CME Group

Clearing Advisory Notice

DATE: August 11, 2020

TO: Clearing Member Firms

FROM: CME Clearing

ADVISORY #: 20-314

SUBJECT: **Clearing Processing for Adjusted Interest Rate (AIR) Futures
            with BTIC Trading**

On Sunday, September 20, 2020, for trade date Monday, September 21, 2020, and pending all regulatory review, CME will launch BTIC trading in Adjusted Interest Rate (AIR) Futures on the S&P 500 Total Return Index. These new products were made available in CME's "New Release" testing environment on Monday, August 10.

For more information, please see:
Special Executive Report 8631, published August 4, 2020, at:
https://www.cmegroup.com/content/dam/cmegroup/notices/ser/2020/08/SER-8631.pdf

New Product Advisory Notice 20-312, published August 7, 2020, at:
https://www.cmegroup.com/content/dam/cmegroup/notices/clearing/2020/08/Chadv20-312.pdf

CME Globex Notice published August 3, 2020, at:
https://www.cmegroup.com/notices/electronic-trading/2020/08/20200803.html#aisp

CME's AIR future on the S&P 500 Total Return Index will offer market participants a futures contract which closely tracks the payoff of a total return swap on the index, by incorporating the accrued cost of the financing leg of the swap in trade prices and in the daily and final settlement prices. BTIC trading will allow the BTIC price to be quoted as a differential over or under a benchmark interest rate used for quoting the financing leg of a hypothetical underlying swap.

The product code for BTIC trading will be **AST**. Normal BTIC trading on **AST** will be available on CME Globex, and block BTIC trades on **AST** may be submitted through CME Clearport as with any block trade. BTIC prices on **AST** are quoted in basis points over(under) the Fed Funds Effective Rate, for example, +16.5 bps, with a minimum fluctuation of 0.5 bps.

As with all BTIC trading, market participants will receive transactions in the cleared future with code **ASR**. Note that the **ASR** cleared future will not be tradeable except as EFRP transactions submitted through Clearport.

For each BTIC trade in **AST**, the initial absolute **ASR** trade price received in the FIXML trade confirmation message will be approximate, based upon the value of the S&P 500 Total Return Index at the time of the trade. These values will be updated throughout the trading day as the index moves, and in the late afternoon, when the closing value of the index is known, a final trade update message will be transmitted for each BTIC trade cleared that day, with the final value of the absolute trade price. Prices for **ASR** will be in index points, with a minimum price fluctuation of 0.01 index points, and the contract value factor (CVF, contract multiplier) will be 25.0. All of this is perfectly standard for BTIC trading, so clearing firms should require no systems changes or upgrades to support these new products.

The cleared futures price will be derived from the traded BTIC price as follows:

Futures Price = Index Price – Accrued Financing + Financing Spread Adjustment

Accrued financing for the current business day is equal to the accrued financing for the previous business day plus the daily financing cost. The daily financing is determined on the morning of each business day, and reflects the hypothetical financing cost of rolling the corresponding US equity trades done on the previous exchange business day to the current exchange business day:

Daily Financing = Previous Day's Index Value * Benchmark Interest Rate
* (Number of Days / 360)

The previous day's index value is the daily close for the S&P 500 Total Return Index on that previous exchange business day. The benchmark interest rate is Fed Funds Effective, expressed as a percentage (and hence must be multiplied by 0.01 to convert it to an annual value). The number of days is the number of calendar days between two value dates for physical settlement of a US equity trade – one value date associated with an equity trade done on the current exchange business day, and the second value date associated with an equity trade done on the previous exchange business date.

The financing spread adjustment reflects the adjustment to the financing cost associated with the trade being done at a differential over/under the benchmark interest rate, and is calculated as:

Financing Spread Adjustment = Current Day's Index Value * BTIC Price
* (Days To Maturity / 360)

where the BTIC price is decimalized by multiplying by 0.0001, and days to maturity is the calendar days between two value dates for physical settlement of a US equity trade – one value date associated with an equity trade on the contract's clearing settlement date, and the second value date associated with an equity trade done on the current exchange business date.

As described above, the absolute price for each trade in the **ASR** cleared future will be derived by CME Clearing from the BTIC price for each trade in the **AST** BTIC contract, and there is no need for clearing firms to replicate these calculations. Other than the normal BTIC process of picking up the final absolute price for each trade, the **ASR** contract functions as a perfectly standard cash-settled equity index future, and firms should require no bookkeeping system changes or enhancements to process them.

For those wishing to understand or replicate the calculations, CME Clearing will publish new **AIR Futures Datafiles**, to provide market participants with the details of the daily and accrued financing cost, and the daily and final settlement prices for the **AST** BTIC contract and the **ASR** cleared future. The **early** files will be published in the morning, when the Fed Funds Effective Rate is known and hence the daily and accrued financing costs in effect for the current exchange business date may be calculated, and the **final** files will be published in the late afternoon, when the closing value of the index has been published and the daily settlement prices for the **AST** and **ASR** contracts have been determined. At each point in time, both a **top-day** and a **complete** file will be published, the top-day file having data only for the current business day, and the complete file having a record for each eligible contract for each business day starting with its first day of trading and continuing up through and including the current exchange business day (which allows you to track the day-over-day accumulation of accrued financing costs.) A complete specification for the files is available at: https://www.cmegroup.com/clearing/files/cme-air-futures-datafile-specification.pdf

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.