CFE Spread Order Pricing

Corporate Bond Index Futures

U.S. Futures

The following text provides an explanation of **intra-commodity** spread trading for the Cboe® iBoxx® iShares® $ High Yield Corporate Bond Index ("IBHY") futures and Cboe® iBoxx® iShares® $ Investment Grade Corporate Bond Index ("IBIG") futures (collectively, "Corporate Bond Index" futures or "CB Index" futures). Intra-commodity spread trading refers to IBHY Nov. versus IBHY Dec., for example, not to be confused with **inter-commodity** spread trading, which would be IBHY Nov. versus IBIG Nov.

As with other Complex Instruments traded on Cboe Futures Exchange, LLC ("CFE"), CB Index futures B1:S1 calendar spreads are structured to Sell the Nearest Term and Buy the Furthest Term. When a "Buy" order is submitted to the CFE trading platform, the instrument's structure determines the position effect for each leg of the spread. A "Buy" order will Sell the Nearest Term and Buy the Furthest Term. A "Sell" order will have the opposing position effect from how the spread is structured. A sell order will Buy the Nearest Term and Sell the Furthest Term. **Attention should be paid to the price levels of the outright future legs when entering spread orders in IBHY futures and IBIG futures.**

Prices for calendar spreads are net prices between the two outright futures that are part of the spread instrument's structure. **These prices are entered as positive values when the nearest term is valued at a lower price than the furthest term (contango).**

Example: CB Index futures/L1 Outright Market: Bid 126.75 x Offer 126.76

CB Index futures/L2 Outright Market: Bid 127.25 x Offer 127.26

The implied bid for the CB Index futures/Sell L1(1): Buy L2(1) calendar spread on a 1:1 ratio is derived from the bid price of L2 less the offer price of L1.

L2 Bid 127.25 – L1 Offer 126.76 = .49

The implied offer for the CB Index futures/Sell L1(1): Buy L2(1) calendar spread on a 1:1 ratio is derived from the offer price of L2 less the bid price of L1.

L2 Offer 127.26 – L1 Bid 126.75 = .51

Implied Market for CB Index futures/Sell L1 (1): Buy L2 (1) = Bid .49 x Offer .51.

A buy order entered for this Spread for .48 is a penny away from the implied bid from the net prices of the two outright markets. A sell order priced at .50 is a penny better than the implied offer from the net prices of the two outright markets.

When the nearest term outright future is valued at a higher price than the furthest term, order prices for Corporate Bond Index futures spreads are entered in negative values (backwardation).

Example: CB Index futures/L1 Outright Market: Bid 128.45 x Offer 128.46

CB Index futures/L2 Outright Market: Bid 127.22 x Offer 127.23

The structure of the CB Index future/Sell L1 (1): Buy L2 (1) calendar spread on a 1:1 ratio remains the same on the CFE trading platform. The bid price is also derived in the same way, but is now a negative integer.

L2 Bid 127.22- L1 Offer 128.46 = -1.24

The Buyer of the spread collects a $1.24 credit.

The offer price is also now a negative number.

L2 Offer 127.23- L1 Bid 128.45 = -1.22

The Seller of the spread pays $1.22 for the spread.

Implied market for the CB Index futures/Sell L1(1): Buy L2(1) calendar spread in backwardation: -1.24 x -1.22

A buy order of -1.23(credit) is a penny better than the implied price of -1.24. A sell order of -1.21(debit) is a penny away from the better implied price of the spread.

Additional Information

This document provides a high level summary of spread order pricing for CB Index futures and is not intended to be a comprehensive description.

This information is current as of October 29, 2018 and is subject to change.

For more information, please contact your Cboe Account Manager or the CFE Trade Desk at 312.786.8700 or cfetradedesk@cboe.com.