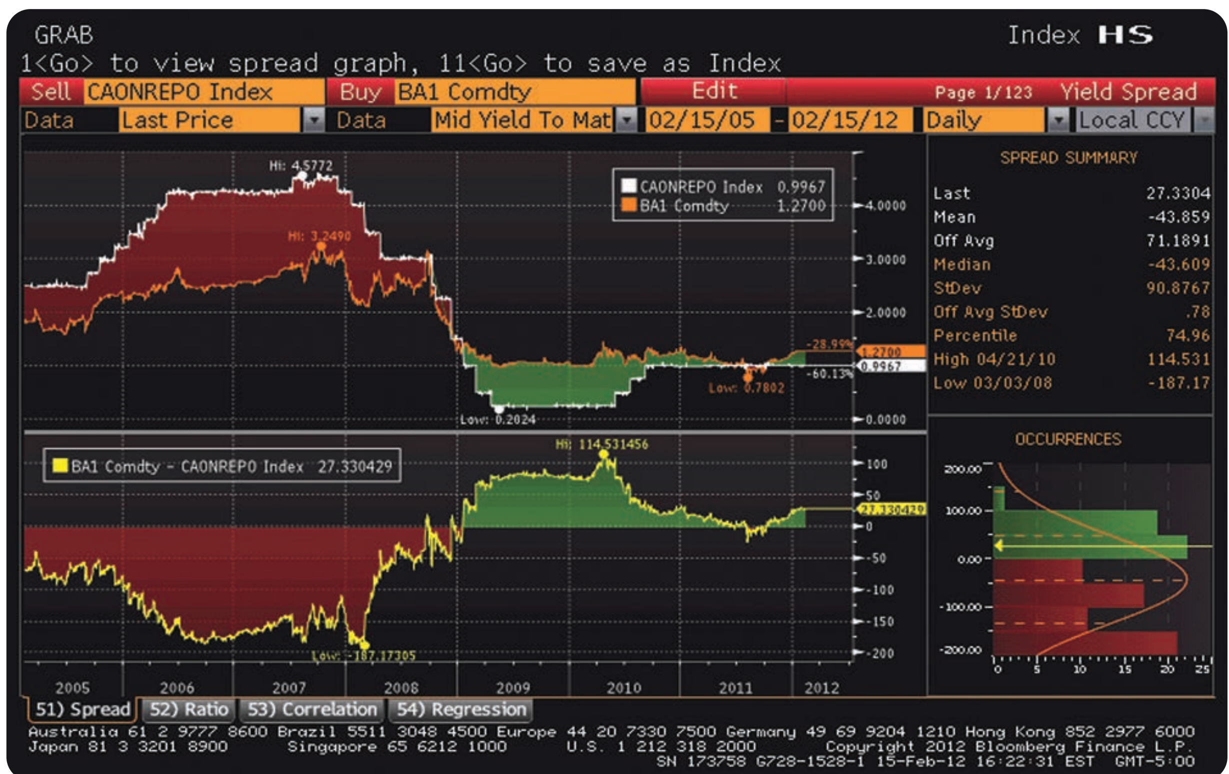
OIS™

Spreading OIS futures against BAX futures

Situation

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 OIS 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 (CORRA) and the implied rate of the BAX front contract month (Three-Month Canadian Bankers' Acceptance Futures contract) from February 2005 to February 2012. We observe that the yield spread inverted during the financial crisis of 2008.



An interest rate trader believes that credit spreads will widen with implied yields of the BAX futures contract rising more compared to implied yields of the OIS futures contract.

Strategy

The trader buys the spread by buying 10 OIS futures contracts and selling 25 BAX futures contracts with gains or losses of the position dependent on the yield spread between the OIS and the BAX as opposed to changes in the direction of interest rates.

Cont'd... >>

TMX Montréal Exchange

Strategy *(cont'd...)*

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
OIS futures	0.01% = $62.50
BAX futures	0.01% = $25.00

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

$$\frac{\text{OIS DV01}}{\text{BAX DV01}} = \frac{\$62.50}{\$25.00} = \text{2.5 contracts}$$

Hence, to establish a spread trade with a dollar duration that is equal to zero, the trader sells 2.5 BAX futures contracts for every 1 OIS futures contract bought. The strategy results in a profit if the yield spread between the OIS/BAX widens; however, the strategy will generate a loss if the yield spread between the OIS/BAX narrows.

Results

DATA	JUNE 30st	DECEMBER 31st
OIS futures price	98.75	98.50
OIS futures implied rate	1.25%	1.50%
BAX futures price	98.45	98.00
BAX futures implied rate	1.55%	2.00%
Implied rate (yield) spread	**0.30%**	**0.50%**

STRATEGY	FORMULA	PROFIT/LOSS
Buy 10 OIS futures, hold to expiry	(98.50 – 98.75) X 10 X 6,250	-$15,625
Sell 25 BAX futures, hold to expiry	(98.00 – 98.45) X -25 X 2,500	$28,125
Profit/loss		**$12,500**

Conclusion

At the expiration of the futures contracts, the trader realizes a profit because the yield spread between the OIS futures contract and the BAX futures contract widened from 0.30% (or 30 basis points) to 0.50% (or 50 basis points).

TMX | Montréal Exchange