Proceedings, State of Beef Conference
November 2 and 3, 2016, North Platte, Nebraska

PRICE RISK MANAGEMENT AS PART OF A MARKETING PLAN

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Introduction

A written risk management plan that takes into account cost of production, meeting customer wants, market seasonality and price risk can help producers recognize and take advantage of marketing opportunities. Cattle price movement and volatility, (both up and down) in the last several years have been breathtaking. Many cow-calf and stocker/yearling producers are aware of price risk tools available to them such as futures and options that can be used to try to mitigate price risk. Utilization of these tools by many cow-calf and stocker/yearling producers seems to be limited. The size of Feeder Cattle futures contracts and options along with the specification of weight at 50,000 pounds of cattle per contract keeps many producers from considering the use of these tools. For some producers the idea of getting a broker and the potential for margin calls related to a market position deters many from using these tools to potentially reduce price risk.

Livestock Risk Protection Insurance

An alternative for producers to futures and options for price risk management is Livestock Risk Protection Insurance (LRP). This insurance is available to feeder and fed cattle producers. It is single-peril insurance that covers price risk only. It doesn't cover production or death loss risk. LRP is similar to a put option in that it allows a producer to set a floor price while leaving market moves to the upside open. LRP is available in many forms, terms of length and coverage levels. The insurance is offered by the USDA Risk Management Agency (RMA) and is available from licensed crop insurance agents. Dr. Kathleen Brooks and Dr. Jay Parsons have authored two Nebraska Extension NebGuides "Livestock Risk Protection Insurance for Feeder Cattle" and "Livestock Risk Protection Insurance for Fed Cattle" that provide details on the rules and regulations of LRP and give examples of how it works. These NebGuides are available at http://beef.unl.edu/nebguides.

An Analysis of LRP Insurance Performance for Feeder Cattle Producers

When evaluating a risk management tool like LRP insurance, it is beneficial to review historic performance for how the tool would have performed given parameters that reflect a future projected use. An analysis of 5 LRP cattle products available in Nebraska from 2005-2014 was conducted by Jay Parsons and Kathleen Brooks (2015). They analyzed a 13-week coverage endorsement which was taken out on August 6, or the subsequent Monday if August 6 was on a weekend) of each year at the highest coverage price available for the insurance. This resulted in an ending date of November 5-7 of each year. This time represents when many producers are marketing calves or feeder cattle off of grass in the fall.

The premiums reported in the tables are what producers would have paid after the 13% subsidy paid by the USDA.

Two tables from the analysis have been added to with data from 2015 utilizing the same time frame to reflect what would have occurred last year.

Results of the analysis showed for 5 of the 11 years from 2004-2015 that an indemnity would have been paid for steers weighing less than 600 pounds (Table 1) and steers weighing 600-900 pounds (Table 2). Indemnities were paid from 2006-2009 and also in 2015. From 2010 to 2014, insurance premiums would have been paid by the producer but no indemnities would have been collected for the coverage selected. Over that 11 year period, purchasing insurance for steer calves less than 600 pounds would have resulted in the producer collecting an average of $1.55 per hundred weight of steer calf insured. For every $1.00 in premiums the producer paid, they would have gotten back $1.55. Another way to look at it is that it would have netted an additional $7.75 per head on a 500 pound steer.

For the time frame analyzed, the year when buying the insurance was really beneficial was in 2008. That year an indemnity of $18.42 would have been paid per hundred weight of steer calf insured or $92.10 per head on a 500 pound steer. The 2008 year is the example of when buying the insurance proved to be valuable.

For several years in a row, from 2010 – 2014, producers buying the insurance would not have collected an indemnity. Producers who started buying the insurance in 2010 may have wondered at the value of buying the insurance as prices tended to be steady or increasing over that 5 year period for the time frame insured. However, LRP insurance is probably best utilized when it is consistently part of a complete marketing and risk management plan. Trying to out guess what the market will do when using LRP insurance will likely result in disappointing results.

SUMMARY

The use of LRP in a risk management plan provides the opportunity to protect against an unexpected downturn in the market. LRP Insurance should be viewed as its title implies, as insurance. A person purchases insurance on a car or a home hoping that they will not need to collect an indemnity. LRP insurance is much the same. A producer purchases the insurance hoping that they won't need to collect, but knowing the insurance protects them from a major downward price move in the market.

LITERATURE CITED

Parsons, J. and Brooks, K. 2015. "LRP Insurance Performance 2005-2014" UNL BeefWatch, August. University of Nebraska-Lincoln. Lincoln, NE. http://newsroom.unl.edu/announce/beef/4433/25161

Table 1. LRP-Feeder Cattle Steers Weight 1, less than 600 lbs

	8/8/05	**8/7/06**	**8/6/07**	**8/6/08**	**8/6/09**	**8/6/10**	**8/8/11**	**8/6/12**	**8/6/13**	**8/6/14**	**8/6/15**	**Average**	**Indemnity Ratio**
Expected Ending Value (Nov 5-7)	115.87	126.80	129.07	129.91	111.75	124.74	149.22	155.48	176.23	240.99	228.80		
Coverage Price	108.17	119.16	127.61	129.14	109.68	120.89	144.82	135.13	175.49	238.62	209.96		
Actual Ending Value (Nov 5-7)	127.67	113.52	119.64	106.25	102.47	122.45	156.17	158.53	181.05	264.40	208.47		
Indemnity	0	5.64	7.97	22.89	7.21	0	0	0	0	0	1.49	4.11	**1.61**
Premium	0.77	0.99	3.04	4.47	2.69	2.10	3.33	0.43	3.53	5.52	1.24	2.56	
Net Effect	**($0.77)**	**$4.65**	**$4.93**	**$18.42**	**$4.52**	**($2.10)**	**($3.33)**	**($0.43)**	**($3.53)**	**($5.52)**	**$0.25**	**$1.55**	

Table 2. LRP-Feeder Cattle Steers Weight 2, 600 to 900 lbs

	8/8/05	**8/7/06**	**8/6/07**	**8/6/08**	**8/6/09**	**8/6/10**	**8/8/11**	**8/6/12**	**8/6/13**	**8/6/14**	**8/6/15**	**Average**	**Indemnity Ratio**
Expected Ending Value (Nov 5-7)	105.34	115.27	117.34	118.10	101.59	113.40	135.65	141.35	160.21	219.08	208.00		
Coverage Price	98.34	108.32	116.01	117.40	99.71	109.90	131.65	122.85	159.54	216.93	190.88		
Actual Ending Value (Nov 5-7)	116.06	103.20	108.76	96.59	93.15	111.32	141.97	144.12	164.59	240.36	189.52		
Indemnity	0	5.12	7.25	20.81	6.56	0	0	0	0	0	1.36	3.74	**1.61**
Premium	0.70	0.91	2.77	4.06	2.45	1.91	3.03	0.38	3.21	5.01	1.13	2.32	
Net Effect	**($0.70)**	**$4.21**	**$4.48**	**$16.75**	**$4.11**	**($1.91)**	**($3.03)**	**($0.38)**	**($3.21)**	**($5.01)**	**$0.23**	**$1.41**	

NOTES