ICE DATA PRICING & REFERENCE DATA, LLC

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This brochure provides information about the qualifications and business practices of ICE Data Pricing & Reference Data, LLC (the "Company"). If you have any questions about the contents of this brochure, please contact us at the telephone number provided above. The information in this brochure has not been approved or verified by the United States Securities and Exchange Commission (SEC) or by any state securities authority.

Additional information about ICE Data Pricing & Reference Data, LLC also is available on the SEC's website at www.adviserinfo.sec.gov.

ICE Data Pricing & Reference Data, LLC is a registered investment adviser with the SEC. This registration does not imply a certain level of skill or training.

Item 2 – Material Changes

This section includes a summary of material change to our business since the Other Than Annual update to our brochure dated January 30, 2024. There have been no material changes to the Company's brochure.

The Company may update this brochure from time to time. You may obtain a copy of our current brochure by sending a written request to:

        ICE Data Pricing & Reference Data, LLC
        Attn: Compliance Department
        100 Church Street, 11th Floor
        New York, NY 10007

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Item 4 – Advisory Business

The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice.

ICE Data Pricing & Reference Data, which has been in business since 1968, is a Delaware Limited Liability Company, and is an indirect, wholly owned subsidiary of Intercontinental Exchange, Inc. (NYSE:ICE).

ICE Data Pricing & Reference Data provides global securities evaluations, reference data, and analytics designed to support financial institutions' and investment funds' valuation activities, securities operations, research, and portfolio management.

ICE Data Pricing & Reference Data offers the following securities evaluations and analytics services under its advisory business:

Evaluated Prices [1]

Evaluated prices are market-based measurements that are processed through a rules-based pricing application and represent our good faith determination as to what the holder may receive in an orderly transaction for an institutional round lot position (typically 1MM or greater face value U.S.D. or local currency equivalent) under current market conditions. The rules-based logic utilizes standard valuation techniques that vary by asset class and maximizes the use of relevant observable inputs, including quoted prices for similar assets, benchmark yield curves and market corroborated inputs. The Company provides both end of day evaluations and continuous evaluated pricing (CEP™).

We produce the same evaluations for each security on any given day. We also provide CEP throughout the day to subscribers. It is up to the client to choose and retrieve the evaluation type which can be in the form of bid, mean and ask and based on different settlement conventions and the point in time.

The Company's affiliates, ICE Data Services Europe Ltd., ICE Data Services Australia Pty Ltd., ICE Data Services Singapore Pte. Ltd., ICE Data Services France SAS, ICE Data Services India Private Limited and Intercontinental Exchange Germany GmbH provide evaluations for certain securities, which the Company makes available to its customers.

Fixed income and equity securities for which the Company provides evaluated pricing include:

- U.S. and Non-U.S. Corporate and Government Bonds, including investment grade and high yield bonds and preferred stock, fixed and floating rate securities, stripped coupon and principal issues

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[1] Evaluated Prices may be referred to as evaluated pricing and/ or evaluations throughout the document, all of which represent the Company's activities as defined under Evaluated Prices.

- U.S. and Non-U.S. Leveraged Loans

- U.S. and Non-U.S. Money Market Instruments

- U.S. Municipal Bonds – including taxable & tax-exempt, and investment grade and high-yield municipal securities

- U.S. and Non-U.S. Convertible Securities

- U.S. and Non-U.S. Commercial Mortgage-Backed Securities

- U.S. Collateralized Mortgage Obligations – Agency/Government Sponsored Enterprise (GSE)

- U.S. and Non-U.S. Private Label Residential Mortgage-Backed Securities (RMBS)

- U.S. and Non-U.S. Asset-Backed Securities (ABS)

- U.S. Agency/GSE Pass-Through Securities – including FNMA, FHLMC, GNMA and SBA securities, and

- Sovereign and Emerging Market Debt

- Global and American Depositary Receipts (ADRs)

Size-Adjusted Pricing

The Company offers SAP which is a service that leverages its Evaluated Prices and Best Execution services (BestEx Service)[2] to assist customers in valuing transactions and/or holdings that are smaller than institutional round lot positions. The outputs generated by the SAP service are called "size-adjusted prices". The size adjusted price generated by the SAP service represents a trade size and size adjusted price calculated from a distribution of prices around the applicable ICE evaluation. In addition to size, SAP also considers the side of the distribution (i.e., dealer buy vs dealer sell) and provides the ability to create size adjusted bid and ask prices.

Fair Value Information Service

The Company offers Fair Value Information Services which are designed to provide subscribers with information that can be used to estimate a price for an equity security, equity index futures contract, equity option or certain non-U.S. fixed income securities that would likely prevail in a liquid market, in view of market information available at the time.

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[2] *The ICE Best Execution service (Best Ex) provides users the ability to score or rank the execution of a fixed income trade versus other comparable trades within a selected universe. The Best Ex score represents the percentage of trades that were executed at a less favorable level within the selected universe compared to our CEP^{TM} or other relevant reference price, including a price set by the user. The numerical value of the score represents the percentage of all trades executed within a selected universe with larger price mark-ups than the selected trade. The Company does not consider the BestEx service as part of its advisory business.*

ICE Bond Curves

Evaluated bond curves

Evaluated bond curves are created by using inputs of constituent bond evaluations. Curves are available based on local market end-of-day bond evaluations as well as market close of other regions using CEP. CEP on constituent bonds permits curves to also be made available continuously throughout the day. Evaluated bond curves are provided for global sovereign curves, corporate issuer curves, municipal issuer and sector curves and municipal coupon and callability curves. The determination of constituents for evaluated bond curves is based on security characteristics of the issuer, tier, coupon, rating, call structure and currency.

Model Based Sector curves

Model Based Sector curves are created by using bond evaluations as inputs into regression models to produce granular sector curves defined by various bond attributes including, but not limited to, geographical region or country of issuance, tier, rating and industry sector.

Market Sentiment

The Company offers the Market Sentiment service which is intended to help clients identify when there may be greater dislocation and differences of opinion in the market as to what an assets value may be. The service provides Market Sentiment scores which help summarize the trade data and dealer quotes received by the Company (collectively, Market Points) and can contribute to clients' analysis of the direction the market is trending. The Market Sentiment service covers:

- U.S. dollar denominated corporate bonds
- U.S. municipal bonds

The service is provided on an issuer, industry, and asset class basis. Market Sentiment scores are not published as an individual instrument-level score.

Item 5 – Fees and Compensation

The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice and, as such, its fees and compensation arrangements are not typical of those historically employed by investment advisers.

The Company provides its services to a wide range of institutional customers (see Item 7 for additional information) and typically offers three types of fee arrangements:

- Fixed fee subscription (on either a multi-year, annual, quarterly, monthly, or daily basis)

- Variable fees based on the amount and/or type of information received ("usage-based fees")

- Combination of fixed fee subscription and usage-based fees

Fees are subject to negotiation. Fees vary based on the services selected, method of delivery, delivery frequency, and use case. Discounts may be available for various reasons including volume, subscription to multiple services and may take into account subscriptions to services provided by affiliates of the Company. For a small number of customers, the Company provides services in exchange for contributed market data. The Company also receives fees from third party resellers which can also be based on the size or number of end-users or other factors.

The Company does not require or solicit prepayment of fees six months or more in advance for products and services offered in connection to its registration as an investment adviser and described in Item 4 above.

Additional Fees and Expenses

Third party licenses and additional fees may apply for access to certain data. Customers are responsible for any applicable taxes and for their own costs associated with all equipment and communication necessary to access the service.

Item 6 – Performance-Based Fees and Side-By-Side Management

Not Applicable - The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice, and therefore there are no performance-based fees or side-by-side management.

Item 7 – Types of Clients

The Company calculates, publishes, and provides its securities evaluations and analytics services under its advisory business to a wide range of primarily institutional clients, including:

- Government entities
- Broker-dealers
- Banks and thrifts
- Clearing and custody firms
- Investment advisers, registered investment companies and other pooled investment vehicles (e.g., hedge funds and private funds)
- Fund administrators and processors
- Pension and profit-sharing plans
- Insurance companies
- Data vendors
- Corporations and other business entities
- Public accounting and research firms
- Universities and other not-for-profit entities

Item 8 – Methods of Analysis, Investment Strategies, and Risk of Loss

The Company does not design, market or sell investment strategies, manage assets, or provide personalized investment advice.

Below is a summary description of the methodologies utilized by the Company in connection with its advisory services:

EVALUATED PRICES

The Company prepares and publishes evaluated pricing for approximately 3 million fixed income securities daily.

The Company publishes evaluated pricing based upon its documented methodology, incorporating specific data inputs and widely recognized financial models.

For each asset class, a team of evaluators performs the following activities:

1. Design and document a methodology for calculating the value of securities based upon the relevant set of data inputs, processes and models.

2. Confirm that the process, as implemented, complies with the documented methodology.

3. Oversee daily operation of the system, respond to any exception alerts regarding out-of-tolerance inputs or outputs, and correct or exclude erroneous inputs per the documented methodology and update the outputs.

4. As appropriate, in coordination with management, identify methodology improvements to the evaluation process.

5. Assess client evaluation challenges and respond based on the determination of their findings.

The Company utilizes machine learning as a tool to calibrate and normalize a variety of market data to produce, for example, dynamic bid-ask spreads currently applied to most investment grade and high yield corporate fixed income evaluations with a plan to expand to other asset classes in the near term. In connection with its evaluated pricing services, the Company utilizes sophisticated algorithms to generate a level where an institutional round lot of each security is expected to transact in an orderly market. Additionally, the Company uses time series techniques for aggregating and scoring data sources and many statistical tools like linear regressions to generate analytics for many of our products and services. While the Company does not currently utilize Generative Artificial Intelligence or large language models in providing its advisory services, the Company continues to explore other tools available, including advanced technologies, that help us to improve our products and to develop additional products and services that benefit our clients.

CONTINUOUS EVALUATED PRICING

CEP provides evaluations for certain fixed income instruments throughout the day. Through rules-based logic (relevant to how the market calculates valuations for that asset class or instrument), these evaluations are continuously updated as market information, including dealer quotes and trades, are received and processed. Trade execution data from FINRA and the MSRB's trade reporting systems are important inputs into our evaluations of US Corporate, US Agency, US TBA and pool-specific MBS and US Municipal bonds. For convertible bonds and exchangeable securities, listed exchange trades for convertible preferred securities are also taken into consideration as part of the process.

The CEP workflow processes incoming data with evaluator oversight. Incoming market data is enriched through our pricing application to convert between spread, yield and/or price information as appropriate, enabling known data points to be extrapolated for application across a range of related securities. The enriched data is assessed against the current evaluation, internal system tolerance levels and parameters. The pricing applications generate exceptions based on internal tolerance thresholds and notify evaluators to review. Based on the exception review process, preset parameters may be adjusted to reflect prevailing market conditions. Continuous evaluated prices will not be updated until those reviews are complete. Note that the time that the CEP evaluated prices were last updated is automatically made available to clients in a number of delivery mechanisms, yet some delivery mechanisms require the customers to select if they want to receive this information in their delivery.

CEP produces evaluations continuously and contributes to our "end-of-day" fixed income evaluated price process (e.g. as of 3:00 Eastern Time and/or 4:00 Eastern Time for U.S. markets). For non-US securities, continuous evaluations are calculated throughout the day with end-of-day evaluations as of the close of the applicable local market.

END-OF-DAY FIXED INCOME EVALUATED PRICING

End-of-day fixed income evaluated prices are produced by incorporating intraday market information processed by our pricing application in near real time. These evaluated prices are produced based upon the applicable close of the applicable local market or, in the U.S., U.S. corporate and structured securities are made available as of both 3:00 p.m. and 4:00 p.m. Eastern Time. Evaluated prices for U.S. municipal bonds and U.S. convertible bonds are as of 4:00 p.m. Eastern Time.

Consistent with the process for CEP, as exceptions are identified, the pricing applications generate notifications that are reviewed by the evaluators. More time is allotted for the release of end-of-day evaluations to support additional quality controls, including sign off by the asset class manager prior to the release. Please note that the results of these reviews may not be known by the end of day evaluation snap time, which may result in differences between the

continuous evaluated price and the end-of-day evaluated price associated with the applicable snap time.

SIZE-ADJUSTED PRICING

The process of calculating a size adjusted price starts with the ICE evaluated price which is the benchmark reference price and starting point for the SAP methodology. The ICE Best Execution service builds a trade price distribution around the ICE evaluations. These distributions are built using a process that creates trading buckets that use factors such as benchmark, sector, issuer and issue to bucket trades which are then utilized to provide a Best Execution score for fixed income instruments. The Best Execution score is a percentile ranking of differences around the ICE evaluation. The size-adjusted price for an instrument is generated using the following inputs from the user: size of the position, side of the transaction, and security ID. Depending on the delivery mechanism chosen by the client, users may be able to request a size-adjusted price for a specific Best Ex score or the SAP will default to certain pre-set Best Ex scores. For example, a user may request the median, or the middle 50th percentile distribution and in response ICE will return the size adjusted price at the 50th percentile which is based on the instrument type, size and side (buy/bid or sell/ask).

GLOBAL & AMERICAN DEPOSITARY RECEIPTS (ADRS)

The Company provides daily evaluated pricing for listed and unlisted ADRs. ADRs are calculated at approximately 4:30 p.m. Eastern Time. For Latin and South American market-based ADRs, the Company uses the 4:00 p.m. Eastern Time intra-day underlying price when trading is still in session.

FAIR VALUE INFORMATION SERVICES

The Company provides Fair Value Information Services ("FVIS") for fixed income, equities and equity index futures. The FVIS for fixed-income securities is based on historically calculated variances and co-variances between movements in the US Markets and price changes in the local markets to arrive at a FVIS evaluated price. The FVIS for equities and equity index futures generates an Evaluated Adjustment Factor for each security which can be applied to the closing price to adjust for local post closing market movements. Using the Evaluated Adjustment Factor, the FVIS models can provide an FVIS evaluated price.

ICE BOND CURVES

EVALUATED BOND CURVES

Determination of eligible securities for use as constituents in a specific curve is conducted within our proprietary evaluated pricing application using search criteria based on security characteristics relevant to the specific issuer, sector, or coupon and callability curves. Issuer curves specify issuer, tier and currency while sector curves utilize country/region, industry sector, tier, rating and currency. Coupon and callability curves criteria may include, but are not limited

to, tax-status, coupon rate, call features, maturity, rating, security type, use of proceeds, maturity size and a minimum threshold of market activity.

End-of-day yield and spread curves are constructed following the completion of the end-of-day bond evaluation processes, including their respective quality control procedures. Certain curves are also available intra-day at market close of other regions using inputs of CEP.

The curves are monitored by evaluators who review and resolve exceptions flagged by the system. Systematic checks incorporate preset tolerances and parameters and generate alerts for any exceptions.

MODEL BASED SECTOR CURVES

Curves leverage cross-section modeling, in contrast to time series modeling, to analyze data at a specific point in time and use regression models to analyze the relationship between various inputs. We use multiple regression models incorporating several factors, including but not limited to geographical region or country of issuance, tier, rating and industry sector. Regression models are run for each targeted tenor point.

The inputs include most fixed-rate bonds in the Company evaluated pricing universe denominated in over 30 model-eligible currencies. The evaluated mid-price for each bond is converted to the z-spread and is included in regression models of multiple currencies.

We provide continuous compounding z-spread sector curves calculated off the appropriate LIBOR or OIS swap curve and derive zero yield curves and par yield curves based on the z-spread curve produced (and corresponding swap curve) for multiple tenor points in over 30 currencies. Curves for each currency are fit independently of the others. An outlier removal procedure is in place and used in the production of the curves.

MARKET SENTIMENT

The Company produces Market Sentiment scores by observing and scoring trade data and dealer quotes, each as received by the Company (collectively, Market Points), using the ICE Best Execution Service (BestEx service). Depending on the Market Point type (side and size) and the corresponding BestEx score, the model generates a Market Sentiment score. That score is the numerical value indicating a more positive or negative direction of market observations compared to the continuous evaluated price of the security associated with the Market Point. The model runs continuously throughout the day using a time weighted approach designed to help maintain sensitivity on the near-term market activity. Not all instruments are eligible for Market Sentiment calculations.

SERVICES LIMITATIONS

The services described in this section are a point in time output and as such, are dependent on and take into account the information available to the Company at the time of calculation. The

Company does not have access to all relevant trade-related data or dealer quotes, and the utility of the output may diminish depending upon the amount of available data underlying the analysis. The inputs utilized in each of the services described in this section depend on the methodologies employed by each such service and may not be the same as the inputs used in the other services. There are many methodologies (including computer-based analytical modelling) available to calculate and determine information such as the services described in this section. The Company's services may not generate results that correlate to actual outcomes, and/or actual behavior of the market, such as with regard to the purchase and sale of instruments.

THIRD-PARTY VALUATION SERVICES

The Company does not consider the following third-party valuation services it redistributes as part of its evaluated pricing business. For reference, below is a description of each:

- Valuations for Canadian Dollar-denominated corporate, treasury, provincial, and municipal bonds, zeros, strips, and trusts/funds provided by CanDeal Innovations Inc. (formerly Candeal.ca Inc.)

- Valuations for certain Student Loan Auction Rate Securities (SLARS), and Auction Rate Preferred Securities (ARPS) provided by Pluris Valuation Advisors LLC

- CDO/CLO and other securities, derivatives and instrument valuations provided by BofA Securities

Item 9 – Disciplinary Information

On December 9, 2020, ICE Data Pricing & Reference Data, LLC resolved an SEC proceeding with respect to an alleged violation by the Company of Section 206(4) of the Investment Advisers Act of 1940, and Rule 206(4)-7 thereunder, relating to the SEC's allegations that the Company failed to adopt and implement policies and procedures reasonably designed to prevent violations of the Advisers Act and the rules thereunder in connection with the Company's delivery of broker quoted prices for certain categories of fixed income securities for which it did not have sufficient information to produce an evaluated price. The Company, without admitting or denying the allegations, agreed to the entry by the SEC of an order imposing the following: (1) to cease and desist from committing or causing any violations and any future violations of the Advisers Act section at issue; (2) a censure; and (3) the payment of a civil money penalty in the amount of $8,000,000. The Company's delivery of single broker quoted prices was discontinued on October 1st, 2020.

Item 10 – Other Financial Industry Activities and Affiliations

Advisory Affiliates

The Company's affiliates include ICE Bonds Securities Corporation, ICE Securities Execution and Clearing Services LLC, Archipelago Securities L.L.C., Archipelago Trading Services, Inc., ICE Data Services Europe Ltd., ICE Data Services Australia Pty Ltd., ICE Data Services Singapore Pte. Ltd., ICE Data Services France SAS, ICE Data Services India Private Limited and Intercontinental Exchange Germany GmbH.

Foreign Affiliates

ICE Data Services Europe Ltd., ICE Data Services Australia Pty Ltd., ICE Data Services Singapore Pte. Ltd., ICE Data Services France SAS, ICE Data Services India Private Limited and Intercontinental Exchange Germany GmbH provide evaluations and ICE Bonds Curves for certain securities, which the Company makes available to its customers.   These affiliates are under common control with the Company.

ICE Data Services Australia Pty Ltd. has been granted an AFS license by the Australian Securities and Investments Commission. ICE Data Services Europe Ltd., ICE Data Services Singapore Pte. Ltd., ICE Data Services France SAS, ICE Data Services India Private Limited and Intercontinental Exchange Germany GmbH are not required to be registered in their respective jurisdiction.

Other Affiliates

ICE Bonds Securities Corporation, ICE Securities Execution and Clearing Services LLC, Archipelago Securities L.L.C. and Archipelago Trading Services, Inc. are SEC registered broker dealers and indirect, wholly owned subsidiaries of Intercontinental Exchange, Inc., which in turn places them under common control with the Company.

The Company has a Conflicts of Interest Management Policy which created a framework for the identification, assessment, as necessary remediation, and periodic review of its business activities with respect to the appearance of actual, perceived, or potential conflicts of interest. The policy seeks to mitigate conflicts including those created by relationships with its affiliates listed above.

Item 11 – Code of Ethics

The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice.

The Company has adopted a Code of Ethics as required pursuant to Rule 204A-1 under the Advisers Act.   The Company posts the Code of Ethics on its website, (http://www.ice.com under resources-data resources-business practices) and will provide its customers with a copy of its Code of Ethics upon request.

The Code of Ethics covers the following principal areas:

- Standards of ethics expected of Supervised Persons, who must follow principles of integrity and honesty in dealings with customers and must disclose actual or potential conflicts of interest.

- Requirements for Access Persons to complete and submit initial and annual securities holdings, confirm quarterly securities transactions reports, and preclear personal transactions in reportable securities.

- Requirements for Supervised Persons to promptly report violations of the Code of Ethics and to disclose transactions or relationships that might give rise to a conflict of interest.

- Requirements for Supervised Persons to disclose any outside activity on a declaration form.

- Limitations on the actions of Supervised Persons, including that each Supervised Person may accept or provide only small gifts and accept or provide business entertainment only if infrequent, modest and intended to serve legitimate business goals.

- Prohibitions on the actions of Supervised Persons, including that each Supervised Person may not trade based on material, non-public information or tip others to trade based on material non-public information, and may not offer, give or receive bribes in connection with Company business.

Each Supervised Person is provided a copy of the Code of Ethics and any amendments thereto and is required to provide a written acknowledgment of the Code of Ethics. Personnel of the Company's affiliates who provide advisory services on behalf of the Company are also Supervised Persons and subject to the Code of Ethics.

Compliance with the Code of Ethics

The Chief Compliance Officer is responsible for administering the Code of Ethics. Supervised Persons are required to report any violations of the Code of Ethics or applicable laws. Failure to comply with the Code of Ethics may result in disciplinary action, up to and including termination.

Item 12 – Brokerage Practices

Not Applicable - The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice and, therefore, does not select or recommend broker-dealers for client transactions.

Item 13 – Review of Accounts

Not Applicable - The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice and does not hold customer accounts.

Item 14 – Customer Referrals and Other Compensation

The Company pays referral fees to certain third-parties for the purposes of identifying prospective purchasers and licensees of Company products and services.

For a small number of customers, the Company provides services in exchange for contributed market data. The Company also receives fees from resellers/redistributors. The Company does not consider those customer referrals.

Item 15 – Custody

Not Applicable - The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice.

Item 16 – Investment Discretion

Not Applicable - The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice.

Item 17 – Voting Customer Securities

Not Applicable - The Company does not design, market or sell investment strategies, hold or manage assets, or provide personalized investment advice.

Item 18 – Financial Information

The Company is an indirect, wholly owned subsidiary of Intercontinental Exchange, Inc., a public company listed on the NYSE under the trading symbol ICE. Financial information regarding ICE is readily available to customers by visiting www.ice.com and can also be provided by the Company upon request.