

SUBMISSION COVER SHEET

IMPORTANT: Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 21-245 (2 of 4)

Organization: The Board of Trade of the City of Chicago, Inc. ("CBOT")

Filing as a: DCM SEF DCO SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 07/28/21 Filing Description: Initial listing of the Micro 2-Year Futures, Micro 5-Year Yield Futures, Micro 10-Year Yield Futures, and Micro 30-Year Yield Contracts

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

- | | | |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Notification | § 40.6(d) |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change | § 40.10(h) |

Rule Numbers: See filing.

New Product

Please note only ONE product per Submission.

- | | | |
|-------------------------------------|---------------------------------------|------------|
| <input checked="" type="checkbox"/> | Certification | § 40.2(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.23(a) |
| <input type="checkbox"/> | Certification Swap Class | § 40.2(d) |
| <input type="checkbox"/> | Approval | § 40.3(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.23(b) |
| <input type="checkbox"/> | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/> | Swap Submission | § 39.5 |

Official Product Name: See filing.

Product Terms and Conditions (product related Rules and Rule Amendments)

- | | | |
|--------------------------|---|----------------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Certification Made Available to Trade Determination | § 40.6(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.24(a) |
| <input type="checkbox"/> | Delisting (No Open Interest) | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Approval Made Available to Trade Determination | § 40.5(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.24(c) |
| <input type="checkbox"/> | Approval Amendments to enumerated agricultural products | § 40.4(a), § 40.5(a) |
| <input type="checkbox"/> | "Non-Material Agricultural Rule Change" | § 40.4(b)(5) |
| <input type="checkbox"/> | Notification | § 40.6(d) |

Official Name(s) of Product(s) Affected:

Rule Numbers:

July 28, 2021

VIA ELECTRONIC PORTAL

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, D.C. 20581

**Re: CFTC Regulation 40.2(a) Certification: Initial Listing of the Micro 2-Year Futures, Micro 5-Year Yield Futures, Micro 10-Year Yield Futures, and Micro 30-Year Yield Futures Contracts.
CBOT Submission No. 21-245 (2 of 4)**

Dear Mr. Kirkpatrick:

The Board of Trade of the City of Chicago, Inc. ("CBOT" or "Exchange") hereby certifies to the Commodity Futures Trading Commission ("CFTC") the initial listing of the Micro 2-Year Futures, Micro 5-Year Yield Futures, Micro 10-Year Yield Futures, and Micro 30-Year Yield Futures contracts (the "Contracts") for trading on the CME Globex electronic trading platform ("CME Globex") and for submission for clearing via CME ClearPort effective on Sunday, August 15, 2021, for trade date Monday, August 16, 2021.

| Contract Title | Commodity Code | Rulebook Chapter |
|-----------------------------|----------------|------------------|
| Micro 2-Year Yield Futures | 2YY | 80 |
| Micro 5-Year Yield Futures | 5YY | 81 |
| Micro 10-Year Yield Futures | 10Y | 82 |
| Micro 30-Year Yield Futures | 30Y | 83 |

Section 1 – Contract Specifications

The Contracts are priced directly in yield, i.e., 2.001 for a yield of 2.001%. A full percentage point move (i.e., 2.001% to 3.001%) will be worth \$1000, meaning the DV01 or dollar value per single basis point move (i.e., 2.001% to 2.011%) will be \$10, and the minimum dollar movement for a 1/10th basis point move (i.e., 2.001% to 2.002%) will be \$1.00..,

The Contracts settle to the most recently auctioned On-the-Run CUSIP at each tenor, which updates monthly and the expectation is that the front contract month will dominate trading, with a second contract month listed mainly for roll activity.

Exhibit 1 summarizes the Contracts' shared features, and includes indicative initial margin rates based on a similar yield movement coverage to existing CBOT treasury futures.

Exhibit 1 – Shared Specifications

| Micro 2/5/10/30-Year Yield Futures | |
|------------------------------------|--|
| Settlement | Cash-Settled to BrokerTec benchmark |
| Price Convention | U.S. Treasury Yield |
| Contract Size | \$1000 x Index points (\$10.00 DV01) |
| Tick Size | \$1.00 (1/10 th of 1 bp) |
| # of Expiries | 2 Nearest Monthly Contracts |
| Termination | Last business day of the named month |
| Initial Margin | ~\$200 estimate, based on 0.20% yield move |

Settlement Method

The Contracts are expected behave similarly to an equity index with respect to settlement and valuation. On a daily basis, they will be free to trade according to market sentiment, subject to protections such as circuit breakers. The daily settlement methodology will be a standard 30 second VWAP immediately preceding the 2:00 pm. CT / 3:00 p.m. market close.

The final settlement value, applied on the last business day of the month, will be determined by the 3:00 p.m. ET BrokerTec US Treasury Benchmark¹, or latest available fixing. The fixings are calculated as a Volume Weighted Average Yield (“VWAY”) of cash Treasury transactions during the 15 minutes leading up to each fixing, i.e., 2:45-3:00 p.m. for the 3:00 p.m. ET fixing.

In the event of an early cash market closing, this will mean the 11:00 a.m. ET fixing would be used (if the 11:00 a.m. ET fixing is also not available, this would mean a fully closed market on the last day of the month, meaning that the “last business day”, last trade day, and settlement day would be the prior day, with its 3:00 p.m. fixing). The Settlement Procedure Document in connection with the Contracts may be viewed in Appendix F below.

¹ CME Group Benchmark Administration: <https://www.cmegroup.com/market-data/cme-group-benchmark-administration.html#fixed-income>

Exhibit 2 – Contract Specifications

| | | |
|-------------------------------|---|---|
| CONTRACT UNIT | \$1,000 x Index points (\$10 DV01) | |
| PRICE QUOTATION | Percentage points of yield per annum | |
| TRADING AND CLEARING HOURS | CME Globex: | Sunday - Friday 6:00 - 5:00 p.m. ET (5:00 - 4:00 p.m. CT). Monday - Thursday 5:00 - 6:00 p.m. ET (4:00 - 5:00 p.m. CT) daily maintenance period |
| | CME Globex Pre-Open: | Sunday 5:00 - 6:00 p.m. ET (4:00 - 5:00 p.m. CT) Monday - Thursday 5:45 - 6:00 p.m. ET (4:45 - 5:00 p.m. CT) |
| | CME ClearPort: | Sunday 6:00 p.m. ET (5:00 p.m. CT) - Friday 6:45 p.m. ET (5:45 p.m. CT) with no reporting Monday - Thursday from 6:45 - 7:00 p.m. ET (5:45 - 6:00 p.m. CT) |
| MINIMUM PRICE FLUCTUATION | All delivery months: 0.001 Index points (1/10 th basis point per annum) = \$1.00 Calendar spreads: 0.001 Index points Min final settle fluctuation: 0.001 Index points | |
| COMMODITY CODE | CME Globex: 2YY, 5YY, 10Y, 30Y CME ClearPort: 2YY, 5YY, 10Y, 30Y Clearing: 2YY, 5YY, 10Y, 30Y | |
| CME GLOBEX MATCHING ALGORITHM | F - FIFO | |
| LISTING SCHEDULE | Monthly contracts listed for 2 consecutive months Initial Listed Months: August 2021, September 2021 | |
| SETTLEMENT METHOD | Financially Settled | |
| TERMINATION OF TRADING | Trading terminates on the last business day of the contract month. | |
| BLOCK TRADE MINIMUM THRESHOLD | RTH – 2,000 contracts ETH – 1,000 contracts ATH – 500 contracts | |
| BLOCK TRADE REPORTING WINDOW | RTH – 5 minutes ETH/ATH – 15 minutes | |

Section 2 – BrokerTec US Treasury Benchmarks

The Contracts will reference the BrokerTec US Treasury Benchmarks² which match their corresponding tenors (2-year, 5-year, 10-year, and 30-year). The US Treasury holds an auction for each tenor once per month, and that new Note or Bond is considered to be “On-the-Run” (OTR) until the subsequent auction. Indicative sizes for recent auctions are included below:

Exhibit 3: Treasury Auction Sizes

| Auction size (\$B) | 2yr | 3yr | 5yr | 7yr | 10yr | 20yr | 30yr |
|--------------------|-----|-----|-----|-----|------|------|------|
| Feb-21 | 60 | 58 | 61 | 62 | 41 | 27 | 27 |
| Mar-21 | 60 | 58 | 61 | 62 | 38 | 24 | 24 |
| Apr-21 | 60 | 58 | 61 | 62 | 38 | 24 | 24 |

BrokerTec lists each new cash OTR contract for trading. BrokerTec US Treasury Benchmarks in turn are calculated as a Volume Weighted Average Yield (“VWAY”) across the 15-minute periods immediately preceding these times: 11:00 a.m., 3:00 p.m., 4:00 p.m., and 5:00 p.m. ET.³ These benchmarks are administered by the CME Group Benchmark Administration Limited.⁴

Of these, the 3:00 p.m. ET / 2:00 p.m. CT fixings are on average the most liquid, and align with the settlement time of existing CBOT US Treasury futures.

Benchmark Robustness

On February 1, 2021, BrokerTec cash Treasuries transitioned to CME Globex. As a baseline of underlying activity, over the subsequent four months, total daily trading averaged approximately \$100 billion while the lowest volume exceeded one-third of that average and the highest volume exceeded greater than three (3) times that average.

Exhibit 4: ADV for BTEC Treasuries, February-May 2021 (CME Globex)

| BTEC Volume (\$MM) | UB02 (2yr) | UB03 (3yr) | UB05 (5yr) | UB07 (7yr) | UB10 (10yr) | UB20 (20yr) | UB30 (30yr) | Total |
|--------------------|------------|------------|------------|------------|-------------|-------------|-------------|---------|
| Min | 3,731 | 3,482 | 10,364 | 3,097 | 8,904 | 283 | 2,465 | 34,904 |
| Max | 33,751 | 43,863 | 112,529 | 48,471 | 81,983 | 10,790 | 24,050 | 345,573 |
| Median | 7,728 | 11,695 | 30,403 | 10,100 | 29,269 | 2,535 | 9,561 | 100,185 |
| Mean | 9,090 | 12,949 | 34,827 | 11,566 | 32,896 | 3,028 | 10,042 | 114,398 |

In order to ensure robust liquidity in the underlying instrument, the subsets of benchmark-eligible transactions dating from December 2017 to May 2021 were analyzed. The below table shows average

² BrokerTec US Treasury Benchmarks: <https://www.nexdata.com/indices/fixed-income/brokertec-us-treasury-benchmarks/>

³ BrokerTec Benchmark Methodology: <https://www.cmegroup.com/market-data/files/benchmark-administration-brokertec-methodology.pdf>

⁴ CME Group Benchmark Administration Limited is a registered benchmark administrator under the UK Benchmark Regulation (Regulation (EU) 2016/2011, as retained in UK law under the European Union (Withdrawal) Act 2018) and is authorized and supervised by the UK Financial Conduct Authority (FCA).

daily volumes during each 15-minute VWAY interval, in millions of USD notional, from December 2017 to May 2021.

Exhibit 5: ADV per VWAY Interval, December 2017-May 2021

| ADV (\$MM) | 2 yr | 3 yr | 5 yr | 7 yr | 10 yr | 20 yr | 30 yr | Total |
|------------|------|------|------|------|-------|-------|-------|-------|
| 11am ET | 554 | 480 | 1267 | 381 | 1092 | 67 | 307 | 4,088 |
| 3pm ET | 579 | 509 | 1310 | 453 | 1150 | 100 | 476 | 4,491 |
| 4pm ET | 311 | 288 | 763 | 250 | 704 | 68 | 270 | 2,596 |
| 5pm ET | 274 | 237 | 497 | 153 | 437 | 37 | 151 | 1,754 |

These averages are for the entire 41 month sample period, but individual monthly averages were also examined, to account for different rate environments where volumes might consistently trend up or down. The below table contains average volumes in the 3pm VWAY period for the best, worst, and average months.

Exhibit 6: ADV per 3:00 p.m. ET Interval, Monthly Stats

| Monthly ADV (\$MM) | 2 yr | 3 yr | 5 yr | 7 yr | 10 yr | 20 yr | 30 yr | Total |
|--------------------|-------|-------|-------|------|-------|-------|-------|-------|
| Min | 207 | 205 | 686 | 232 | 699 | 82 | 221 | 2,453 |
| Max | 1,571 | 1,216 | 2,441 | 781 | 1,929 | 258 | 874 | 8,009 |
| Median | 583 | 515 | 1,290 | 432 | 1,126 | 99 | 471 | 4,412 |
| Mean | 595 | 525 | 1,344 | 459 | 1,172 | 112 | 482 | 4,594 |

Combining the information from the last two tables, the Exchange summarizes the trading volume that determines the 3:00 p.m. fixing on a monthly basis as noted below:

- 2yr & 30yr consistently average ~1/2 billion in notional, seldom drop by half, and may double
- 5yr & 10yr consistently average >1 billion in notional, seldom drop by one third, and may double

One final measure of robustness and defense against manipulation is the typical number of times the last traded price changes during the VWAY interval, indicating a market with continual price discovery (rather than, for example, being held at a single price by large bids or offers).

The table below provides the number of price movements during the 3:00 p.m. ET snapshot interval, first across the full 41 months, then the best, worst, and average monthly averages as above.

Exhibit 7: Price Movements, 2017-2021 and Monthly Statistics

| Price Moves | 2 yr | 3 yr | 5 yr | 7 yr | 10 yr | 20 yr | 30 yr | Total |
|---------------|------|------|------|------|-------|-------|-------|-------|
| 2017-2021 Avg | 126 | 125 | 400 | 217 | 444 | 89 | 334 | 1,665 |

| Price Moves | 2 yr | 3 yr | 5 yr | 7 yr | 10 yr | 20 yr | 30 yr | Total |
|-------------|------|------|-------|------|-------|-------|-------|-------|
| Min | 32 | 38 | 197 | 96 | 228 | 66 | 221 | 877 |
| Max | 565 | 394 | 1,019 | 533 | 1,041 | 192 | 665 | 4,131 |
| Median | 84 | 114 | 376 | 202 | 401 | 83 | 318 | 1,544 |
| Mean | 126 | 127 | 405 | 220 | 451 | 96 | 337 | 1,687 |

With hundreds of price changes taking place during the sample period, and hundreds of millions in USD notional, this implies it would take a substantial volume of trade activity throughout the VWAY interval to meaningfully manipulate the BrokerTec US Treasury Benchmarks upon which the Contracts will be based.

Section 3 – Compliance with Core Principles

The Exchange reviewed the designated contract market core principles (“Core Principles”) as set forth in the Commodity Exchange Act (“CEA” or “Act”) and identified that the following Core Principles may be impacted by this initiative as follows:

- **Compliance with Rules:** Trading in the Contracts will be subject to the rules in Rulebook Chapter 4 which include prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading in this Contract will also be subject to the full panoply of trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. As with all products listed for trading on one of CME Group’s designated contract markets, activity in the Contracts will be subject to extensive monitoring and surveillance by CME Group’s Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.
- **Contracts Not Readily Subject to Manipulation:** The underlying BrokerTec US Treasury Benchmarks are supported by a large pool of transaction data, with a transparent methodology. They are highly robust and resistant to attempts at manipulation. As such, the product listings are in compliance with this Core Principle.
- **Prevention of Market Disruption:** Trading in the Contracts will be subject to the Rules of CME, which include prohibitions on manipulation, price distortion, and disruption to the cash settlement process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the Contracts proposed herein will be subject to monitoring and surveillance by CME Group’s Market Regulation Department.
- **Position Limits or Accountability:** The Contract shall be subject to Position Reporting as well as Single- and All-Month Position Accountability Levels set conservatively, based on the equivalent exposure of the best practice of 2% of the underlying index. The speculative position limits for the Contract as demonstrated in this submission are consistent with the Commission’s guidance
- **Availability of General Information:** The Exchange will amend the rulebook accordingly which is publicly available on the CME Group website. In addition, the Exchange will publish a Special Executive Report (“SER”) to advise the marketplace of the Rule Amendments. The SER will also be posted on the CME Group website.
- **Daily Publication of Trading Information:** The Exchange will publish the Contracts’ trading volumes, open interest levels, and price information daily on its website and through quote vendors for the Contracts.
- **Execution of Transactions:** The Contracts will be listed for trading on the trading floor and the CME Globex electronic trading platform and for clearing through CME ClearPort. The CME Globex and open outcry trading venues provide for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity.
- **Trade Information:** All requisite trade information for the Contracts will be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.
- **Financial Integrity of Contracts:** The Contracts will be cleared by the CME Clearing House, a derivatives clearing organization registered with the CFTC and subject to all CFTC regulations related thereto.

- **Protection of Market Participants:** CME Rulebook Chapters 4 and 5 set forth multiple prohibitions that preclude intermediaries from disadvantaging their customers. These rules apply to trading in all of the Exchange's competitive trading venues.
- **Disciplinary Procedures:** Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in the Contracts will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in these products are identified.
- **Dispute Resolution:** Disputes with respect to trading in the Contracts will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all nonmembers to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a nonmember is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.6(a), the Exchanges hereby certify that listing the Contracts comply with the Act, including regulations under the Act. There were no substantive opposing views to this proposal.

The Exchanges certify that this submission has been concurrently posted on the Exchange's website at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

Should you have any questions concerning the above, please contact the undersigned at 212-299-2200 or via e-mail at CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Christopher Bowen
 Managing Director and Chief Regulatory Counsel

| | |
|-------------------------|--|
| Attachments: Appendix A | CBOT Rulebook Chapter 80, 81, 82, and 83 |
| Appendix B | Position Limit, Position Accountability, and Reportable Level Table, CBOT Rulebook Chapter 5 (attached under separate cover) |
| Appendix C | CBOT Rule 588.H – (“Globex Non-Reviewable Trading Ranges”) Table |
| Appendix D | CBOT Rule 589. Special Price Fluctuation Limits and Daily Price Limits Table |
| Appendix E | Exchange Fees |
| Appendix F | Settlement Procedure Document |

APPENDIX A
CBOT Rulebook
Chapter 80
Micro 2-Year Yield Futures

80100. SCOPE OF CHAPTER

This chapter is limited in application to Micro 2-Year Yield futures (“futures” or “contract”). The procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein or in Chapter 7 shall be governed by the general rules of the Exchange.

Unless otherwise specified, times referenced herein shall indicate Chicago time.

80101. CONTRACT SPECIFICATIONS

Each contract is valued at \$1000 times the contract-grade Index (Rule 80102.C).

80102. TRADING SPECIFICATIONS

The number of contract expiration months open for trading at a given time shall be determined by the Exchange.

80102.A. Trading Schedule

The hours for trading shall be determined by the Exchange.

80102.B. Trading Unit

For a contract for a given delivery month, the unit of trading shall be the BrokerTec US Treasury Benchmark for the on-the-run 2 Year U.S. Treasury Note, expressed as a Volume Weighted Average Yield (VWAY), for which each basis point shall be worth \$10 per futures contract. The 15:00 Eastern Time (ET) fixing price shall be used, or if unavailable the most recently available fixing shall be used.

Example: On days where the cash Treasury market has a recommended Early Close, the most recently available Benchmark may be the 11:00 ET fixing price.

80102.C. Price Increments

Contract prices shall be quoted in percentage points of yield per annum. The minimum price fluctuation shall be 0.001 Index points, equal to \$1.00 per contract, or \$1000 per Index point. For intermonth spreads the minimum price fluctuation shall also be 0.001 Index points (equal to \$1.00 per contract).

Example: A BrokerTec US Treasury Benchmark Yield of 1.501 shall correspond to a contract price of 1.501 and an interest rate of 1.501%.

80102.D. Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Limits Table in the Interpretations & Special Notices Section of Chapter 5.

80102.E. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

80102.F. Termination of Trading

Trading in an expiring contract shall terminate at 15:00 ET on the last Business Day of such contract's delivery month.

80103. DELIVERIES ON EXPIRING FUTURES CONTRACTS

On its last day of trading, an expiring contract shall be marked to market by reference to the Exchange daily settlement price for such contract.

Delivery on expiring contracts that remain outstanding following termination of trading shall be made by cash settlement through the Clearing House following normal variation margin procedures. The final mark to market on any such expiring contract shall be made on the day such contract's final settlement price is determined, by reference to such contract's final settlement price.

Such final settlement price shall be calculated by the Exchange on the business day on which CME Group Benchmark Administration Limited publishes the 15:00 ET fixing rate for the last day of such expiring contract's delivery month, or if unavailable the most recently available fixing shall be used. The rate for the last day of such expiring contract's delivery month shall be as first published by CME Group Benchmark Administration Limited.

Such rate shall be rounded to the nearest one tenth of one basis point per annum, ie, 0.001. Tie values, i.e., any such arithmetic average value ending in 0.0005, shall be rounded up. (For example, a value of 2.5915 percent per annum would be rounded up to 2.592 percent per annum.)

Chapter 81 Micro 5-Year Yield Futures

81100. SCOPE OF CHAPTER

This chapter is limited in application to Micro 5-Year Yield futures (“futures” or “contract”). The procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein or in Chapter 7 shall be governed by the general rules of the Exchange.

Unless otherwise specified, times referenced herein shall indicate Chicago time.

81101. CONTRACT SPECIFICATIONS

Each contract is valued at \$1000 times the contract-grade Index (Rule 81102.C).

81102. TRADING SPECIFICATIONS

The number of contract expiration months open for trading at a given time shall be determined by the Exchange.

81102.A. Trading Schedule

The hours for trading shall be determined by the Exchange.

81102.B. Trading Unit

For a contract for a given delivery month, the unit of trading shall be the BrokerTec US Treasury Benchmark for the on-the-run 5 Year U.S. Treasury Note, expressed as a Volume Weighted Average Yield (VWAY), for which each basis point shall be worth \$10 per futures contract. The 15:00 Eastern Time (ET) fixing price shall be used, or if unavailable the most recently available fixing shall be used.

Example: On days where the cash Treasury market has a recommended Early Close, the most recently available Benchmark may be the 11:00 ET fixing price.

81102.C. Price Increments

Contract prices shall be quoted in percentage points of yield per annum. The minimum price fluctuation shall be 0.001 Index points, equal to \$1.00 per contract, or \$1000 per Index point. For intermonth spreads the minimum price fluctuation shall also be 0.001 Index points (equal to \$1.00 per contract).

Example: A BrokerTec US Treasury Benchmark Yield of 1.501 shall correspond to a contract price of 1.501 and an interest rate of 1.501%.

81102.D. Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Limits Table in the Interpretations & Special Notices Section of Chapter 5.

81102.E. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

81102.F. Termination of Trading

Trading in an expiring contract shall terminate at 15:00 ET on the last Business Day of such contract's delivery month.

81103. DELIVERIES ON EXPIRING FUTURES CONTRACTS

On its last day of trading, an expiring contract shall be marked to market by reference to the Exchange daily settlement price for such contract.

Delivery on expiring contracts that remain outstanding following termination of trading shall be made by cash settlement through the Clearing House following normal variation margin procedures. The final mark

to market on any such expiring contract shall be made on the day such contract's final settlement price is determined, by reference to such contract's final settlement price.

Such final settlement price shall be calculated by the Exchange on the business day on which CME Group Benchmark Administration Limited publishes the 15:00 ET fixing rate for the last day of such expiring contract's delivery month, or if unavailable the most recently available fixing shall be used. The rate for the last day of such expiring contract's delivery month shall be as first published by CME Group Benchmark Administration Limited.

Such rate shall be rounded to the nearest one tenth of one basis point per annum, ie, 0.001. Tie values, i.e., any such arithmetic average value ending in 0.0005, shall be rounded up. (For example, a value of 2.5915 percent per annum would be rounded up to 2.592 percent per annum.)

Chapter 82 Micro 10-Year Yield Futures

82100. SCOPE OF CHAPTER

This chapter is limited in application to Micro 10-Year Yield futures (“futures” or “contract”). The procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein or in Chapter 7 shall be governed by the general rules of the Exchange.

Unless otherwise specified, times referenced herein shall indicate Chicago time.

82101. CONTRACT SPECIFICATIONS

Each contract is valued at \$1000 times the contract-grade Index (Rule 82102.C).

82102. TRADING SPECIFICATIONS

The number of contract expiration months open for trading at a given time shall be determined by the Exchange.

82102.A. Trading Schedule

The hours for trading shall be determined by the Exchange.

82102.B. Trading Unit

For a contract for a given delivery month, the unit of trading shall be the BrokerTec US Treasury Benchmark for the on-the-run 10 Year U.S. Treasury Note, expressed as a Volume Weighted Average Yield (VWAY), for which each basis point shall be worth \$10 per futures contract. The 15:00 Eastern Time (ET) fixing price shall be used, or if unavailable the most recently available fixing shall be used.

Example: On days where the cash Treasury market has a recommended Early Close, the most recently available Benchmark may be the 11:00 ET fixing price.

82102.C. Price Increments

Contract prices shall be quoted in percentage points of yield per annum. The minimum price fluctuation shall be 0.001 Index points, equal to \$1.00 per contract, or \$1000 per Index point. For intermonth spreads the minimum price fluctuation shall also be 0.001 Index points (equal to \$1.00 per contract).

Example: A BrokerTec US Treasury Benchmark Yield of 1.501 shall correspond to a contract price of 1.501 and an interest rate of 1.501%.

82102.D. Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Limits Table in the Interpretations & Special Notices Section of Chapter 5.

82102.E. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

82102.F. Termination of Trading

Trading in an expiring contract shall terminate at 15:00 ET on the last Business Day of such contract's delivery month.

82103. DELIVERIES ON EXPIRING FUTURES CONTRACTS

On its last day of trading, an expiring contract shall be marked to market by reference to the Exchange daily settlement price for such contract.

Delivery on expiring contracts that remain outstanding following termination of trading shall be made by cash settlement through the Clearing House following normal variation margin procedures. The final mark

to market on any such expiring contract shall be made on the day such contract's final settlement price is determined, by reference to such contract's final settlement price.

Such final settlement price shall be calculated by the Exchange on the business day on which CME Group Benchmark Administration Limited publishes the 15:00 ET fixing rate for the last day of such expiring contract's delivery month, or if unavailable the most recently available fixing shall be used. The rate for the last day of such expiring contract's delivery month shall be as first published by CME Group Benchmark Administration Limited.

Such rate shall be rounded to the nearest one tenth of one basis point per annum, ie, 0.001. Tie values, i.e., any such arithmetic average value ending in 0.0005, shall be rounded up. (For example, a value of 2.5915 percent per annum would be rounded up to 2.592 percent per annum.)

Chapter 83 Micro 30-Year Yield Futures

83100. SCOPE OF CHAPTER

This chapter is limited in application to Micro 30-Year Yield futures (“futures” or “contract”). The procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein or in Chapter 7 shall be governed by the general rules of the Exchange.

Unless otherwise specified, times referenced herein shall indicate Chicago time.

83101. CONTRACT SPECIFICATIONS

Each contract is valued at \$1000 times the contract-grade Index (Rule 83102.C).

83102. TRADING SPECIFICATIONS

The number of contract expiration months open for trading at a given time shall be determined by the Exchange.

83102.A. Trading Schedule

The hours for trading shall be determined by the Exchange.

83102.B. Trading Unit

For a contract for a given delivery month, the unit of trading shall be the BrokerTec US Treasury Benchmark for the on-the-run 30 Year U.S. Treasury Note, expressed as a Volume Weighted Average Yield (VWAY), for which each basis point shall be worth \$10 per futures contract. The 15:00 Eastern Time (ET) fixing price shall be used, or if unavailable the most recently available fixing shall be used.

Example: On days where the cash Treasury market has a recommended Early Close, the most recently available Benchmark may be the 11:00 ET fixing price.

83102.C. Price Increments

Contract prices shall be quoted in percentage points of yield per annum. The minimum price fluctuation shall be 0.001 Index points, equal to \$1.00 per contract, or \$1000 per Index point. For intermonth spreads the minimum price fluctuation shall also be 0.001 Index points (equal to \$1.00 per contract).

Example: A BrokerTec US Treasury Benchmark Yield of 1.501 shall correspond to a contract price of 1.501 and an interest rate of 1.501%.

83102.D. Special Price Fluctuation Limits

At the commencement of each trading day, the contract shall be subject to special price fluctuation limits as set forth in Rule 589 and in the Special Price Fluctuation Limits and Daily Limits Table in the Interpretations & Special Notices Section of Chapter 5.

83102.E. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

83102.F. Termination of Trading

Trading in an expiring contract shall terminate at 15:00 ET on the last Business Day of such contract's delivery month.

83103. DELIVERIES ON EXPIRING FUTURES CONTRACTS

On its last day of trading, an expiring contract shall be marked to market by reference to the Exchange daily settlement price for such contract.

Delivery on expiring contracts that remain outstanding following termination of trading shall be made by cash settlement through the Clearing House following normal variation margin procedures. The final mark

to market on any such expiring contract shall be made on the day such contract's final settlement price is determined, by reference to such contract's final settlement price.

Such final settlement price shall be calculated by the Exchange on the business day on which CME Group Benchmark Administration Limited publishes the 15:00 ET fixing rate for the last day of such expiring contract's delivery month, or if unavailable the most recently available fixing shall be used. The rate for the last day of such expiring contract's delivery month shall be as first published by CME Group Benchmark Administration Limited.

Such rate shall be rounded to the nearest one tenth of one basis point per annum, ie, 0.001. Tie values, i.e., any such arithmetic average value ending in 0.0005, shall be rounded up. (For example, a value of 2.5915 percent per annum would be rounded up to 2.592 percent per annum.)

APPENDIX B
CBOT Rulebook
Chapter 5
(“Trading Qualifications and Practices”)

Position Limit, Position Accountability, and Reportable Level Table

(attached under separate cover)

APPENDIX C
CBOT Rulebook
Chapter 5
(“Trading Qualifications and Practices”)

Rule 588.H. (“Globex Non-Reviewable Trading Ranges”) Table

| Instrument | Globex Symbol | Outrights | | | Spreads | |
|------------------------------------|---------------|------------------------------------|--------------------|--------------------|--|--------------------|
| | | Globex Non-Reviewable Ranges (NRR) | NRR: Globex Format | NRR: Minimum Ticks | NRR: Globex Format | NRR: Minimum Ticks |
| <u>Micro 2-Year Yield Futures</u> | <u>2YY</u> | <u>2 basis points</u> | <u>20</u> | <u>20</u> | <u>Each leg evaluated as an outright</u> | |
| <u>Micro 5-Year Yield Futures</u> | <u>5YY</u> | <u>2 basis points</u> | <u>20</u> | <u>20</u> | <u>Each leg evaluated as an outright</u> | |
| <u>Micro 10-Year Yield Futures</u> | <u>10Y</u> | <u>2 basis points</u> | <u>20</u> | <u>20</u> | <u>Each leg evaluated as an outright</u> | |
| <u>Micro 30-Year Yield Futures</u> | <u>30Y</u> | <u>2 basis points</u> | <u>20</u> | <u>20</u> | <u>Each leg evaluated as an outright</u> | |

APPENDIX D
CBOT Rulebook
Chapter 5
(“Trading Qualifications and Practices”)

Rule 589. Special Price Fluctuation Limits and Daily Price Limits Table

| Product | Rulebook | Commodity Code | PRIMARY / ASSOCIATED | ASSOCIATED WITH | Dynamically Calculated Variant - All Hours |
|------------------------------------|-----------|----------------|----------------------|-----------------|--|
| <u>Micro 2-Year Yield Futures</u> | <u>80</u> | <u>2YY</u> | <u>Primary</u> | <u>Primary</u> | <u>20 basis points</u> |
| <u>Micro 5-Year Yield Futures</u> | <u>81</u> | <u>5YY</u> | <u>Primary</u> | <u>Primary</u> | <u>20 basis points</u> |
| <u>Micro 10-Year Yield Futures</u> | <u>82</u> | <u>10Y</u> | <u>Primary</u> | <u>Primary</u> | <u>20 basis points</u> |
| <u>Micro 30-Year Yield Futures</u> | <u>83</u> | <u>30Y</u> | <u>Primary</u> | <u>Primary</u> | <u>20 basis points</u> |

APPENDIX E
Exchange Fees

| Level | Account Owner | Execution Type | Venue/Transaction Type | Fee |
|--|---|--------------------------------|------------------------|--------|
| Individual Member | | | | |
| 1 | Individual Members | Member Account Owner | CME Globex | \$0.03 |
| | | | EFP | \$0.12 |
| | | | EFR | \$0.12 |
| | | | Block | \$0.12 |
| | Individual Delegates | Delegate Trading Own Account | CME Globex | \$0.07 |
| | | | EFP | \$0.27 |
| | | | EFR | \$0.27 |
| | | | Block | \$0.27 |
| Equity Members (Individual Equity members, Clearing Firms and Equity Firms) | | | | |
| 2 | Equity Members ¹ | Member or Delegate | CME Globex | \$0.03 |
| | | | EFP | \$0.12 |
| | | | EFR | \$0.12 |
| | | | Block | \$0.12 |
| | | Non-Member | CME Globex | \$0.06 |
| | | | EFP | \$0.12 |
| | | | EFR | \$0.12 |
| | | | Block | \$0.12 |
| | Rule 106.S. Family of Funds Equity Member Firms | Member, Delegate or Non-Member | CME Globex | \$0.06 |
| | | | EFP | \$0.12 |
| | | | EFR | \$0.12 |
| | | | Block | \$0.12 |

¹ Clearing Closely Held Corporate Members & Sole Proprietors, Rule 106.J. Equity Closely Held Corporate Members & Rule 106.I. Affiliate Equity Member Firms, Individual Equity Members (other member/delegate executing), Clearing FCMs, Rule 106.J. Equity FCMs, Clearing Corporate Members, Rule 106.J. Equity Corporate Members & Rule 106.I. Affiliate Equity Member Firm (Affiliate of Clearing FCM, Clearing Corporate Member or Rule 106.J Equity FCM or Equity Corporate Member), Rule 106.I. Affiliate Membership Umbrella - Qualified Affiliate - Unlimited Number of Affiliates.

(Execution Not a Factor in Membership Types Below)

| Level | Account Owner | Execution Type | Venue/Transaction Type | Fee |
|--|--|--------------------------------|------------------------|--------|
| Trading Members (Individual Non-Equity Members and Non-Equity Member Firms) | | | | |
| 3 | Individual Non-Equity Members (other member/delegate executing); Rule 106.H. Corporate Trading Firms; Rule 106.H. Trading FCMs; & Rule 106.I. Affiliate Trading Member Firms | Member, Delegate or Non-Member | CME Globex | \$0.08 |
| | | | EFP | \$0.28 |
| | | | EFR | \$0.28 |
| | | | Block | \$0.28 |
| | Individual Delegates (Other Member or Delegate executing the trade) & Rule 106.I. Affiliate Trading Member Firms | Member, Delegate or Non-Member | CME Globex | \$0.10 |
| | | | EFP | \$0.30 |
| | | | EFR | \$0.30 |
| | | | Block | \$0.30 |
| | Rule 106.S. Family of Funds Trading Member Firms | Member, Delegate or Non-Member | CME Globex | \$0.08 |
| | | | EFP | \$0.28 |
| | | | EFR | \$0.28 |
| | | | Block | \$0.28 |

| Level | Account Owner | Execution Type | Venue/Transaction Type | Fee |
|---|---|--------------------------------|------------------------|--------|
| Electronic Corporate Member Firm | | | | |
| 4 | Rule 106.R Electronic Corporate Member Firms (For other than CME Globex - Non-Member rates apply) | Member, Delegate or Non-Member | CME Globex | \$0.10 |
| Non-Members | | | | |
| 5 | International Incentive Program (IIP) and International Volume Incentive Program (IVIP) Participants (Open Outcry at same rate as CME Globex for Interest Rate products only) | Member, Delegate or Non-Member | CME Globex | \$0.30 |
| | Central Bank Incentive Program (CBIP) and Latin American Fund Manager Incentive Program (FMIP) Participants (For other than CME Globex - Non-Member rates apply) | Member, Delegate or Non-Member | CME Globex | \$0.30 |
| | Non-Members | N/A | CME Globex | \$0.30 |
| | | | EFP | \$0.50 |
| | | | EFR | \$0.50 |
| Block | \$0.50 | | | |
| CMACE Permit Holders | | | | |
| 6 | CMACE Permit Holders (For Rough Rice & Mini-sized Ag products only; all other products - Non-Member rates apply) | Member, Delegate or Non-Member | CME Globex | n/a |
| | | | EFP | n/a |
| | | | EFR | n/a |
| | | | Block | n/a |

| Processing Fees | Fee |
|---|----------------------|
| Exchange Fees for Non-Trades (Member/Delegate/Non-Member) | \$0.10/\$0.25/\$0.55 |
| Exchange Fees for Non-Trades - Expired Options | \$0.10 |
| Facilitation Fee | \$0.00 |
| Give-Up Surcharge | \$0.06 |
| Position Adjustment/Position Transfer | \$0.10 |

APPENDIX F

Micro Treasury Yield Futures Daily Settlement Procedure

Normal Daily Settlement Procedure

Daily settlement of Micro 2-Year (2YY), Micro 5-Year (5YY), Micro 10-Year (10Y) and Micro 30-Year (30Y) Yield Futures are determined by CME Group staff based on trading activity on CME Globex.

Lead Month

The designated lead month* is settled according to the following procedure:

Tier 1: If the lead month contract trades on Globex between 13:59:30 and 14:00:00 Central Time (CT), the settlement period, then the lead month settles to the volume-weighted average price (VWAP) of the trade(s) during this period.

Tier 2: If no trades in the lead month occur on Globex between 13:59:30 and 14:00:00 CT, then the most recent trade (or prior settle in the absence of a last trade price) is used. The lead month settles to the last trade/prior settle provided that it does not violate the bid or the ask in the settlement period. If the last trade is outside the bid or the ask then the settlement will be adjusted to that bid or ask.

Second Month

Tier 1: If the lead month-second month spread trades on Globex between 13:59:30 and 14:00:00 CT, then the spread VWAP is calculated and rounded to the nearest tradable tick. The spread differential is then applied to the lead month settlement price to derive the second month settlement.

Tier 2: If a VWAP is not available due to an absence of trades, then the most recent spread trade or prior settlement is applied to the lead month settlement price to derive the second month settlement.

In either of the above scenarios, if the derived spread differential in the lead month-second month spread is outside the bid/ask then the spread settle will be adjusted to that bid or ask.

*The Lead-Month is the first chronological listing until the day prior to its expiration. The second chronological listing will become the Lead Month effective on the day prior to the first chronological listing's expiration.

Final Settlement Procedure

The final settlement value, applied on the last business day of the month, will be determined by the 14:00:00 CT BrokerTec US Treasury Benchmark, or latest available fixing. The fixings are calculated as a Volume Weighted Average Yield ("VWAY") of cash Treasury transactions during the 15 minutes leading up to each fixing, i.e., 13:45:00-14:00:00 CT for the 14:00:00 CT fixing.

In the event of an early cash market closing, this will mean the 10:00:00 CT fixing would be used (if the 10:00:00 CT fixing is also not available, this would mean a fully closed market on the last day of the month, meaning that the "last business day", last trade day, and settlement day would be the prior day, with its 14:00:00 CT fixing).

If you have any questions, please call the CME Global Command Center at 800.438.8616, in Europe at 44.800.898.013, or in Asia at 65.6532.5010.

Note: In the event the aforementioned calculations cannot be made or if CME Group staff, in its sole discretion, determines that anomalous activity produces results that are not representative of the fair value of the contract, staff may determine an alternative settlement price.