INDEX METHODOLOGY

NASDAQ IFED TARGET VOLATILITY INDEX SERIES

INDEX DESCRIPTION

The Nasdaq *IFED* Target Volatility Index Series is a suite of indices which allocates dynamically to the Nasdaq *IFED* US Large-Cap Low Volatility Index™ (Nasdaq *IFED-LV*™) and the UBS 10Y Treasuries Excess Return Index (MLTAU10E). The Index adjusts its leverage on a daily basis targeting a defined volatility.

INDEX PARAMETERS

The table below details parameters specific to the calculation process of each index in the suite.

Index	Ticker	Target Volatility
Nasdaq *IFED* 5% Target Volatility Index	IFEDLV5	5%
Nasdaq *IFED* 10% Target Volatility Index	IFEDLV10	10%

INDEX CONSTITUENTS

The Index may include the following Index Constituents:

Constituent	Index Constituent Name	Ticker
Equity Constituent	Nasdaq *IFED* US Large-Cap Low Volatility Index	IFEDLVT Index
Treasury Constituent	UBS 10Y Treasuries Excess Return Index	MLTAU10E Index

INDEX CALENDAR

Reconstitution and rebalance schedule

The Index is reconstituted and rebalanced daily at market close according to the process described in Index Calculation and Weighting.

Reconstitution and rebalance reference dates

The Index is reconstituted and rebalanced using end of day index values each day.

Holiday schedule

The Index is calculated Monday through Friday, except on days when all Eligible Exchanges are closed.

Index calculation and dissemination schedule

End of Day values are disseminated to Nasdaq's website by the Calculation Agent.

INDEX CALCULATION AND WEIGHTING

The Index Level is based on the value of each of the relevant Index Constituents as determined in accordance with this Section on each Index Calculation Day.

The determination of dates used in the calculation is based on the relevant calendars and exchange schedules available at the time of such determination. On any day where the Index Level is not calculated, no Index Level will be published in respect of such day, subject to the provisions set out below.

The Index Level will be published on each Index Calculation Day that is not a Disrupted Day with a precision of 2 decimals rounded 0.005 up.

Step 1: Determination of the level of Excess Return Equity Constituent

From the Index Calculation Day Level immediately following the Index Base Date, the level of the Excess Return Equity Constituent EEC_t on Index Calculation Day t is calculated as per the following:

$$EEC_t = EEC_{t-1} \times \left(\frac{EC_t}{EC_{t-1}} - \frac{DCT}{360} \times RATE_{t-1}\right)$$

Where,

$RATE_t$ means (i) ICE LIBOR USD 1 Month rate divided by 100 on and prior to April 2nd, 2018, and (ii) Secured Overnight Financing Rate (SOFR) divided by 100 plus 0.11% after April 2nd, 2018, on Index Calculation Day t*;*

In case, there is no published level for either (i) ICE LIBOR USD 1 Month rate or (ii) Secured Overnight Financing Rate (SOFR) on an Index Calculation Day t, $RATE_t$ will take the value of the relevant rate on the immediately Index Calculation Day on which either (i) ICE LIBOR USD 1 Month rate or (ii) Secured Overnight Financing Rate (SOFR) has been published;

$RATE_{t-1}$ means the Rate as defined above on the Index Calculation Day immediately preceding Index Calculation Day t;

EC_t means the closing level of the Equity Constituent on Index Calculation Day *t;*

DCT means the number of calendar days from and including Index Calculation Day t-1 to but excluding Index Calculation Day t;

Step 2: Determination of Daily Returns

The Return of the Equity Constituent REC_t on Index Calculation Day t is calculated as per the following:

$$REC_t = \ln(\frac{EEC_t}{EEC_{t-1}})$$

The Return of the Treasury Constituent on Index Calculation Day t is calculated as per the following:

$$RTC_t = ln(\frac{TC_t}{TC_{t-1}})$$

The Return of the Intermediate Index Level on Index Calculation Day t is calculated as per the following:

$$RIL_t = ln(\frac{IIL_t}{IIL_{t-1}})$$

Where,

EEC_t means the level of Excess Return Equity Constituent in respect of Index Calculation Day t defined in Step 1;

EEC_{t-1} means the level of Excess Return Equity Constituent in respect of the Index Calculation Day immediately preceding Index Calculation Day t;

IIL_t means the level of the Intermediate Index Level in respect of the Index Calculation Day t;

IIL_{t-1} means the level of the Intermediate Index Level in respect of the Index Calculation Day immediately preceding Index Calculation Day t;

TC_t means the level of Treasury Constituent in respect of Index Calculation Day t;

TC_{t-1} means the level of Treasury Constituent in respect of the Index Calculation Day immediately preceding Index Calculation Day t

Step 3: Determination of Quadratic Solution

Step 3.1: Determination of Quadratic Solution using 50-day Lookback Window

Calculation of the 50D Variance of the Equity Constituent

On an Index Calculation Day t, the 50-day Variance ("$50EVAR_t$") of the Equity Constituent is calculated as per the below formula:

On the First Lookback Start Date,

$$50EVAR_t = \frac{\sum_{i=0}^{49} REC_{t-i}^2 * \left(1-\frac{3}{50}\right)^i}{\sum_{i=0}^{49}\left(1-\frac{3}{50}\right)^i}$$

And thereafter,

$$50EVAR_t = REC_t^2 * \frac{3}{50} + 50EVAR_{t-1} * \frac{47}{50}$$

Calculation of the 50D Variance of the Treasury Constituent

On an Index Calculation Day t, the 50-day Variance ("$50TVAR_t$") of the Treasury Constituent is calculated as per the below formula:

On the First Lookback Start Date,

$$50TVAR_t = \frac{\sum_{i=0}^{49} RTC_{t-i}^2 * \left(1-\frac{3}{50}\right)^i}{\sum_{i=0}^{49}\left(1-\frac{3}{50}\right)^i}$$

And thereafter,

$$50TVAR_t = RTC_t^2 * \frac{3}{50} + 50TVAR_{t-1} * \frac{47}{50}$$

Calculation of the 50D Covariance

On an Index Calculation Day t, the 50-day Covariance ("$50CVAR_t$") is calculated as per the below formula:

On the First Lookback Start Date,

$$50CVAR_t = \frac{\sum_{i=0}^{49} REC_{t-i} * RTC_{t-i} * \left(1-\frac{3}{50}\right)^i}{\sum_{i=0}^{49}\left(1-\frac{3}{50}\right)^i}$$

And thereafter,

$$50CVAR_t = REC_t * RTC_t * \frac{3}{50} + 50CVAR_{t-1} * \frac{47}{50}$$

Calculation of the 50D Correlation

On an Index Calculation Day t, the 50-day Correlation ("$50CORR_t$") is calculated as per the below formula:

$$50CORR_t = \frac{50CVAR_t}{\sqrt{50TVAR_t * 50EVAR_t}}$$

Calculation of the Determinants

On an Index Calculation Day t, the Determinants a, b, c (respectively "$50DA_t, 50DB_t, 50DC_t$") with respect to the Quadratic Solution using 50-day lookback window are calculated as per the below formulas:

$$50DA_t = 50EVAR_t + 50TVAR_t - 2 * 50CVAR_t$$

$$50DB_t = 2 * 50CVAR_t - 2 * 50TVAR_t$$

$$50DC_{\mathrm{t}} = 50TVAR_t - \frac{Target\ Vol^2}{252}$$

Where $Target\ Vol$ means the Target Volatility as defined in Section 3 Definitions.

Calculation of the Equity Weight

On an Index Calculation Day t, the Equity Weight with respect to the Quadratic Solution using the 50-day lookback window ("$50EQW_t$") is calculated as per the below formula:

If $50DB_{\mathrm{t}}^2 - 4 * 50DA_{\mathrm{t}} * 50DC_{\mathrm{t}} < 0$:

$$50EQW_{\mathrm{t}} = \mathrm{MIN}[1, \mathrm{MAX}\left(0, \frac{-50CVAR_t + 50TVAR_t}{50DA_{\mathrm{t}}} * \frac{Target\ Vol}{\sqrt{252 * \frac{50EVAR_t * 50TVAR_t - 50CVAR_t^2}{50DA_{\mathrm{t}}}}}\right)]$$

and

$$Solution_t = "Imaginary\ Solution"$$

If $50DB_{\mathrm{t}}^2 - 4 * 50DA_{\mathrm{t}} * 50DC_{\mathrm{t}} \geq 0$:

$$LBound_t = \frac{-50DB_{\mathrm{t}} + \sqrt{50DB_{\mathrm{t}}^2 - 4 * 50DA_{\mathrm{t}} * 50DC_{\mathrm{t}}}}{2 * 50DA_{\mathrm{t}}}$$

$$RBound_t = \frac{-50DB_{\mathrm{t}} - \sqrt{50DB_{\mathrm{t}}^2 - 4 * 50DA_{\mathrm{t}} * 50DC_{\mathrm{t}}}}{2 * 50DA_{\mathrm{t}}}$$

If $MAX(LBound_t, RBound_t) < 0$:

$50EQW_{\mathrm{t}} = 0$ and

$Solution_t =$ "Negative Solution"

Else if $0 \leq MAX(LBound_t, RBound_t) \leq 1$:

$50EQW_{\mathrm{t}} = MAX(LBound_t, RBound_t)$ and

$Solution_t =$ "Positive Solution"

Else if $MIN(LBound_t, RBound_t) < 0$:

$50EQW_{\mathrm{t}} = 1$

$Solution_t =$ "Unique Solution"

Else if $0 \leq MIN\ (LBound_t, RBound_t) \leq 1$:

$50EQW_{\mathrm{t}} = 1$ and

$Solution_t =$ "Positive Solution"

Otherwise:

$50EQW_{\mathrm{t}} = 1$ and

$Solution_t =$ "Multiple Solutions"

Calculation of the Treasury Weight

On an Index Calculation Day t, the Treasury Weight with respect to the Quadratic Solution using 50-day lookback window ("$50TW_t$") is calculated as per the below formula:

If $Solution_t =$ "$Imaginary\ Solution$":

$$50TW_t = (1 - 50EQW_{\mathrm{t}}) * \frac{Target\ Vol}{\sqrt{252 * \frac{50EVAR * 50TVAR_t - 50CVAR_t^2}{50DA_{\mathrm{t}}}}}$$

Otherwise:

$50TW_t = (1 - 50EQW_{\mathrm{t}})$

Step 3.2: Determination of Quadratic Solution using 100-day lookback window

Calculation of the 100D Variance of the Equity Constituent

On an Index Calculation Day t, the 100-day Variance ("$100EVAR_t$") of the Equity Constituent is calculated as per the below formula:

On the Second Lookback Start Date,

$$100EVAR_t = \frac{\sum_{i=0}^{99} REC_{t-i}^2 * \left(1 - \frac{3}{100}\right)^i}{\sum_{i=0}^{99} \left(1 - \frac{3}{100}\right)^i}$$

And thereafter,

$$100EVAR_t = REC_t^2 * \frac{3}{100} + 100EVAR_{t-1} * \frac{97}{100}$$

Calculation of the 100D Variance of the Treasury Constituent

On an Index Calculation Day t, the 100-day Variance ("$100TVAR_t$") of the Treasury Constituent is calculated as per the below formula:

On the Second Lookback Start Date,

$$100TVAR_t = \frac{\sum_{i=0}^{99} RTC_{t-i}^2 * \left(1 - \frac{3}{100}\right)^i}{\sum_{i=0}^{99} \left(1 - \frac{3}{100}\right)^i}$$

And thereafter,

$$100TVAR_t = RTC_t^2 * \frac{3}{100} + 100TVAR_{t-1} * \frac{97}{100}$$

Calculation of the 100D Covariance

On an Index Calculation Day t, the 100-day Covariance ("$100CVAR_t$") is calculated as per the below formula:

On the Second Lookback Start Date,

$$100CVAR_t = \frac{\sum_{i=0}^{99} REC_{t-i} * RTC_{t-i} * \left(1-\frac{3}{100}\right)^i}{\sum_{i=0}^{99}\left(1-\frac{3}{100}\right)^i}$$

And thereafter,

$$100CVAR_t = REC_t * RTC_t * \frac{3}{100} + 100CVAR_{t-1} * \frac{97}{100}$$

Calculation of the 100D Correlation

On an Index Calculation Day t, the 100-day Correlation ("$100CORR_t$") is calculated as per the below formula:

$$100CORR_t = \frac{100CVAR_t}{\sqrt{100TVAR_t * 100EVAR_t}}$$

Calculation of the Determinants

On an Index Calculation Day t, the Determinants a, b, c (respectively "$100DA_t, 100DB_t, 100DC_t$") with respect to the Quadratic Solution using 100-day lookback window are calculated as per the below formulas:

$$100DA_{\mathrm{t}} = 100EVAR_t + 100TVAR_t - 2 * 100CVAR_t$$

$$100DB_{\mathrm{t}} = 2 * 100CVAR_t - 2 * 100TVAR_t$$

$$100DC_{\mathrm{t}} = 100TVAR_t - \frac{Target\ Vol^2}{252}$$

Where $Target\ Vol$ means the Target Volatility as defined in Section 3 Definitions.

Calculation of the Equity Weight

On an Index Calculation Day t, the Equity Weight with respect to the Quadratic Solution using 100-day lookback window ("$100EQW_t$") is calculated as per the below formula:

if $100DB_{\mathrm{t}}^2 - 4 * 100DA_{\mathrm{t}} * 100DC_{\mathrm{t}} < 0$:

$$100EQW_{\mathrm{t}} = \mathrm{MIN}[1, \mathrm{MAX}\left(0, \frac{-100CVAR_t + 100TVAR_t}{100DA_{\mathrm{t}}} * \frac{Target\ Vol}{\sqrt{252 * \frac{100EVAR_t * 100TVAR_t - 100CVAR_t^2}{100DA_{\mathrm{t}}}}} \right)] \text{and}$$

$$Solution_t = "Imaginary\ Solution"$$

if $100DB_{\mathrm{t}}^2 - 4 * 100DA_{\mathrm{t}} * 100DC_{\mathrm{t}} \geq 0$:

$$LBound_t = \frac{-100DB_{\mathrm{t}} + \sqrt{100DB_{\mathrm{t}}^2 - 4 * 100DA_{\mathrm{t}} * 100DC_{\mathrm{t}}}}{2 * 100DA_{\mathrm{t}}}$$

$$RBound_t = \frac{-100DB_{\mathrm{t}} - \sqrt{100DB_{\mathrm{t}}^2 - 4 * 100DA_{\mathrm{t}} * 100DC_{\mathrm{t}}}}{2 * 100DA_{\mathrm{t}}}$$

If $MAX(LBound_t, RBound_t) < 0$:

$100EQW_{\mathrm{t}} = 0$ and

$Solution_t =$ "Negative Solution"

Else if $0 \leq MAX(LBound_t, RBound_t) \leq 1$:

$100EQW_{\mathrm{t}} = MAX(LBound_t, RBound_t)$ and

$Solution_t =$ "Positive Solution"

Else if $MIN(LBound_t, RBound_t) < 0$:

$100EQW_{\mathrm{t}} = 1$

$Solution_t =$ "Unique Solution"

Else if $0 \leq MIN\ (LBound_t, RBound_t) \leq 1$:

$100EQW_{\mathrm{t}} = 1$ and

$Solution_t =$ "Positive Solution"

Otherwise:

$$100EQW_{\mathrm{t}} = 1 \text{ and}$$

$$Solution_t = \text{"Multiple Solutions"}$$

Calculation of the Treasury Weight

On an Index Calculation Day t, the Treasury Weight with respect to the Quadratic Solution using 100-day lookback window ("$100TW_t$") is calculated as per the below formula:

If $Solution_t = \text{"}Imaginary\ Solution\text{"}$:

$$100TW_t = (1 - 100EQW_{\mathrm{t}}) * \frac{Target\ Vol}{\sqrt{252 * \frac{100EVAR * 100TVAR_t - 100CVAR_t^2}{100DA_{\mathrm{t}}}}}$$

Otherwise:

$$100TW_t = (1 - 100EQW_{\mathrm{t}})$$

Step 4: Calculating the Final Equity Weight and the Final Treasury Weight

Step 4.1: Calculating the Final Equity Weight

On Index Calculation Day t, the Final Equity Weight ("FEW_t") is calculated as per the following formula:

$$FEW_t = \mathrm{MIN}(50EQW_{t-1}, 100EQW_{t-1})$$

Step 4.2 Calculating the Final Treasury Weight

On Index Calculation Day t, the Final Treasury Weight ("FTW_t") is calculated as per the following formula:

If $FEW_t - 50EQW_{t-1} = 0$:

$$FTW_t = 50TW_{t-1}$$

Otherwise:

$$FTW_t = 100TW_{t-1}$$

Step 5: Calculation of the Intermediate Index Level

On an Index Calculation Day t, the Intermediate Index Level ("IIL_t") is calculated as per the following formula:

On the Intermediate Date,

$$IIL_t = 100$$

And thereafter:

$$IIL_t = IIL_{t-1} + EqUnit_{t-1} * (EEC_t - EEC_{t-1}) + TsyUnit_{t-1} * (DTC_t - DTC_{t-1})$$

Where,

EEC_t means the level of the Excess Return Equity Constituent on Index Calculation Day t;

DTC_t means the level of the Dynamic Treasury Constituent (see Appendix A) on Index Calculation Day t;

EEC_{t-1} means the level of the Excess Return Equity Constituent on Index Calculation Day immediately prior to Index Calculation Day t;

DTC_{t-1}means the level of the Dynamic Treasury Constituent on Index Calculation Day immediately prior to Index Calculation Day t as defined in Appendix 1;

$EqUnit_{t-1}$ means the Equity Unit as defined below on Index Calculation Day immediately prior to Index Calculation Day t;

$TsyUnit_{t-1}$ means the Treasury Unit as defined below on Index Calculation Day immediately prior to Index Calculation Day t.

Step 6: Determining Equity Unit, Treasury Unit

Step 6.1: Determining the Equity Unit

On an Index Calculation Day t, the Equity Unit ("$EqUnit_t$") is calculated under the following formula:

On the Intermediate Date,

$$EqUnit_t = \frac{IIL_t * FEW_t}{EEC_t}$$

And thereafter:

$$EqUnit_t = \frac{IIL_{t-1} * FEW_t}{EEC_{t-1}}$$

Step 6.2: Determining the Treasury Unit

On an Index Calculation Day t, the Treasury Unit ("$TsyUnit_t$") is calculated under the following formula:

On the Intermediate Date,

$$TsyUnit_t = \frac{IIL_t * FTW_t}{DTC_t}$$

And thereafter:

$$TsyUnit_t = \frac{IIL_{t-1} * FTW_t}{DTC_{t-1}}$$

Step 7: Calculation of the Index Level

We define:

$$Equity\_TC = 0.02\%$$

$$Treasury\_TC = 0.02\%$$

$$Index\_Fee = 0.5\%$$

Step 7.1 Calculation of the Leverage

The Return of the Intermediate Index Level RIL_t on Index Calculation Day t is calculated as per the following:

$$RIL_t = \ln(\frac{IIL_t}{IIL_{t-1}})$$

On an Index Calculation Day t, the Leverage ("Lev_t") is calculated as per the following formula:

$$Lev_t = \text{MIN}\left(150\%, \frac{Target\ Vol}{MAX(ILVOL50_t, 100ILVOL_t)}\right)$$

Where,

$Target\ Vol$ means the Target Volatility as defined in Section 3 Definitions.

50ILVOL_t means the 50-day Volatility of the Intermediate Index Level in respect of Index Calculation Day t;100ILVOL_t means the 100-day Volatility of the Intermediate Index Level in respect of Index Calculation Day t;

$50\text{ILVOL}_\text{t}$and 100ILVOL_t are calculated in accordance with the following formula:

$$50\text{ILVOL}_\text{t} = \sqrt{252 \times 50ILVAR_t}$$

$$100\text{ILVOL}_\text{t} = \sqrt{252 \times 100ILVAR_t}$$

Where,

On the Index Base Date:

$$50ILVAR_t = \frac{\sum_{i=0}^{49} RIL_{t-i} * RIL_{t-i} * \left(1 - \frac{3}{50}\right)^i}{\sum_{i=0}^{49}\left(1 - \frac{3}{50}\right)^i}$$

$$100ILVAR_t = \frac{\sum_{i=0}^{99} RIL_{t-i} * RIL_{t-i} * \left(1 - \frac{3}{100}\right)^i}{\sum_{i=0}^{99}\left(1 - \frac{3}{100}\right)^i}$$

On any Index Calculation Day following the Index Base Date:

$$50ILVAR_t = RIL_t * RIL_t \times \frac{3}{50} + 50ILVAR_{t-1} \times \frac{47}{50}$$

$$100ILVAR_t = RIL_t * RIL_t \times \frac{3}{100} + 100ILVAR_{t-1} \times \frac{97}{100}$$

Where,

$50ILVAR_t$ means the 50-day Variance of Index Level in respect of Index Calculation Day t;

$100ILVAR_t$ means the 100-day Variance of Index Level in respect of Index Calculation Day t;

$50ILVAR_{t-1}$ means the 50-day Variance of Index Level in respect of the Index Calculation Day immediately prior to Index Calculation Day t;

$100ILVAR_{t-1}$ means the 100- day Variance of Index Level in respect of the Index Calculation Day immediately prior to Index Calculation Day t;

Step 7.2: Calculation of the Equity Exposure and the Treasury Exposure

On Index Calculation Day t, the Equity Exposure and the Treasury Exposure are calculated as per the below formula:

Equity Exposure: $EqExpo_t = Lev_t * FEW_t$

Treasury Exposure: $TsyExpo_t = Lev_t \times Signal_{t-2} \times FTW_t$

Where,

$Signal_{t-2}$ means the Trend Signal with respect to the Index Calculation Day that is 2 Index Calculation Days prior to Index Calculation Day t as defined in Appendix 1

Step 7.3: Calculation of the Index Level

On the Index Base Date and on the Index Calculation Day immediately following the Index Base Date:

$$IL_t = 100$$

And thereafter:

$$IL_t = IL_{t-1} * \left(1 + Lev_{t-2} * \left(\frac{IIL_t}{IIL_{t-1}} - 1\right) - Index\_Fee * \frac{CD(t-1,t)}{360} - TSC_t\right)$$

Where,

Lev_{t-2} means the Leverage with respect to the Index Calculation Day that is two Index Calculation Days prior to Index Calculation Day t

$$TSC_t = |EqExpo_t - EqExpo_{t-1}| * Equity\_TC + |TsyExpo_t - TsyExpo_{t-1}| * Treasury\_TC$$

$CD(t-1,t)$ is the number of calendar days from and including the Index Calculation Day immediately preceding Index Calculation Day t and to (but excluding) Index Calculation Day t

APPENDIX A: CALCULATION OF THE DYNAMIC TREASURY CONSTITUENT

Step 1: Calculation of the Trend Signal

On an Index Calculation Day t, the Intermediate Trend Signals with regards to a specific lookback window are calculated as per the below formulas:

$$21ITS_t = \begin{cases} 0, & \frac{TC_t}{TC_{t-21}} - 1 < 0 \\ 1, & \frac{TC_t}{TC_{t-21}} - 1 \geq 0 \end{cases}$$

$$63ITS_t = \begin{cases} 0, & \frac{TC_t}{TC_{t-63}} - 1 < 0 \\ 1, & \frac{TC_t}{TC_{t-63}} - 1 \geq 0 \end{cases}$$

$$126ITS_t = \begin{cases} 0, & \frac{TC_t}{TC_{t-126}} - 1 < 0 \\ 1, & \frac{TC_t}{TC_{t-126}} - 1 \geq 0 \end{cases}$$

$$252ITS_t = \begin{cases} 0, & \frac{TC}{TC_{t-252}} - 1 < 0 \\ 1, & \frac{TC_t}{TC_{t-252}} - 1 \geq 0 \end{cases}$$

Where TC_t means the level of Treasury Constituent in respect of Index Calculation Day t

Step 2: Calculate the Trend Signal

On an Index Calculation Day t, the Trend Signal ("$Signal_t$") is calculated as per the below formula:

$$Signal_t = \sum_{i=t-9}^{t} \frac{(21ITS_i + 63ITS_i + 126ITS_i + 252ITS_i)}{40}$$

Step 3: Calculate the Daily Deduction

On an Index Calculation Day t, the Daily Deduction ("DD_t") is calculated as per the below formula:

$$DD_t = 0.1\% \times \frac{CD(t-1,t)}{365}$$

Where,

$CD(t-1,t)$ is the number of calendar days from and including the Index Calculation Day immediately preceding Index Calculation Day t and to (but excluding) Index Calculation Day t

Step 4: Calculation of the level of the Dynamic Treasury Constituent

On an Index Calculation Day t, the level of the Dynamic Treasury Constituent is calculated as per the below formula:

On the Intermediate Date,

$$DTC_t = 100$$

Thereafter:

$$DTC_t = DTC_{t-1} \times \left(1 + Signal_{t-2} \times \left(\frac{TC_t}{TC_{t-1}} - 1 - DD_t\right)\right)$$

ADDITIONAL INFORMATION

Announcements

Nasdaq announces Index-related information via the Nasdaq Global Index Watch (GIW) website at http://indexes.nasdaq.com.

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

Historical Data

The performance of each indices in the Nasdaq *IFED Target Volatility Index Series* for periods prior to its launch date is based on historical data applying the index methodology outlined herein. Thus, the historical performance does not represent actual, real-time performance of a portfolio. The back-tested index levels are not amended for any ex-post adjustments.

Contact information

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

Index dissemination

Index values and weightings information are available through Nasdaq Global Index Watch (GIW) website at https://indexes.nasdaq.com/ as well as the Calculation Agent's website at https://indxx.com/.

For more detailed information regarding Index Dissemination, refer to the **Nasdaq Index Methodology Guide**.

Website

For further information, refer to Nasdaq GIW website at https://indexes.nasdaq.com/.

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, refer to the **Nasdaq Index Methodology Guide.**

Nasdaq Index Management Committee

The Nasdaq Index Management Committee is responsible for the overall oversight of activities related to the development, issuance, and operation of Nasdaq Indexes. The Committee reviews and approves all new Index Methodologies as well as updates to existing methodologies. For a detailed overview of the Index Management Committee, refer to the **Nasdaq Index Methodology Guide.**

Nasdaq U.S. Oversight Committee

The U.S. Oversight Committee is responsible for the oversight of the overall Benchmark determination process and is responsible for the overall governance of the U.S.-based Index business including review and approval of the control framework, certain policies and procedures, certain methodologies and methodology changes and other Index management oversight.

For a detailed overview of the U.S. Oversight Committee, refer to the **Nasdaq Index Methodology Guide.**

Internal reviews of methodology

All new methodologies or updates to existing methodologies must be reviewed by the Index Management Committee. Additionally, all in-scope Index methodologies are subject to an annual review by the Index Management Committee and U.S. Oversight Committee. For a detailed description on internal reviews of the Methodology, refer to the **Nasdaq Index Methodology Guide**.

Communication with stakeholders and consultations

In certain circumstances, Nasdaq will seek feedback from clients and market participants via consultations. For a detailed description on Consultations and Communications with Stakeholders, refer to the **Nasdaq Index Methodology Guide.**

Index cessation

Nasdaq has a documented procedure that is followed for Index Cessation that includes termination/retirement of an Index or Index Family. For more information, refer to the **Nasdaq Index Cessation Policy.**

Discretionary adjustment

This Index Methodology was created by Nasdaq to achieve the aforementioned objective of measuring the underlying purpose of each Index governed by this methodology document. Any deviations from this methodology are made in the sole judgment and discretion of Nasdaq so that the Index continues to achieve its objective.

For more information on potential adjustments including Calculation and Pricing Disruptions, Expert Judgment, and Unexpected Reconstitution/Rebalances, Refer to the **Nasdaq Index Methodology Guide.**

GLOSSARY OF TERMS AS USED IN THIS DOCUMENT

"Component Security" means, in respect of an Index Constituent, each component security of such Index Constituent;

"Component Security Scheduled Trading Day" means, in respect of a Component Security, any day on which each relevant Exchange is scheduled to be open for trading for its regular trading sessions;

"Disrupted Day" means any day on which a Disruption Event has occurred or is continuing;

"Disruption Event" means any Market Disruption Event that the Index Calculation Agent determines is material;

"First Lookback Start Date" means July 26, 1999;

"Second Lookback Start Date" means October 5, 1999;

"Intermediate Date" means October 6, 1999;

"Index Base Date" means March 2, 2000;

"Index Calculation Agent" means IndXX, LLC;

"Index Calculation Day" means a day on which all Index Constituents are scheduled to be published that is not a Disrupted Day;

"Index Constituent Administrator" means, in respect of an Index Constituent, the entity that announces (directly or through an agent) the level of such Index Constituent on a regular basis. Nasdaq, Inc. and IHS Markit are the Index Administrators of IFEDLVT and MLTAU10E Index, respectively;

"Index Constituent" means each constituent specified under the heading "Index Constituent Name" in the Index Constituents table in Section 4 Index Data;

"Index Force Majeure Event" means an 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) that is beyond the reasonable control of the Index Administrator and that the Index Administrator determines, in its sole discretion, affects an Index, any Index Constituent or the methodology on which the relevant Index is based or the Index Administrator's ability to calculate and publish the relevant Index;

"Index Level" means the closing value of the Index on an Index Calculation Day, as determined by the Index Calculation Agent in accordance with the methodology described in Section 5 Index Calculation;

"Index" means an index listed in Table Index Information in Section 4;

"Market Disruption Event" means the occurrence or existence of any of the following cases:

(i) any suspension or permanent discontinuation of, or limitation imposed on trading by the relevant Exchange or Related Exchange or otherwise and whether by reason of movements in price exceeding limits permitted by the relevant Exchange or Related Exchange or otherwise: (A) relating to any Component Security on the relevant Exchange; or (B) in any futures or options contracts relating to an Index Constituent or a Component Security on any relevant Related Exchange(s);

(ii) the closure on any day of any Exchange or any Related Exchange prior to its scheduled closing time, unless such earlier closing is announced by such Exchange or Related Exchange(s) at least three hours prior to the earlier of: (A) the actual closing time for the regular trading session on such Exchange or Related Exchange (as the case may be) on such day; and (B) the submission deadline for orders to be entered into the relevant Exchange or Related Exchange system for execution as of the close of trading on such day;

(iii) any event (other than an early closure as described in sub-paragraph (ii) above) that disrupts or impairs (as determined by the Index Calculation Agent) the ability of market participants in general to effect transactions in, or obtain market values for: (A) any Component Security on the relevant Exchange; or (B) futures or options contracts relating to an Index Constituent or a Component Security on any relevant Related Exchange(s);

(iv) an Index Constituent Administrator fails to publish the level of an Index Constituent;

(v) an Index Force Majeure Event;

(vi) any Exchange or Related Exchange fails to open for trading during its regular trading session; or

(vii) the level of an Index Constituent has been calculated by reference to data that, in the determination of the Index Calculation Agent, acting in good faith and in a commercially reasonable manner, is inaccurate, incomplete and/or does not reflect the true market trading prices, values or levels of such Index Constituent and/or the Component Securities thereof,

in each case, which the Index Calculation Agent determines is material;

"Target Volatility" means the Target Volatility as defined in the Table Index Information in Index Parameters.

For more glossary of key terms, refer to the **Nasdaq Index Methodology Guide.**

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.

Neither Nasdaq, Inc., nor any of its affiliates (collectively "Nasdaq") makes any recommendation to buy or sell any security or any representation about the financial condition of any company. Investors should undertake their own due diligence and carefully evaluate companies before investing. The information contained herein is provided for informational and educational purposes only, and nothing contained herein should be construed as investment advice, either on behalf of a particular security or an overall investment strategy. **ADVICE FROM A SECURITIES PROFESSIONAL IS STRONGLY ADVISED**.

