

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



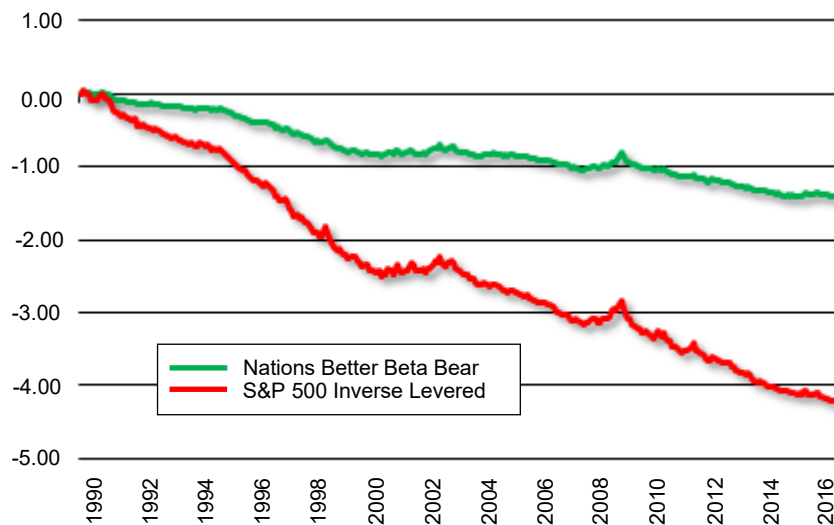
## Index Description

The Nations Large Cap Better Beta<sup>®</sup> Bear Index is a significantly improved methodology for achieving inverse levered returns. It measures the return of an inverse option levered strategy that seeks to generate approximately 200% of the inverse of any decline in the reference index with a cap on gains while returning only 100% of the inverse of any appreciation in the reference index. The Index accomplishes this by overlaying a 1x2 put option spread (long 1 at-the-money put, short 2 out-of-the-money puts) on a short position in the reference index.

The Index is a significant improvement over existing inverse levered indexes:

- The Nations Large Cap Better Beta<sup>®</sup> Bear Index generates superior risk-adjusted returns;
- The Nations Large Cap Better Beta<sup>®</sup> Bear Index levers gains with a cap but does not lever losses;
- Monthly<sup>1</sup> returns for the Nations Better Beta<sup>®</sup> Bear Indexes are not impacted by the effect of compounding, a significant problem for existing levered products. This compounding means the period returns for existing vehicles can differ significantly from expectations. Monthly<sup>1</sup> relative returns for the Nations Better Beta<sup>®</sup> Bear Indexes are knowable;
- The Nations Inverse Option Levered<sup>™</sup> Index doesn't require daily rebalancing.

## Comparative Historical Performance



	Nations Better Beta Bear	S&P 500 Inverse Levered <sup>2</sup>	S&P 500 Total Return	Barclays Aggreg. Bond	30 Day T-Bill
<b>Compound Annual Return</b>					
2016	-7.915%	-24.779%	11.960%	2.658%	0.249%
3 Year	-6.065%	-20.312%	8.872%	3.041%	0.173%
5 Year	-11.350%	-27.804%	14.660%	-0.382%	0.127%
10 Year	-9.805%	-24.922%	6.946%	3.209%	0.634%
Since Inception <sup>3</sup>	-11.347%	-30.401%	9.388%	5.693%	2.832%
<b>Average Annualized Standard Deviation of Monthly Returns</b>					
2016	10.498%	19.334%	10.287%	3.717%	0.017%
3 Year	11.379%	20.205%	10.736%	3.022%	0.070%
5 Year	11.230%	19.603%	10.242%	4.249%	0.064%
10 Year	13.736%	25.990%	13.936%	3.912%	0.082%
Since Inception <sup>3</sup>	12.810%	25.130%	13.131%	3.718%	0.103%
<b>Average Annual Sharpe Ratio</b>					
2016	-0.78	-1.29	1.14	0.65	na
3 Year	-0.69	-1.09	0.96	1.10	na
5 Year	-1.11	-1.49	1.64	0.78	na
10 Year	-0.87	-1.06	0.86	1.30	na
Since Inception <sup>3</sup>	-1.40	-1.58	1.04	1.08	na

## Effects of Compounding

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

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

For the levered benchmark, this annual effect has averaged 255 basis points from 1990 to 2016.

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

Frequency of Long Put Expiring In-the-Money	36.73%
Frequency of Short Puts Expiring In-the-Money	15.12%
Frequency of S&P Exceeding the Appreciation Cap	6.79%
ATM Put Option Distance From Market at Initiation	0.140%
OTM Put Option Distance From Market at Initiation	3.052%
Monthly Average Appreciation Cap	6.115%
Monthly Net Premium Generated as % of Portfolio	0.151%

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

<sup>2</sup> As calculated by NationsShares

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

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

<sup>5</sup> All as of 12/31/2016

## Return Statistics

	Nations Better Beta Bear	S&P 500 Inverse Levered <sup>2</sup>	S&P 500 Total Return	Barclays Aggreg. Bond	30 Day T-Bill
Avg. Annual Return <sup>5</sup> (1990-2016)	-10.400%	-27.062%	10.913%	5.870%	2.585%
Annualized Sortino Ratio	-1.605	-1.980	0.826	1.129	-
Annualized Stutzer Ratio	0.953	1.213	0.494	0.666	-
Value of \$1 Invested on 12/31/89	\$0.04	\$0.00	\$11.28	\$4.48	\$2.14
Beta	-0.86	-1.86	1.00	0.02	0.00
Alpha	-2.31%	-12.40%	-	5.58%	2.84%
Skew	0.739	0.647	-0.564	-0.875	0.194
Kurtosis	1.936	1.232	1.218	4.336	-1.209
R <sup>2</sup> to S&P 500	80.20%	96.02%	-	0.53%	0.08%
Up Capture Ratio	-99.41	-228.90	-	16.23	7.38
Down Capture Ratio	-87.06	-153.46	-	-10.28	-6.56

## Annual Results

	Nations Better Beta Bear Index		S&P Inverse Levered Index <sup>2</sup>		S&P 500 Total Return Index	
	Return	Annualized STD	Return	Annualized STD	Return	Annualized STD
1990	-2.378%	18.873%	-20.544%	35.266%	-3.104%	18.405%
1991	-25.814%	12.568%	-53.630%	29.305%	30.466%	15.814%
1992	-5.003%	7.755%	-24.811%	14.896%	7.619%	7.611%
1993	-7.754%	6.725%	-26.521%	11.756%	10.079%	6.078%
1994	-0.998%	9.173%	-16.490%	20.963%	1.320%	10.553%
1995	-31.280%	5.141%	-56.333%	9.664%	35.578%	3.861%
1996	-18.602%	11.784%	-45.783%	20.101%	22.960%	10.882%
1997	-25.607%	16.013%	-56.473%	29.799%	33.363%	15.943%
1998	-28.344%	15.339%	-54.056%	45.562%	28.579%	21.497%
1999	-20.629%	12.725%	-46.334%	25.028%	21.042%	14.605%
2000	7.646%	18.563%	-12.679%	33.149%	-9.104%	17.155%
2001	-7.849%	17.938%	0.013%	40.294%	-11.886%	19.861%
2002	24.310%	21.646%	27.651%	42.305%	-22.101%	20.649%
2003	-21.937%	9.920%	-46.418%	20.449%	28.685%	11.394%
2004	-2.178%	9.917%	-24.406%	14.260%	10.882%	7.303%
2005	-4.792%	9.305%	-19.484%	15.095%	4.911%	7.919%
2006	-18.515%	5.122%	-37.017%	10.720%	15.795%	5.637%
2007	-13.055%	9.509%	-27.252%	18.235%	5.494%	9.654%
2008	20.480%	14.635%	45.158%	34.261%	-36.998%	21.016%
2009	-15.914%	30.327%	-50.653%	44.478%	26.464%	22.279%
2010	-16.918%	14.641%	-31.742%	36.317%	15.063%	19.260%
2011	-11.066%	12.095%	-18.439%	28.597%	2.112%	15.940%
2012	-14.741%	11.963%	-29.360%	21.304%	16.003%	10.521%
2013	-22.525%	10.053%	-45.131%	16.093%	32.388%	8.482%
2014	-13.664%	8.726%	-25.637%	16.113%	13.689%	8.258%
2015	4.255%	14.911%	-9.533%	25.169%	1.384%	13.662%
2016	-7.915%	10.498%	-24.779%	19.334%	11.906%	10.287%

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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