

# Side Effect Trading

Side effect trading is a phenomenon occurring in implied spread markets that can only take place when a product transitions\* to a trading state, also called opening. Side effect trading begins during the pre-open when outright orders create an implied quote that would match with a resting spread order. Upon opening, the price of this implied quote can exceed the resting spread's limit price, resulting in a price improvement. This price improvement, which must be allocated somewhere, is assigned to the resting spread on a price/time basis. The allocation to the resting spread, rather than to the outright bid or offer, has been determined to be the most defensible distribution for the price improvement.

*\*Transitions from a non-trading to trading state include scheduled openings, re-opening after a Velocity Logic event, a re-opening after a Circuit Breaker event, or a re-enabling of implied functionality in a locked limit scenario.*

## Example

In the Pre-Open, the following orders are entered	Instrument	Bid Size	Bid	Ask	Ask Size
<u>Buyer A</u> enters order to buy 1 CLM5 at 100.15	CLM5	1	100.15		
<u>Seller B</u> enters order to sell 1 CLZ5 at 100.00	CLZ5			100.00	1
<u>Spreader C</u> enters order to sell 5 CLM5-CLZ5 at 0.10	CLM5-CLZ5			0.10	5

Upon opening, Buyer A's bid in the CLM5 pairs with Seller B's offer in the CLZ5 to form an implied bid in the CLM5-CLZ5, wanting to buy 1 lot at **0.15**. This 1 lot is matched with Spreader C's resting sell order at **0.10**, but with the improved price of **0.15**. Market data reports the match at **0.15**, and the resting spread market is now 4 lots offered for sale at **0.10**.



Implied functionality does not turn on until the market opens. This is why the implied bid of **0.15** is not displayed in market data prior to the open.

## Video

Watch this video for additional information and an animated depiction of Side Effect Trading.

