TRADING THE CATTLE AND HOG CRUSH SPREADS

Chicago Mercantile Exchange Inc. (CME) and the Chicago Board of Trade (CBOT) have signed a definitive agreement for CME to provide clearing and related services for all CBOT products. Under the CME/CBOT Common Clearing Link, clearing services are expected to begin, pending regulatory approval, no later than January 2, 2004.

The arrangement will provide clearing firms and customers with operational, performance bond (margin) and capital efficiencies, as well as a combined risk capital pool and other expected cost savings. In providing clearing services to CBOT, CME's wholly owned Clearing House will clear, settle and guarantee all CBOT transactions, using the full resources of CME's advanced clearing processes and financial safeguards package. CME's state-of-the-art clearing system, CLEARING 21®, processes trades and positions on a real-time basis, providing users with instantaneous information on trades, positions and risk exposure. CLEARING 21 allows clearing firms to electronically manage their positions, exercise options, manage collateral posted to meet performance bond requirements and access other online applications.

CME's Clearing House uses the exchange's proprietary Standard Portfolio Analysis of Risk® (SPAN®) risk evaluation system, which has been adopted by 40 exchanges and clearing organizations worldwide. SPAN calculates the appropriate performance bond requirements for clearing firms and customers by simulating the gains and losses of complex portfolios. With the Common Clearing Link in place, SPAN will be able to recognize the risk offsets between products that were previously margined independently. As a result, collateral and capital efficiencies from combined portfolio margining will occur.

For agricultural traders, combined portfolio margining will result in a coordination of risk management strategies using exchange-traded products. In particular, livestock producers and speculators will be able to enjoy the benefits of lower margin requirements for futures positions involving corn, lean hogs, feeder cattle and live cattle.

Prior to the Common Clearing Link, the positions entered into for corn were treated separately from the positions for livestock for margin calculation purposes. Combined portfolio margining will allow the following combinations of futures positions to be margined as spread positions with lowered margin requirements:

1-Corn contract versus 2-Lean Hogs contracts
1-Corn contract and 1-Feeder Cattle contract versus 2-Live Cattle contracts
1-Corn contract versus 2-Live Cattle contracts

For example, a hog finisher can hedge the risk of corn prices increasing during the feeding period by buying corn futures contracts. Similarly, the risk of decreasing prices for slaughter hogs can be hedged by selling hog futures. One corn contract contains 5,000 bushels or 280,000 pounds, which is approximately enough corn to raise 400 pigs -- the equivalent of 2 futures contracts -- to slaughter weight. By recognizing the combined futures positions in a 1 corn to 2 hogs ratio, margins on the spread will be reduced as much as 60% from the separate margins required on the outright positions. Notice that the contract month for the corn futures position must occur prior to the contract month for the hog futures to qualify for these lower margins.

Similarly, a cattle feeder can hedge the risk of corn prices increasing during the feeding period by buying corn futures contracts. One corn contract will feed approximately 65 head of feeder cattle, the equivalent of one feeder cattle contract. The purchase price of these feeder animals can be locked in the same way. Buying one feeder cattle futures contract allows the feeder to reduce the risk of increased feeder cattle purchase prices. To complete the spread, the feeder would sell two contracts of live cattle, since one contract of live cattle contains approximately 33 head of fed steers. By selling live cattle futures, the feeder is reducing the risk of declining prices for his fed cattle. The combined futures positions of 1 corn and 1 feeder cattle to 2 live cattle contracts will receive a margin reduction of up to 85% from the separate margins required on the outright positions. Once again, the contract months for the corn and feeder cattle futures positions must occur prior to the contract month for the live cattle futures to qualify for these lower margins.

A modified cattle spread, which also qualifies for reduced margins, would be one in which 1 corn futures contract is bought, providing protection from increasing feed costs and 2 live cattle contracts are sold, reducing the risk of decreasing finished cattle prices. A margin reduction of up to 55% will be available, and the contract month for the corn futures position must occur prior to the contract month for the live cattle futures position.

Speculators also can benefit from these reduced margins. Since these spreads replicate livestock feeding operations, traders who want to use these spreads to “feed” hogs or cattle “on paper” – also called the “hog crush” or “cattle crush,” respectively – can do so at reduced rates. Other traders may prefer to use a contrarian strategy by using a “reverse hog crush” (sell 1 corn contract and buy 2 hog contracts), a “reverse cattle crush” (sell 1 corn contract, sell 1 feeder cattle contract, buy 2 live cattle contracts) or a “reverse modified cattle crush” (sell 1 corn contract, buy 2 live cattle contracts) when they believe price relationships differ from historical levels. These “reverse” spreads involve taking opposite futures positions to those that a livestock producer would use.

The following figures provide seasonality indexes for the individual commodities included in each respective spread as well as a seasonality index for each actual spread. Seasonality trends reflect the way factors affecting the components change with reasonable regularity during the year. When a line moves below the 100 percent mark on the graph, the price is below the 5-year average. Conversely, when a line moves above the 100 percent mark, the price is above the 5-year average price. The price seasonality of the actual spread is not the same as a measurement of the profits from feeding cattle or hogs. None of these graphs take into account any other costs associated with the feeding process except the cost of the feeder animal (in the case of cattle only) and the cost of corn (for both hogs and cattle). There are many additional costs that must be included when determining profitability such as operating overhead, costs of other feed included in the rations, veterinarian bills, etc.

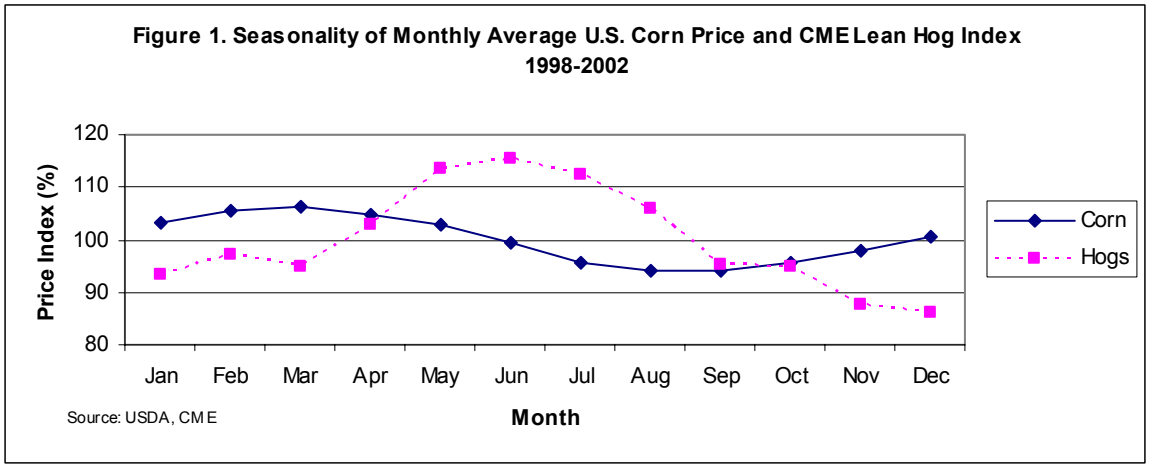
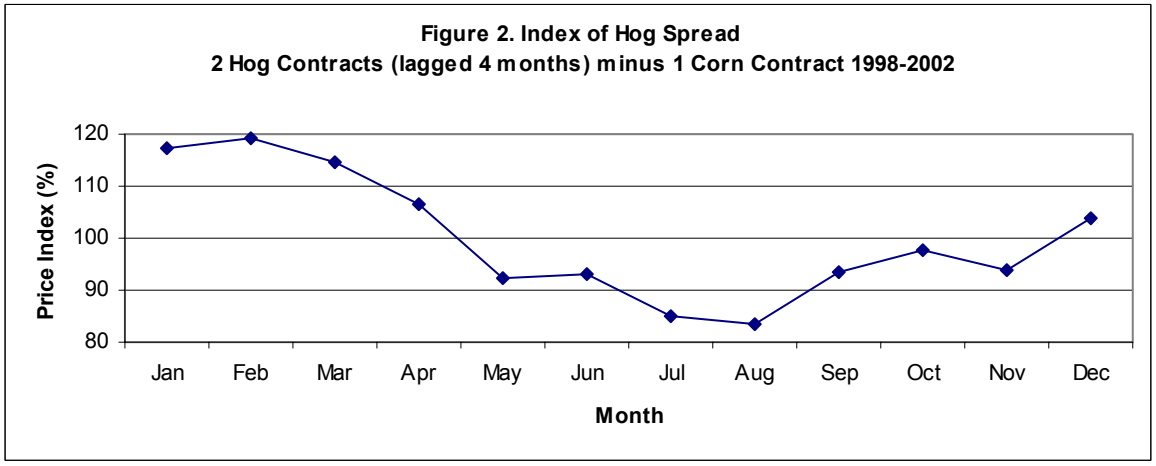


Figure 1 is a graph of the seasonality index for corn and hogs using five-year average prices. Corn prices are above the five-year average price beginning in late winter and spring, then move below the average as planting and harvesting proceeds until winter approaches and prices rise again. Hog prices rise through early summer and then decline as winter commences.



When examining the index of the hog spread, it can be seen that the spread (Figure 2) has the same general shape as the corn seasonality graph. Note that the hog position is placed in a contract month that is four months after the contract for the corn position (for example, March corn futures and July hog

futures). The four months approximate the average number of days that hogs are on feed. Graphs in which the hog position is not lagged by four months may differ from those presented here.

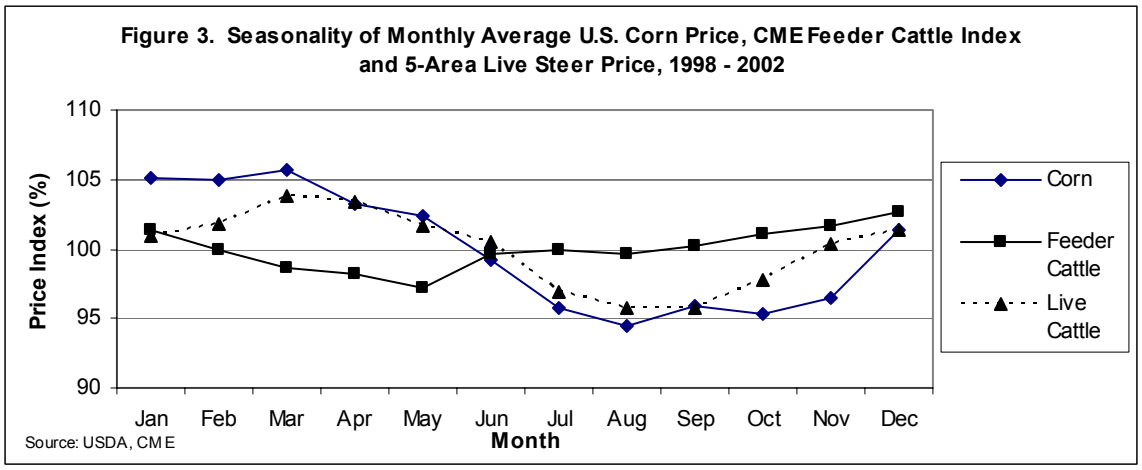
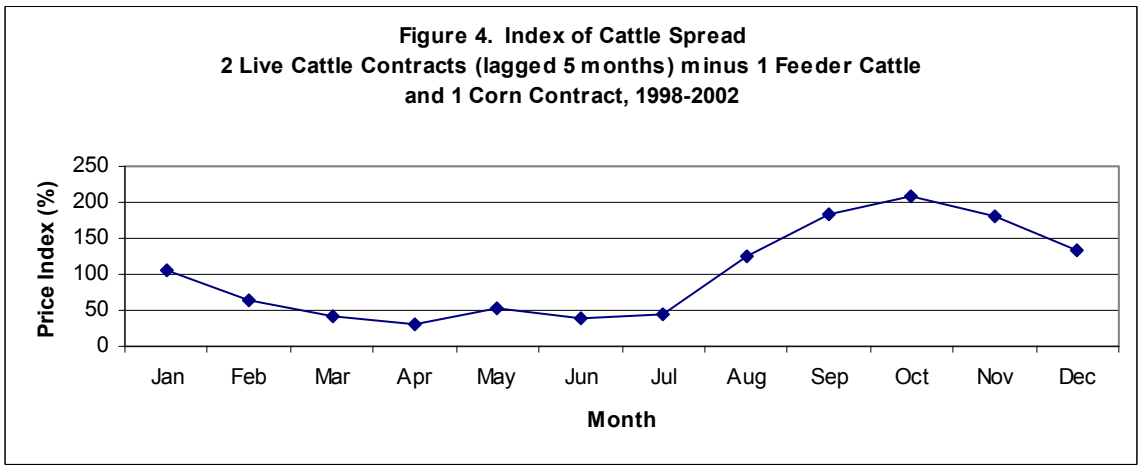
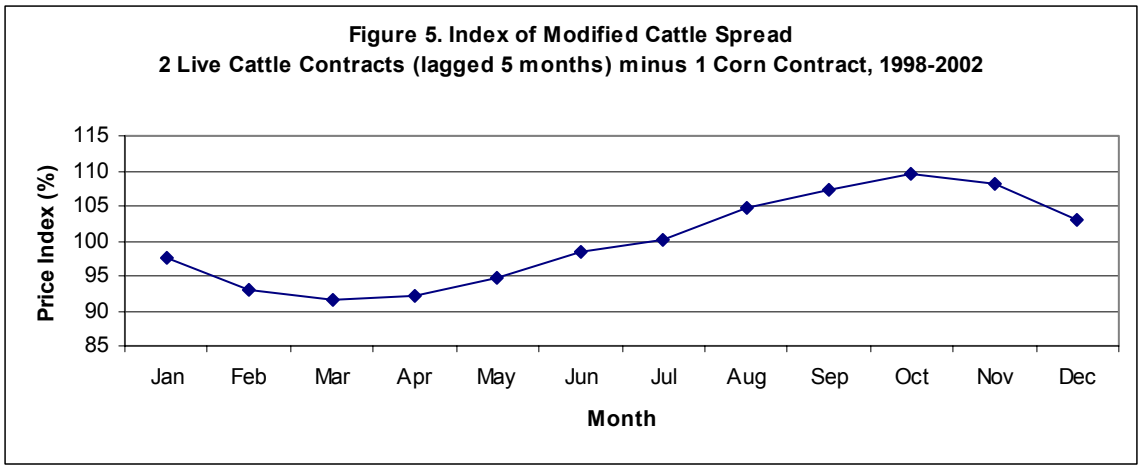


Figure 3 is a graph of the seasonality indexes for corn, feeder cattle and live cattle prices using five-year average prices. Corn seasonality follows the harvest cycle, and the lowest cattle prices correspond to large slaughter numbers during the same period. Feeder cattle prices tend to be lowest in the spring when large numbers come off wheat pasture.





It is interesting to note that the complete cattle spread, which includes the feeder cattle position, (Figure 4) has greater volatility than the modified cattle spread, which excludes feeder cattle (Figure 5). However, both spreads generally follow the same seasonality pattern in that the index is below or equal to the five-year average price until July. August is the first month in which the index is above 100 percent and this level is maintained through the rest of the year. It is important to note that in both Figures 4 and 5, the live cattle position is placed in a contract month that is five months after the contract(s) for the corn and/or feeder cattle position(s). The five months approximate the average number of days that cattle are on feed. Graphs in which the live cattle position is not lagged by five months may differ from those presented in this paper.

With the introduction of the Common Clearing Link, agricultural traders can take advantage of these opportunities available in the livestock feeding sector at reduced capital costs while continuing to manage price risk and maintaining effective trading strategies. For more information about the costs of trading or the design of trading strategies, contact your broker.