



NYSE[®] Composite Index[™] (NYA)
NYSE[®] World Leaders Index[™] (NYL)
NYSE[®] U.S. 100 Index[™] (NY)
NYSE[®] International 100 Index[™] (NYI)
NYSE[®] TMT Index[™] (NYY)
NYSE[®] Energy Index[™] (NYE)
NYSE[®] Financial Index[™] (NYK)
NYSE[®] Health Care Index[™] (NYP)

Version 4.0
Valid from
April 24, 2018

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Version History:

Version 4.0 (Effective April 24, 2018)

This version combines the NYSE Composite and Sector Indices with the NYSE Indices and incorporates language reflecting changes to the announcement policy, legal structure of the Index Administrator, introduces language codifying certain established procedures relating to Index governance, correction of data used in index calculation and an updated Disclaimer.

Version 3.0 (Effective December 31, 2002)

The methodology document covers the newly-launched NYSE® Energy Index®, NYSE® Financial Index®, NYSE® Health Care Index®.

Version 2.0 (Effective December 31, 1995)

The methodology document covers the newly-launched NYSE® World Leaders Index®, NYSE® U.S. 100 Index®, NYSE® International 100 Index® and NYSE® TMT Index®.

Version 1.0 (Effective 1966)

The methodology document covers the newly-launched NYSE® Composite Index®

1. Index summary

Factsheet	
Full Names	NYSE® Composite Index® / NYSE® Composite Mini-Index™ NYSE® World Leaders Index® / NYSE® World Leaders Mini-Index™ NYSE® U.S. 100 Index® / NYSE® U.S. 100 Mini-Index™ NYSE® International 100 Index® / NYSE® International 100 Mini-Index™ NYSE® TMT Index® / NYSE® TMT Mini-Index™ NYSE® Energy Index® NYSE® Financials Index® NYSE® Health Care Index®
Index Types	Price Return (USD): NYA / Gross Total Return (USD): NYATR / Price Return Mini (USD): NYA.MN Price Return (USD): NYL.ID / Gross Total Return (USD): NYLTR / Price Return Mini (USD): NYL.MN Price Return (USD): NY.ID / Gross Total Return (USD): NYTR / Price Return Mini (USD): NY.MN Price Return (USD): NYI.ID / Gross Total Return (USD): NYITR / Price Return Mini (USD): NYI.MN Price Return (USD): NYY.ID / Gross Total Return (USD): NYYTR / Price Return Mini (USD): NYY.MN Price Return (USD): NYE.ID / Gross Total Return (USD): NYETR Price Return (USD): NYK.ID / Gross Total Return (USD): NYKTR Price Return (USD): NYP.ID / Gross Total Return (USD): NYPTR
Index Description	These Indices are rules-based indices designed to measure the performance of highly capitalized companies in key market sectors and regions. Further description on each Index is available in Section 3. Index composition and corporate actions, including rebalance information, can be accessed from NYSE Market Data at www.nyse.com/market-data/indices .
Eligible Stocks	All component stocks will be listed on the New York Stock Exchange (“NYSE”), and be recognized as reported National Market System (“NMS”) securities.

<i>Number of Constituents</i>	NYSE® World Leaders Index®: Fixed NYSE® U.S. 100 Index®: Fixed NYSE® International 100 Index®: Fixed NYSE® TMT Index®: Fixed NYSE® Composite Index®: Variable NYSE® Energy Index®: Variable NYSE® Financials Index®: Variable NYSE® Health Care Index®: Variable
<i>Weighting</i>	NYSE® TMT Index®: Modified Float-adjusted Capitalization-weighted Others: Float-adjusted Capitalization-weighted
<i>Review of Composition</i>	The Indices are rebalanced quarterly based on closing prices on the third Friday in March, June, September and December.
<i>Effective Date of the Rebalance</i>	Rebalances are effective the opening of the first trading day after the review of composition.
<i>Calculation Frequency</i>	Price and Total Return: Every 15 seconds between 09:30 & 18:00 ET
<i>Base Date</i>	NYA: December 31, 2002 NYL, NY, NYI, NYY: December 31, 1995 NYE, NYK, NYP: December 31, 2002 NYA.MN, NYI.MN, NYY.MN, NY.MN, NYL.MN: December 31, 2003
<i>Base Level</i>	NYA: 5000 NYL, NY, NYI, NYY: 3,000 NYE, NYK, NYP: 5,000
<i>Historic Data Available Since</i>	NYA: November 30, 1984 NYL, NY, NYI, NYY: December 31, 1995 NYE, NYK, NYP: December 31, 2002 NYA.MN, NYI.MN, NYY.MN, NY.MN, NYL.MN: December 31, 2003

Bloomberg Code	NYA <INDEX> / NYATR <INDEX> NYL <INDEX> / NYLTR <INDEX> NY <INDEX> / NYTR <INDEX> NIN <INDEX> / NYITR <INDEX> NYY <INDEX> / NYYTR <INDEX> NYE <INDEX> / NYETR <INDEX> NYK <INDEX> / NYKTR <INDEX> NYP <INDEX> / NYPTR <INDEX> NYAMN <INDEX> NYIMN <INDEX> NYYMN <INDEX> NY.MN <INDEX>
Reuters Code	.NWA / .NYATR./ .NYAMN .NWL / .NYLTR .NY / .NYTR .NYI / .NYITR .NYY / .NYYTR .NYE / .NYETR .NYK / .NYKTR .NYP / .NYPTR .NYAMN .NYIMN .NYYMN .NY.MN. .NYL.MN
Launch Date	NYA: December 31, 1966 NYL, NY, NYI, NYY: December 31, 1995 NYSE, NYK, NYP: December 31, 2002 NYA.MN, NYI.MN, NYY.MN, NY.MN, NYL.MN: December 31, 2003
Website	https://www.theice.com/market-data/indices

2. Governance

Index Sponsor & Administrator

ICE Data Indices, LLC (“IDI”) is the Index Sponsor and the Index Administrator.

IDI is responsible for the day-to-day management of the Index, 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 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 Governance Committee is responsible for reviewing all rule book modifications and 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’s and the Governance Committee discussions and decisions are confidential until released to the public.

Cases not covered in rules

In cases which are not expressly covered in these 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 this 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.

Rule book changes

The 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.

Limitations of the Index

All the NYSE indices produced by IDI (“the NYSE 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.

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

3. Index Description

NYSE® Composite Index™ (NYA) - a float adjusted market capitalization weighted index that is composed of equities of NYSE-listed companies. The index is designed to measure the performance of all common stocks listed on the NYSE, including ADRs, REITs and tracking stocks. It is a measure of the changes in aggregate market value of NYSE-listed U.S. and non-U.S. stocks, adjusted to eliminate the effects of capitalization changes, new listings and delistings. The index is weighted using free-float market capitalization, and calculated on both price and total return basis.

NYSE® World Leaders Index™ (NYL) - a float adjusted market capitalization weighted index that is composed of equities of the top 100 U.S. domiciled-NYSE-listed companies by market cap and equities of the top 100 non-U.S. domiciled components of NYA by market cap.

NYSE® U.S. 100 Index™ (NY) - a float adjusted market capitalization weighted index that is composed of equities of the top 100 U.S. domiciled components of NYA by market cap.

NYSE® International 100 Index™ (NYI) - a float adjusted market capitalization weighted index that is composed of equities of the top 100 non-U.S. domiciled components of NYA by market cap.

NYSE® TMT Index™ (NYY) - a float adjusted market capitalization weighted index that is composed of equity components of NYA by market cap that have been determined to offer goods and services in the Technology, Media and Telecommunications industries.

NYSE® Energy Index™ (NYE) - a float adjusted market capitalization weighted index that is composed of equity components of NYA by market cap that have been determined to offer goods and services in the Energy Industry.

NYSE Financials Index (NYK) - a float adjusted market capitalization weighted index that is composed of equity components of NYA by market cap that have been determined to offer goods and services in the Financials Industry.

NYSE® Health Care Index™ (NYP) - a float adjusted market capitalization weighted index that is composed of equity components of NYA by market cap that have been determined to offer goods and services in the Health Care Industry.

NYSE® Composite Index™ (NYA), NYSE® World Leaders Index™ (NYL), NYSE® U.S. 100 Index™ (NY), NYSE® International 100 Index™ (NYI) and NYSE® TMT Index™ (NYY) each include a “Mini” variant. Additional information on the calculation of the Mini indices is outlined in Section 5. Calculation.

4. Publication

4.1 The opening, intraday and closing or daily publication of index values.

Opening

The first index level is calculated and published around 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. 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 (primary exchange official closes) or estimated prices (for IPOs, buyouts and swap offers) are used.

Dissemination frequency

The level of the price return, mini price return and gross total return indexes are in principle 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 would incorporate trades on a consolidated level, from all exchanges including those not designated as the official primary exchange.

The index is calculated from 09:30 until 18:00 ET on those days specified as index business days. Index business days will be classified as days on which the U.S. Equity Markets (NYSE, NASDAQ and NYSE American) 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 listing market 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 (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 Section 4.2.

Sources of Data

The Consolidated Tape (CTS/UDTF) is the primary market data source for U.S. equity real-time and closing prices. Additional sources of data less commonly used include market data vendors, company announcements, exchange announcements and other official sources.

4.2 Exceptional market conditions and corrections

The Index Administrator retains the right to delay the publication of the opening level of the index. Furthermore, the Index Administrator retains the right to suspend the publication of the level of the index if it believes that circumstances prevent the proper calculation of the index.

If index constituent prices are cancelled, 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. If incorrect price or corporate action data affects index daily closing values, they are corrected retroactively as soon as possible and all revisions are communicated out to the public and market data vendors.

There is the possibility of an exchange or market-wide event resulting in the normal closing auction not going off or official closing prices not being available. In those situations, the index will take guidance from the respective exchange(s) and address 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

4.3 Changes to the Index

Announcement policy

Changes to the index methodology will be announced by an index announcement which will be distributed by IDI via www.nyse.com/indices and NYSE Market Data at www.nyse.com/market-data/indices

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

New listings and IPOs are added to the NYSE Composite Index, and also, if determined to be eligible, to the NYSE® Energy Index™, NYSE Financials Index, and NYSE Healthcare Index, at the close of trading on the first day of trading on the NYSE. For all other indexes, the inclusion of new companies in the index will typically only occur during the quarterly re-compositions or rebalances, although there could be exceptions based on a specific corporate action affecting a

current constituent. The inclusion of the new company at IPOs or new listings will be announced on the first trading day and effective for the market open on the next trading day. The inclusion of the new company at rebalance will be announced at least two trading days before the effective date of the actual inclusion. For example, for a rebalance effective for market open on March 19, 2018, the announcement would occur after the close on March 9, 2018.

Removal of Constituents

Components would be removed from the index as a result of periodic corporate actions as well as the results of the quarterly rebalances. All removals will be announced at least one trading day before the effective date of the removal. It should be noted that in the case of mergers and acquisitions, every effort will be made to remove the company at some reasonable time ahead of the suspension in trading in the acquired company. There will be certain situations and corporate actions that would 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 inform the market about the intended treatment of the event in the index shortly after the firm details have become available and have been confirmed. When possible, the corporate action 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 effectuated, the Index Administrator will confirm the changes in a separate announcement.

Rule changes

Going forward, barring exceptional circumstances, the Index Administrator shall announce proposed Rules changes to stakeholders prior to them being implemented. Stakeholders shall also be notified of when the changes shall take effect.

Index Reviews

IDI shall undertake regular reviews of the Index, the methodology and the market which it represents to ensure it continues to meet the index objective, in accordance with IDI's policies and procedures. Should changes to the Index be required or proposed, this will be communicated to stakeholders in accordance with IDI's policies and procedures.

Consultations

IDI may from time to time consult with stakeholders on proposed material changes that affect the Index in accordance with IDI's policies and procedures including IDI's consultation policy: https://www.theice.com/publicdocs/Consultation_Policy.pdf. Such proposals shall be published to Stakeholders and all feedback received will be considered by the Index

Administrator. Any resulting changes to the Index will be announced prior to it being implemented.

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 trading days before the effective date and can be accessed from NYSE Market Data at www.nyse.com/market-data/indices.

5. Calculation

5.1 Calculation of the price index

The indices are calculated on a Price and Total Return basis. The current index levels would be calculated by dividing the current modified index float adjusted market capitalization by the index divisor. The divisor was determined off of the initial capitalization base of the index and the base level. The divisor is updated as a result of corporate actions and composition changes.

“Mini” variants are determined by dividing the calculated index level of the parent index by 10. Indices with “mini variants include:

- i) NYSE Composite Mini-Index
- ii) NYSE U.S.100 Mini-Index
- iii) NYSE International 100 Mini-Index
- iv) NYSE World Leaders Mini-Index
- v) NYSE TMT Mini-Index

A full description of the formulae used to calculate Price and Total Return index values can be found in the “NYSE Index - Guide to Index Mathematics” at <https://www.nyse.com/indices/rules>.

6. Index rebalances

6.1 General aim of rebalances and frequency

General aim of the periodical rebalance

The general aim of the quarterly rebalance of the Composite and Sector indices is to ensure that the weightings of the constituents continues to reflect changes in Shares Outstanding and Float that are less than 10% of the current numbers. For all other indices the general aim of the quarterly rebalance is to ensure that selection and weightings of the constituents continue to reflect as closely as possible each index objective of identifying and selecting stocks from a particular market segment. The Index Administrator reserves the right to, at any time, 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 discretion such addition, deletion or substitution is necessary or appropriate to maintain the quality and/or character of the index. Such index constituent changes are reviewed by the Governance Committee to ensure that they are made objectively, without bias and in accordance with applicable law and regulation and IDI's policies and procedures.

Frequency

Changes to the Composite and Sector indices may occur at each NYSE listed company IPO or New Listing and as a result of removal of an index constituent. Changes to all other index constituents may occur during a scheduled rebalance and as a result of the removal of an index constituent.

The NYSE indices rebalances become effective at the open of the first trading after the third Friday of March, June, September and December. The rebalance announcement will be made after the close two trading days prior to that last trading day. The reference date for all company-specific data and information utilized in the rebalancing process will be taken from prices established at the close of trading on the third Friday of March, June, September and December.

6.2 Index universe and selection principle

Index Universe

NYSE® Composite Index™ (NYA)

Development and maintenance of the component universe for the NYSE® Composite Index™ is undertaken by IDI. The Universe is composed of all NYSE listed equity securities classified as common stocks, ADRs, Tracking Stocks and REITs. The NYSE® Composite Index™ is utilized as the index universe for all indices described below.

NYSE® World Leaders Index™ (NYL)
NYSE® U.S. 100 Index™ (NY)
NYSE® International 100 Index™ (NYI)

Development and maintenance of the component universe for the NYSE® World Leaders Index™, NYSE® U.S. 100 Index™ and NYSE® International 100 Index™ is undertaken by IDI. The Universe is composed of all component securities in the NYSE Composite Index.

NYSE® TMT Index™ (NYY), NYSE® Energy Index™ (NYE), NYSE Financials Index (NYK), and NYSE® Health Care Index™ (NYP)

Development and maintenance of the component universe for the NYSE® TMT Index™, NYSE® Energy Index™, NYSE Financials Index, NYSE Health Care Index, is undertaken by IDI. The Universe is composed of all component securities in the NYSE® Composite Index™ that are determined by IDI to be representative of:

- For NYY: the Technology, Media and Telecommunications Industries;
- For NYE: the Energy Industry;
- For NYK: the Financials Industry; and
- For NYP: the Health Care Industry.

This determination is completed using publically available information on individual security issuers as well as the respective industries. Also instrumental in this determination is IDI employees' expertise concerning index design and development and their knowledge surrounding index use and stakeholder feedback. IDI may change the composition of the Universe at any time to reflect the conditions of the respective Industries and to ensure that the pool of component securities continues to represent the applicable Industries, in accordance with the Index requirements.

All index component candidates must be common shares or other securities that have the characteristics of common equities. All classes of common shares, both fully and partially paid, are eligible for consideration. However, only the most liquid class of each company's stock may be included in the index. Fixed-dividend shares and securities such as convertible notes, warrants, rights, mutual funds, unit investment trusts, closed-end fund shares, shares in limited partnerships and tracking stocks are not eligible. Temporary issues arising from corporate actions, such as "when issued" shares, are considered on a case-by-case basis when necessary to maintain continuity in a company's index membership

Selection of constituents to specific indices

Rules specific to NYSE U.S. 100 Index, NYSE International 100 Index, NYSE® World Leaders Index™, NYSE® TMT Index™ :

At each quarterly rebalance, the index universe will be screened utilizing the following criteria:

1. The entire index universe is ranked in descending order by unadjusted market capitalization
2. Average Daily Trading volume in each of the last six months of not less than 100,000 shares. For Depository Receipts (DR) volume will include NYSE listed DR trade volumes as well as local trading volume multiplied by the DR ratio (1DR : X Local Shares)
3. If a component has multiple share classes, select the most liquid share class for that issuer
4. Choose the top companies:
 - a. For the NYSE® U.S. 100 Index™ and NYSE® International 100 Index™ select the 100 top ranked securities by unadjusted market capitalization
 - b. For the NYSE® World Leaders Index™ combine the final component pools for both the NYSE® U.S. 100 Index™ and the NYSE International 100 Index
5. Weight each index by float adjusted market capitalization

Rules specific to the NYSE® TMT Index™

1. Limit Sector weights for each of Technology, Media and Telecommunication to 40% of total index weight so that no single industry exposure does not dominate the index
2. Limit Industry weights for each Industry to 20% so that no single Industry does not dominate any particular Sector

6.3 Periodical update of weighting

Determining constituent weightings at Quarterly Index Rebalances

At Quarterly Index Rebalances, the index will be rebalanced according to the methodology in Section 6.2.

7. Corporate Actions

7.1 General

The index may be adjusted in order to maintain the continuity of the index level and the composition. The underlying aim is that the index continues to reflect as closely as possible each index objective of measuring the performance of highly capitalized companies in key market sectors and regions..

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.

A full description of standard corporate action events and their handling can be found in the “NYSE Indices - Corporate Action Handling Guide” at <https://www.nyse.com/indices/rules>.

8. Disclaimer

The products and services mentioned herein solely in relation to the NYSE Indices (each an “Index”) may not be available in all jurisdictions. This document does not constitute an offer of services in jurisdictions or circumstances where ICE Data Indices, LLC (“IDI”) does not have the necessary or appropriate licenses or approvals for the offering of the products and services described herein. Each Index provides a general investment strategy, does not take into account any of the specific needs or financial circumstances of any person, entity or group of persons and should not be considered investment advice. All information provided by IDI, including without limitation, any materials that describe any Index, is of general nature only.

The development or creation of any financial product that is based on, developed in connection with, or uses directly or indirectly any index of IDI, including any bi-lateral contract, fund, investment vehicle or issue of securities (an “Investable Product”), is prohibited without the prior written consent of IDI. IDI is not obligated to enter into or promote Investable Products or other transactions or investments that are linked to any ICE index or any of its constituents.

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It is not possible to invest in an index directly. Exposure to an asset class or sector represented by an index or an interest the index seeks to measure may be available through Investable Products based on that index. IDI does not sponsor, endorse, sell, promote or manage, and has not reviewed or passed on the legality or suitability with respect to any person of, any Investable Product that is offered by third parties or any associated document, literature or publication, including without limitation, any prospectus or offering memorandum. IDI makes no assurance that Investable Products based on any Index will accurately track index performance or provide positive investment returns or not result in a loss of some or all of any investment in such Investable Products. IDI makes no representation regarding the advisability or suitability of investing in or assuming any risk in connection with any such Investable Products.

The products and services described herein may not be suitable for all purposes and for all investors and IDI makes no representation regarding (a) the level at which any Index stands at any particular time on any particular date, (b) the ability of any Index to track corresponding market performance (c) the results to be obtained by any party from the use of any Index or any data included in it for the purposes of issuing securities or carrying out any financial transaction or (d) any other matter.

A decision to invest in any Investable Product should not be made in reliance on any of the statements set forth in this document. Prospective investors should carefully consider, prior to making a decision to invest in any Investable Product, the risks associated with investing in such Investable Product, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer or obligor of the Investable Product and whether it

is appropriate for their purposes and circumstances. Prospective investors should consult with an attorney, tax advisor, or accounting professional regarding any specific legal, tax, or accounting situation, or the impact of making any particular investment decision. Inclusion of a security within an index is not a recommendation by IDI to buy, sell, or hold such security, nor is it considered to be investment advice.

IDI is under no obligation to maintain or calculate any Index and may cancel or cease to calculate any Index without notice, subject to applicable regulation and its policies and procedures.

IDI does not assume any obligation or duty to any party in relation to any Index and under no circumstances does IDI assume any relationship of agency or trust or of a fiduciary nature for or with any party. Any calculations or determinations in respect of any Index or any part thereof will be made by IDI in accordance with the terms of its methodology at the relevant time and acting reasonably and in good faith.

Unless otherwise indicated, these materials have been prepared solely for informational purposes based upon information generally available to the public from source(s) believed to be reliable and are subject to change without notice. No content contained in these materials (including index data, ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of IDI. The Content shall not be used for any unlawful or unauthorized purposes. In no event shall IDI have any liability (whether in negligence or otherwise) to any person in connection with such person's unauthorized use of any Index or Content.

Unless otherwise indicated, for the purpose of calculating any Index, IDI has relied on publicly available sources and has not independently verified the information extracted from these sources and accepts no responsibility or liability in respect thereof. IDI, its affiliates and its third-party providers and licensors and co-branding partners (where applicable) (collectively "IDI Parties") do not guarantee that the Content is accurate, complete, timely or error free and it should not be relied upon as such. IDI Parties are not responsible for any errors, omissions, or interruptions regardless of the cause, or for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. IDI PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES AND CONDITIONS, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM VIRUSES, BUGS, WORMS, OTHER HARMFUL COMPONENTS OR OTHER PROGRAM LIMITATIONS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall IDI Parties 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 Index and/or Content even if advised of the possibility of such damages.

Any available index returns are hypothetical and do not represent the results of actual trading of Investable Products, and as such, do not represent actual past performance and are not indicative of any specific investment. The Content (including any of the output derived from any analytic tools or models) is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results.

Intercontinental Exchange, Inc., the ultimate parent company of IDI, keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of Intercontinental Exchange, Inc. may have information that is not available to other business units. IDI has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process. There is no obligation on IDI to disclose information held by it in relation to any Index to other parties.

The various businesses of Intercontinental Exchange, Inc. provide a wide range of products and services to a diverse group of clients and, as such, Intercontinental Exchange, Inc. faces potential conflicts of interest in the ordinary course of its business. Intercontinental Exchange, Inc. may be acting in a number of capacities in connection with Investable Products or other transactions entered into in relation to IDI. Intercontinental Exchange, Inc., acting in such capacities in connection with such transactions, shall have only the duties and responsibilities expressly agreed to by it in its relevant capacity and shall not, by virtue of its acting in any other capacity, be deemed to have other duties or responsibilities or be deemed to hold a standard of care other than as expressly provided with respect to each such capacity. IDI has established policies and procedures designed to identify and address conflicts of interest.

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