RESEARCH ROUNDUP

Digging deeper to evaluate usefulness of tools new and old

Compiled by Shauna Rose Hermel, editor

▶▶▶ Economist charts risk, benefit of hedging sale of live cattle

Kansas State University (K-State) Ag Economist Brian Coffey looked at the average price of steers and heifers sold in Kansas between 2010 and June 2020 to determine if hedging — a strategy to lock in prices using futures markets — is a reliable strategy for selling live cattle.

"If we look just at the average price that live cattle would have been sold for from 2010 to 2020, the hedged prices are lower, but they are only 48¢ per hundredweight (cwt.) lower than unhedged sales, on average," Coffey shared. "In other words, the risk-management benefits of hedging come at a fairly lower cost per hundredweight, on average."

Hedging helps to protect against adverse price changes in the markets by allowing a producer feeding cattle to establish an approximate selling price now and be protected if prices decline by the time they market those animals later.

"In given weeks or months, you can definitely give up potential gains in some of those extreme times when cash prices rally unexpectedly," Coffey said. "But you also avoid extreme losses in weeks or months when cash prices decline unexpectedly."

In his study, Coffey assumed a feeding period of 160 days while comparing what a producer might have earned on live cattle sales had they hedged those sales instead.

"Basically, what I assumed was that a producer would hedge cattle immediately upon placement, then immediately lift the hedge when those live cattle are priced or sold," he said. "It's a very disciplined and systematic hedging routine."

While he found a slight average-price decrease when hedging during normal times, Coffey said hedging can provide huge benefits when disaster hits the industry.

Coffey compared live-cattle prices for 23 weeks, between July and October 2019 to see what effect hedging would have had on producers' profits after the Tyson fire in fall 2019.

"What I saw was the hedged price, on average, was about $10 per hundredweight higher," he said. "If someone was marketing fed cattle week after week through that same time period, having those cattle hedged was worth an extra $10 per hundredweight."

More recently, Coffey looked at the effect of the COVID-19 pandemic, comparing prices between February 2020 and the end of June.

"The hedged value of gain averaged about $221 per head higher," Coffey said.

"The take-home lesson from both of those instances," he said, "is that hedging can protect from scenarios that can, frankly, end a business. Hedging protects against catastrophic losses."

Coffey's full report is available at *https://agmanager.info*.

▶▶▶ Study quantifies value of red meat exports to U.S. corn, soybeans

Since 2015, indirect exports of corn and soybeans through beef and pork exports have been the fastest-growing category of corn and soybean use, delivering critical returns for corn and soybean farmers. These producers support the international promotion of U.S. beef, pork and lamb by investing a portion of their checkoff dollars in market development efforts conducted by the U.S. Meat Export Federation (USMEF).

USMEF recently released an updated version of an independent study aimed at quantifying the value red meat exports provide to U.S. corn and soybean producers. The original study was conducted in 2016. Updates were released in 2018 and 2019. Key findings from the latest version, which uses 2019 export data, include:

Value of red meat exports' feed use of corn and soybeans

- In 2019, U.S. beef and pork exports used 480 million bushels (bu.) of corn. Corn revenue generated by pork exports totaled $1.8 billion (480 million bu. at average annual price of $3.75 per bu.).
- In 2019, U.S. pork exports used 2.12 million tons of soybean meal, which is the equivalent of 89.2 million bu. of soybeans. Soybean revenue generated by pork exports totaled $751.7 million (89.2 million bu. at average annual price of $8.43 per bu.).
- Beef and pork exports also used about 3 million tons of dried distillers' grains with solubles (DDGS) in 2019 at an annual average price of $137 per ton. This generated $411.8 million in revenue for ethanol mills' coproducts.

Value to U.S. corn and soybean crop from red meat exports

- In 2019, beef and pork exports contributed more than 12% of the per-bushel price of corn ($0.46 per bu.) of an annual average price of $3.75 per bu. With total production of 13.62 billion bu., the value of pork exports to the U.S. corn crop was $6.26 billion.
- In 2019, pork exports contributed 9% of the per-bushel price of soybeans ($0.76 per bu.) of an annual average price of $8.43. With total production of 3.55 billion bu., the value of pork exports was $2.7 billion to the U.S. soybean crop.

"The value of red meat exports to corn is higher than the previous year, both in cents per bushel and percentage of total price," explained Dave Juday, senior analyst for World Perspectives Inc., who conducted the original study and subsequent updates. "Soybean prices last year trended lower overall, so the total value of pork exports to U.S. soybeans — in terms of cents per bushel — is not as large as in our last update. But the value added as a percentage of the per-bushel price remained steady."

USMEF President and CEO Dan Halstrom said quantifying the value delivered by beef and pork exports is reassuring to corn and soybean producers, who provide critical support for USMEF's efforts to expand global demand for U.S. red meat.

"These are challenging times for everyone in U.S. agriculture, with producers facing difficult choices every day," Halstrom said. "USMEF greatly appreciates the foresight and confidence shown by the corn and soybean sectors when they invest in red meat exports, and this study provides a detailed analysis of the value delivered by that investment."

Handouts detailing the impact of red meat exports on the leading corn-producing and soybean-producing states are available from the USMEF website.