CME Group

Clearing Advisory Notice

DATE: October 13, 2020
TO: Clearing Member Firms
FROM: CME Clearing

ADVISORY #: 20-390

SUBJECT: **Increase in maximum precision of Eurodollar and SOFR strike prices**
Associated changes to strike price formats to four decimal places
Change confirmed for Monday November 23, 2020

This advisory updates and supersedes previously published clearing advisories 20-371 and 20-384. We have received confirmation from certain clearing firms and software providers, which had requested additional time to test, that their systems will be able to handle this change.

Therefore, it is now confirmed that this change will take effect on Monday November 23, 2020.

In particular, effective Monday, November 23, 2020, listing rules for certain CME options on Three-Month Eurodollar futures and on Three-Month SOFR futures will be modified to allow creation of strikes at intervals of 0.0625 index points. Currently, the interval is 0.125. Please see updated Special Executive Report 8638RRR and updated Product Modification Summary 20-332RR at these addresses:
https://www.cmegroup.com/content/dam/cmegroup/notices/ser/2020/10/SER-8638RRR.pdf
https://www.cmegroup.com/content/dam/cmegroup/notices/clearing/2020/10/Chadv20-332RR.pdf

Thus, the number of decimal places needed to represent a strike price for these products will change from three to four.

In CME's positional-format SPAN files (the "PA2" format) and positional-format settlement price files, strike prices for options are represented as a string of seven digits, with each product code having its own "strike price decimal locator" – *ie,* the number of assumed decimal places in that string.

Currently, 3-month and 1-month Eurodollar and 3-month SOFR options are a mixture, with some symbols having two implied decimal places in these files and some having three.

Given that certain Eurodollar and SOFR options will now require four decimal places, and that options on Fed Funds futures and One-Month SOFR futures are already formatted with four implied decimal places, CME is taking this opportunity to simplify and harmonize strike formats in these two files.

So, also effective Monday, November 23, strike prices for all options on Eurodollar futures (one-month and three-month) and three-month SOFR futures will be made consistent in these two files with the current format for options on Fed Funds futures and one-month SOFR futures, and will have FOUR implied decimal places.

For example, a strike price of 98.125 for an ED option today appears as **0009812**, with two implied decimal places, and the trailing digit 5 truncated. With the change, this strike will be formatted as **0981250**. A new strike of 98.0625 will be formatted as **0980625**. Note that there will no longer be any need for implied trailing digits.

Strike prices are also provided as seven digits in the positional 80-byte positional file format long used for Large Trader Position Reporting both to CFTC and to CME.

Currently, the CFTC expects strike prices for all options on 3-month and 1-month Eurodollars and 3-month SOFR to have three implied decimal places in these files. We have coordinated with CFTC and they will also accommodate the new format with four implied decimal places, exactly as CME will be providing them in the settlement price file and the SPAN file. Firms should make this change in the files submitted to CFTC effective on the morning of November 23, 2020.

Note that CME provides firms with some flexibility in how they format strikes in the version of the Large Trader file that they send to us, and currently accepts strikes formatted with either three or two decimal places in these products. Effective November 23rd, this flexibility will continue, except now we will accept strikes in the Large Trader file formatted with either four implied decimal places (0981250) or two (0009812).

The bottom lines:

> **Effective Monday November 23, 2020, all strike prices for options on Eurodollars, Fed Funds or SOFR futures in the PA2-format SPAN files and in the positional-format settlement price files will be formatted with four implied decimal places, and without any assumed trailing digits.**
>
> **Firms should submit Large Trader files to CFTC beginning that Monday (for trade date Friday Nov. 20) with strikes formatted exactly the same way, with four implied decimal places.**
>
> **Firms may submit Large Trader files to CME beginning that Monday morning (for trade date Friday Nov. 20) in either the four-decimal place format or the two decimal place format.**

Note that all FIXML data provided by CME Clearing, and the FIXML-format PCS and CGM datafiles submitted by clearing firms to CME Clearing, have strike prices formatted as decimal

values, already containing a decimal point, and hence there is no need to track the number of implied decimal places. Daily fee files also have strike prices formatted with a decimal point.

The table below illustrates the complete set of Eurodollar, SOFR and Fed Funds products, together with their existing strike formats in the PA2-format SPAN file and settlement price file, their current format for Large Trader Reporting, their format as of November 23, and whether the updated format represents a change from the current format.

Test data is available. Since Monday September 28, 2020, we have been publishing SPAN files and settlement price files with production data but reflecting these updated strike price formats, in the following location:
ftp://ftp.cmegroup.com/pub/span/data/cme/test

The SPAN files and settlement price files published from the "New Release" testing environment also have reflect the updated strike price formats since September 23, in the following locations:
ftp://ftp.cmegroup.com/pub/span/data/cme/nr
ftp://ftp.cmegroup.com/pub/settle/nr

The production PA2-format SPAN files are located at:
ftp://ftp.cmegroup.com/pub/span/data/cme

The production settlement price files are located at:
ftp://ftp.cmegroup.com/pub/settle

The positional-format ("PA2") SPAN file layout is located at:
https://www.cmegroup.com/confluence/display/pubspan/Risk+Parameter+File+Layouts+for+the+Positional+Formats
Strike prices are contained on the type "8" records, and the strike price decimal locator is contained on the type "P" records.

The positional-format settlement price file layout is located at:
https://www.cmegroup.com/clearing/files/s_setlmntpricelayout.pdf

The Large Trader file layout, used for reporting both to CME and to CFTC, is at:
https://www.cmegroup.com/clearing/files/s_lrgtraderlayout.pdf

CFTC's online system for looking up Large Trader strike price formats is at:
https://strikeprice.cftc.gov/StrikePriceFormat.aspx

For more information please contact CME Clearing at ccs@cmegroup.com or via phone at Chicago (312) 207 2525 | London (44) 203 379 3198 | Singapore (65) 6593 5591.

CME Clearing

Updates to strike formats effective Monday, November 23, 2020

For Eurodollar and SOFR futures

								PA2 Strike Decimals		
Exchange	Product	Description	Actual Strike	Current PA2	Cur. Stlmt	Current LTR	New PA2/LTR	Current	New	Change?
CME	ED	Three-Month Eurodollars	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	ED	Three-Month Eurodollars-new strikes	98.0625	-	-	-	0980625	-	4	Yes
CME	E0	3-Month Eurodollars-One-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	E2	3-Month Eurodollars-Two-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	E3	3-Month Eurodollars-Three-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	E4	3-Month Eurodollars-Four-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	E5	3-Month Eurodollars-Five-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	1K thru 5K	3-Month Eurodollars-Weekly One-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	EE1 thru EE5	3-Month Eurodollars-Weekly Two-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	EF1 thru EF5	3-Month Eurodollars-Weekly Three-Year Midcurves	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	TE2, TE3, TE4	3-Month Eurodollars-3, 6, 9-Month Midcurves	98.1250	0098125	0009812	0098125	0981250	3	4	Yes
CME	EM	One-Month Eurodollars	98.1250	0009812	0009812	0098125	0981250	2	4	Yes
CME	SR3	Three-Month SOFR	98.1250	0098125	0098125	0098125	0981250	3	4	Yes
CME	SR3	Three-Month SOFR--new strikes	98.0625	n/a	n/a	n/a	0980625	-	4	Yes
CME	S0,S2,S3,S4,S5	Three-Month SOFR-1,2,3,4,5 Year Midcurves	98.1250	0098125	0098125	0098125	0981250	3	4	Yes
CME	S01 thru S05	Three-Month SOFR-Weekly One-Year Midcurves	98.1250	0098125	0098125	0098125	0981250	3	4	Yes
CME	S21 thru S25	Three-Month SOFR-Weekly Two-Year Midcurves	98.1250	0098125	0098125	0098125	0981250	3	4	Yes
CME	S31 thru S35	Three-Month SOFR-Weekly Three-Year Midcurves	98.1250	0098125	0098125	0098125	0981250	3	4	Yes
CME	TS2, TS3, TS4	3-Month SOFR-3, 6, 9-Month Midcurves	98.1250	0098125	0098125	0098125	0981250	3	4	Yes
CME	SR1	One-Month SOFR	98.0625	0980625	0980625	0980625	0980625	4	4	No
CBT	41	Fed Funds	98.0625	0980625	0980625	0980625	0980625	4	4	No
CBT	FF1	One-Year Midcurves on Fed Funds	98.0625	0980625	0980625	0980625	0980625	4	4	No
CBT	FF6	Two-Year Midcurves on Fed Funds	98.0625	0980625	0980625	0980625	0980625	4	4	No

Notes: **TE2, TE3 and TE4 currently have two implied decimal places in the settlement price file but three in the SPAN file.**
SR1 currently has three implied decimal places in the settlement price file but four in the SPAN file.