



Tradeweb ICE U.S. Treasury
Closing Prices Feedback Statement on
Methodology Enhancements

October 8, 2021

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Executive Summary

The Tradeweb ICE U.S. Treasury Closing Prices (U.S. Treasury Closing Prices) are designed to represent the market mid-prices for U.S. Treasury Securities at or around market close on U.S. business days.

ICE Benchmark Administration (IBA), a leading administrator of systemically important benchmarks, administers the U.S. Treasury Closing Prices.

Tradeweb Markets LLC (Tradeweb) is a leading global operator of electronic marketplaces. Tradeweb's marketplaces facilitate trading across a range of asset classes, including rates, credit, equities and money markets. The U.S. Treasury Closing Prices are based on data from Tradeweb's institutional platform, the first web-based electronic trading platform for U.S. Treasuries. Tradeweb is the Calculation, Publication and Licensing Agent for the U.S. Treasury Closing Prices benchmark.

On July 23, 2021, IBA published a consultation paper on two possible enhancements to the benchmark:

- Utilizing top of book prices from Dealerweb Inc.'s (Dealerweb) Treasury platform as Level 1 data for calculating a closing price for Treasury notes and bonds; and
- Increasing the number of randomized snapshot intervals and shortening the data collection window to 10 seconds.

The consultation was published on IBA's website and made available to known interested parties.

A questionnaire requested specific feedback from market participants and more general feedback by email or letter was also welcomed. Respondents were asked to provide feedback to IBA on or before 17:00 London time on August 13, 2021.

No written feedback was received but informal feedback was supportive of the proposals. Accordingly, further testing is being carried out with a view to implementing the above changes to the methodology.

About the Tradeweb ICE U.S. Treasury Closing Prices

The Tradeweb ICE U.S. Treasury Prices (the U.S. Treasury Closing Prices) have been designed to represent the mid-market price for U.S. Treasury Securities at or around 15:00 ET and 16:00 ET on days when the U.S. Treasury Securities market is open for trading in the United States.

ICE Benchmark Administration (IBA) is the benchmark administrator responsible for the U.S. Treasury Closing Prices and provides the governance, oversight, surveillance and regulatory compliance. IBA has outsourced certain roles to Tradeweb Markets LLC (Tradeweb): the collection and verification of input data; the calculation and pre-publication verification of the U.S. Closing Treasury Prices; publication of the benchmark; and licensing.

The U.S. Treasury Closing Prices are calculated and published daily by Tradeweb on more than 900 U.S. Treasury securities using live prices available on Tradeweb's global institutional platform for trading U.S. Treasury Securities and other fixed income asset types.

The U.S. Treasury Closing Prices are designed to be used by banks, dealers, issuers, funds, investment managers and other participants in the markets and geographies relevant to U.S. Treasury Securities, in order to value financial assets and instruments, including investment portfolios, indices and contracts and/or to use the U.S. Treasury Closing Prices as an independent benchmark in such assets and instruments.

The current benchmark methodology includes:

- The use of multiple random snapshots of firm quotes taken during a short window before the calculation at or around market close;
- The exclusion of dealer mid-prices that are more than one standard deviation from the mean;
- The potential removal of random dealer quotes in order to protect the benchmark against the possibility of predicting the impact that a particular quote (or quotes) may have on the benchmark calculation;
- The calculation of average prices across Dealers' client-specific quote tiers; and
- The handling of certain special cases where the published price is not derived using bid and offer quotes from the Tradeweb Platform (Special Cases). For example, U.S. Treasury Securities that are close to maturity are priced at par or illiquid STRIPs are priced using a zero-coupon curve.

The U.S. Treasury Closing Prices are comprised of 11 types of U.S. Treasury Securities such as U.S. Treasury Notes/Bonds; U.S. Treasury Bills; and U.S. Treasury Principal Strips.

The calculation steps are as follows (except for the Special Cases):

- 1. During a short collection window, multiple random market snapshots are taken for each U.S. Treasury Security and a Dealer Mid-Price (DMP) is calculated for each dealer in each snapshot;
- 2. Outlier DMPs and a set of randomly selected DMPs are potentially removed from the calculation;
- 3. The arithmetic mean of the remaining DMPs is calculated for each snapshot;

- 4. The price for each U.S Treasury Security is calculated as the arithmetic mean of the snapshots; and
- 5. A verification process determines whether the price in step 4 is published, or an alternative using snapshots from an earlier collection window.

Full details are published in the Calculation Methodology.

In addition, IBA publishes general formulae for derived prices for the U.S. Treasury Closing Prices.

The U.S. Treasury Closing Prices are published daily shortly after 15.00 ET and 16.00 ET. The <u>benchmark</u> <u>publication days</u> follow the U.S. SIFMA holiday schedule, with closure on U.S. holidays and early closing the day before certain U.S. holidays (Early Closing Days).

Further information about IBA and the U.S. Treasury Closing Prices can be found at: https://www.theice.com/iba

Further information about Tradeweb can be found at: https://www.tradeweb.com

Clients wishing to access, use or redistribute the U.S. Treasury Closing Prices should contact Tradeweb at: referenceprices@tradeweb.com

Collection Window

The use of multiple random market snapshots is designed to give the benchmark robustness and reliability by protecting against attempted manipulation and temporary aberrations in the underlying market. Outlier exclusions also protect against unrepresentative dealer quotes within a market snapshot influencing the benchmark. In addition, to protect against the market predicting the impact that a particular quote (or quotes) may have on the benchmark calculation, a number of dealer mid-prices may be randomly eliminated from the calculation.

From extensive review of data, the following was observed:

- Fast-moving markets near the close may create price movements, which market participants still consider to be accurate price levels;
- During active markets around the close, sharp changes in a dealer's streaming price may occur; price
 averaging during the thirty second window may diverge the resultant price away from active market
 levels near the close; and
- Additional sources of data would help produce a closing price that more accurately captures activity in the Treasury market.

To align better with the prevailing market practices, the data collection window will be shortened to 10 seconds and the number of randomized snapshot intervals will be increased.

Step 5 of the calculation of the U.S. Treasury Closing Prices is a verification process to determine whether an alternative, earlier collection window should be used for a U.S. Treasury Security, as described in the consultation paper. The duration of the alternative collection windows in Step 5 of the calculation process will also be reduced in line with the initial collection window.

Inclusion of Dealerweb Pricing

Dealerweb Inc. (Dealerweb) is a subsidiary of Tradeweb that operates an alternative trading system (ATS) offered to dealers, market makers and principal trading firms. Dealerweb offers trading in U.S. Treasury Securities via a central limit order-book (CLOB) and a direct streaming protocol. Liquidity Providers use the direct streaming protocol to provide competitive two-way prices to pre-set counterparties. Quotes are firm executable levels and the top of book represents the best bid and offer from the Dealerweb platform.

Dealerweb provides additional functionality by aggregating direct streams onto a single screen, allowing market participants to evaluate available prices and route orders across direct stream and the CLOB.

Since there is a liquid market for trading U.S. Treasury Securities on Dealerweb, the bid-offer spread for the top of book is tight¹. The spread of the 30 Year tenor is generally ½ of 1/32nd percentage point of par. For shorter tenors (such as 2 Year and 3 Year), the spread can be as tight as 1/16th of 1/32nd percentage point of par.

Using the firm executable quotes from the Dealerweb platform will expand the calculation waterfall and incorporate additional observations for calculating a closing price. Those observations will be used to calculate the on-the-run Treasury Security prices which will form the basis from which off-the-run Treasury Security prices will be calculated.

Further testing is being carried out with a view to implementing the proposal to use the top of book prices from Dealerweb's U.S. Treasury Securities platform as Level 1 data for calculating a closing price for U.S. Treasury Security Notes and Bonds.

¹ The Covid-19 pandemic caused a period of extreme volatility in the U.S. Treasury market in the spring of 2020. Many of Dealerweb's market makers had to reduce risk which widened the bid-offer spreads.

Next Steps

Following the conclusion of the consultation and after considering the informal feedback received, IBA and Tradeweb are carrying out further testing and other preparatory work with a view to implementing the following changes:

- 1. Utilizing top of book prices from Dealerweb's U.S. Treasury Securities platform as Level 1 data for calculating a closing price for Treasury notes and bonds; and
- 2. Increasing the number of randomized snapshot intervals and shortening the data collection window to 10 seconds.

Benchmark rates for most off-the-run U.S. Treasury Notes and Bonds are based upon the yield spread from the relevant on-the-run benchmark rate. The yield spread is determined by the difference in mid-quotes between the off-the-run security and the corresponding on-the-run security on Tradeweb's Institutional platform (D2C market).

When the above changes are implemented, consequential changes will be made to the following documents published at:

https://www.theice.com/iba/us-treasuries#policies:

- Benchmark Statement;
- Calculation Methodology; and
- Insufficient Data Policy.

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The approach set out in this document is subject to change in response to feedback from market participants and other stakeholders and IBA's further development work.

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