INTEREST RATES

Euro Short-Term Rate (€STR) Three-Month Single Contract Basis Spread Futures

ASSIGNMENT AT FINAL SETTLEMENT

Designed to provide efficient liquidity between forward-looking benchmarks, such as 3-Month Euribor, and realized-in-arrears benchmarks, such as €STR or Repo Funds Rates, CME Group is launching Three-Month Single Contract Basis Spread futures. These contracts aim to provide hedging for risks that have traditionally been managed using OTC FRA/OIS transactions by offering exposure to both the series of OIS rates and 3-Month Euribor in a single product.

Each contract is sized to be the same as their associated outright OIS STIR contracts where 1 basis point price movement is valued at €25 per contract.

The tradable price of these futures is designed to represent the difference between the expected or projected value of the prevailing forward-looking rate, such as Euribor, and the projected value of the realized-in-arrears rate, such as €STR or Repo Funds Rates.

The price relationship is maintained by reference to the final settlement process.

Final settlement of spread futures

Final settlement of an €STR Three-Month Single Contract Basis Spread Future occurs at the beginning of its interest period.

Settlement is by assignment into the adjacent outright contract covering the same interest period. For example, the September-2022 €STR Three-Month Single Contract Basis Spread futures contract (contract code EUSU2) will assign into the associated September 2022 €STR future (contract code ESRU2). This in turn will settle approximately three months later when all the required overnight benchmark rates in the reference period are known.

This process is intended to be analogous the settlement of FRA/OIS transactions in the OTC world.

Final settlement of Three-Month Single Contract Basis Spread futures will occur two good business day prior the IMM Wednesday, typically on the Monday preceding an IMM Wednesday. Upon the publication of the 3-Month Euribor rate the exchange will calculate the assignment price.

Assignment price will be used to assign long (short) holders of Three-Month Single Contract Spread futures contracts into long (short) positions of same month in their associated outright contracts. Assignment will be on a 1:1 basis.

ASSIGNMENT PRICE IS DETERMINED BY THE FOLLOWING FORMULA:

100.00	–	3-month Euribor Benchmark Rate	+	Three-Month Single Contract Spread Future last Daily Settlement

WHERE:

Last daily Settlement is in the normal end-of-day settlement price for the Three-Month Single Contract Spread futures as at the end of the day on the Friday, or prior good business day, preceding the Monday prior to IMM Wednesday.

Examples

The September 2022 €STR Three month Spread futures will assign into the September 2022 €STR outright future.

Recalling that the contract critical dates for outright €STR or RFR futures are defined for a given delivery months as follows:

> *The Reference Quarter shall be the interval that ends on (and does not include) the third Wednesday of the contract delivery month, and that begins on (and includes) the third Wednesday of the third calendar month preceding the contract delivery month.*

And that an €STR or RFR futures delivery month is three months after the contracts named month, we can observe that for the September named month the dates in 2022 are defined as:

From and including September 21, 2022, to and not including December 21, 2022.

USING SEPTEMBER 2022 AS OUR EXAMPLE, WE WILL HAVE THE FOLLOWING CONTRACT CRITICAL DATES:	September 16, 2022	Friday preceding IMM date
	September 19, 2022	Fixing date for 3-Month Euribor rate with value on IMM date
	September 21, 2022	IMM date
	December 21, 2022	IMM date three months hence

ADDING HYPOTHETICAL SETTLEMENT PRICES AS FOLLOWS:	Spread contract Daily settlement price on September 16, 2022	**0.2250**
	3-Month Euribor fixing rate on September 19, 2022	**0.4511**
	Daily Settlement price of €SRU2 on September 16, 2022	**99.7750**
	Assignment price of long and short positions into new Sep2022 €STR (ESRU2) contracts at **100 – 0.4511 + 0.2250 = 99.7739**	

In this example the assignment price is very close to the previous settlement price of the outright contract with the difference being within the bid/ask spread of valid tick prices.

Let us see what happens if that is not the case. We start with the same settlement prices as above. In this example we see a change in future expectations for €STR rates, such that the outright €SRU2 contract trades up to 99.81 in early Monday trading. We do not see any corresponding change in the expectations for Euribor. As a result, the spread contract EUSU2 trades up to 0.2600.

Here at assignment the spread contract assigns into the outright contract at exactly the same price as in the first example. A long position in the spread that was valued at 0.2250 at previous settlement and is now trading at 0.2600 realises the gain in value by assignment into the outright contract at 99.7739 relative to the market trading at 99.81.

Similarly, a short position who sees a benefit in the assignment price at 0.2250 relative to current market finds that benefit offset by the assignment into a short outright position in €SRU2 at a price lower than current market.

This settlement mechanism means that the holders of spread contracts achieve assignment at prices that are effectively the market price of the spread at the time of the three-month benchmark publication.

Once a participant is assigned into an outright €STR or RFR futures position, they may either trade out of the position to neutralize risk and crystallize profit and loss or hold the outright futures contract to the end of its reference period and subsequent cash settlement based on the calculation methodology represented in this paper, European Overnight Index futures: Final settlement calculation.

PM22IR015/0922