

Intermediate Marketing Workshop

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In the words of the late Jerry Garcia, lead guitarist of the Grateful Dead: "What a long strange trip it has been!" Wheat prices have moved both up and down throughout 2015. Upward movements in one month seem to have been followed by reversals in the next. July represented another of these reversals. September spring wheat futures prices began the month of July at their highest level since early January (\$6.22/bu) and then steadily declined to finish at \$5.23/bu.

As we have discussed in previous newsletters, June and July are particularly critical periods for the world wheat crop and weather can greatly influence prices. We reported last month that the June rally in wheat prices was driven by poor weather and crop quality concerns as harvest approached. In July, much of the uncertainty about the size and quality of the world wheat crop was resolved. The Kansas winter wheat harvest was strong. Crop condition reports from spring wheat growing areas such as North Dakota suggested that U.S. spring wheat yields will be relatively high.

Looming over this bearish news was large wheat inventory levels reported by the USDA in their June 30th wheat stocks report. Large inventories mean that any negative yield shocks to the current crop can be buffered by wheat inventories; the market is less concerned about yield shortfalls when inventories are large. Some analysts

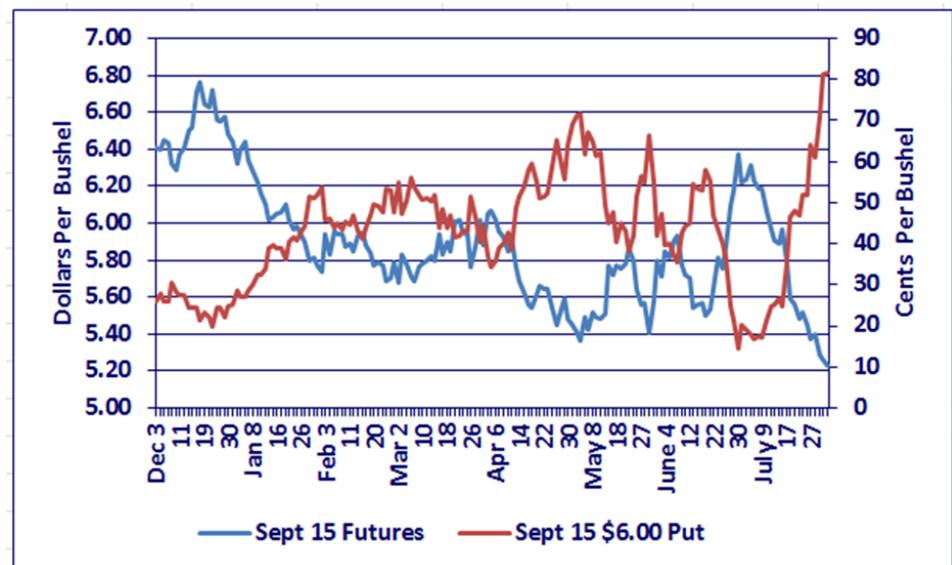
also pointed to declines in prices for other crops, such as corn, as a factor that has put downward pressure on wheat prices. But, it is more likely that wheat prices led agricultural commodity markets lower during the month of July.

In response to declines in spring wheat futures prices, the value of our September \$6.00/bu strike put option increased from \$0.2025/bu on July 1 to a record high of \$0.8150/bu on July 31. The purpose of purchasing the put option was to protect against the potential for national price declines below \$6.00/bu. Since the current futures price (\$5.23/bu) is \$0.77/bu below our MGEX September put option strike price of \$6.00/bu, our put option currently has \$0.77/bu of *intrinsic* value (i.e., if we were to exercise the option

today, we would receive \$0.77/bu from the option seller). The difference between the current value of the option (\$0.8150/bu) and its intrinsic value represents the option's *time value* (\$0.045/bu). Since we are less than two months from the option's expiration date, the time value is very small and will decline to zero at expiration.

We have included a graph that presents the MGEX September 2015 futures price and the value of our \$6.00/bu put option since our entry into the market. The correlation between the two price series continues to be almost perfectly negative (a correlation coefficient of -0.90) through the month of July. This means that our put option is a good hedge against

Graph 1: MGEX September Futures and \$6.00 Put Option Activity



changes in spring wheat futures prices – declines in the futures market have been offset by gains in the value of our put option.

The expected September Great Falls Columbia Grain spring wheat basis declined substantially in July. The wheatbasis.montana.edu website forecasted the September 2015 basis for 14% protein spring wheat to be a **minus** \$1.10/bu at the end of July in response to improvements in harvested wheat quality. Hence, our best forecast for cash 14% spring wheat prices in September at this location is \$4.13/bu (i.e., \$5.23/bu - \$1.10/bu).

The intrinsic value of our option can be added to the expected cash price of \$4.13/bu to arrive at a final expected net sales price of \$5.00/bu. Purchasing and holding a put option has covered us against falling futures prices, but not changes in the basis. A basis contract

could have been used to lock-in the better basis levels we saw earlier in the year. To discuss further the use of options to hedge, basis risk, or any other questions you would like answered in the next newsletter, please contact [Joe Janzen](#) , or 406-994-5616) or [Gary Brester](#) or 406-994-7883).

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