



Spread Opportunities Using the MGEX Wheat Indices

The Minneapolis Grain Exchange (MGEX) offers financially settled futures contracts for the Hard Red Winter wheat Index (HRWI), Soft Red Winter wheat Index (SRWI), and Hard Red Spring wheat Index (HRSI). The index-based futures contracts represent an important advancement for traders, merchandisers, and procurement professionals interested in trading wheat spreads and managing cross-class price risk.

Spread Choices

The number of unique spread opportunities among markets is represented by combinations of N markets taken two at a time, or $C(N,2) = N!/[2!(N-2)!]$. Where, $N!$ (N factorial) equals $N*(N-1)*(N-2)*(N-3)*...*(N-(N-2)*(N-(N-1)))$. So, with three markets ($N=3$), the number of spreads is $3!/[2!(3-2)!]$ or $(3*2*1)/(2*1) = 3$.

With the traditional delivery-settled wheat futures, there are three markets and three unique spreads. The introduction of the MGEX index-based futures contracts results in a total of six wheat futures markets; so, the number of spread choices is $C(6,2) = 6!/[2!*4!] = 15$. The addition of the three MGEX index-based futures contracts results in a fivefold increase in the number of unique spreads available to traders and hedgers.

The spreads create a number of unique opportunities for managing risk associated with country-level basis, class premiums, and protein premiums. Traders will undoubtedly find a number of applications for these spreads. Here, we look at two specific examples: hedging the national basis and protecting protein premiums.

Basis Spreads

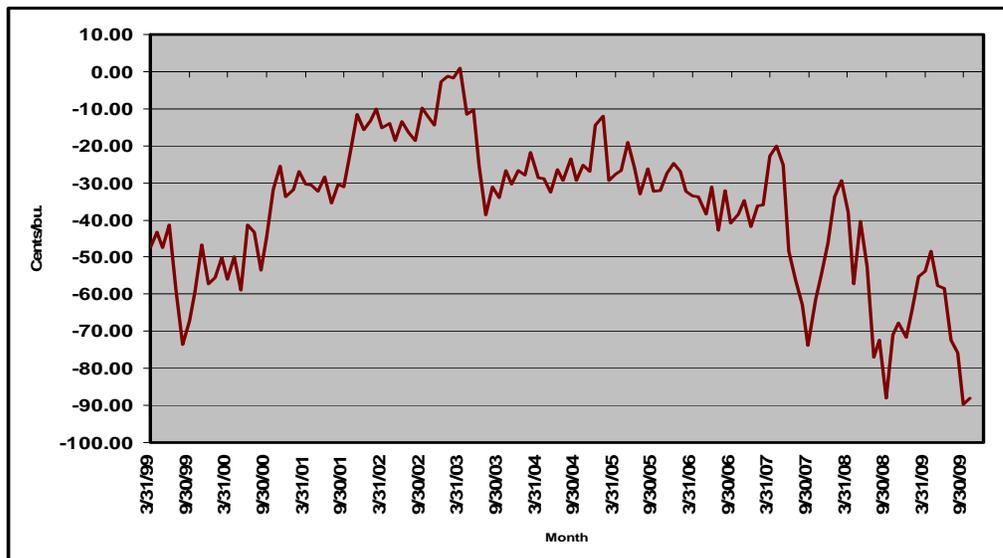
The MGEX Hard Red Winter wheat Index (HRWI) reflects interior elevator bids for hard red winter wheat. As such, it is representative of the country-level price. Therefore, the HRWI – KCBT spread reflects the average country-level HRW wheat basis versus the Kansas City futures. A merchandiser wanting to get long the basis would get long the HRWI – KCBT spread, buying the HRWI and selling the KCBT futures. Conversely, an effective short basis position is achieved through selling the HRWI and buying the KCBT futures.

End-users are naturally short the basis, where a strengthening basis may erode milling or processing margins. A purchasing manager may want to take long HRWI – KCBT spread positions to reduce their exposure to a strengthening basis.

Alternatively, assume that a flour mill enters into a forward basis agreement with a producer to purchase harvest time HRW wheat at 10¢ under the July KCBT futures, effectively taking a long basis position. As the crop develops, the mill may want to alter their long forward basis positions by selling the HRWI – KCBT spread.

The key to managing basis exposure in this manner is to understand the national average basis as represented by the HRWI – KCBT spread. As shown in Figure 1, movement in the HRWI – KCBT spread provide plenty of opportunities for the astute hedger.

Figure 1. HRWI – KCBT Spread, 2000-2009 Crop Years



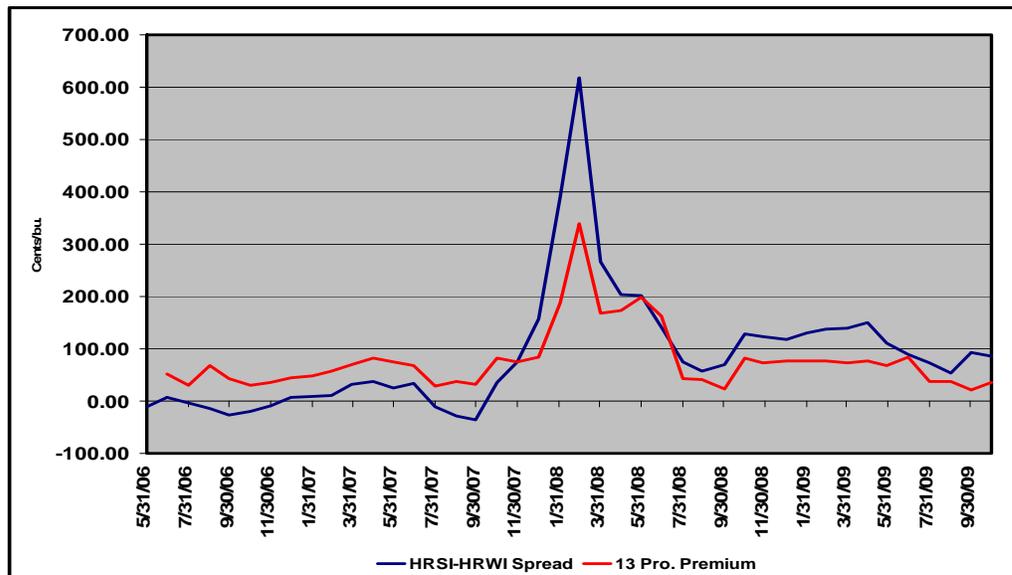
Managing Protein Premiums

Procurement managers also face risk across the marketing channel related to changes in protein premiums and class spreads. Traditionally, spreads between wheat contracts have served as a proxy for protein premiums. However, because of the delivery choices embedded in the contract specifications (e.g., CBOT wheat is a cheapest-to-deliver market), they may reflect other factors involved in the delivery process, such as alternative delivery locations.

Because they are financially settled, the MGEX index-base contracts are not impacted by the delivery process. Therefore, the prices represent a well-defined commercial quote for the underlying commodity, and the price spreads are well-suited for managing cross-class price risk.

As an example, consider the premium for 13% protein HRW wheat over ordinary HRW wheat. The 13% protein premium may be hedged by using the HRSI – HRWI futures spread. The HRSI represents the commercial quote for 14% protein HRS wheat, while the HRWI reflects the commercial quote for ordinary (up to 11% protein) HRW wheat. Not surprisingly, the HRSI – HRWI spread tends to follow the 13% protein – ordinary protein HRW premiums quoted at Kansas City.

Figure 2. HRSI – HRWI and the 13% – Ordinary Protein Premium, 2006-2009



A long spread position between the HRSI and the HRWI effectively tracks the 13% protein premium in Kansas City. A long HRSI-HRW spread position would have largely protected hedgers from the steep increase in protein premiums experienced in early 2008.

Risk managers and traders may find that spreads between the MGEX wheat index futures represent a more pure play on class spreads and protein premiums than spreads using traditional delivery-based futures contracts. Hedging protein premiums is just one example of how the spreads can be used to manage cross-class price risk.

Conclusions

The MGEX index-based wheat futures contracts increase the number of possible wheat spreads from three to fifteen. The myriad of potential spreads present a number of unique opportunities to traders and hedgers. The country-level index contracts can be spread against the traditional terminal-level delivery contracts to replicate basis positions. Spreads between wheat classes using the index contracts can be used to manage cross-class risks, such as protein premiums. With the large increase in available spreads, traders will undoubtedly find many unique ways to manage their procurement risk in the wheat complex.