Price Risk Management for Cow-Calf Producers: Part 3

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Cow-calf producers use various strategies to manage price risk, including futures and options. Livestock Risk Protection (LRP) is a livestock insurance product that is like a put option. The focus of this article is the cost of LRP.

What is LRP? LRP is price insurance that pays out when market prices for feeder cattle are lower than expected. For example, consider a producer that is calving in April and selling at wean in October. The current LRP expected price for feeder cattle being sold in October is around $194/cwt, similar to the futures price. This producer can purchase an LRP policy (or "endorsement") at "coverage prices" which range from around $174/cwt to $194/cwt. If the actual price in October is less than the producer-selected coverage price, the producer will receive a payout (or "indemnity") to make up the difference between the actual and expected price.

Producers pay a "premium" for the effective price floor that LRP provides, with higher coverage prices having higher premiums. The lowest coverage levels have the maximum Federal government cost share of 50%, while the highest coverage levels have a government cost share of 35%. Because of recent increases in the government cost share, LRP is now more affordable for the producer. LRP is also cheaper than purchasing a put option due to this cost share.

The table below shows the estimated cost of current LRP coverage price choices. These producer premium estimates were obtained on February 24 for unborn steers and heifers in Kansas intended for sale in October.

Table 1. Current LRP-feeder cattle costs

Coverage price	Producer Premium
$193.11	$6.57
$188.91	$5.21
$184.71	$4.09
$180.51	$2.93
$176.31	$2.27
$174.21	$1.81

Note: Estimated premiums for selected coverage prices collected on 2/24/2022 from https://public.rma.usda.gov/livestockreports/main.aspx. Official premiums vary daily and can only be provided by an insurance agent.

The highest coverage prices have a higher cost (up to $6.57 per cwt in this example) because it is much more likely that actual prices in October will be below $193 than below $174. The premium cost for the $174 coverage price is less ($1.81/cwt) and reflects the reduced likelihood of a price decline below that point. Further, any indemnities for higher coverage prices will be larger.

Given the inflation and uncertainty in today's economy, many producers are wary of additional expenses. There are many ways for a producer to consider the cost of LRP: below are a few examples.

1. Is the premium worth the revenue guarantee? Is $6.57 per cwt worth guaranteed revenue (or price floor) of $193 per cwt? Or is $1.81 per cwt worth a guarantee of $174 per cwt?
2. A producer may know their breakeven price for calves or have a target price for calves. Are current LRP coverage prices and premiums sufficient to help a producer achieve that price?

For example, is your breakeven price less than $186? (or the LRP coverage price less producer premium: $193.11-$6.57=$186.54)

3. How does LRP compare to existing expenses that help lower revenue risk? For example, Bovine Respiratory Syncytial Virus (BRSV) and Bovine Viral Diarrhea (BVD) both cause illness, reduced performance, and even mortality in calves, lowering revenue.[1] One estimate of BVD vaccine costs (not including labor) for pre-weaned calves was equivalent to approximately $2/cwt[2], which is comparable to LRP premiums.

Currently LRP policies have premiums that can range from $1-$7 per cwt. In the next article in this series, we will discuss in more detail the value of the price guarantee provided by LRP.

For more information, please contact the local K-State Research and Extension Office.

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[1] One study estimated that BVD costs the beef cattle industry $1.5-$2.5 billion per year (https://www.beefmagazine.com/blog/how-much-money-have-you-lost-bvd)

[2] One study estimated a cost of $6.25 to vaccinate a preweaned calf for BVD (only), which for a 300-pound calf is equivalent to approximately $2 per cwt. This estimate does not include labor costs. Costs can vary significantly by individual operation. For more information, see https://avmajournals.avma.org/view/journals/javma/253/5/javma.253.5.617.xml