The Intercontinental Exchange (ICE), most noted as a commodity exchange for energy, financial, and agricultural “soft” commodity futures, has begun trading grain and oilseed contracts in competition with the CME Group’s Chicago Board of Trade. One distinctive feature of trading grain contracts on the ICE is a 22-hour trading window. Grain contracts in Chicago currently trade from 6:00 pm to 7:15 am and then 9:30 am to 1:15 pm Central time. The ICE grain and oilseed contracts trade from 8:00 pm to 6:00 pm Eastern time the next day. In response, CME announced it would expand to a 22-hour trading day as well, but has since pared that back to 21-hours, 5:00 pm to 2:00 pm Central time.

What will the expansion of trading hours mean to the agricultural producer looking to manage price risk using futures and options? Aside from an extended opportunity to enter and exit the markets, the expansion of trading hours means that the markets will be open at 7:30 am when USDA releases many of its market moving reports like World Agricultural Supply and Demand Estimates (WASDE), Grain Stocks, Planting Intentions, Acreage, and others. To answer the question of what the impact expanded trading hours will have on the hedging activities of farmers and ranchers, we need to consider how expanded hours relate to the overall purpose for which futures markets exist as well as consider the structure of the modern commodity futures exchange. Both are important in gauging the impact of this trading rule change and how the commodity trading business may continue to evolve.

The Purpose of Futures Markets

The traditional answers to the question of “What is the purpose of futures markets?” are price discovery and market liquidity. That is, the buying and selling of futures contracts allows for an efficient discovery of the price of a particular commodity, made publicly available, given the best information held by market participants. Liquidity refers to the numbers of market participants such that at any point in time there is a buyer for a willing seller, and vice versa, and that no one participant is large enough in proportion to the trade such that he or she can influence the price. In that regard, round-the-clock trading may be beneficial to both objectives; more participants trading on 24-hour information thereby enhancing both price discovery and liquidity.

The more practical answer to the question “What is the purpose of futures markets?” is “To make money.”

In This Issue...

Major commodity exchanges have expanded their hours for the trading of grain and oilseed futures contracts. This article discusses the potential impact expanded trading hours may have on the hedging activities of farmers and ranchers, and how the evolving business of commodity futures exchanges affects price risk management.
The major commodity exchanges, like CME Group and ICE, are for-profit businesses with much of that profit generated by the volume of trades. Virtual, round the clock trading will likely generate little additional volume from commodity producers and users. But, given the global nature and worldwide interest in commodity markets today, the change is directed at the institutional investor particularly seeking to attract overseas market participants. Expanded trading is also designed to try to gain market share from other competing exchanges.

Trading Issues

Even though the Chicago Board of Trade still has open outcry pit trading, the vast majority of contracts in grains and oilseeds are traded electronically; ICE futures trading is exclusively electronic. Many of these electronic trades are executed by computer generated trading systems. The concern is that allowing trading to take place at the time a market sensitive USDA report is released would increase volatility, as traders would be motivated to quickly place orders without the time they currently have to pour over the numbers and more reflectively weigh the price implications of the report. Furthermore, the rise of high-frequency trading powered by computer algorithms may contribute to excess volatility if the computer programs begin to react to the price changes caused by the reports. If the algorithmic trading is not closely supervised by humans during such periods, the extended trading hours may lead to an increase in flash crashes like the one observed in S&P 500 ETF trading in May of 2010. One way that the markets currently have to pour over the numbers and more reflectively weigh the price implications of the report. However, the rise of high-frequency trading powered by computer algorithms may contribute to excess volatility if the computer programs begin to react to the price changes caused by the reports. If the algorithmic trading is not closely supervised by humans during such periods, the extended trading hours may lead to an increase in flash crashes like the one observed in S&P 500 ETF trading in May of 2010. One way that the markets may adapt to this situation is an increase in pre-report positioning, although this still may not prevent unanticipated surprises and sharp market reactions.

An important safeguard for hedgers and speculators, alike, is still in place as trading hours are expanded — the daily trading limit. For corn, the most the closing price can vary from the previous day’s close is 40 cents on both the ICE and CBOT. When the market hits the daily price limit, trading is suspended or “locked” until the next day. These limits are expandable on succeeding trading days under certain conditions, but do offer an important cool-down period in the case of extreme volatility. In 2011, the Chicago December 2011 corn futures contract traded at the exchange imposed limit nine times, with four limit up moves and five limit down moves. Three of these locked limit days coincided with USDA reports: March 31 Planting Intentions and Grain Stocks, June 30 Acreage, and the September 30 Grain Stocks.

It is interesting that only three of the nine limit days in 2011 coincided with USDA report releases. One of the criticisms of expanded trading hours has been that the markets would be open when the reports are released. More often than not, other market events were sources of limit moves. Traders have to be adept at responding to market news whenever it occurs and would likely adapt quickly to USDA reports being released during trading hours. This has, apparently, been the case over the last five years when cotton futures were trading during the release of major USDA reports. Real time trader responses are also evident in livestock markets where some of the major futures markets moves have come from other events like BSE discoveries.

Another concern, moving forward, is that exchanges seeking increased trading activity may not want markets locked down under price limit restrictions. The incentive to appease the institutional investor may be to either increase limits, or change the amount of time before the limits reset, or perhaps both. For instance, instead of waiting until the next trading day, will a period of a few hours be seen as sufficient for markets to cool down and trading to resume?1

It can be argued that the functionality of a commodity futures exchange may benefit from a longer trading day through enhanced price discovery and liquidity, but there are costs as well. If the new trading structure results in increased volatility, then that means the financial risk and cost of holding a futures position (maintaining a margin account) will increase. This cost will be borne less by the high frequency traders who are in and out of the market quickly and more by the hedger or commercial trader whose aim is to lock in a price and reduce price risk. That does not mean that futures markets will cease to be a viable tool for managing price risk, but producers and users need to consider how changing trading rules impact their hedged position.

1 A third variable is that options markets still trade when futures are locked in a limit move. Options markets may “heat up” while futures markets are “cooling down.” This has implications for options traders and holders of futures positions as well. When this happened in cotton in March of 2008, option premiums were used to synthetically derive futures values that were then used as settlement prices for margin accounts. The resultant margin calls were far in excess of what would have been required if the last actually traded futures price had been used.
Why not trade 24 hours instead of 22? The simple answer is that there has to be a time to “settle up” the day’s trades. On paper, each trader’s account is balanced at the end of each day using the settlement prices of that day. This accounting determines whether or not a trader receives a margin call. Margins assure financial performance of futures trading, guaranteeing that both buyers and sellers ultimately meet their financial obligations. The daily settlement time allows margin accounts to be adjusted to account for the impact of the day’s trading activity. At the end of the month it allows final settlement on an expiring contract.

Summary

Expanding world markets and changing technology have created the opportunity to expand futures market trading. These brief comments are meant to help producers and users of agricultural commodities think through some of the possible implications of those changes.

For further reading:

