Rules for the Construction and Maintenance of the

NASDAQ-100 Leveraged, 3x Leveraged & 3x Inverse Indexes

Version as of December 11, 2017

Nasdaq

Table of Contents

1. Rules for the Construction and Maintenance of the NASDAQ-100 Leveraged & Short Indexes

1.1 General Description

The NASDAQ-100 Leveraged and Short indexes have been constructed with the objective of creating an index to reflect a strategy that aims to produce leverage to the daily return of the Underlying Index with financing costs embedded in the performance of the index.

As the Underlying Index is the NASDAQ-100, this set of rules is also based on the "NASDAQ-100 Index Methodology" which in its entirety also is applicable on the NASDAQ-100 leveraged long and short indexes. This document therefore refers to those index rules in most cases with the exception for the index specific rules associated with the leverage characteristics of the NASDAQ-100 leveraged long and short indexes.

The long version is made up of the combination of an investment aiming to replicate a long position on the NASDAQ-100 Index with an increased exposure and borrowing at a given interest rate.

The short version is made up of the combination of an investment aiming to replicate a short position on the NASDAQ-100 Index with a short exposure and additional monetary gain at a given interest rate.

1.2 Index Rules for the Underlying Index

See the "NASDAQ-100 Index Methodology".

1.3 The Index Formula

The formula for calculating the leveraged and short indexes is:

$$I_t = (I_{t-1}) * (1.0 + U + R)$$

For 3x Inverse Indexes:

$I_t = Current\ value\ of\ the\ leverage\ index$

$I_{t-1} = Last\ closing\ value\ of\ the\ leverage\ index$

and

$U = (C - 1.0) * LF$

$C = \frac{X_t}{X_{t-1}}$

$X_t = Current\ value\ of\ underlying\ index$

$X_{t-1} = Last\ closing\ of\ the\ underlying\ index$

$R = \left(r_{(t-1)} * Interest\ Factor + SBR_{t-1} * LF \right) * d/360$

$Interest\ Factor = 1 - LF$

$LF = Leverage\ Factor$

$r_{t-1} = Fed\ Fund\ Effective\ Rate\ at\ the\ previous\ calculation\ date$

$d =\ number\ of\ calendar\ days\ between\ the\ day\ of\ the\ calculation\ and\ the\ previous\ calculation\ date$

$SBR_{t-1} =$

The Short Borrowing Rate is created by averaging the cost to borrow for each of the components of the Underlying Index based on the weights of each Underlying Index component over the 5 trading days before the 5th to the last trading day of each calendar month. The Short Borrowing Rate will be incorporated into the index formula, prior to the market open on the first trading day of each calendar month.

For Long Indexes:

$I_t\ = Current\ value\ of\ the\ leverage\ index$

$I_{t-1} = Last\ closing\ value\ of\ the\ leverage\ index$

and

$U = (C - 1.0) *\ LF$

$C = \frac{X_t}{X_{t-1}}$

$X_t = Current\ value\ of\ underlying\ index$

$X_{t-1} = Last\ closing\ of\ the\ underlying\ index$

$R = \left(r_{(t-1)} * Interest\ Factor +\ SPR_{t-1} * Interest\ Factor \right) *\ d/360$

$Interest\ Factor = 1 - LF$

$LF = Leverage\ Factor$

$r_{t-1} = Fed\ Fund\ Effective\ Rate\ at\ the\ previous\ calculation\ date$

$d =\ number\ of\ calendar\ days\ between\ the\ day\ of\ the\ calculation\ and\ the\ previous\ calculation\ date$

$SPR_{t-1} = Liquidity\ Spread =$

$1Y\ Long\ term\ rate\ (LIBOR\ 1Y) -\ 1Y\ capitalized\ Overnight\ swap\ rate\ (Swap\ OIS\ vs\ 1Y)$

Index Parameters

The leveraged and short indexes are calculated and disseminated on the same day as the Underlying Indexes. The calculation frequency for the leveraged and short indexes is equal to frequency of the Underlying Index. If the Underlying Index is suspended or not available for a period of time, the leveraged and short indexes will be suspended until Underlying Index is available.

The liquidity spread reflects the financing cost over the Fed Fund Effective rate at the previous calculation date. The liquidity spread parameter will be determined each calendar month using the average of the 5 trading days before the 5th to the last trading day of the month. The liquidity spread parameter will be incorporated into the index formula, prior to market open on the first trading day of each calendar month.

1.3.1 NASDAQ-100 Leveraged and Short Indexes

Index	Underlying Index	Symbol	Leverage Factor	Base Date	Base Value	Currency
NASDAQ-100 3x Leveraged Index	NASDAQ-100	NDXL3	+3	10/19/2012	10,000.00	USD
NASDAQ-100 3x Leveraged Notional Net Total Return Index	NASDAQ-100 Notional Net Total Return Index	XNDXNNRL3	+3	10/19/2012	10,000.00	USD
NASDAQ-100 3x Leveraged Total Return Index	NASDAQ-100 Total Return	XNDXL3TR	+3	12/11/2017	1,000.00	USD
NASDAQ-100 Leveraged Index	NASDAQ-100	NDXL	+2	11/18/2009	1,000.00	USD
NASDAQ-100 Leveraged Notional Net Total Return Index	NASDAQ-100 Notional Net Total Return Index	XNDXNNRL	+2	12/21/2011	1,415.17	USD
NASDAQ-100 Leveraged	NASDAQ-100 Total Return	XNDXL	+2	12/11/2017	1,000.00	USD

Total Return Index						
NASDAQ-100 3x Inverse Index	NASDAQ-100	NDXS3	-3	10/19/2012	10,000.00	USD
NASDAQ-100 3x Inverse Total Return Index	NASDAQ-100 Total Return	XNDXS3	-3	10/19/2012	10,000.00	USD
NASDAQ-100 3x Inverse Notional Net Total Return Index	NASDAQ-100 Notional Net Total Return Index	XNDXNNRS3	-3	12/11/2017	1,000.00	USD

1.3.2 Suspension of calculation and dissemination of leverage index

In order to handle extreme market movements, the leveraged indexes have been equipped with protection towards very large differences in the current index value in comparison to the previous trading day's closing index value.

The total daily loss in leverage index is limited to 50% and the test of this is made intra-day. In this case the leverage index will be suspended and the value to be considered as the index closing value for that calculation day.

In the event an Index is suspended intra-day, an announcement will be made to inform clients of this change through the Nasdaq Global Index Watch (GIW) website. The announcement will be issued as soon as practicable, but it would not be sent out prior to the suspension taking place; by definition the Index has to be automatically stopped once the limit is reached.

1.3.3 Calculation and Dissemination Frequency

The Indexes are calculated and disseminated during the trading day once per second from 09:30:00 to 17:16:00 Eastern Time (ET). The closing value of the Indexes may change up until 17:15:00 ET due to corrections to the closing value of the Underlying Indexes.

1.4 Discretionary Adjustments

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate to ensure Index integrity.

1.5 Limitations of liability

Nasdaq shall not be liable for any direct, indirect, incidental, special or consequential damages or lost profits related to or arising out of the use of the index. Nasdaq expressly disclaims all warranties of accuracy, completeness, merchantability or fitness for any particular purpose, with respect to the index. Neither Nasdaq nor any third party make any warranty or representation whatsoever, express or implied, in respect of the index, the results to be obtained by the use thereof or the value of the index at any given time.