Risk Management and Insurance

Part 1 of Series

By: Dwane Link - Cattle.lytix Research and Consulting

As the market reaches for the heavens like a home sick angel, it all appears too good to be true. In life, things that seem too good to be true usually are. Which begs the questions, where is our risk and how can we manage it? Ag commodity risk is typically associated with weather, production cost and commodity price. Operations of critical mass have the luxury of using the futures market to hedge fuel, fertilizer, grain, and livestock, in order to mitigate price risk for their commodities and inputs. Smaller operators can coop together to attain critical mass, for the benefit of capitalizing on these tools. The instruments that are implemented are wide ranging and can seem daunting and confusing at first. We will discuss and define a few that may be useful.

First let us dissect a straight hedge. Live cattle contracts traded on the CME consist of 40,000 lbs. of harvest ready steers typically weighing 1200lbs. Feeder cattle contracts are comprised of 50,000 lbs. of stockers weighing 750lbs., and ready to enter the final feeding and finishing phase. Corn contracts are 5000 bu. of #2 yellow dent. For instance, 50,000 lbs. feeder cattle contract has 67 head of steers weighing 750lbs. If a stocker operator had 200 steers, he would need 3 feeder cattle contracts to protect his risk. The cattle are hedged against the month they are being shipped. It may be prudent to deliver on a month that has the most volume and open interest for the sake of liquidity. Volume and open interest are indicators of the number of contracts being traded, therefore the higher the volume the easier it is to get in and out of your hedge position (this is called liquidity).

CME Group Livestock Contracts		
Commodity	Quantity	Settlement
Feeder Cattle	50,000 lbs. live weight	12-State Average USDA Market Price ~ 700-899 lbs. feeder steers, Med-Large #1 and M-Lrg #1-2 ~ 8 total weight divisions ~ Available daily prices
Live Cattle	40,000 lbs. live weight	Physical Delivery ~ Live steers or heifers or carcasses ~ 65% Choice, 35% Select, YG 3 ~ 1,050-1,500 lbs. live: 600-900 lbs. carcass ~ Beef breeds

Suppose an operator had 200 steers at 5 weight today, and was planning to run them on grass through the summer with an ADG of 1.70. The order would be to sell 3 SEP feeder cattle contracts @ 226.025 per cwt. When you own the commodity you sell the board, when you are purchasing the commodity or offsetting your original hedge position, you buy the board. This means the operator has locked in his price risk at 226.025. In other words, if the cash market crashes in September, the hedge would guarantee the final sale price of 226.025. Think of it as insurance, like the policy you keep on your vehicle. You drive every day, praying you do not have to use it.

Example: of Feeder Cattle Hedge for Stocker Operator

Time	Cash Feeder Cattle			Feeder Cattle Futures			Basis
	Activity	Price per cwt	Position	Activity	Price per cwt	Position	
Nov. 2022	Buy 5wts	$ 160.00	long	Sell FC H23	$ 182.63	short	$ (22.63)
Mar. 23	Sell 7.5 wts	$ 199.00	short	Buy FC H23	$ 193.75	long	$ 5.25
NET:		$ 39.00		$ 21.63			$ (17.38)

The cattle were sold on the cash side for $39/cwt profit
The futures contracts lost $17/cwt at offset
Net profit: $21/cwt
The market could have easily and more predictably turned the other way and the hedge would have limited losses to only $21/cwt, locking in a bottom price

Basis = Cash-Futures

There are other factors that one must considered when looking at these tools. One being margin calls, margin is a small percentage of the contract value often referred to as vested interest or skin in the game like a deposit. In the span of time that you own the contract, there will be fluctuations in the market which will subject the account to margin calls. Margin account funds are only lost when the futures market movement results in a loss on the position. Initial margin is set by the CME, maintenance margin is established by the broker and varies from firm to firm. Currently, the maintenance margin for feeder cattle is $2850 per contract. The maintenance margin account must be reconciled daily in response to market fluctuations, it is the epitome of a zero-sum transaction. Let us say you are short (in anticipation of the market going lower) 3 contracts SEP FC @ 226.00 and the market rallies to 230.00. The margin account would need to be balanced and tapped for an additional $2000 per contract equaling $3150 ($6000-$2850). Conversely, if the futures market trended lower to 222.00 in favor of your short position, who ever holds the opposing side of the trade would be responsible for putting up the additional $6000 into your margin account.

In addition to a margin account, there will also be brokerage fees. Each brokerage firm has their own fee schedule for executing the trades and trading the paper. These fees range from $5 - $100 per trade. These costs can be factored into the breakeven and assessed as risk protection. Again, it is strictly a vehicle to be used to protect down side price risk.

Given a little practice and diligence, you can get real creative with your hedge account through cost averaging, spread management and timing strategies. If you have patience, a steady hand and enjoy math and chess, then you may really appreciate this facet. Stay tuned for next month as we dig into other avenues of risk management. In the meantime, keep your pencils sharp.

Disclaimer: There are inherent risk associated with trading futures and stocks. This article is strictly for information and educational purposes, not for investing advice. Consult your local broker or consultant for additional information.