



## How Will Closing the Trading Pits Affect Market Performance?

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CME Group's recent [announcement](#) regarding the scheduled July 2 closing of most futures trading pits has triggered a range of reactions. News stories have covered related issues such as displaced floor traders and the effect on membership or "seat" prices, but there has been little discussion about the impact of these closings on the performance of the agricultural futures markets used by *farmdoc daily* readers. This article examines three questions of interest to market participants.

### How will pit trading perform between now and July 2?

In the agricultural markets, the transition from pit to electronic has been less rapid in livestock (Figure 1) than in grains (Figure 2), but in both cases pit-traded volume has been decreasing steadily for several years. Over the next four months, pit volume will decline to zero, although it is anyone's guess which of several possible "glide paths" these declines will take. Some floor traders will leave now; others will stick around until the very end, and possibly compete for the honor of making last trade in each market. In any event, liquidity – the ability to buy or sell without moving the price – in the pits will erode as volumes decline. Liquidity in the electronic markets may experience some modest improvement as the remaining pit-traded activity migrates to the Globex electronic trading platform.

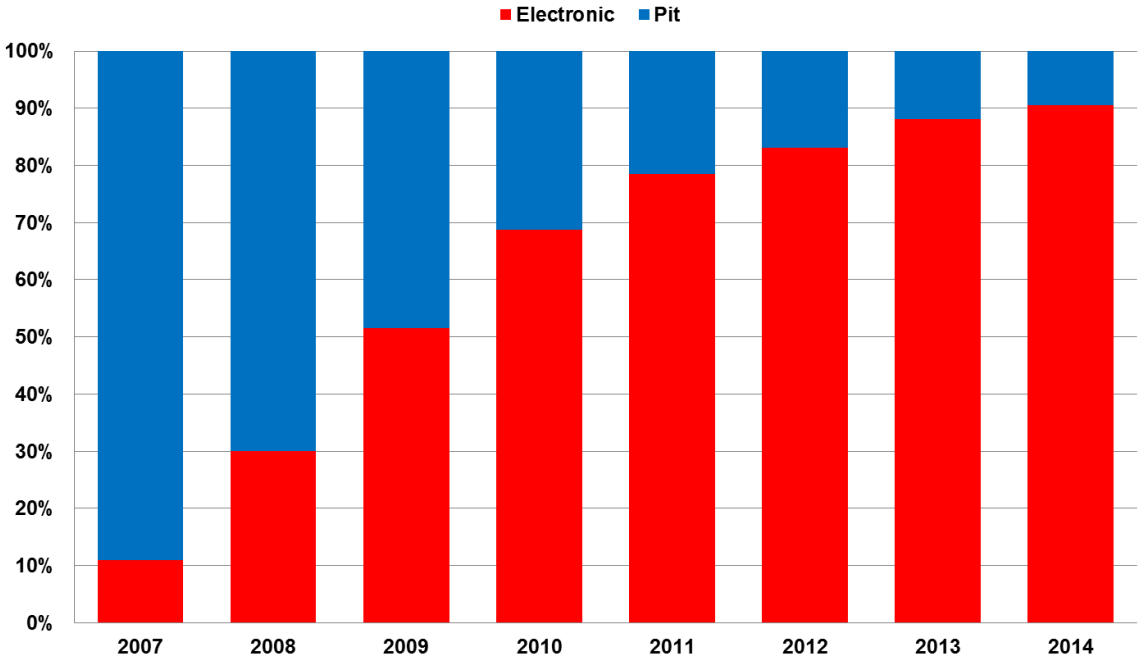
### How will the decline of pit trading affect daily settlement prices?

An earlier *farmdoc daily* [article](#) examined the procedures used to determine daily settlement prices for a number of major commodity futures markets. Most of this information is still correct, but there has been one important change: livestock futures now use a volume-weighted average price, or VWAP. VWAP is "blended" price involving both Globex-traded and pit-traded prices, with the prices from each market weighted by the respective volumes; see [here](#) for complete details. Grain and oilseed futures including KCBT wheat use a similar VWAP procedure. One feature of the VWAP is that as pit-traded volumes decline, pit-traded prices will have a decreasing influence on daily settlement prices. This reduces the potential for daily settlements to be distorted by any illiquidity-induced volatility in the pits during the final days. When pit-traded volumes eventually fall to zero, daily settlements will be calculated using only Globex prices.

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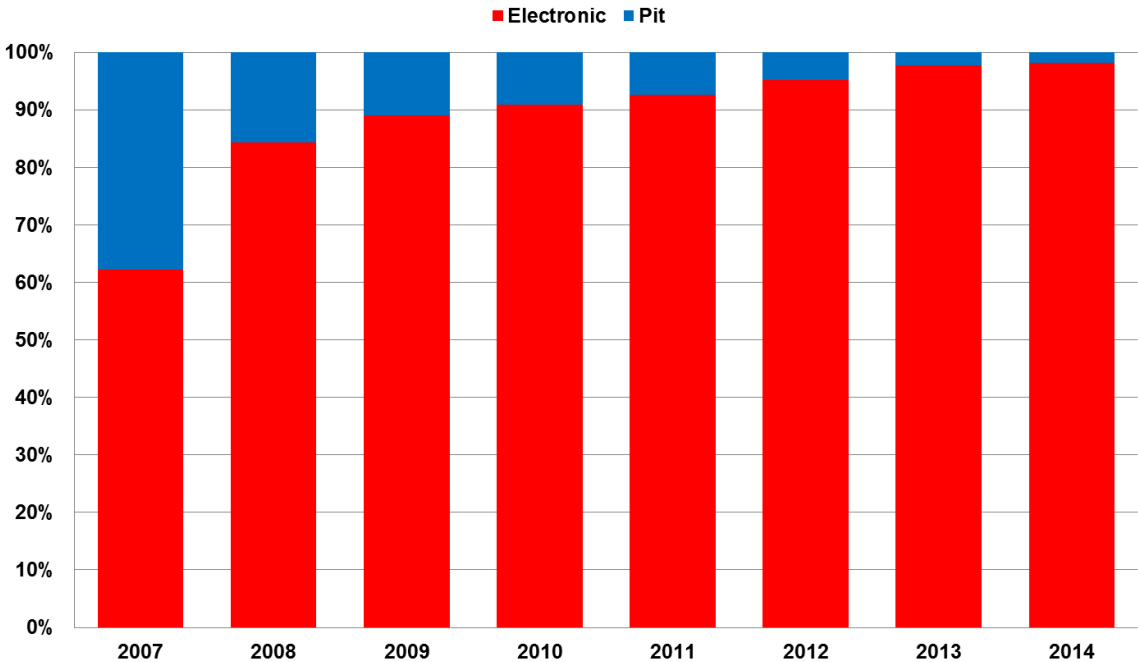
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**Figure 1. CME Livestock Futures Volume Share of Volume by Trading Method**



Source: CME Exchange Volume Report - Monthly

**Figure 2. CBOT Grains & Oilseeds Trading Volume Share of Volume by Trading Method**



Source: CBOT Exchange Volume Report - Monthly

## How will electronic-only trading affect trading costs?

To answer this question we will first define trading costs to include all costs related to making a trade, including exchange fees, brokerage, and slippage. Exchange fees are incredibly complex: see [here](#) and [here](#) for the fee schedules used for CME contracts and CBOT contracts, respectively. When viewing these schedules it is important to remember that fees are assessed “per side” (i.e., once on the buy side and once on the sell side of each trade), so for a round-turn transaction these values must be multiplied by two (x2).

In livestock futures, brokerage firm customers currently pay fees of  $\$0.69 \times 2 = \$1.38$  per contract for a round-turn trade in the pit and  $\$2.03 \times 2 = \$4.06$  per contract for a round-turn trade on Globex. Similarly in grain and oilseed futures, customers currently pay fees of  $\$0.65 \times 2 = \$1.30$  per contract for a round-turn trade in the pit and  $\$1.89 \times 2 = \$3.78$  per contract for a round-turn trade on Globex. These figures do not include brokerage fees and other charges by brokerage firms, which may vary by firm and by customer. While it may appear at first glance that electronic trading is considerably more expensive than pit-trading – by  $\$2.68 (= \$4.60 - \$1.38)$  for livestock and by  $\$2.48 (= \$3.78 - \$1.30)$  for grains and oilseeds – the all-in costs of trading suggest something different.

### Slippage

Slippage is the difference between the price at which you expect a market order will be filled – for example, the price of the last trade – and the price at which it is actually filled. This is frequently the largest part of execution costs, and is an often-overlooked cost of trading. Slippage is typically measured by the bid-ask spread, which is the difference between the highest bid, or buying price and the lowest ask, or selling price. The bid-ask spread shows how many “ticks” or minimum price increments a buyer or seller loses in getting a market order filled.

When a buy order hits the market, it is filled at the best (lowest) ask price; when a sell order hits the market, it is filled at the best (highest) bid price. The best bid and the best offer will not be the same price, for the simple reason that buyers try to pay a little less than the current market price and sellers try to receive a little more. Therefore, the narrowest or “tightest” market, by definition, will be 1 tick. In the heyday of pit trading, a 2-tick market was considered good; today, most electronically-traded contracts are 1-tick markets.

### The Importance of a Tick

How much difference does saving a tick make in terms of trading costs? If the bid-ask spread is 1 tick, this is equal to  $\$12.50$  per contract for grains, oilseeds and feeder cattle, and  $\$10.00$  per contract for live cattle & lean hogs. But these amounts are for just one side: a buy transaction only or a sell transaction only. For a complete round-turn transaction they would be twice as much, or  $\$25.00$  per contract and  $\$20.00$  per contract, respectively. These totals are more than six and five times, respectively, as large as the  $\$4.06$  and  $\$3.78$  Globex fees presented earlier in this section, and nine and eight times, respectively, as large as the  $\$2.68$  and  $\$2.48$  Globex vs. pit fee differences presented above.

Stated differently, even if pit-trading fees were zero, the trading pits could not compete against the tighter bid-ask spreads and lower all-in trading costs available in the electronic markets. The ability to trade at smaller bid-ask spreads gives electronic trading a tremendous competitive advantage. It is this competitive advantage that helps explain the rapid migration to electronic trading.

### The End of an Era

The loss of open outcry trading marks the end of an era, much like the closing of the Chicago Union Stockyards in 1971. Also like the stockyards, pit trading is being displaced by a lower-cost way of doing business. In this sense, futures trading is like any other commodity-related business, because the lowest-cost method eventually drives out all others.

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