As a former agricultural loan officer, I witnessed first-hand the effects that the Dairy Herd Buyout Program had on the Cattle Market of 1986. During this time, I became intrigued by cattlemen who used some form of risk management (Futures, Options, Forward Contracting, etc.) as compared to those who did nothing but speculate on the cash market. It didn’t take long to observe which group made better financial and marketing decisions (*perhaps that “hedging stuff” that my college professors were teaching was really important after all*). This market event caused my loan officer career to be transformed into a new profession as a commodity futures broker who specialized in risk management strategies for cattlemen. However, my naïve belief back then was that everyone else was having this “illumination” about cattle hedging at the same time. In the 1980’s, it was said that less than 5% of cattlemen were involved in risk management. Fifteen years later, things haven’t changed much which is quite surprising when you look at the total dollars now at risk in any cattle operation.

After what we’ve seen during the cattle market of the past two years, I truly believe that cattlemen cannot afford to be just cattlemen any longer. Rather, they must first be “businessmen” who incidentally invest their, time, money and livelihood in a cattle operation. Therefore, the purpose of this article is to quickly review the basics of several risk management strategies in a way that is very simplistic so that the foundational hedging precepts can be easily understood.

When it comes to hedging with Futures and Options, there are several alternatives for setting in floors and locking in specific prices. The question I hear most often is, “which hedging strategy is the best?” Surprisingly, there is not one specific hedging strategy that works better than another. Only with “20/20 hindsight” could this question be answered correctly because you never know which strategy will work the best until the day you sell you cattle and liquidate your hedge position. Rather, *each strategy has its own advantages and disadvantages with varying degrees of risk and reward.*
Other determinative factors to be considered before selecting an appropriate hedging strategy include risk tolerance, financial position, debt owed on the cattle, and the personality of the hedger. For example, some cattlemen and first time hedgers cannot emotionally handle large margin calls wired back and forth from their bank to their futures account as the cattle market fluctuates up and down. Even though a better price can be locked in by hedging with futures than when forward contracting, a Put Option is an alternative strategy that can eliminate the emotional stress of hedging altogether. Since buying a Put Option is only a one-time expense that establishes a minimum floor price while keeping the upside open, no further margin calls are required. Below are several key risk management strategies used today and a short narrative on each of them. However, due to space constraints, you should consult an experienced cattle hedging broker for more detailed information before implementing any of these strategies.

**SPECULATE ON CASH MARKET:** This is the default strategy of doing nothing. Some say that since they are always buying and selling cattle regularly, this is their preferred strategy. However, unless your pockets are so deep that you can afford to take steep losses in back to back years, this is probably not the best alternative. Many lenders are now refusing to renew loans based on this strategy because it carries more financial risk than any of them.

**CASH FORWARD CONTRACTS:** The end result of a CASH FORWARD CONTRACT is almost identical to the end result of a STRAIGHT HEDGE BY SELLING FUTURES. The difference is that with a Cash Forward Contract, there is no initial margin deposit or subsequent margin calls. However, if the market moves higher after the forward contract is in place, the end result is like those margin calls were made anyway because there is no ability to participate in the higher market under either scenario. Furthermore, cash contracts are usually quoted a “few dollars back of the board”. This means the price of the cash contract will be lower than the futures price because the person making the contract needs to make a couple of dollars per hundred-weight since they are posting the margin money and laying off that risk on someone else. In a scenario where the market drops, one of the biggest concerns with a cash contract is, COUNTER-PARTY RISK. This is a term which defines the risk of default if the market drops so much that the other party doesn’t show up to pick up your cattle and fulfill their end of the contract. This happened in the energy industry with ENRON. Enron was also in the business of cash contracting with oil and gas producers. When Enron collapsed, (which no one thought possible) they defaulted on many of their cash contracts. Likewise, about every four years when the bottom falls out of the cattle market, many cash forward contracts go unperformed and litigation through the courts is the only remedy available (if the other party does not file bankruptcy first). However, if you are dealing with someone about which you have no default concerns, then consider BUYING SOME CALL OPTIONS so that you may still participate if the market rallies. The summer and fall of 2003 is a perfect example where we saw active forward contracting but very few cattlemen bought back any Call Option coverage and subsequently left thousands of dollars on the table as the market continued moving higher.

**BUYING PUT OPTIONS:** A very basic strategy and probably the best one for the first time hedger. Buying a Put allows a “floor price” to be set in at the selected strike price while allowing one to still participate if the market moves higher (unlike the Cash Contract or Straight Futures Hedge). Buying a Put is a one-time expense which means you only send in money for the initial cost of the option protection and you will not receive any other margin calls. There are
several strike prices on each contract month to choose. The closer the strike price is to the underlying futures contract, the more the option will cost. Again, the “floor price” gives the Put buyer unlimited profit potential at the strike price and below, while at the same time the maximum loss from the strategy cannot be more than the initial cost of the option. Some cattlemen buy cheap Put Options at their break-even price to simply “hold their money together”. This strategy usually complies with a bank’s lending agreement which requires the borrower to use some form of risk management.

STRAIGHT HEDGE BY SELLING FUTURES CONTRACT: Another basic hedging strategy. When Selling the Futures, the Futures Price is locked in. Margin money must be deposited with the broker. This margin money is earnest money (good faith funds) that will be used to offset any losses in the account should the market keep rising. There is unlimited risk if the market rises and the position is subject to on-going margin calls that must be immediately met to keep the positions from being liquidated by the brokerage firm. However, there is also unlimited profit potential to the downside in a declining market. If the market drops, money immediately flows into the futures account even before the position is offset. There is virtually no Counter-Party Risk because the exchange is the other party to the transaction, not some person or small corporation like in a Cash Forward Contract. The Chicago Mercantile Exchange recently pointed out in its brochure that it has never defaulted on a single transaction in any commodity since it came into existence in the late 1800’s. In fact, Futures Contracts came into existence during the Civil War era because of numerous defaults with cash forward contracts. Interestingly, Futures are really “exchanged traded forward contracts” that have been standardized so that all terms (contract size, grade, delivery, etc) are uniform and disclosed to all market participants. However, unlike the typical Cash Forward Contract, delivery on the Futures Contract is rare in the Live Cattle and impossible in the Feeder Cattle since it is cash settled on the CME Cash Feeder Steer Index Price. Typically, the day that the cattle are sold at auction, in the country, or at the feedyard, the Futures Contract is offset (bought back) which results in either a profit or loss depending upon market fluctuations during this period. The futures market gains or losses are then either credited or debited to the concurrent cash market transaction to complete the hedge analysis.

THE WINDOW/FENCE: (BUYING PUTS / SELLING CALLS): This strategy is rather complicated and is not suitable for the first time hedger. Basically, a floor price is set in at the strike price where the Put is bought. However, this strategy also requires that a “ceiling price” be set in somewhere above the current futures price which is done by Selling a Call. The advantage is the market will pay back some premium for setting in the “ceiling price” and this premium can be used to offset some of the purchase price of the Put. Because there is extra premium obtained from Selling the Call, a higher strike price on the Put might become more affordable when using this strategy. In other words, experienced hedgers use this strategy to set in a higher floor price because the Call that is sold offsets much of the cost of the Put. However, because of the “ceiling price” created from Selling the Call, initial margin money is also required (in addition to the cost of the Put). There is now unlimited risk above the Call strike price and additional margin calls will be required if the market moves higher.
**COSTLESS COLLARS (another type of WINDOW/FENCE):** Exactly the same as the Window/Fence above, except that the Call Option that is sold is at or near the same price as the Put Option that is bought. Thus, the price of the protection nets out near $0. Likewise, margin money for Selling the Call is also required as well as the potential for additional margin calls. However, as the name “costless” implies, as long as the Futures Price stays below the strike price of the Call, the protection in the end will cost almost nothing and will still provide unlimited downside protection at the strike price of the Put.

**THE BUTTERFLY: (Another type of WINDOW/FENCE with a twist):** Another complex strategy. The Butterfly starts out as a Window/Fence except that another Put is also sold several strike prices below the first Put Option that was bought. Selling this other Put is the extra twist because it cheapens up the cost of the Window because more premium is received from the additional Put that is sold. However, profit potential is no longer unlimited to the downside but is now limited to the difference between the two strike prices of the Put Options (less their net cost). This strategy is used frequently by experienced Cattle Feeders who look for an average profit of $30 to $50 per head on large volume. Unfortunately, in a market crash, the profit potential from this strategy is limited.

**PUT SPREAD: (BUYING A PUT / SELLING A PUT):** Not as complex as it sounds. Basically it is the Butterfly above without the Ceiling Price since no Call Option is sold. Now, if the Cash and Futures Market moves higher, there is full participation to the upside and no margin calls. However, to the downside, the most that can be made is the difference between the strike prices of the two puts (less the net cost). It is a one-time expense and there is no subsequent margin calls. This strategy may be appropriate when volatility levels are such that the options seem too expensive but some protection is still desirable. Again, in a market crash, the profit potential from this strategy is limited.

**SYNTHETIC PUTS: (SELLING FUTURES / BUYING CALLS):** Another complex hedging strategy which works very similar to Buying a Put but has much more flexibility. Remember, the traditional Put Option allows the buyer to pay a premium for a certain strike price which provides unlimited protection at the selected strike price. Here, the Futures are Sold (for the downside protection) and a Call is bought to keep losses predetermined should the market continue to rally. This strategy contains other advantages and disadvantages that must be considered prior to use which are too numerous to mention here. For advanced hedgers, this strategy provides some the greatest flexibility in pricing decisions but also has one of the largest requirements for margin money. This is one of my favorite strategies for more experienced risk management programs.

**CONCLUSION:** A risk management program for hedging cattle is essential regardless if that plan is simple, moderately advanced, or extremely complex. For better results, some risk management programs combine several of these hedging strategies rather than focusing on just one. Remember, these strategies are tools for transferring price risk from the cash market onto the futures/options markets, each with different levels of risk and reward. As the old proverb says, “a three-fold cord is not quickly broken”. Likewise, there should be a strong three-way relationship between the cattleman, the broker and the lender, all working together to minimize price risk and insure long-term financial viability of the cattle operation.
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