In The Cattle Markets

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Call Spread

Recently, I heard a presentation regarding the use of option spreads to mitigate risk. Spreads are various combinations of contracts that generally involve buying something and selling something. When a specific commodity, with a specific expiration, and a specific option type is used, it is generally referred to as a vertical spread. Thus, in contrast to buying a put option outright, a vertical put spread would couple the purchase with sale of a put option at a different strike price. A vertical call spread is used when there is upside price risk to be mitigated. Usually, the option bought initially is at-the-money (or at a strike price that is close to the futures price), and the option sold initially is out-of-the-money (or at a strike price that is far away from the futures price).

The proceeds from selling an option are used to cheapen up or reduce the outlay for the option that is bought. However, by taking this approach the unlimited aspect of the purchased option is curtailed. Thus, from a hedger's perspective a vertical option would come with trade-offs that are more complex compared to buying options outright. A vertical spread may make sense if there was a specific price range that one seeks to avoid.

Consider a feedlot that is concerned about higher feeder cattle prices. The feedlot could lock in the price of feeder cattle by using futures. The feedlot could also protect against higher feeder cattle prices by buying call options. A call option would increase in value as the futures price increases. The cost of an option is dependent on how volatile prices are expected to be until the option's expiration date. Recently the implied volatility of feeder cattle has been falling and is at an average level. The August futures have been trading around $165-170 per cwt in recent weeks from its high of $187 in February. Consider an at-the-money call option at the 170 strike price. At last week's close, that option had a premium of $3.30 per cwt (ignoring any commissions and fees). Buying this call would give a price ceiling for a feedlot of $173.30 per cwt for feeder cattle, regardless of how high the futures were to rise. If the price were to fall before August, the feedlot would be out the premium.

A vertical call spread would involve selling a call with a higher strike price. For example, the 180 strike option had a premium of $1.08 per cwt at last week's close. Selling that option would reduce the outlay to $2.22 per cwt. However, if the futures price at expiration were to increase above 180, then the sold option would have a value that matches the bought option dollar-for-dollar. Thus, any upside benefits of buying the initial option would stop accruing or accumulating. The range of price risk avoided is largely contained to when the futures fall between $170 and $180 per cwt. Or, one can think about this as the trade-off of paying $2.22 per cwt to offset a potential $10 futures range. It is more art than science when selecting a strike price combination, as doing so changes the spread and premium differential.

The Markets

The markets finished mixed for the week. In the cash trade, fed cattle were lower and feeder cattle were mixed across weight classes. Boxed beef prices were higher and remain below year ago levels. Futures prices were mostly steady last week across classes and duration. Corn prices were lower on the cash side. For corn futures, the prices moved lower for the week. Distillers were lower for the week.

Data Source: USDA-AMS Market News		**Week of 5/27/22**	**Week of 5/20/22**	**Week of 5/28/21**
5-Area Fed Steer	all grades, live weight, $/cwt	$139.07	$140.25	$119.64
	all grades, dressed weight, $/cwt	$223.99	$225.80	$190.69
Boxed Beef	Choice Price, 600-900 lb., $/cwt	$264.05	$261.03	$329.64
	Choice-Select Spread, $/cwt	$19.14	$15.23	$26.30
700-800 lb. Feeder Steer	Montana 3-market, $/cwt	$163.86	$158.75	$142.93
	Nebraska 7-market, $/cwt	$165.63	$173.14	$141.97
	Oklahoma 8-market, $/cwt	$152.75	$157.01	$140.72
500-600 lb. Feeder Steer	Montana 3-market, $/cwt	$207.43	$206.57	$177.72
	Nebraska 7-market, $/cwt	$190.81	$203.26	$183.50
	Oklahoma 8-market, $/cwt	$178.46	$187.08	$164.20
Feed Grains	Corn, Omaha, NE, $/bu (Thursday)	$8.01	$8.09	$6.97
	DDGS, Nebraska, $/ton	$262.50	$270.00	$212.50