



**ICE[®] FactSet[®] Global NextGen
Automotive Technologies Index[™]
(ICEFSNA)**

Version 1.0
Valid from
July 12, 2019

Contents

Version History:	1
1. Index summary	2
2. Governance	3
3. Index Description	5
4. Publication.....	6
4.1 The opening, intraday and closing or daily publication of Index values.....	6
4.2 Exceptional market conditions and corrections.....	7
4.3 Changes to the Index	7
5. Calculation	10
5.1 Calculation of the Index	10
6. Index Reconstitutions and Rebalances	11
6.1 General aim of Reconstitutions and Rebalances and frequency	11
6.2 Index universe and selection principle	11
6.3 Weighting methodology and periodical update of weighting	14
6.4 Special considerations for Index backtest	15
7. Corporate Actions.....	16
7.1 General	16
8. Disclaimer	17

Version History:

Version 1.0 (Effective July 12, 2019)

The methodology document covers the newly-launched ICE® FactSet® Global NextGen Automotive Technologies Index™ (ICEFSNA).

1. Index summary

Factsheet	
Full Name	ICE® FactSet® Global NextGen Automotive Technologies Index™
Index Tickers	Price Return (USD): ICEFSNA Gross Total Return (USD): ICEFSNAT Net Total Return (USD): ICEFSNAN
Index Description	The ICE® FactSet® Global NextGen Automotive Technologies Index™ is a rules-based equity benchmark designed to track the performance of globally listed companies involved in next generation automotive components and technologies. Index compositions and corporate actions, including Rebalance information, can be accessed from ICE Data Services at https://www.theice.com/market-data/indices/equity-indices/products .
Eligible Stocks	Common stocks, ADRs, or GDRs of selected companies involved in next generation automotive components and technologies that are listed for trading and electronically quoted on a major stock market that is accessible by foreign investors.
Number of Constituents	Variable (Minimum: 30; Maximum: 40)
Weighting	Modified float-adjusted, market capitalization weighted
Index Reconstitutions	The Index is reconstituted annually after the close of the fourth Friday in March each year (“Reconstitution Date”). If the Reconstitution Date is a holiday, it will occur on the next Index Business Day.
Index Rebalances	Index constituent weights are rebalanced semi-annually after the close of the fourth Friday in March and September each year (“Rebalance Date”). If the Rebalance Date is a holiday, it will occur on the next Index Business Day.
Calculation Frequency	Price and Total Return: Every 15 seconds between 19:45 (T-1) & 19:00 (T) ET
Base Date	March 25, 2016
Base Level	1000.00
Historic Data Available Since	March 25, 2016
Bloomberg Code	ICEFSNA <INDEX> / ICEFSNAT <INDEX> / ICEFSNAN <INDEX>
Reuters Code	.ICEFSNA / .ICEFSNAT / .ICEFSNAN
Launch Date	July 12, 2019
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.

The ICE® FactSet® Global NextGen Automotive Technologies Index™ is calculated and maintained by IDI based on a methodology developed by IDI, and which uses industry classifications developed and maintained by FactSet Research Systems Inc. (“FactSet”).

IDI is responsible for the day-to-day management of the Index in accordance with its 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 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 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 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

The Index 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, this Index is focused on representing the next generation automotive components and technologies industry and is therefore expected to be heavily weighted towards a few sectors. Should the underlying markets transform due to consolidation and technology transformation, the companies included in the Index will adjust and change accordingly.

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

3. Index Description

The ICE® FactSet® Global NextGen Automotive Technologies Index™ is a rules-based equity benchmark designed to track the performance of globally listed companies involved in the next generation automotive components and technologies value chain, including vehicle components, vehicle materials, automotive technology hardware, and automotive technology software.

The ICE® FactSet® Global NextGen Automotive Technologies Index™ is compiled utilizing RBICS (Revere Business Industry Classification System) classifications, FactSet Supply Chain Relationships, and the FactSet Document Search database licensed from FactSet.

4. Publication

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

Opening

The first Index level is calculated and published at 19:45 ET, which is around the general time that a number of Asian equity markets open for their regular trading session. The calculation of that level utilizes the most updated prices available to IDI 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 (primary exchange official closes) or estimated prices (for IPOs, buyouts and swap offers) are used.

Dissemination frequency

The level of the price return and total return Indices is published every 15 seconds to the ICE Data Global Index Feed (ICE Data GIF). The calculated Index levels incorporate, as available to IDI, the latest traded price of each constituent from within the regular trading session of their respective market. If the last traded price of a constituent is not available to IDI, the previous day's reference price (typically primary exchange official closes) is used. For U.S. equities, intraday calculations of the Index would incorporate trades on a consolidated level, from all exchanges including those not designated as the official primary exchange. For international equities, intraday calculations of the Index would solely incorporate trades made on the security's primary exchange.

The Index is calculated from 19:45 ET (T-1) until 19:00 ET (T) on those days specified as Index Business Days. Index Business Days will be classified as days on which at least one of the current constituents' primary listing exchange is 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. The currency rate that will be utilized in the calculation of the closing level is the current day's London 4:00 PM WM/Reuters Spot FX rate, or if not available, the prior day's relevant London 4:00 PM WM/Reuters Spot FX rate. 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/UTDF) is the primary market data source for U.S. equity real-time and closing prices. The ICE Data Services Consolidated Feed is the primary market data source utilized for retrieving real-time and closing prices for international (ex-U.S.) equities and real-time spot currencies, all for use in Index calculations. Closing spot currencies utilized for

constituent conversion or Index level conversion are sourced from WM/Reuters Spot FX fixings, specifically the 4 PM London fixing. 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. 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 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.theice.com/market-data/indices/equity-indices and ICE Data Services at 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 only occur during the annual Reconstitutions, although there could be exceptions based on a specific corporate action affecting a current constituent. The inclusion of the new company will be announced at least two trading days before the effective date of the actual inclusion, although as it relates to a scheduled Reconstitution the announcement would occur after the close of trading on the

Monday preceding the third Friday of the relevant month. For example, for the Reconstitution effective for market open on March 30, 2020, the announcement would occur after the close on March 16, 2020.

Removal of Constituents

Components would be removed from the Index as a result of periodic corporate actions as well as the results of the annual Reconstitution and semi-annual Rebalance. All removals will be announced at least one trading day before the effective date of the removal, although as it relates to a scheduled Reconstitution or Rebalance the announcement would occur after the close of trading on the Monday preceding the third Friday of the relevant month. 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.

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 after the close of trading on the Monday preceding the third Friday of the relevant month and can be accessed from ICE Data Services at www.theice.com/market-data/indices/equity-indices/products.

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 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.

Rule changes

Barring exceptional circumstances, the Index Administrator shall announce Rule changes to stakeholders prior to implementation. The announcement will include the date on which the changes shall take effect.

5. Calculation

5.1 Calculation of the Index

The Index is calculated on a Price Return, Gross Total Return, and Net Total Return basis in USD. The current Index level is calculated by dividing the current modified Index market capitalization by the Index divisor. The divisor was set on the Index Inception Date (i.e. the backtest start date) to yield an Index level of 1000.00. The divisor is updated as a result of corporate actions and composition changes.

A full description of the formulae used to calculate Index values can be found in the “NYSE Indices - Guide to Index Mathematics” at <https://www.theice.com/market-data/indices/equity-indices/methodologies>.

6. Index Reconstitutions and Rebalances

6.1 General aim of Reconstitutions and Rebalances and frequency

General aim of the periodical Reconstitution or Rebalance

The general aim of the semi-annual Rebalance and annual Reconstitution of the Index is to ensure that the selection and weightings of the constituents continue to reflect, as closely as possible, the Index's objective of identifying, selecting and tracking the performance of stocks from the next generation automotive components and technologies industry, based on sector classifications provided by FactSet. 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 Index composition and constituent weights may occur during a scheduled Reconstitution and Rebalance and as a result of the removal of an Index constituent. During the semi-annual Rebalances, components may be removed from the Index if they do not meet the market capitalization and liquidity criteria as laid out in Section 6.2. Components will not be added to the Index during the semi-annual Rebalances.

The Index is reconstituted annually after the close of the fourth Friday in March each year ("Reconstitution Date"). Index constituent weights are rebalanced semi-annually after the close of the fourth Friday in March and September each year ("Rebalance Date"). If the Reconstitution Date or Rebalance Date is a holiday, it will occur on the next Index Business Day.

The data used to reconstitute and rebalance the Index is as of the close of business on the second Friday in March and September ("Reference Date").

6.2 Index universe and selection principle

Constituent Selection and Weighting Schema

The following rules are used for the initial constituent selection and ongoing Reconstitutions.

1. Starting universe: Common stocks, ADRs, or GDRs of companies that are listed for trading and electronically quoted on a major stock market that is accessible by foreign investors in one of the following countries:

Eligible Countries		
Australia	Indonesia	Poland
Austria	Ireland	Portugal
Belgium	Israel	Spain
Canada	Italy	Sweden
Denmark	Japan	Switzerland
Finland	Malaysia	Taiwan
France	Mexico	United Kingdom
Germany	Netherlands	United States
Hong Kong	Norway	

In the event that two or more listings for a given company qualify for inclusion based upon the exchange country and liquidity requirements, the primary listing exchange will be included in the universe.

- Securities must have a minimum float-adjusted market capitalization of \$500 million or greater, and a three-month Average Daily Trading Value (ADTV) of \$2 million or greater on the Reference Date.

Existing constituents may remain in the Index if they have a minimum float-adjusted market capitalization of \$375 million or greater, and a three-month ADTV of \$1.5 million or greater on the Reference Date.

- Select companies that are classified as focus, having derived 50% or more revenues from one of the following (104) automotive components and technologies related RBICS Level 6 industries. The list of (104) industries are further broken down into (4) automotive value chain categories: (i) Automotive Vehicle Components; (ii) Automotive Vehicle Materials; (iii) Automotive Technology Hardware; and (iv) Automotive Technology Software. This list of industries will be evaluated periodically and may change over time as the market evolves.

Category 1: Automotive Vehicle Components	
Aluminum Manufacturing	Motion Control and Precision Motors Manufacturing
Auto Exterior Comfort/Safety/Electronics Products	Multi-Industry-Specific Factory Machinery Makers
Auto Interior Comfort/Safety/Electronics Products	Multi-Process Assembly Services
Automotive and Marine Electronics Manufacturing	Multi-Type Alumina and Aluminum Product Makers
Chassis and Body Manufacturing	Multi-Type Motor Vehicle Parts Manufacturers
Commercial/Public Service Vehicle Component Makers	Optoelectronics Electronic Components
Conventional Flat Panel Display Equipment	Other Auto Comfort, Safety and Electronic Products
Diversified Defense Providers	Other Electric Motors and Motion Control Products
Diversified Electrical/Power System Manufacturing	Other Industrial Electrical Product Manufacturing
Diversified Electronic Components	Other Infrastructure Construction
Diversified Industrial Distribution	Other Metal Processing and Recycling Providers
Diversified Industrial Manufacturing	Other Metal Products Makers
Diversified Primary Metals Processors	Other Mobile Equipment
Electric Motors Manufacturing	Other Module and Subassembly Electronic Components

Electrical Systems and Equipment Manufacturing	Other Passive Electronic Components
Electronic Interconnect Components	Pan-Powertrain and Chassis Manufacturing
Electronics Manufacturing Equipment Manufacturing	Power Module and Subassembly Electronic Components
Fuse Passive Electronic Components	Power Transmission and Distribution Products
General Machinery Manufacturing	Powertrain and Chassis Thermal Management Products
Heating, Ventilation and Air Conditioning Products	Powertrain Manufacturing
Industrial Robots and Robotic Assembly Line Makers	Traffic Safety and Management Equipment Products
Lighting Equipment and Components Manufacturing	Vehicle Autonomous Control Electronics Makers
Material Handling/Conveyor Equipment Manufacturing	

Category 2: Automotive Vehicle Materials	
Alumina Refineries	Mixed Non-Ferrous and Ferrous Metals Ore Mining
Copper Ore Mining	Mixed Specialty and Commodity Chemical Makers
Copper-Derived Structural Shape Manufacturing	Multi-Type Fertilizers Manufacturing
Diversified Commodity Chemical Makers	Nickel Ore Mining
Diversified Materials	Oil and Gas and Mining Additive Manufacturing
Diversified Metal Ore Mining	Other Additive Manufacturing
Diversified Specialty/Performance Chemicals Makers	Other Inorganic Chemical Makers
Electronic Materials Manufacturing	Other Non-Ferrous Metal Products Manufacturing
Fuel Cell Equipment and Technology Providers	Other Non-Ferrous Metals Ore Mining
Heavy-Duty and High-End Batteries Manufacturing	Pesticide Manufacturing
Industrial and Construction Additive Manufacturing	Petrochemical Manufacturing
Iron Ore Mining	Potash, Soda and Borates Mineral Mining
Metal Recycling Providers	

Category 3: Automotive Technology Hardware	
Diversified Semiconductors	Other Power Analog and Mixed Signal Semiconductors
Diversified Technology Hardware	Other Processor Semiconductors
General Analog and Mixed Signal Semiconductors	Other Satellite Equipment
Image Sensor and Image Capture Semiconductors	Other Wide Area Networking (WAN) Equipment
Microprocessor (MPU) Semiconductors	Peripheral Semiconductors
Monitoring and Control Sensor/Instrument Products	Programmable Logic Device Semiconductors
Other Communications Semiconductors	Smart Phone Manufacturing
Other Discrete Semiconductors	Specialty Analog and Mixed Signal Semiconductors
Other Memory Semiconductors	Video Multimedia Semiconductors

Other Optoelectronics Discrete Semiconductors	Volatile Memory Semiconductors
---	--------------------------------

Category 4: Automotive Technology Software	
Communications Infrastructure Software	Multi-Type Business and Personal Systems
Computer Aided Design (CAD) Software	Multi-Type Home and Office Software
General and Mixed-Type Software	Radio Broadcasting
Global Positioning Systems (GPS) Manufacturing	Transportation Industry Software
International Mobile Satellite Services	United States Satellite Services
Manufacturing and Scientific/Technical Services	Vehicle Autonomous Control Software
Multiple Industry-Specific Software	Web Search Sites and Software

4. Using the FactSet Supply Chain Relationships database, which captures a list of Relationship Keywords characterizing the products and technologies that each company is involved in, count the number of Relationship Keywords related to next generation automotive technologies for each company identified in Step 3.
5. Using the FactSet Document Search database, which is a global database containing regulatory filings filed by publicly listed companies, search and count the number of keywords related to next generation automotive components and technologies for each company identified in Step 3.
6. Compute a next generation automotive components and technologies Composite Keyword Score for each company identified in Steps 4 and 5, and rank them from highest to lowest within each of the (4) automotive value chain categories. The top (10) ranked companies within each category are eligible for index inclusion. The total number of index constituents shall not exceed 40 or be less than 30, in which case the next ranked companies would be included to reach the minimum count in the Index.

6.3 Weighting methodology and periodical update of weighting

Constituent weights are determined by dividing their individual float-adjusted market capitalization by the total float-adjusted market capitalization of all constituents. Individual security weights are capped at 8%, with excess weight redistributed proportionally among remaining securities whose weights are less than 8%. If this redistribution leads to additional security weights exceeding 8%, the aforementioned redistribution process is repeated iteratively until no security weight exceeds 8%.

Determining constituent weightings at Semi-Annual Index Rebalances and Annual Reconstitution

At semi-annual Index Rebalances and Annual Reconstitutions, constituent weights are adjusted to reflect their respective float-adjusted market capitalizations based upon company data as of the Reference Date, subject to the diversification limits set forth above. At the semi-annual Rebalance, the portfolio is tested for market capitalization and liquidity based on the principles in Section 6.2 above.

Constituent percentage weights as determined in the Reconstitution and Rebalance process outlined above are converted to Index shares to be implemented on the effective date using information from the Reference Date. Subsequent adjustments to the Index composition may be made to account for corporate actions that occur between the Reference Date and the Rebalance or Reconstitution Date.

The newly adjusted portfolio becomes the basis for the Index's value effective on the first trading day following the semi-annual adjustments. The divisor will be adjusted to ensure continuity of the Index's value.

6.4 Special considerations for Index backtest

For the backtest of the Index, the percentage weights for Reconstitutions and Rebalances were converted to Index shares and implemented after the close of the fourth Friday of the month. 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.

7. Corporate Actions

7.1 General

Apart from normal Rebalance and Reconstitution changes, the Index composition may be adjusted at other times 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 the Index's objective of tracking the performance of globally listed companies involved in the next generation automotive components and technologies industry.

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.theice.com/market-data/indices/equity-indices/methodologies>.

8. Disclaimer

The products and services mentioned herein solely in relation to the 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.

IDI receives compensation in connection with the licensing of its Indices to third parties.

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.

Historical returns and weights before the launch date of an Index are based upon backtested data. For the period prior to the launch date of an Index, simulated performance data has been provided as an illustration of how the Index would have performed during the relevant period had the Index been calculated by IDI using the current Index methodology. Such simulated performance data has inherent limitations, as the simulated data is produced by the retroactive application of the methodology. Simulated performance data is based on criteria applied retroactively with the benefit of hindsight and knowledge of factors that may have positively affected its performance and may reflect a bias toward strategies that have performed well in the past. Additional limitations may be described in the methodology document under the Special Considerations for Index Backtest section, if applicable.

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.

In addition, Intercontinental Exchange, Inc. provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities may form part of any Index or other evaluation IDI carries out.

ABOUT INTERCONTINENTAL EXCHANGE Intercontinental Exchange, Inc. (NYSE:ICE) operates a leading network of exchanges and clearing houses. ICE's exchanges and clearing houses, which include the New York Stock Exchange, serve global commodity and financial futures and equities markets. The New York Stock Exchange is the world leader in capital raising and equities trading. ICE is a leading provider of data services

across global markets. Trademarks of ICE and/or its affiliates include Intercontinental Exchange, ICE, ICE block design, NYSE, New York Stock Exchange, and Interactive Data. Information regarding additional trademarks and intellectual property rights of Intercontinental Exchange, Inc. and/or its affiliates is located at <https://www.intercontinentalexchange.com/terms-of-use>. Other products, services or company names mentioned herein are the property of, and may be the service mark or trademark of, their respective owners.

ABOUT ICE DATA SERVICES ICE Data Services is part of Intercontinental Exchange (NYSE: ICE) and offers end-to-end solutions for information, analytics Index services and connectivity, with a range of proprietary data and tools for global markets across fixed income, equities, commodities, FX and options.

ICE Data Services is the marketing name used for ICE Data Services, Inc. and its subsidiaries globally, including ICE Data Pricing & Reference Data, LLC, Interactive Data (Europe) Ltd. and ICE Data Services Australia Pty Ltd. ICE Data Services is also the marketing name used for ICE Data Derivatives, Inc. and its subsidiaries globally, ICE Data Indices, LLC and certain other data products and services offered by other subsidiaries of Intercontinental Exchange, Inc. (NYSE:ICE).

FactSet is a registered trademark of FactSet Research Systems, Inc.