Nasdaq

INDEX METHODOLOGY

NASDAQ MARKETFLEX™ INDEX

NDXMFLX™

INDEX DESCRIPTION

The Nasdaq MarketFlex Index (NDXMFLX), the "Index", is designed to provide exposure to the Nasdaq-100 Index® while maintaining a risk profile comparable to the Nasdaq US 500 Large Cap Index. The Index uses the truVol® Risk Control Engine to dynamically adjust exposure on a daily basis to the Component with the aim of targeting the volatility of the Reference Index.

The truVol® Risk Control Engine is a proprietary risk management tool designed by Salt Financial LLC to offer higher levels of responsiveness and accuracy in targeting volatility for risk-controlled indices. The mechanism generally increases exposure to the Component when relative volatility falls and decreases exposure when it rises.

The Index is rebalanced daily. Although the Index is designed to target the volatility of the Reference Index, there is no guaranty the Index will achieve this result.

Unless stated otherwise, all capitalized terms used in this document are defined in Appendix A: Definitions.

INDEX CALCULATION

For each Index Day, the value of the Index is calculated in accordance with the following formula:

$$I_t = I_{t-1} + U_{t-1} \times (P_t - P_{t-1}) - TC_t - FC_t - AF_t + IA_t$$

where:

t = an Index Day t.

$t - 1$ = the Index Day immediately preceding Index Day t.

I_x = the value of the Index for Index Day x.

U_x = the number of units of the Component for Index Day x (see *Rebalancing process* section below for more details).

P_x = the daily closing price of the Component for Index Day x (rounded to two decimal places).

TC_t = the estimated trading costs for the Component for Index Day t as determined in accordance with the following formula:

$$TC_t = |U_t - U_{t-1}| \times P_t \times CTC$$

Note: $TC_t = 0$ on or prior to the Index Base Date.

where:

CTC = the assigned Component trading cost of 0.0001 (0.01%).

FC_t = the estimated funding costs for the Component for Index Day t as determined in accordance with the following formula:

$$FC_t = U_{t-1} \times P_{t-1} \times FS \times \frac{Days_{t-1,t}}{360}$$

where:

FS = the assigned funding spread of 0.005 (0.50%).

AF_t = the Index fee for Index Day t as determined in accordance with the following formula:

$$AF_t = I_{t-1} \times F \times \frac{Days_{t-1,t}}{360}$$

where:

F = the assigned fee rate of 0.02 (2%).

IA_t = the estimated interest accrual for Index Day t as determined in accordance with the following formula:

$$IA_t = (I_{t-1} - U_{t-1} \times P_{t-1}) \times RF_{t-1} \times \frac{Days_{t-1,t}}{360}$$

where:

RF_{t-1} = the Effective Federal Funds Rate published by the Federal Reserve Bank of New York for Index Day $t - 1$. If such rate is unavailable, then the rate shall be the most recent rate available on an Index Day preceding Index Day t–1.

$Days_{t-1,t}$ = the number of calendar days from Index Day $t - 1$ (inclusive) to Index Day t (exclusive).

If the value for an underlying Component is unavailable on a given Index Day t, then such value shall be the last available value for that Component, as determined by the Index Administrator.

INDEX CONSTRUCTION

Index parameters

The table below details parameters specific to the construction and calculation of the Index.

Index (Symbol)	Component (Symbol)	Component Exposure		Reference Index (Symbol)
		Maximum	Minimum	
Nasdaq MarketFlex Index (NDXMFLX)	Nasdaq-100 Total Return Index (XNDX)	100%	0%	Nasdaq US 500 Large Cap Total Return Index (NQUS500LCT)

For information on the Component, please refer to the [Nasdaq-100 Index Methodology document](#). *For information on the Reference Index, please refer to the* [Nasdaq US Select Index Family Methodology](#).

Index components and weighting

The Index may only include the Component as detailed above in *Index parameters*. The Index does not provide exposure to the Reference Index.

For each Index Day, the truVol® Risk Control Engine is employed to determine the exposure to the Component. The Index then rebalances each Index Day into Units of the Component (see *Rebalancing process* section below).

Rebalancing process

Subject to a Hedge Delay, the Index is rebalanced daily as of the market close. The number of units of the Component is determined in accordance with the following formula.

$$U_t = \frac{I_{t-1} \times ER_{t-1}}{P_{t-1}}$$

where:

U_t = the number of Units of the Component for Index Day t.

ER_{t-1} = the exposure ratio for the Component for Index Day $t-1$ (see *Appendix B: Exposure Determination Process*).

I_{t-1} = the Index value on Index Day $t-1$.

P_{t-1} = the daily closing price of the Component for Index Day $t-1$ (rounded to two decimal places).

For the Index Base Date (t_0), the initial Units of the Component are determined based on information from the Index Day prior to the Index Base Date and calculated in accordance with the following formula:

$$U_{t_0} = \frac{1000 \times ER_{t_0-1}}{P_{t_0-1}}$$

INDEX CALENDAR

Holiday schedule

The Index is calculated Monday through Friday, except on days when the Nasdaq Stock Exchange is scheduled to be closed and the underlying Component is not scheduled to be calculated (the "Holiday Schedule").

Index calculation and dissemination schedule

Index values are made available after the market close on each Index Day via the Nasdaq Global Index Watch (GIW) website.

ADDITIONAL INFORMATION

Announcements

Nasdaq announces Index-related information via the Nasdaq Global Index Watch (GIW) website.

For more information on the general Index Announcement procedures, please refer to the Nasdaq Index Methodology Guide.

Recalculation and restatement policy

For information on the Recalculation and Restatement Policy, please refer to the Nasdaq Index Recalculation Policy.

Contact information

For any questions regarding an Index, please contact the Nasdaq Index Client Services team at indexservices@nasdaq.com.

Index dissemination

Where applicable, Index values and weightings information are available through the Nasdaq Global Index Watch (GIW) website as well as the Nasdaq Global Index FlexFile Delivery Service (GIFFD) and Global Index Dissemination Services (GIDS). Similar to the GIDS offerings, Genium Consolidated Feed (GCF) provides real-time Index values and weightings for the Nordic Indexes.

For more detailed information regarding Index Dissemination, please see the Nasdaq Index Methodology Guide.

Website

For further information, please refer to the Nasdaq Global Index Watch (GIW) website.

FTP and dissemination service

Where applicable, Index values and weightings are available via FTP on the Nasdaq Global Indexes FlexFile Delivery Service (GIFFD). Index values are available via Nasdaq's Global Index Dissemination Services (GIDS).

GOVERNANCE

Index governance

All Nasdaq Indexes are managed by the governance committee structure and have transparent governance, oversight, and accountability procedures for the index determination process. For further details on the Index Methodology and Governance overlay, please refer to the Nasdaq Index Methodology Guide.

APPENDIX A: DEFINITIONS

Term	Description
Calculation Disruption Event	In respect of a Component, the occurrence of one or more of the following events that affects that Component or any underlying instrument of that Component, and that the Index Administrator deems to be material to the Index: • **Price Failure:** Any event that impairs or prevents the ability of the Index Administrator to obtain a relevant price, level, rate, value or any other information from an exchange or other source necessary, on a timely basis and in a manner acceptable to the Index Administrator, in order to perform the calculation of the Index. • **Inaccurate Data:** The price or value of a component, or other input data, used directly or indirectly in the Index that, in the determination of the Index Administrator, is inaccurate, incomplete and/or does not adequately reflect the true market price or value of such component or input data. • **Force Majeure:** Any event or circumstance (including, without limitation, a systems failure, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labor disruption or any similar intervening circumstance, or restrictions due to emergency powers enforced by federal, state or local government agencies), that is beyond the reasonable control of the Index Administrator and that the Index Administrator determines, in its sole discretion, affects the Index, a Component of the Index, any input data required to calculate the Index, or that prevents the ability of the Index Administrator to calculate the Index. • **General Moratorium:** the Index Administrator observes on any day that there has been a declaration of a general moratorium in respect of banking activities in any relevant jurisdiction.
Component	The Component for the Index as detailed in the *Index parameters* section.
Consequences of a Market Disruption Event or a Calculation Disruption Event	If a Market Disruption Event or a Calculation Disruption Event occurs or is occurring on an Index Day that the Index Administrator determines materially affects the Index, the Index Administrator may: • Delay the calculation of the Index and halt the dissemination of the value of the Index and /or other information relating to the Index until such time, which may be a subsequent Index Day, that the Index Administrator determines that such Market Disruption Event or Calculation Disruption Event is no longer occurring. • Determine a good faith estimate of any affected or missing input data required to calculate the Index or the value of the Index for such Index Day or time for such Index Day.
Disrupted Day	In respect of a Component, an Index Day on which there is a Market Disruption Event.
Evaluation Date	Each Index Day.
Hedge Delay	In respect of a Component, if a Market Disruption Event occurs on a scheduled Rebalance Day for such Component, then no change of units of that Component shall occur on that day.
Index Administrator	Nasdaq, Inc.

Index Base Date	April 2, 2001
Index Base Value	1,000.00
Index Day	Starting with the Index Base Date, each weekday that is not a scheduled holiday according to the Index Holiday Schedule as defined in the *Index Calendar* section.
Market Disruption Event	In respect of a Component, the occurrence of one or more of the following events that affects that Component or any underlying instrument of that Component, and that the Index Administrator deems to be material to the Index: • **Trading Disruption:** Any unscheduled closure of the relevant exchange; a material suspension, limitation or disruption of trading on such exchange; a failure of such exchange to publish the relevant price, level, value or other information; a halt in trading, such as a circuit breaker or other exchange imposed halt, including an exchange imposed daily "limit price"; or any other event that materially affects the ability of market participants to trade, effect transactions in, maintain or unwind positions in that Component or any underlying instrument of that Component. • **Exchange Disruption:** Any exchange related event on a relevant exchange that disrupts or impairs the ability of market participants to effect transactions or obtain market values or price discovery of a component used directly or indirectly in the Index.
Rebalance Day	In respect of a Component and an Evaluation Date, the Index Day after that Evaluation Date that is not a Disrupted Day for that Component.
Reference Index	The Reference Index for the Index as detailed in the *Index parameters* section.

For additional key terms not defined above, please refer to the Nasdaq Index Methodology Guide.

APPENDIX B: EXPOSURE DETERMINATION PROCESS

In order to target the volatility of the United States large cap equity market, as measured by the Reference Index, the Index has the ability to adjust the notional exposure to the Component up and down each day, subject to a maximum leverage constraint.

This daily exposure determination mechanism consists of the following determination steps:

1. **The Initial Exposure Ratio (IER)**

$$IER_t = \min\left(1, \frac{TV_t}{EWVol_t}\right)$$

where:

TV_t is the target volatility for Index Day t based on the minimum of two exponential weighted volatility measures of the Reference Index, and is determined in accordance with the following formula:

$$TV_t = \sqrt{252 \times \min\left(EWVAR_{RI,t}^{0.93}, EWVAR_{RI,t}^{0.97}\right)}$$

$EWVol_t$ is the average of two exponential weighted volatility measures for Index Day t of the Component and is determined in accordance with the following formula:

$$EWVol_t = \sqrt{252 \times \frac{EWVAR_{C,t}^{0.93} + EWVAR_{C,t}^{0.97}}{2}}$$

2. **The Smoothed Risk Scalars**

The risk scalars ($Smoothed\_Risk\_Scalars_t$) are proprietary elements of the truVol® Risk Control Engine that are detailed in the truVol Calculation Module, which is made available to relevant authorized individuals by Salt Financial LLC.

3. **The Volatility Adjustment Factor (VAF)**

The VAF is used to help nudge the realized volatility back to the that of the Reference Index and correct for any temporary over- or under-shoots from the risk scaling mechanism. It is based on the slow decay exponential weighted variance measures of the Reference Index and Index:

$$VAF_t = min\left(1.2, \frac{EWVAR_{RI,t}^{0.99}}{EWVAR_{I,t}^{0.99}}\right)$$

Prior to the Index Base Date (t_0):

$$VAF_{t<t_0} = 1.00$$

4. **Exponential Weighted Moving Average Variance ($EWVAR$)**

Each $EWVAR$ is initialized for the Index Base Date (t_0) and defined by:

$$EWVAR_{C,t<t_0}^{\lambda} = \frac{0.20^2}{252}$$

$$EWVAR_{RI,t<t_0}^{\lambda} = \frac{0.15^2}{252}$$

$$EWVAR_{I,t\leq t_0}^{\lambda} = \frac{0.15^2}{252}$$

For each Index Day thereafter, the $EWVAR$ is calculated in accordance with the following formula:

$$EWVAR_{x,t}^{\lambda} = \lambda \times EWVAR_{x,t-1}^{\lambda} + (1-\lambda) \times ln\left(\frac{P_{x,t}}{P_{x,t-1}}\right)^2$$

where:

C = the Component.

RI = the Reference Index.

I = the Index (i.e., the Nasdaq MarketFlex Index).

λ = a specified lambda variable {0.93, 0.97, 0.99}.

$P_{x,t}$, $P_{x,t-1}$ = the daily price of the specified index x (i.e., C, RI, or I) for Index Day t or $t-1$, as applicable (rounded to two decimal places for C and RI).

5. **Exposure Ratio**

$$ER_t = \min(1, IER_t \times Smoothed\_Risk\_Scalars_t \times VAF_t)$$

APPENDIX C: SUPPLEMENTAL TRUVOL DEFINITION

This Methodology document has a companion document, the Nasdaq MarketFlex Index – truVol Calculation Module ("truVol Calculation Module") that contains proprietary information designated as trade secrets by Salt Financial LLC. The truVol Calculation Module is made available to a more limited group of authorized individuals with the banks engaging in hedging activity of the Index.

DISCLAIMER

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity, including but not limited to, quantitative inclusion criteria. Nasdaq may also, due to special circumstances, if deemed essential, apply discretionary adjustments to ensure and maintain the high quality of the index construction and calculation. Nasdaq does not guarantee that any Index accurately reflects future market performance.

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Salt Financial LLC licenses its truVol® Risk Control Engine and other methodologies (collectively, "Salt IP") to Nasdaq as a contributor to the Nasdaq MarketFlex Index. Salt Financial LLC and its affiliates, employees, partners, and vendors shall not be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Salt IP even if advised of the possibility of such damages.