

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 country 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 that the HRWI – KCBT spread must be indicative of the country-level HRW basis. To demonstrate this, the quoted Hutchinson, Kansas basis is plotted along with the HRWI – KCBT spread.

Figure 1. Hutchinson Basis Quote and HRWI – KCBT Spread, 2006 Crop Year

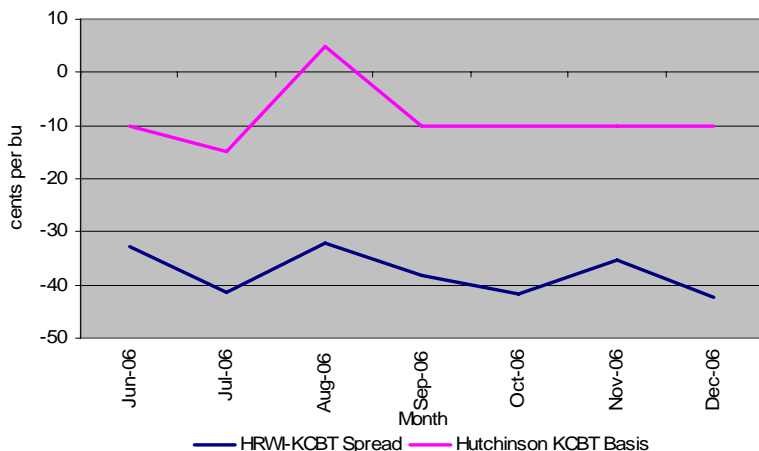
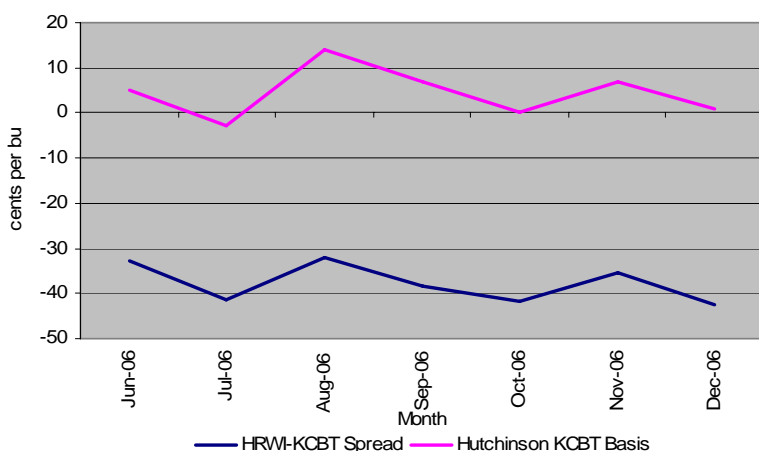


Figure 1 demonstrates that the HRWI – KCBT spread tends to track the country-level Hutchinson basis. The average difference between the two is 30¢ per bushel. So, if the HRWI – KCBT futures spread is at -40¢, then a merchandiser could get long the spread and effectively hedge a 10¢ under Hutchinson basis.

Figure 2 illustrates a similarly close relationship between the Enid, Oklahoma basis quote and the HRWI – KCBT futures spread. Grain merchandisers, who have an intimate knowledge of their local basis, may be able to take advantage of temporary discrepancies between their particular basis and the national average represented by HRWI – KCBT futures spread. For instance, if the Enid basis is unusually strong relative to the national average, they may want to replace long basis positions with long HRWI – KCBT futures spreads. The HRWI futures provide unique opportunities for hedgers to trade around their inherent basis position.

Figure 2. Enid Basis Quote and HRWI – KCBT Spread, 2006 Crop



Hedgers should be able to place similar spreads between the HRSI – MGE and the SRWI – CBOT futures to manage basis exposure in hard red spring and soft red winter wheat markets. The country-level MGEX index futures and the traditional terminal-level futures contracts provide a powerful tool for merchandisers to manage their basis exposure.

Managing Protein Premiums

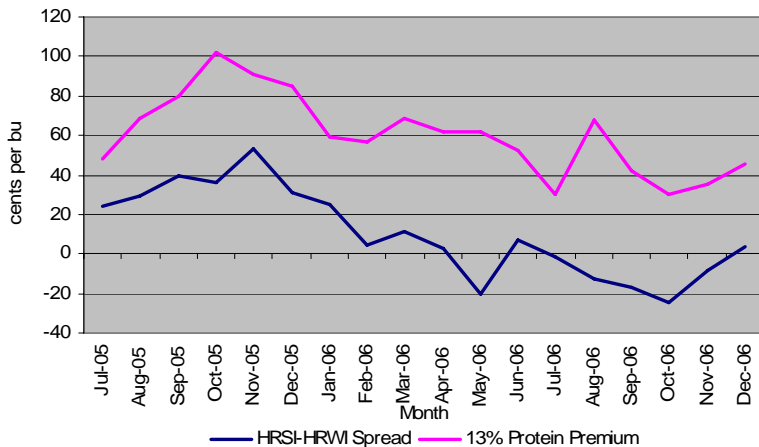
Procurement managers also face risk across the marketing channel related to changes in protein premiums and class spreads. Traditionally, spreads between wheat contracts have served as a

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 3. HRSI – HRWI and the 13% – Ordinary Protein Premium, 2005-2006



The average difference between the 13% – ordinary protein premium and the HRSI – HRWI spread is 50 cents. So, if the HRSI – HRWI spread is trading at a 10¢ premium, then one would expect a long spread position to effectively hedge a 60¢ premium for 13% protein over ordinary protein HRW at Kansas City.

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.

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