July 2006

Livestock Gross Margin Insurance for Cattle

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CORNHUSKER ECONOMICS

July 26, 2006

University of Nebraska–Lincoln Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
http://agecon.unl.edu/pub/cornhusker.htm

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Market Report	Yr Ago	4 Wks Ago	7/21/06
Livestock and Products, Weekly Average			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight	$79.02	$81.83	$80.17
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb	128.17	140.65	135.39
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb	111.96	116.68	119.95
Choice Boxed Beef, 600-750 lb. Carcass	129.77	152.28	144.12
Western Corn Belt Base Hog Price Carcass, Negotiated	68.14	78.07	67.89
Feeder Pigs, National Direct 45 lbs, FOB	45.97	50.42	49.27
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean	71.01	81.76	73.77
Slaughter Lambs, Ch. & Pr., 90-160 lbs., Shorn, Midwest	105.00	80.00	100.00
National Carcass Lamb Cutout, FOB	250.36	218.01	229.50
Crops, Daily Spot Prices			
Wheat, No. 1, H.W. Imperial, bu	2.97	4.58	4.61
Corn, No. 2, Yellow Omaha, bu	1.83	1.99	2.06
Soybeans, No. 1, Yellow Omaha, bu	6.55	5.56	5.46
Grain Sorghum, No. 2, Yellow Columbus, cwt	3.14	2.68	3.16
Oats, No. 2, Heavy Minneapolis, MN , bu	1.87	2.25	2.18
Hay			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton	117.50	130.00	135.00
Alfalfa, Large Rounds, Good Platte Valley, ton	37.50	80.00	87.50
Grass Hay, Large Rounds, Good Northeast Nebraska, ton	52.50	55.00	82.50
* No market.			

Livestock Gross Margin Insurance (LGM) for Cattle is a relatively new insurance policy offered through USDA's Risk Management Agency (RMA) that offers protection against a decline in cattle feeding margins. LGM provides protection as a bundled option that comprehensively covers the cost of corn, the cost of feeder cattle and the fed cattle selling price, unlike traditional options on futures where these margin components must be hedged separately. Essentially, LGM provides insured producers an indemnity when the spread between fed cattle sales prices and feeder cattle and corn input prices narrows due to changing market conditions.

As this margin narrows, the insurance indemnity payment becomes larger to offset lower revenues or increased costs. LGM for Cattle has an 11-month insurance coverage period, allowing producers to establish target marketings in any of the 11 months except the first month. Indemnity payments are based on a Gross Margin Guarantee (GMG) and a total Actual Gross Margin (AGM). The GMG is the total cattle feeding margin for the 11 months of target marketings that producers insure when they purchase the policy. The total AGM is the cattle feeding margin that actually occurred in the market after the 11-month coverage period. At the end of the 11-month insurance period an indemnity is paid to the producer if the total AGM exceeds the GMG. The GMG and AGM are based on adjusted futures prices and state and month-specific basis levels.

LGM is unique from traditional options and futures and offers several advantages. By allowing producers to sign up 12 times per year and insure all of the cattle they expect to market over a rolling 11-month period (up to program limits), insured individuals do not need to decide on the mix of options to purchase, the strike price of the options or the date of entry into the various option contracts. In addition to being convenient, LGM also offers customization. This policy can be tailored to fit the needs of any size operation (within policy limitations). Because there is no minimum number of head to insure with LGM, producers with smaller-sized operations can obtain beneficial price protection through its use.

LGM for Cattle is currently available in 20 states (Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, North Dakota, Ohio, Oklahoma, South Dakota, Texas, Utah, West Virginia, Wisconsin and Wyoming) for calf finishing and yearling finishing operations. In order to be eligible for this policy, the insured cattle must be located in one of these 20 states and be specifically intended for commercial or private slaughter (no breeding animals). The owner of the cattle must reside in one of the 48 contiguous states and have at least 10 percent interest in the insured cattle in order to constitute substantial beneficial interest.

LGM is sold on the last business day of every month. The sales period commences once RMA validates the futures price data that will be used to calculate the GMG. This verification of data occurs after the futures market closes on the last day of the price discovery period, which is simply the last three days of prices in the corresponding commodity months (fed cattle, feeder cattle and corn) that are used to calculate gross margins for each of the target marketing months. The LGM sales periods ends at 9:00 am CST on the next business day. At the time of policy purchase, producers can elect not to insure a portion of the expected gross margin by selecting a deductible. Deductible amounts range from zero to $150 per head, in $10 per head increments. Producers are not required to insure all cattle they plan to sell and can therefore insure any amount of cattle they own up to a program limit of 5,000 head for any 11-month insurance period, and a limit of 10,000 head per crop year (July 1 to June 30).

At the time of coverage purchase an expected gross margin (EGM) is calculated per head for each target marketing month. The EGM per head for month t is calculated using one of the following equations:

Calf Finishing

$EGM_t = (11.5 * \text{Live Cattle Price}_t) - (5.5 * \text{Feeder Cattle Price}_{t-8}) - (54.5 * \text{Corn Price}_{t-4})$

Yearling Finishing

$EGM_t = (12.5 * \text{Live Cattle Price}_t) - (7.5 * \text{Feeder Cattle Price}_{t-5}) - (57.5 * \text{Corn Price}_{t-2})$

Once all EGMs are calculated for each of the 11 target marketing months (some months may be zero), all applicable EGMs are then multiplied by their respective target marketings (number of head insured). These monthly totals are then added to create the total EGM. A GMG is then calculated by subtracting the total deductible (per head deductible times the number of cattle to be marketed) from the total EGM. At the end of the 11-month insurance period, a total actual gross margin (AGM) will be calculated. The AGM per head is based on the three respective commodity futures prices (fed cattle, feeder cattle and corn), and when the cattle are scheduled to be marketed (the target marketing month) according to the same equation used to calculate EGM. Once the total AGM has been calculated based on final realized futures prices, an indemnity equal to the difference between the total AGM and GMG is paid if the GMG exceeds the total AGM. Indemnities are not paid until the end of the 11-month insurance period.

Even though price risk is reduced with this coverage, it is not completely eliminated nor are other risks associated with feeding cattle. This policy does not protect against death loss or other losses or damage to the cattle. Basis may also pose a risk. It is important to understand that the prices used to calculate the expected and actual gross margins consist of an average futures price and a fixed basis (not the producers' actual basis). These prices are not the same as the cash prices producers will experience in their own local fed cattle, feeder cattle and corn markets. Even though each policy uses a state and month-specific basis, LGM basis is the difference between the adjusted futures price (including the policy's fixed basis) and the local cash selling price producers actually receive (using local basis).

LGM for Cattle offers a unique way for cattle feeders to simultaneously manage the three largest price risks they face: changes in fed cattle, feeder cattle and corn prices. As a result, the LGM for Cattle policy is somewhat more complex than previous livestock insurance policies (e.g., Livestock Risk Protection Insurance). University of Nebraska-Lincoln Extension, in partnership with Nebraska Cattlemen and Nebraska Pork Producers Association, recently received a grant from the North Central Risk Management Education Center to assist cattle feeders and insurance agents in learning about this new tool. Later this year, a series of educational seminars focusing on LGM will be held across Nebraska. In addition, NebGuides, Extension Circulars and online "webinars" will be available by the end of 2006.

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