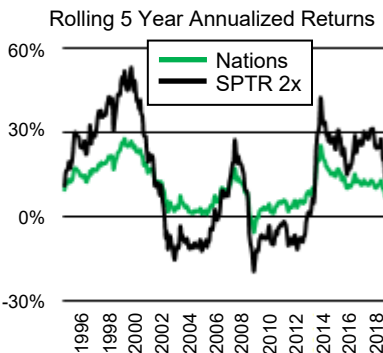
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## Effects of Compounding

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 800 basis points three times while averaging 260 basis points from 1990 to 2018.



	Nations Better Beta Bull	S&P 500 Levered <sup>2</sup>	S&P 500 Total Return	Barclays Aggreg. Bond	30 Day T-Bill
Avg. Annual Return <sup>5</sup> (1990-2018)	11.645%	18.505%	10.762%	5.923%	2.753%
Annualized Sortino Ratio	0.964	0.741	0.827	1.577	-
Annualized Stutzer Ratio	0.585	0.449	0.499	0.842	-
Value of \$1 Invested on 12/31/89	\$17.98	\$27.72	\$13.14	\$5.15	\$2.20
Beta	0.92	1.99	1.00	0.03	0.00
Alpha	2.00%	-3.98%	-	5.82%	2.77%
Skew	-0.705	-0.567	-0.595	-0.220	0.259
Kurtosis	1.991	2.320	1.286	0.840	-1.192
R <sup>2</sup> to S&P 500	89.23%	98.19%	-	0.88%	0.05%
Up Capture Ratio	97.48	187.97	100.00	17.03	7.27
Down Capture Ratio	89.08	214.01	100.00	-10.22	-6.36
Maximum Drawdown	63.52%	87.04%	50.95%	15.22%	0.00%

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

Frequency of Long Call Expiring In-the-Money	57.06%
Frequency of Short Calls Expiring In-the-Money	38.62%
Frequency of S&P Exceeding the Appreciation Cap	20.17%
ATM Call Option Distance From Market at Initiation	0.444%
OTM Call Option Distance From Market at Initiation	2.214%
Monthly Average Appreciation Cap	4.152%
Monthly Net Premium Generated as % of Portfolio	0.168%

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

<sup>2</sup> As calculated by Nations Indexes

<sup>3</sup> Inception, 12/31/1989

<sup>4</sup> Monthly averages since inception

<sup>5</sup> All as of 12/31/2018