

# Nations SkewDex<sup>®</sup> Option Skew Indexes

NATIONS<sup>®</sup>

A ROBUST, RULES-BASED AND INVESTABLE MEASURE OF OPTION SKEW

The Nations<sup>®</sup> family of SkewDex<sup>®</sup> Indexes provide the best available measures of option skew. The Nations SkewDex Indexes provide a clearer measure of option skew, relative expectations for market volatility and the market's willingness to assume risk. SkewDex Indexes are robust from a theoretical point of view and are the best indication of the amount of risk market participants are willing to bear.

## What is Option Skew?

Option skew is the tendency for options with the same expiration date but with different strike prices to exhibit differing implied volatilities. In equity and index options implied volatility generally increases as the strike price decreases from at-the-money. It is driven by demand for hedging with put options and by asset owner's willingness to sell covered calls.

Option skew is not a measure of fear or implied volatility. It's a measure of how much risk market participants are willing to bear, that is how far investors are willing to let markets fall before hedges offer protection.

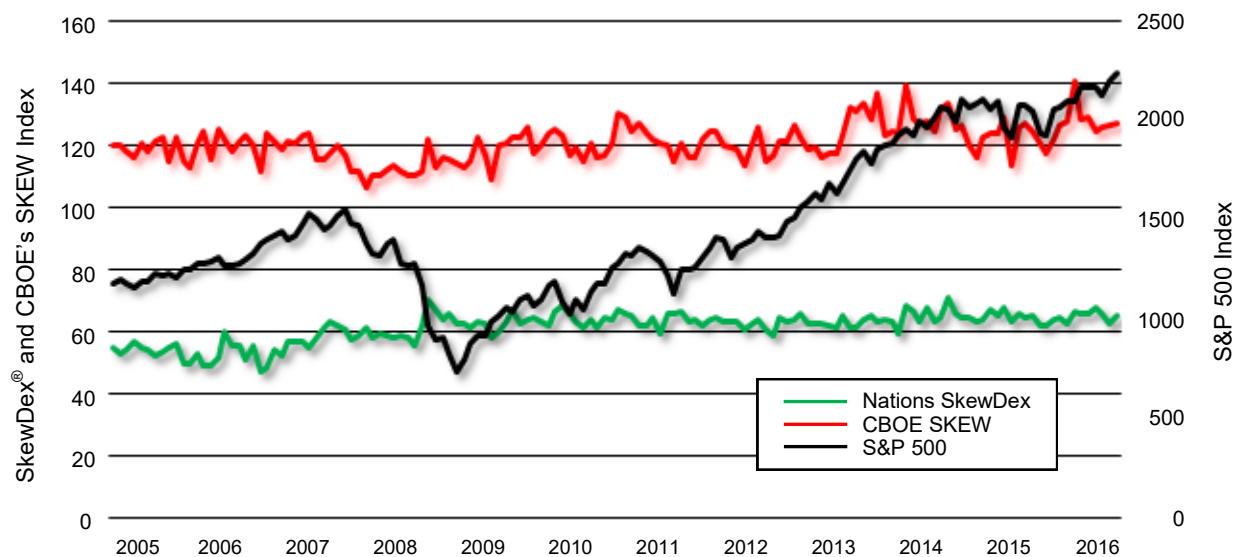
## Index Description

The Nations family of SkewDex Indexes provide an improved measure of option skew, the tendency for options with differing strike prices to exhibit different implied volatilities. SkewDex calculates skew the way option practitioners use it, by comparing the implied volatility of at-the-money option prices to the implied volatility of one standard deviation out-of-the-money put options resulting in the most meaningful measure.

Nations Large Cap  
SkewDex Ticker Symbol:

**SDEX**

## Historical Comparative Results



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

## Nations SkewDex Indexes

Existing measures of option skew measure the cost of all options, even those significantly out-of-the-money, or they compare the cost of out-of-the-money put options to the cost of out-of-the-money call options without regard to the most important gauge of option cost - that of at-the-money options.

Nations SkewDex Indexes compare the cost of at-the-money options to the cost of out-of-the-money put options to generate indexes that are a better measure of option skew, a measure that is consistent with the way option professionals measure skew. Since SkewDex Indexes compare the implied volatility of at-the-money options to that of put options struck one standard deviation out-of-the-money, they gauge a market's willingness to accept a one standard deviation loss and can be fairly compared to the SkewDex Indexes for other equity assets and measure the amount of risk participants in different markets are willing to bear. SkewDex indexes are protected by patents pending.

The Nations Large Cap SkewDex Index compares the implied volatility of a SPDR S&P 500 (SPY) option that is precisely at-the-money with precisely 30 days to expiration and the cost of a SPY put option that is precisely one standard deviation out-of-the-money with precisely 30 days to expiration. SkewDex tells market participants how expensive out-of-the-money options are in relation to at-the-money options and thus, how risk averse investors are. When SkewDex is high out-of-the-money options are expensive in relation to at-the-money options.

## Historical Values

	Nations SkewDex Index	CBOE SKEW Index
Average Monthly Closing Value	61.412	121.053
Median Monthly Closing Value	62.887	120.875
Standard Deviation of Monthly Change	5.029%	4.401%
Correlation to S&P 500	-21.925%	25.274%
Monthly Closing High	71.241 (December 2014)	140.580 (June 2016)
Monthly Closing Low	47.354 (October 2006)	106.430 (January 2008)

## A Superior Measure

SkewDex is a superior measure of option skew:

- SkewDex measures skew as option users and theorists measure it, by comparing at-the-money options to out-of-the-money puts.
- SkewDex yields a robust, tradable measure of skew.
- Moneyness is calculated logically based on the current volatility environment rather than by using stale historical data.
- Since time to expiration and moneyness are standardized, Nations SkewDex Indexes can be compared to those of other equity assets without regard to the number of strike prices listed, increments between strike prices, expiration, etc.

## Other Skew Indexes

The CBOE Skew Index (SKEW) seeks to measure tail risk via skew; it doesn't compare out-of-the-money volatility to baseline at-the-money volatility, the real measure of skew. Due to the calculation methodology, SKEW generates significant statistical noise resulting in a less useful measure of option skew.

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

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