TMX THE FUTURE IS YOURS TO SEE.®

STRATEGY

CRA Three-Month CORRA Futures

MONTRÉAL EXCHANGE

Spreading CRA futures against BAX futures

The short-end of the yield curve is widely followed by many market participants. One way to take a view on the very short-end of the curve is by using the CRA futures contract in conjunction with the BAX contract as part of a yield spread strategy.

Below is an illustration of the evolution of the yield spread between the overnight repo rate and the implied rate of the BAX front contract month (Three-Month Canadian Bankers' Acceptance Futures contract) from October 2019 to May 2020. We observe that the yield spread increased significantly near the end of March 2020, when the Bank of Canada did two unexpected rate cuts of 50 basis points in a few days to support the economy and financial markets in response to the Covid-19 outbreak.

Source: Bloomberg

An interest rate trader believes that credit spreads will decrease with implied yields of the BAX futures contract rising less compared to implied yields of the CRA futures contract over the next few months.

Strategy

The trader sells the spread by selling 25 CRA futures contracts and buying 25 BAX futures contracts with gains or losses of the position dependent on the yield spread between the CRA and the BAX contracts as opposed to changes in the direction of interest rates.

To neutralize a directional change of interest rates, a hedge ratio is determined using the dollar value of a basis point (DV01 or the dollar value of a 0.01% rate change) for each futures contract to assure that each leg will respond equally, in dollar terms, to a given yield change.

Contracts	Value of a 0.01% rate change
CRA futures	0.01% = $25
BAX futures	0.01% = $25

The hedge ratio, expressed in terms of CRA futures contract per BAX futures contract, is determined as follows:

$$\frac{\text{CRA DV01}}{\text{BAX DV01}} = \frac{\$25}{\$25} = 1 \text{ contract}$$

Hence, to establish a spread trade with a dollar duration that is equal to zero, the trader buys 1 BAX futures contracts for every 1 CRA futures contract sold. The strategy results in a profit if the yield spread between the CRA/BAX narrows; however, the strategy will generate a loss if the yield spread between the CRA/BAX widen.

Results

Data	June 15th	December 14th
Dec CRA futures price	99.50	99.25
Dec CRA futures implied rate	0.50%	0.75%
Dec BAX futures price	99.10	99.00
Dec BAX futures implied rate	0.90%	1.00%
Implied rate (yield) spread	**0.40%**	**0.25%**

Strategy	Formula	Profit/Loss
Sell 25 CRA futures, hold to BAX expiry	(99.25 – 99.50) x -25 x 2,500	$15,625
Buy 25 BAX futures, hold to expiry	(99.00 – 99.10) x 25 x 2,500	$-6,250
Profit/loss		**$9,375**

Conclusion

At the Dec BAX expiry, the trader decides to close his Dec CRA position and thus, realizes a profit because the yield spread between the CRA futures contract and the BAX futures contract narrowed from 0.40% (or 40 basis points) to 0.25% (or 25 basis points).