

## Creating Synthetic Basis Positions with NCI Futures

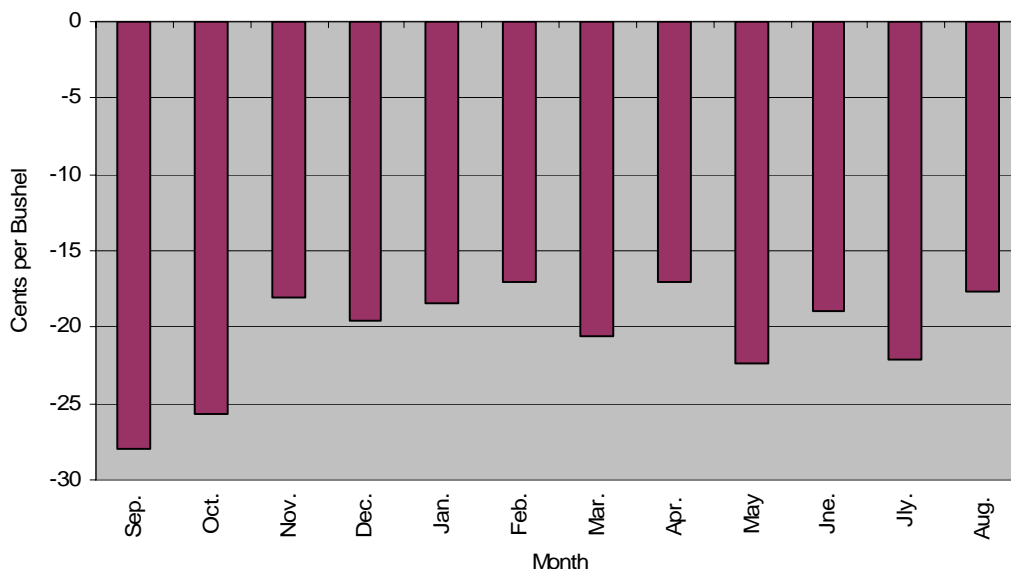
Grain merchandisers often use their intimate knowledge of cash-futures relationships to profit from basis trading. However, the size of the basis position may be limited by the firm's ability to source and merchandise large quantities of grain. In these instances, traders can use the National Corn Index (NCI) futures to create a synthetic basis position.

The NCI represents a national average elevator or country-level price. Therefore, the spread between the NCI and the CBOT futures is effectively a national average basis. A synthetic short basis position is created through the sale of the NCI and purchase of the CBOT futures. Conversely, a long synthetic basis position is equivalent to a long NCI position coupled with a short CBOT futures position.

As a recent example, consider an elevator that wanted to establish a long basis position during planting time in May of 2006. However, they were unable to enter as many local forward cash contracts as they desired. The merchandiser could supplement their long basis positions for the October harvest by purchasing the October NCI futures and selling the December CBOT corn futures.

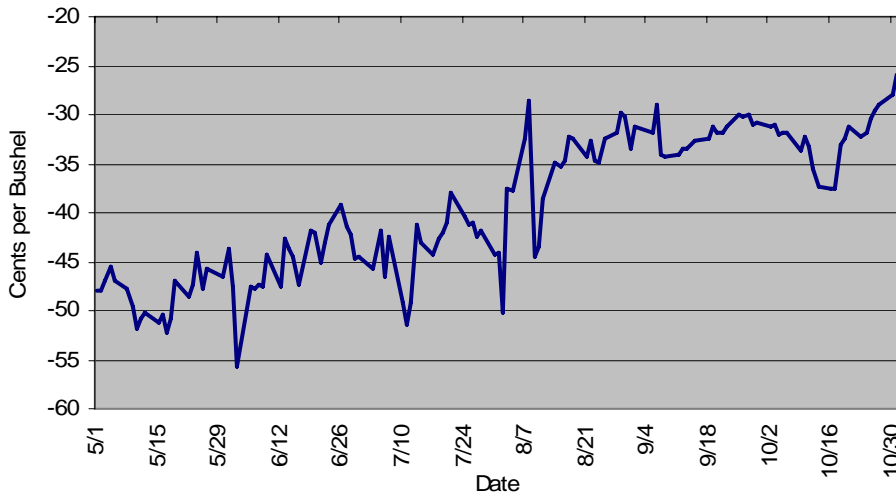
Prior to making this decision, the merchandiser might want to consult the historical average for this spread during expiration of the October NCI futures. As shown in Figure 1, the trader might reasonably expect the NCI-CBOT spread or synthetic basis to be near -25 cents in October.

**Figure 1. Historical Average NCI-CBOT Corn Spread (Synthetic Basis)**



Then, the trader could calculate the current October NCI futures – December CBOT corn futures spread and look for opportunities. As shown in Figure 2, during planting of the 2006 crop, the synthetic October basis was trading at around -50 cents during the May planting period. At that time, it would be reasonable to expect the synthetic basis to strengthen towards its historical average of -25. Therefore, the merchandiser could add to their long basis exposure with by getting long the October NCI futures and short the December CBOT corn futures at -50 cents.

**Figure 2. October NCI – December 2006 CBOT Corn Futures Spread (Synthetic Basis)**



In this instance, the trade worked as expected with the October NCI futures steadily gaining on the December CBOT corn futures through the growing season. The synthetic basis strengthened from -50 cents to near the historical average of -25 cents by the end of October, when the NCI futures financially settle. The merchandiser made a profit of 25 cents per bushel to supplement the income from the long basis positions they established in their cash business.

The NCI futures allow traders to take synthetic basis positions by spreading the NCI futures versus the CBOT corn futures. With their knowledge of the cash markets, merchandisers can use these synthetic basis positions to supplement or manage their overall basis exposure.