



# **ICE<sup>®</sup> Equity Index Methodology**

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### Version History:

#### Version 2.0 (Effective June 24, 2019)

The methodology document was updated to cover the entire ICE® Equity Index Family, with individual documents covering each standalone Index within the family. The Index name, symbol and branding of the NYSE® U.S. Core Large Cap Index (NYCUS, NYCUST) was updated to the ICE® U.S. 500 Index (ICEUST5, ICEUST5T). Additional Indices were launched in the Index family and clarifications were added around corporate actions, rebalancing, and backtesting processes.

#### Version 1.0 (Effective October 24, 2018)

The methodology document covers the newly-launched NYSE® U.S. Core Large Cap Index (NYCUS, NYCUST).

## 1. Series Overview

The ICE® Equity Indices (the “Indices”) are designed to track various segments of the U.S. equity markets, inclusive of all companies that are listed on U.S. stock exchanges and have a U.S. country of risk. The ICE® U.S. 3000 Index is a broad measure of the top 3,000 companies ranked by unadjusted market capitalization. In addition, the ICE® U.S. 500 and U.S. 1000 Indices measure the top 500 and top 1,000 companies respectively, while the ICE® U.S. Small 2000 Index measures the next 2,000 companies. Additional Indices provide other segmentation of the ICE® U.S. 3000 Index universe based on market capitalization ranking.

The Indices undergo a full reconstitution semi-annually after the close of the third Friday in March and September. The reconstitution involves a selection of constituents based on rank by unadjusted market capitalization, and an update in security-level float-adjusted shares outstanding. The Indices undergo a rebalance semi-annually after the close of the third Friday in June and December. The rebalance involves the addition of seasoned and qualified newly listed securities, which includes IPOs and spin-offs, as well as float-adjusted shares outstanding updates for all constituents. The reference date for constituent qualification for all reconstitutions and rebalances is the close of the last trading day of the month preceding the month of rebalance or reconstitution effectiveness. The Index is adjusted for corporate actions that affect constituents, and implements any intra-quarter float-adjusted shares outstanding updates greater than 5% in scheduled weekly share updates.

## 2. Index construction

### 2.1 Index universe and selection principles

#### Index Universe

The starting universe from which Index constituents are selected (“Index Universe”) is comprised of all equities that are listed on the following U.S. stock exchanges: New York Stock Exchange (NYSE), NYSE American, NYSE Arca, NASDAQ Global Select Market, NASDAQ Global Market, NASDAQ Capital Market, Cboe BZX, Cboe BYX, Cboe EDGA, Cboe EDGX, Investors Exchange (IEX). This determination is made using publically available information on individual security issuers.

#### Selection of constituents

At each semi-annual reconstitution, constituent securities are selected from the Index Universe based on the following criteria, as calculated as of the last trading day of the month preceding the month of effectiveness:

1. Unadjusted company-level market capitalization (including all share classes and unlisted shares) of at least \$10 million.
2. Unadjusted, raw price greater than \$1.00 but less than \$10,000.00
3. Minimum free float level of 5%
  - a. Free float calculation includes
    - i. Shares held by officers, directors and their immediate families;
    - ii. Shares held in trust;
    - iii. Shares of the company held by any other corporation, except for shares held by banks and financial institutions in a fiduciary capacity [see 3(b)(ii) in this section];
    - iv. Shares held by the issuing company’s pension/benefit plans;
    - v. Shares held by individuals who hold more than 5% or more of the outstanding shares
  - b. Free float calculation excludes
    - i. Shares under option exercisable within sixty days;
    - ii. Shares held in a fiduciary capacity;
    - iii. Shares held by insurance companies;
    - iv. Preferred stock or debentures that are convertible into common shares
  - c. If a free float level is not available for a given date, then the prior last known float level will be utilized. If there is no available data prior to the date, then the company will be excluded from the Index.
4. Seasoning period of 6 months of active trading (applying to IPOs and new listings)
5. United States country of risk
  - a. With the exception of holding company issuers, country of risk is based on the physical location of the issuer’s operating headquarters.

- b. Holding company issuers are assigned a country of risk based on the location of the majority of operating assets. If no single country represents a majority of operating assets, or if this cannot be determined, the country or risk is the issuer's operating headquarters.
6. Ineligible security types include shares of Limited Partnerships (LPs), Master Limited Partnerships (MLPs), Limited Liability Partnerships (LLPs), Limited Liability Corporations (LLCs), Business Development Companies (BDCs), Special Purpose Acquisition Companies (SPACs), Closed-End Funds (CEFs), Exchange Traded Products (ETPs), Royalty Trusts, Preferred Stocks, Convertible Preferred Stocks, Unit Investment Trusts (UITs), Equity Warrants, Convertible Bonds, Rights Issues, American Depository Receipts (ADRs), American Depository Shares (ADS), Equity Investment Instruments and Non-Equity Investment Instruments. Excluded SPACs includes all blank check and shell companies founded solely for the purpose of effecting a merger, acquisition or business combination. SPACs and BDCs do not qualify for inclusion for the life of the entity, including situations where they continue to exist post-acquisition or post-conversion.
7. For Indices that select constituents based on relative company size, rankings are based on unadjusted market capitalizations, where all listed and unlisted share classes are included in a company's total market capitalization. If a selected company has multiple listed share classes that qualify for inclusion, then they will all be included in the Index at their respective security-level, float-adjusted market capitalization weighting.

At each semi-annual rebalance, the existing constituents in the Index will have their float-adjusted shares outstanding updated. IPOs and new listings that have qualified for inclusion based on the seasoning and minimum criteria rules above will be added to the ICE® U.S. 3000 Index if they have an unadjusted company-level market capitalization that falls within the top 2,700 companies based upon rankings determined using current data as if a full reconstitution was taking place. Any such IPOs and new listings that qualify for addition to the ICE® U.S. 3000 Index will also be added to all appropriate sub-Indices based on the same updated ranking data.

Between the reference date and the effective date, there will be no further updates to the proforma new Index composition except for necessary changes resulting from corporate activity such as mergers and acquisitions, share buybacks or offerings, or other substantial events. In addition, weekly share updates for the weeks between the announcement and effective dates will not be conducted and instead any shares outstanding or float factor updates will be reflected in the proforma new Index composition and made effective with the rebalance or reconstitution.

## **2.2 Periodical updates of constituent holdings and weightings**

Every quarter after the close of trading on the third Friday of March, June, September and December, the Index constituent security-level shares outstanding and float factors are adjusted to reflect their respective float-adjusted market capitalizations. These semi-annual reconstitutions (March and September) and rebalances (June and December) are designed to ensure that the Index constituent selections and weightings continue to reflect the markets that they track. The newly adjusted constituent float-adjusted shares outstanding are the basis for

the Index calculation and level effective as of the open of the first trading day following the third Friday of those months. A divisor adjustment is made to ensure continuity of the Index's level.

The Index Administrator reserves the right, at any time, to change the number of stocks comprising the Index by adding or deleting one or more stocks, or replacing one or more stocks contained in the Index with one or more substitute stocks of its choice, if in the Index Administrator's judgement, such addition, deletion or substitution is necessary and appropriate to maintain the quality and/or character of the Index. Such Index constituent changes are subject to review and approval by the Governance Committee.

The Index reconstitutions become effective after the close of the third Friday of March and September. The rebalances become effective after the close of the third Friday of June and December. The reference date for all company-specific data and information utilized in the constituent qualification process, including prices, is the last trading day of the preceding month. The announcement of the reconstitution or rebalance to the public is made after the close of the first Friday of the month, two weeks before effectiveness.

### **2.3 Special considerations for Index backtests**

For the backtest of the Indices, the percentage weights for reconstitutions and rebalances were calculated and fixed as of the respective reference dates and implemented after the close of the third Friday of the next month. For further clarity, Indices that launched on June 24, 2019 (rebalance effective date) implemented their rebalances as if they were live. Corporate actions were adjusted for in the Index backtest, however, the exact treatment in the backtest and live Index may differ due to differences in timing and knowledge of those actions. Securities whose primary listing moved from an eligible exchange to the OTC markets in the backtest were removed from the Indices after the close of the next trading day (i.e., at the end of the first day of OTC trading). If a free float level was not available for a given date, then the prior last known float level was utilized. If there was no available data prior to the date, then the first available float level was utilized. Weekly share updates were not implemented in the Index backtest. Prior to the March 19, 2004 reconstitution, the Index backtest did not apply a minimum float level criterion and securities were weighted by their full, security-level, non-float adjusted market capitalizations.

### **3. Publication and Dissemination**

#### **3.1 Daily opening, intraday and closing publication of Index values.**

##### **Opening**

The first Index level is calculated and published at 09:30 ET, when the U.S. equity markets open for their regular trading session. The calculation of that level utilizes the most updated prices available at that moment from any exchange, including the official primary exchange. In the case of constituents that have a non-traded, halted or suspended status, or have not opened for the current day, the previous day's reference prices (typically primary exchange official closes) or estimated prices (for IPOs, buyouts and swap offers) are used.

##### **Dissemination frequency**

The level of the Price Return and Gross Total Return Indices is published every 15 seconds to the ICE Data Global Index Feed (ICE Data GIF). The calculated Index levels incorporate the latest traded price of each constituent from within the regular trading session, normally 09:30 to 16:00 ET. The Index only holds equities listed and traded in the U.S., and thus, intraday calculations of the Index incorporate trades on a consolidated level, from all exchanges including those not designated as the official primary exchange. The Indices are calculated on those days specified as Index Business Days. Index Business Days are days on which the U.S. equity markets are open for a full or partial day of trading.

##### **Closing level**

The closing level is the last level disseminated on the trading day and uses the official close prices from the primary exchange for each constituent. For constituents that have non-traded, halted or suspended status, or have not opened for the current day, the previous day's reference prices (typically primary exchange official closes) or estimated prices (for IPOs, buyouts and swap offers) are used instead. In the case of exceptional market conditions, the Index Administrator reserves the right to utilize other prices in the calculation of the official closing level, as indicated below in Sections 3.2, 4.2.2, and 4.2.3.

##### **Data Sources**

The Consolidated Tape (CTS/UTDF) and the ICE Consolidated Feed are the primary market data sources for U.S. equity real-time and closing prices, obtained from ICE Data Services. Currency rates utilized in the real-time calculation of the Index are sourced from ICE Data Services. Currency rates utilized in the closing calculation of the Index are sourced from the WM/Reuters FX benchmarks product provided by Refinitiv. Additional sources of data less commonly used include market data vendors, company announcements, exchange announcements and other official sources.

## 3.2 Exceptional market conditions and corrections

The Index Administrator retains the right to delay the publication of the opening level of the Index, or suspend the publication of the level of the Index, if it believes that circumstances prevent the proper calculation of the Index. If Index constituent intraday prices are cancelled or revised, the Index will not be recalculated unless the Index Administrator decides otherwise.

Reasonable efforts are made to ensure the correctness and validity of data used in real-time Index calculations. Where errors have occurred in the determination or calculation of an Index closing value, the decision to make a restatement will be assessed on a case by case basis. Such decision will take account of the significance, impact, age and scale of the error.

There is the possibility of an exchange or market-wide event resulting in the normal closing auction, or official closing prices, not being available. In those situations, the Index Administrator will take guidance from the respective exchange(s) and determine an appropriate course of action on an event-by-event basis. Exchange or market-wide events include, but are not limited to, the following:

- Volatility Halts
  - LULD (Limit Up / Limit Down)
  - Market Wide Circuit Breaker
- Technological Problems / Failures
- Natural Disaster or Other BCP-Related Event

## 3.3 Changes to the Index

### **Announcement policy**

Changes to the Index methodology will be communicated by an Index announcement which will be distributed by IDI via <https://www.theice.com/market-data/indices/equity-Indices> and ICE Data Services at <https://www.theice.com/market-data/indices/equity-indices/products>.

As a general rule, the announcement periods that are mentioned below will be applied. However, emergency actions, including urgently required corporate action treatments, often resulting from late notices from the relevant company or exchange, may require the Index Administrator to deviate from the standard timing.

### **Inclusion of new constituents**

The inclusion of new companies in the Index will typically occur during the semi-annual reconstitutions or rebalances. The inclusion of the new company in the scheduled reconstitutions and rebalances will be announced after the close of the first Friday of the month, which falls two weeks prior to the effective date (i.e., the third Friday of the month). For example, for a rebalance effective for the open on June 24, 2019, the announcement would occur after the close on June 7, 2019.



During the reconstitution months of March and September, replacement additions can be announced between the first Friday announcement date and third Friday effective date, in order to account for any new corporate actions leading to proforma Index constituent deletions.

Corporate actions affecting constituents of the Index, such as a spin-off or merger, can lead to the addition of a company to the Index at a time other than at the scheduled reconstitutions and rebalances. At the very latest, all such additions will be announced at least one trading day before the effective date of the addition.

### **Removal of Constituents**

The removal of constituent companies from the Index will typically occur during the semi-annual reconstitutions, although there may also be intra-quarter deletions due to specific corporate actions affecting a current constituent such as a merger or acquisition. The removal of the company in the scheduled reconstitutions will be announced after the close of the first Friday of the month, which falls two weeks prior to the effective date (i.e., the third Friday of the month). For example, for a reconstitution effective for the open on September 23, 2019, the announcement would occur after the close on September 6, 2019.

Corporate actions can lead to the removal of a company from the Index at a time other than at the scheduled reconstitutions. At the very latest, all such removals will be announced at least one trading day before the effective date. It should be noted that in the case of mergers and acquisitions, every effort is made to remove the company at some reasonable time ahead of the suspension in trading in the acquired company. There are certain situations and corporate actions that require the removal of a company that has already ceased trading. In those cases, the company will be removed from the Index at its last traded price, or, at the discretion of the Index Administrator, at a derived price that most accurately represents its post-suspension value.

### **Corporate actions**

In case of an event that could affect one or more constituents, the Index Administrator will publish an announcement explaining the treatment of the event in the Index shortly after the firm details have become available and have been confirmed. When possible, the corporate action and resulting treatment within the Index will be announced, even if not all information is known, at least one trading day before the effective date of the action. Once the corporate action has been actioned in the Index, the Index Administrator will confirm the changes and final terms such as Index divisor in a separate announcement.

### **Reconstitution/Rebalance: Publication of Results**

The new composition of the Index, including the companies to be a part of the Index and their corresponding new Index shares, will be announced at least two weeks before the effective date and can be accessed from ICE Data Services at <https://www.theice.com/market-data/indices/equity-indices/products>.

## 4. Corporate Actions

### 4.1 General

There can be situations other than those enumerated in the Index Rules, where the Index constituents and respective weights may need be adjusted in order to maintain the continuity of the Index level and the composition. Such adjustments will be undertaken, as needed, to ensure that the Index continues to achieve its objective of tracking the performance of various segments of the U.S. equity markets.

Adjustments take place in reaction to events that occur with constituents in order to mitigate or eliminate the effect of that event on the Index performance. The Index implements any intra-quarter float-adjusted shares outstanding updates greater than 5% in scheduled weekly share updates.

### 4.2 Removal of Constituents

Any constituent that is deleted from the Index as a result of a corporate action such as a merger, acquisition, spin-off, delisting or bankruptcy will not immediately be replaced by a new stock, except as required due to a specific corporate action as described below. Thus, the total number of stocks in the Index may fluctuate between rebalances and reconstitutions. If a constituent is removed from the Index, the divisor will be adjusted to maintain the Index level.

#### 4.2.1 Mergers and Acquisitions

Merger or acquisition between members of the Index: For certain Indices, in the event a merger or acquisition occurs between members of the Index, the acquired constituent is deleted and its Index market capitalization moves to the acquiring constituent's Index weighting, according to the merger terms and depending on the portion of proceeds paid in the stock of the acquirer.

Merger or acquisition between a member and a non-member: A non-member is defined as a constituent that is not a current constituent of the Index. A merger or acquisition between one member of the Index and one non-member can take two forms:

(1) The acquiring constituent is a member of the Index and the acquired constituent is not. The acquiring constituent's shares will be adjusted at the time of acquisition, or at the next weekly share update, if the stock terms of the acquisition lead to a substantial change in the company market capitalization.

(2) The acquiring constituent is not a member, but the acquired constituent is a member. The acquired constituent is removed from the Index and its Index market capitalization is redistributed proportionately across the remaining constituents via a divisor adjustment. For certain Indices, the acquiring constituent may be considered for inclusion at the next reconstitution, as per the Index methodology. As outlined above, in certain corporate action

situations, the Index Administrator may choose to add in the acquiring constituent should it meet general universe requirements. Exceptions to the implied seasoning rule in the Index methodology can be made at the discretion of the Index Administrator. As in any other addition, these actions would be announced at least one trading day prior to effectiveness.

#### **4.2.2 Suspensions and constituent distress**

Immediately upon a company filing for bankruptcy, an announcement will be made to remove the constituent from the Index effective for the next trading day. If the constituent is trading on an over-the-counter (OTC) market, the last trade or price on that market is utilized as the deletion price on that day.

If the constituent does not trade on a relevant exchange or OTC market between the bankruptcy announcement and point of deletion from the Index, the constituent may be deleted from the Index in that corporate action treatment with a presumed market value of \$0.00.

#### **4.2.3 Price sources**

In the event that the trading in shares is suspended or halted, the last known price established during regular daytime trading on the primary exchange will be used. Depending on the particular situation, the Index Administrator may choose to value the security at a price of \$0.00 for purposes of Index calculation and/or Index corporate action. This would be applicable for certain extreme cases such as a constituent bankruptcy or severe distress.

#### **4.3 Split-up /spin off**

The closing price of the Index constituent is adjusted by the value of the spin-off. For most Indices, spun-off companies will not be automatically added into the Index at the time of the event. The divisor will be adjusted to account for any changes in the overall Index market capitalization.

The Index Administrator reserves the right to be able to add spun-off companies into any Index, provided they meet general universe requirements. Exceptions to the implied seasoning rule in the Index methodology can be made in these situations. As with any other addition, the Index Administrator would announce the corporate action at least one trading day ahead of effectiveness.

#### **4.4 Dividends**

##### **4.4.1 Distinction between ordinary and special dividends**

The Price Return Index will be adjusted for dividends that are special in nature, typically through a price adjustment in the constituent paying the dividend. The divisor will be adjusted to account for any changes in the overall Index market capitalization.

To decide whether a dividend should be considered a special dividend the Index Administrator will use the following criteria:

a) The declaration by a company of a dividend additional to those dividends declared as part of the company's normal results and dividend reporting cycle. An adjustment solely to the timing of the declaration of a company's expected dividend would not be considered as a special dividend circumstance; or

b) The identification of an element of a dividend paid in line with a company's normal results and dividend reporting cycle as an element that is unambiguously additional to the company's normal payment.

For the purpose of clarification, the Index Administrator will not make an adjustment for the following situations, specifically in the Price Return Index:

1. Payment of ordinary dividends, irrespective of how they are financed;
2. Issue of redeemable shares or any other entitlement in lieu of an ordinary dividend; or
3. Unexpected increase or decrease, resumption or cessation, or change in frequency to an ordinary dividend.

#### **4.5 Rights issues and other rights**

In the event of a rights issue, the price is adjusted for the value of the right before the open on the ex-date. The adjustment assumes that the rights issue is fully subscribed. The amount of the price adjustment is determined from the terms of the rights issue, including the subscription price, and the price of the underlying security. The Index Administrator shall only enact adjustments if the rights represent a positive value, or are in-the-money, or alternatively, represent or can be converted into a tangible cash value.

Rights issues or offerings may also lead to changes in constituent shares, representing the increased shares outstanding as a result of the offering. Such changes would typically be handled in subsequent weekly share updates.

#### **4.6 Bonus issues, stock splits and reverse stock splits**

For bonus issues, stock splits and reverse stock splits, the price and number of shares included in the Index will be adjusted in accordance with the ratio given in the corporate action. Since the event won't change the market value of the constituent included in the Index, the divisor will not be changed because of this.

#### **4.7 Changes in number of shares outstanding and free float level**

Changes in the number of shares outstanding and/or free float, typically due to share repurchases, tenders, or offerings, may lead to an adjustment in the constituent shares as a result of the corporate action. This change may occur either at the time of the corporate event, in subsequent weekly share updates, or at the next semi-annual reconstitution or rebalance.

## 5. Calculation Methodology

### 5.1 Calculation of the Index

The Index is calculated on a price return and gross total return basis. The current Index level is calculated by dividing the current Index market capitalization by the Index divisor. The Index market capitalization represents the sum product of Index constituent float-adjusted shares outstanding and prices. The divisor was determined as a function of the initial Index market capitalization and base Index level. The divisor is updated as a result of corporate actions, reconstitutions, rebalances and any other composition changes.

### 5.2 Divisor

Price Return Indices look to measure the period to period change in the value of its components due to changes in the valuation (price) of those components, including the impact of any special cash dividends and spin-offs. For a Total Return Index, the change in value also includes any income produced by those components.

Indices are maintained so as to avoid having corporate actions or changes in the composition resulting from additions, deletions, and share changes directly impact the Index level in any way.

The Divisor is an important element in the determination of Index levels. At the inception of an Index (Base Date) the Divisor is set such that the initial Index level (Base Level) is at the desired starting point. Indices usually have a starting level of 100 or 1,000, although any number could be used. The general formula to determine an Index level is:

$$\text{Index Level} = \frac{\text{Index Market Capitalization}}{\text{Divisor}}$$

which can be rearranged as:

$$\text{Divisor} = \frac{\text{Index Market Capitalization}}{\text{Index Level}}$$

It is this transformed formula which allows an Index calculator to maintain the continuity of the Index in the face of changes that may occur in Index market capitalization not attributed to changes in the prices of components. For example, at the effective date of a rebalance there may be changes to

the pool of components and/or the number of shares held of those components. These changes to the Index are made outside of component trading hours and as such there should be no change to the observed Index level pre- and post-rebalance. Take this simple example below:

	<b>Current Index Market Capitalization</b>	<b>New Index Market Capitalization</b>
Component #1	\$1,500,000	\$1,500,000
Component #2	\$1,250,000	\$1,250,000
Component #3	\$1,250,000	\$1,250,000
Component #4	\$0	\$2,000,000
Index Market Capitalization	\$4,000,000	\$6,000,000
Pre-Rebalance Index Level	2,000.00	
Pre-Rebalance Divisor	2,000.00	
Post-Rebalance Index Level		2,000.00
Post-Rebalance Divisor		3,000.00

In this example we see that the rebalance has added another component to the Index. This addition has increased the Index Market Capitalization from 4 to 6 million USD. If the current Divisor is used, the Index level will be calculated incorrectly ( $6,000,000 / 2,000 = 3,000.00$ ). Because we know that there were no component price changes, we know that the Index level pre- and post-rebalance should be the same. In order to maintain that Index level, we need to calculate a new Divisor.

### 5.3 Formulas

The general formula for the **Price Return version [Index(PR)<sub>t</sub>]** of the Index is:

$$\text{Index(PR)}_t = \frac{\sum_i P_{i,t} Q_{i,t}}{D_t}$$

Where:

$t$  means Index Calculation Date  $t$

$D_t$  means the Price Return Index Divisor on Index Calculation Date  $t$

$P_{i,t}$  means the Price (in the Index Base Currency) of Index Constituent  $i$  on Index Calculation Date  $t$

$Q_{i,t}$  means the number of Shares of Index Constituent  $i$  on Index Calculation Date  $t$

The Index is only calculated on Index Business Days, which are defined in section 3.1 above.

The **Index Divisor**  $D_t$  will be adjusted for corporate actions and any additions, deletions, and share changes for the Index Constituents:

$$D_t = \frac{\sum_i APC_{i,t} Q_{i,t}}{\text{Index}(PR)_{t-1}}$$

Where:

$D_t$  means the Index Divisor on Index Calculation Date  $t$

$\text{Index}(PR)_{t-1}$  means the Price Return Index Level from Date  $t-1$

$APC_{i,t}$  means the Adjusted Previous Close Price (for corporate actions, and, denominated in the Index Base Currency) of Index Constituent  $i$  on Index Calculation Date  $t$

$Q_{i,t}$  means the number of Shares of Index Constituent  $i$  on Index Calculation Date  $t$

The general formula for the **Gross Total Return version** [ $\text{Index}(\text{GTR})_t$ ] of the Index will follow that of the Price Return version:

$$\text{Index}(\text{GTR})_t = \frac{\sum_i P_{i,t} Q_{i,t}}{D_{\text{gtr},t}}$$

Where:

$t$  means Index Calculation Date  $t$

$D_{\text{gtr},t}$  means the Gross Total Return Index Divisor on Index Calculation Date  $t$

$P_{i,t}$  means the Price (in the Index Base Currency) of Index Constituent  $i$  on Index Calculation Date  $t$

$Q_{i,t}$  means the number of Shares of Index Constituent  $i$  on Index Calculation Date  $t$

The **Index Divisor** for the **Gross Total Return Index** will be adjusted as follows:

$$D_{\text{gtr},t} = \frac{\sum_i APC_{i,t} Q_{i,t}}{\text{Index}(\text{GTR})_{t-1}}$$

Where:

$t$  means Index Calculation Date  $t$

$D_{\text{gtr},t}$  means the Gross Total Return Index Divisor on Index Calculation Date  $t$

$APC_{i,t}$  means the Adjusted Previous Close Price (for gross dividends going ex-dividend on Index Calculation Date  $t$  and corporate actions, and, denominated in the Index Base Currency) of Index Constituent  $i$  on Index Calculation Date  $t$

$Q_{i,t}$  means the number of Shares of Index Constituent  $i$  on Index Calculation Date  $t$

$\text{Index}(\text{GTR})_{t-1}$  means the Gross Total Return Index Level from Date  $t-1$

The general formula for the **Net Total Return version [Index(NTR)<sub>t</sub>]** of the Index will follow that of the Price Return version:

$$\text{Index(NTR)}_t = \frac{\sum_i P_{i,t} Q_{i,t}}{D_{ntr,t}}$$

Where:

$t$  means Index Calculation Date  $t$

$D_{ntr,t}$  means the Net Total Return Index Divisor on Index Calculation Date  $t$

$P_{i,t}$  means the Price (in the Index Base Currency) of Index Constituent  $i$  on Index Calculation Date  $t$

$Q_{i,t}$  means the number of Shares of Index Constituent  $i$  on Index Calculation Date  $t$

The **Index Divisor** for the **Net Total Return Index** will be adjusted as follows:

$$D_{ntr,t} = \frac{\sum_i APC_{i,t} Q_{i,t}}{\text{Index(NTR)}_{t-1}}$$

Where:

$t$  means Index Calculation Date  $t$

$D_{ntr,t}$  means the Net Total Return Index Divisor on Index Calculation Date  $t$

$APC_{i,t}$  means the Adjusted Previous Close Price (for net dividends going ex-dividend on Index Calculation Date  $t$  and corporate actions, and, denominated in the Index Base Currency) of Index Constituent  $i$  on Index Calculation Date  $t$

$Q_{i,t}$  means the number of shares of Index Constituent  $i$  on Index Calculation Date  $t$

$\text{Index(NTR)}_{t-1}$  means the Net Total Return Index Level from Date  $t-1$

The formula for the **Net Dividend** of an Index Constituent is:

$$\text{Div}_{net,i,t} = \text{Div}_{gross,i,t} \times (1 - \text{WTR}_{i,t})$$

Where:

$\text{Div}_{net,i,t}$  means the Net Dividend for Index Constituent  $i$  on Index Calculation Date  $t$

$\text{Div}_{gross,i,t}$  means the Gross Dividend for Index Constituent  $i$  on Index Calculation Date  $t$

$\text{WTR}_{i,t}$  means the Tax Withholding Rate being utilized for the respective country of incorporation for Index Constituent ( $i$ )

The schedule of applicable tax rates can be found in the Dividend Withholding Tax Table which can be found at <https://www.theice.com/market-data/Indices/equity-Indices/methodologies>

The following formula is utilized to calculate additional **currency variants** of an Index:



$$\text{Index}_{t,\text{cur}} = \text{Index}_t \times \text{ForeignExchangeRate}$$

Where:

*Index<sub>t,cur</sub>* means the Index level at time t denominated in the currency of the Index currency variant

*Index<sub>t</sub>* means the Index level at time t denominated in the base currency of the Index

*ForeignExchangeRate* means the applicable cross spot currency rate expressed as units of Index variant currency per Index base currency.

By default, any currency conversion required for the calculation of the Index, including the conversion of any foreign currency dividends, utilizes the WM/Reuters Closing Rate Fix from 4 PM London time. If applicable, each individual Index factsheet would clarify the currency rate type utilized in the Index calculation if different.

## 6. Governance

### Index Sponsor & Administrator

ICE Data Indices, LLC (“IDI”) is the Index Sponsor and the Index Administrator for the ICE® Equity Indices. IDI is responsible for the day-to-day management of the Indices in accordance with their rules, including retaining primary responsibility for all aspects of the Index determination process, including implementing appropriate governance and oversight, as required under the International Organization of Securities Commission’s Principles for Financial Benchmarks (the IOSCO Principles). The IDI Index Governance Committee is responsible for helping to ensure IDI’s overall compliance with the IOSCO Principles, by performing the Oversight Function which includes overseeing the Index development, design, issuance and operation of the Indices, as well as reviewing the control framework. IDI is also responsible for decisions regarding the interpretation of these rules and the IDI Index Governance Committee is responsible for reviewing all rule book modifications and, if applicable, any non-rules based Index constituent changes with respect to the Index to ensure that they are made objectively, without bias, and in accordance with applicable law and regulation and IDI’s policies and procedures. Consequently, all IDI and IDI Index Governance Committee discussions pertaining to such reviews and decisions are confidential until released to the public.

### Periodic review of Index rules

The Indices are constructed based on a defined set of rules which spell out all pertinent details of how an Index is compiled. The rules for compiling an Index are established when the Index is first created and specify the criteria for selecting constituent securities. The rules also establish the methodologies for weighting, valuing and rebalancing the constituents. Detailed rule documents are publicly available on our systems. Rules and methodologies are reviewed periodically, in accordance with IDI’s policies and procedures, to ensure the Index continues to meet its objective. The Index Administrator shall announce changes in Rules and methodologies, along with their implementation dates, in accordance with its policies and procedures. As it relates to material changes, the Index Administrator will also consult on proposed material changes that affect the Index prior to making such changes, in accordance with IDI’s consultation policy: [https://www.theice.com/publicdocs/Consultation\\_Policy.pdf](https://www.theice.com/publicdocs/Consultation_Policy.pdf).

### Rule book changes

The IDI Index Governance Committee reviews all rule book modifications and Index changes to ensure that they are made objectively, without bias and in accordance with applicable law and regulation and IDI’s policies and procedures. These rules may be supplemented, amended in whole or in part, revised or withdrawn at any time in accordance with applicable law and regulation and IDI applicable policies and procedures. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the Index is compiled or calculated or affect the Index in another way.

### Cases not covered in rules

In cases which are not expressly covered in the Index rules, operational adjustments will take place along the lines of the aim of the Index. Operational adjustments may also take place if, in the opinion of the Index Administrator, it is desirable to do so to maintain a fair and orderly market in derivatives on the Index and/or this is in the best interests of the investors in products based on the Index and/or the proper functioning of the markets. Any such modifications described under this section or exercise of Expert Judgment will also be governed by any applicable policies, procedures and Guidelines in place by IDI at such time.

### Limitations of the Indices

All indices produced by IDI (the “Indices”) may be subject to potential limitations, such as a decline in the pool of available eligible securities due to advancements in technology, shifts in demographic spending or the economy, changes in regulation or accounting rules, consolidation in certain sectors or industries, or other factors. Other limitations may include the ability of the Benchmark to operate in illiquid or fragmented markets.

By design, the Indices are focused on representing a broad universe of U.S. companies or a segment thereof. As the U.S. equity markets transform, these Indices, by nature of the fact that they may reconstitute semi-annually to a fixed number of companies, may be targeting a different absolute market capitalization range.

IDI seeks to manage and mitigate these limitations through the Benchmark design, review and oversight process.

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