

Kevin Simpson, CFA

Vice-President & Investment Advisor kevin.simpson@rbc.com

Bert Caputo, CFA

Investment Advisor bert.caputo@rbc.com

Tyler Durst

Associate Advisor tyler.durst@rbc.com

RBC Dominion Securities Waterloo Branch 95 King St. S., 3rd Floor Waterloo, ON N2J 5A2 1-866-989-0997 www.bertcaputo.ca

RBC Dominion Securities Edmonton Branch Suite 2400, 101 St. Tower 10235-101 St. Edmonton, AB T5J 3G1 1-888-493-7707 www.kevinsimpson.ca

Commodity Futures Specialists

Hedging livestock with futures

When hedging livestock, it's crucial to understand the importance of the "basis." The basis is amount by which the local cash market differs from futures prices on any given trading day.

For futures markets and hedging to be meaningful, a couple of the fundamental relationships between cash and futures prices must hold true. First, from one day to the next, cash and futures prices may move in opposite direction. But, over the long-term, they should move in the same direction. Secondly, in the expiration month, the price of that futures contract and the cash market at the futures delivery points must come in reasonably close together by a fairly predictable amount. Many factors affect the basis – such as cash market location, grade, average weight, dressing percentage, etc.

With the above in mind, a livestock producer or feeder who decides to hedge can not know what the basis will be when the hedge is lifted. That is why the hedger needs to estimate the basis, which is easier to gauge than the absolute cash prices months into the future. The best way to estimate the basis is by examining the basis patterns of the past.

A case study

A feedlot manager, John, plans to purchase 200 head of feeder cattle in July to be placed in the feedlot in October. With signs of higher prices ahead, he decides to lock in the purchase price by buying three October Feeder Cattle futures contracts at \$105/cwt. Based on the historical data in the area, John expects the basis in October to be \$1 under. With the data, he calculates his purchasing price in October to be \$104.00 (futures price of \$95 minus the anticipated basis of \$1 under).

On the following page, you'll find a few scenarios on how John's hedge might perform.

Actual basis turns out as anticipated

In October, the futures price has risen to \$108 and cash price to \$107 – the basis is exactly \$1 under. John closes out the futures position at \$108 and buys the feeder cattle in the cash market at \$107.

Gain in futures: (\$108 - \$105) = \$3Net purchase price: (\$107 - \$3) = \$104

(The net purchase price is in line with the anticipated purchase price of \$104.)

Actual basis is weaker than expected

In October, the futures price has risen to \$108, but cash price is at \$105 – the basis is \$3 under instead of the anticipated \$1 under. John closes out the futures position at \$108 and buys the feeder cattle in the cash market at \$109.

Gain in futures: (\$108 - \$105) = \$3Net purchase price: (\$105 - \$3) = \$102

(The net purchase price is lower than the anticipated purchase price of \$104.)

Actual basis is stronger than expected

In October, the futures price has risen to \$108, but basis comes in at \$1 over instead of the anticipated \$1 under. John closes out the futures position at \$108 and buys the feeder cattle in the cash market at \$109.

Gain in futures: (\$108 - \$105) = \$3Net purchase price: (\$109 - \$3) = \$106

(The net purchase price is higher than the anticipated purchase price of \$104.)

The example shows that the difference in net purchase price is due to the variation in basis. Therefore, it is crucial to forecast the basis as best as possible to estimate the net purchase price before implementing a hedge.

For more information about livestock hedging, or commodity/financial futures, please contact us.