NebGuide

University of Nebraska–Lincoln Extension, Institute of Agriculture and Natural Resources

Know how. Know now.

G2088

Feeder Cattle Price Slides

Rick J. Rasby, Beef Specialist
Darrell R. Mark, Extension Livestock Marketing Specialist

This NebGuide discusses how feeder cattle prices are adjusted when actual weights are unknown at the time of pricing or contracting. Bid or contracted prices are increased or decreased when the actual weight of the cattle is different than the estimated weight used to establish the price.

One of the most difficult aspects of marketing feeder cattle via private treaty, forward contracts, basis contracts, or minimum price contracts is to establish price levels based on the actual weight of the feeder cattle at the time of delivery when the weight of the cattle is not known at the time of contracting. Typically, heavier weight feeder calves sell at a lower price per hundred weight compared to lighter weight feeder calves, reflecting the lower feed conversion associated with feeding heavier weight cattle. That means potential buyers would expect to pay a lower dollar per hundred weight price if the actual weight of feeder cattle turned out to be higher than estimated.

Conversely, sellers may expect to receive a higher per hundred weight price if the calves weigh less than estimated. Thus, a common practice with feeder cattle that are directly merchandised from a ranch or when forward contracting feeder cattle is to use a price slide that makes a downward (upward) adjustment to the negotiated price if the cattle weigh more (less) than expected. Typically, the amount of this price slide and when it takes effect are contractual terms negotiated or established when the base price is established based on the cattle's estimated weight.

A price slide is used because neither the seller nor buyer can accurately estimate calf weight. This is particularly challenging when the physical exchange of the cattle (and weighing) will take place several months into the future because a variety of environmental factors (e.g., grass production) could cause the cattle to gain more or less than expected. A price slide that enables a buyer to pay a lower price if the weight was underestimated or a seller to receive a higher price if the weight was overestimated can provide assurances to both parties and focus more attention on negotiating the base price according to the estimated weight. The risk that the price slide removes for the buyer could even result in a better base price bid, which impacts the total dollars of the sale. However, even though the price slide removes some of the price focus on the estimated weight, the seller still has every incentive to estimate the feeder cattle's weight as accurately as possible. The more accurately the cattle's weight is forecast, the better the price slide terms the seller can offer.

For example, if a rancher planned in June to sell his/her calves for October delivery and expected them to weigh 600 lb with a high degree of certainty, he/she might be willing to offer a relatively high price slide that takes effect within just a few pounds of the estimated 600 lb base weight. However, if the rancher was very uncertain of how much the calves would actually weigh in October, he/she might offer a lower price slide and a wider range before the price slide took effect. These differences in price slide terms would be evident to the buyer and likely would be reflected in his/her bid price.

Although price slide terms differ significantly from sale to sale, a significant number of U.S. feeder cattle are bought and sold using price slides. One of the most frequent uses of price slides is when cattle are sold and bought through direct marketing channels. Common examples are satellite and Internet video auctions. Price slides also are used in private treaty transactions between two parties like a rancher and a feedyard manager/owner.

How Weight and Price Slides Are Established

Not only is it important for producers to be able to closely approximate the pay weight, it is also important to select the appropriate price slide. The seller and buyer should ensure the magnitude of the price slide is consistent with market price differentials observed in the feeder cattle cash market (local auction market, video sales, or reported sales). For instance, the agreed-upon price slide for 600 lb feeder steers, medium frame #1, should be consistent with the price difference observed from the sale of 550 lb versus 650 lb feeder steers, medium frame #1, in other similar markets. *Tables I* and *II* report the annual average feeder cattle price slides for various weights of steers and heifers, respectively, from 2000 to 2010. These price slides are based on market prices from the seven-market combined weighted average feeder cattle market report from USDA Agricultural Marketing Service.

Table I. Annual average feeder steer price slides, by weight category.

Year	250-350 lb Slide ($/cwt)	350-450 Slide ($/cwt)	450-550 Slide ($/cwt)	550-650 Slide ($/cwt)	650-750 Slide ($/cwt)	750-850 Slide ($/cwt)	850-950 Slide ($/cwt)
2000	0.09	0.08	0.08	0.10	0.07	0.05	0.05
2001	0.07	0.08	0.09	0.09	0.07	0.04	0.04
2002	0.04	0.10	0.09	0.07	0.05	0.04	0.05
2003	0.09	0.01	0.18	0.08	0.05	0.04	0.03
2004	0.12	0.11	0.10	0.10	0.07	0.05	0.05
2005	0.17	0.15	0.12	0.12	0.09	0.06	0.06
2006	0.18	0.15	0.13	0.11	0.08	0.05	0.06
2007	0.08	0.10	0.09	0.09	0.06	0.04	0.04
2008	0.07	0.07	0.07	0.08	0.06	0.03	0.04
2009	0.09	0.05	0.08	0.08	0.06	0.04	0.04
2010	0.03	0.10	0.07	0.08	0.07	0.05	0.04

Table II. Annual average feeder heifer price slides, by weight category.

Year	250-350 lb Slide ($/cwt)	350-450 Slide ($/cwt)	450-550 Slide ($/cwt)	550-650 Slide ($/cwt)	650-750 Slide ($/cwt)	750-850 Slide ($/cwt)	850-950 Slide ($/cwt)
2000	0.05	0.08	0.08	0.06	0.04	0.04	0.03
2001	0.09	0.09	0.09	0.07	0.04	0.04	—
2002	0.05	0.08	-0.09	0.22	0.04	0.03	—
2003	0.05	0.08	0.08	-0.03	0.11	0.03	0.04
2004	0.13	0.10	0.09	0.08	-0.01	0.11	0.06
2005	0.15	0.11	0.12	0.09	0.07	0.06	0.04
2006	0.09	0.13	0.11	0.09	0.07	0.05	0.04
2007	0.05	0.09	0.08	0.06	0.04	0.02	0.04
2008	0.03	0.06	0.06	0.05	0.03	0.02	0.04
2009	0.04	0.05	0.06	0.05	0.04	0.03	0.04
2010	0.02	0.05	0.06	0.07	0.05	0.03	0.05

Note that the feeder cattle price slides differ according to the cattle's weight and sex. Both *Table I* and *II* suggest that the price slide is typically larger for lighter weight feeder cattle than for heavier weight feeders. This is because the value of 1 pound of weight is higher for lighter weight cattle since the feed conversion for those lighter cattle is better (lower). Similarly, because heavier feeder cattle tend to have poorer (higher) feed conversion, a marginal pound of weight on those cattle is less valuable. Also observe that in comparing the steer and heifer price spreads in *Tables I* and *II*, respectively, the price slides for the steers are typically larger than for heifers. Again, this is due to steers typically having better feed conversion relative to heifers of the same weight.

Not only do price slides change according to weight and sex, they are also sensitive to grade, breed, location, corn price, and fed cattle prices, just like base prices. For example, higher corn prices typically result in smaller discounts for heavier weight feeders relative to light feeders because weight gain is more expensive. Dhuyvetter, Schroeder, and Prevatt (2001) discuss the impacts of corn and fed cattle prices on feeder cattle price slides.

Because price slides are affected by these market conditions, it is important to determine the price slide in a contract according to current market conditions. The price slide is calculated by dividing the difference in market price by the corresponding difference in the feeder cattle's weight. For example, calculating a price slide for feeder steer calves of similar quality weighing from 500-550 lb (average = 525 lb) with a market price of $131/cwt to 550-600 lb with a market price of $124/cwt (average = 575 lb), the corresponding market price difference would be $7.00/cwt for a weight

difference of 50 lb (575 - 525). Therefore, the price slide calculates to $14.00/cwt or 14 cents per pound ($7.00/cwt ÷ 0.5 cwt).

Examples Using a Price Slide

Cattle often are sold using a price slide because they can't be conveniently weighed at their current location where they are being sold FOB (i.e., free on board, meaning that the buyer pays all transportation costs, including shrink, beyond that point). This is especially common when feeder calves are sold using a video or Internet auction and transported to the buyer's location some time after the actual sale date.

Shrink is the weight that cattle lose when they are not allowed access to feed or water. Shrink can occur during penning, sorting, weighing, and transporting. The loss in weight due to shrink is commonly from urine and manure excretion during the processes described previously. To minimize the effect of gut fill on sale weight, a "shrink" factor is usually negotiated at the time of sale. Shrink weight is subtracted from the pay weight that is delivered to the buyer.

Common shrink or "pencil" shrink that is used in the industry is 2 to 4 percent of the delivered weight. Typically, the pencil shrink is lower if the cattle will be weighed farther from the FOB point because more time will have elapsed and gut fill may have decreased more. Further, the shrink factor will depend on how the cattle have been handled prior to loading on the truck (e.g., gathering, sorting, dry lotting, etc.) and whether they are weighed on the truck or are unloaded for weighing. This shrink weight is generally subtracted from the cattle's actual weight to determine the pay weight upon which the price slide is applied.

As suggested above, price slides may not be immediately applied when the actual pay weight differs from the estimated base weight upon which price was negotiated. Often, a "window" around the estimated base weight is created where the price slide doesn't apply. For example, a seller estimates the base weight of the cattle to be 550 lb and offers a 7 cent slide for every pound beyond 10 lb over or under the base weight. In this case, no price slide would be applied when the actual pay weight is between 540 and 560 lb.

Additionally, it is common for the price slide to only be used when the actual pay weight exceeds the estimated base weight (by the window). In other words, the negotiated base price is only lowered when the actual pay weight exceeds the estimated base weight. It is not increased if the actual weight is lower than the base weight. Such terms favor the buyer; however, many sellers offer these price slide terms to attract potential buyers. As in the previous example, one of the most common price slide terms used in the industry is a slide of *x* cents per lb for every pound exceeding 10 lb over the base weight.

If calves are marketed using a price slide, buyer and seller must arrive at an estimated base weight that is expected to be delivered, a calculated pencil shrink, weighing conditions, a delivery date, a bid price, and a price slide to adjust sale price if the delivery weight is more or less than the predetermined sale weight.

Example: Actual pay weight is greater than estimated base weight

Estimated base weight = 550 lb per steer
Slide = $5.00/cwt over 10 lb over the base weight
Shrink = 2%
Bid price = $1.45/lb = $145/cwt
Actual physical weight at delivery = 600 lb per steer

The price slide will be used because the actual delivered weight is greater than the estimated base weight. The bid price of $145/cwt was for 550 lb steers and the actual weight of the steers was 600 lb. The price for the 600 lb steers will be lower than for the 550 lb steers.

Shrink = 600 × 0.02 = 12 lb
Pay weight = 600 - 12 = 588 lb
Weight subject to the price slide = 588 lb - 560 = 28 lb = 0.28/cwt
Price slide adjustment = 0.28 cwt × $5.00/cwt = $1.40/cwt
Adjusted sale price = $145 - $1.40 = $143.60/cwt
Sale price per steer = 588 cwt × $143.60 = $844.37 per steer

The price slide was based using 560 lb as there was a 10 lb window on either side of the estimated pay weight that was agreed to at the time of the sale. The pounds within the window are not subject to the price slide (550 lb ± 10 lb = 560 to 540 lb = 20 lb); therefore, 550 lb + 10 lb = 560 lb. The extra 28 lb (0.28 cwt) is multiplied by the price slide to arrive at the price slide adjustment. The $1.40 is subtracted from the negotiated bid price to arrive at the adjusted sale price of $143.60/cwt. Multiply the adjusted sale price by the pay weight to get to the final sale price per head.

Example: Actual pay weight is less than estimated base weight

Estimated base weight = 500 lb per steer
Slide = $10.00/cwt over/under 10 lb over/under the base weight
Shrink = 3%
Bid price = $1.55/lb = $155/cwt
Actual physical weight at delivery = 435 lb per steer

The price slide will be used because the actual physical delivered weight is more than 10 lb under the estimated base weight. Note that this example allows for an upward adjustment to the base price, unlike the previous example. The bid price of $155/cwt was for 500 lb steers and the delivered weight was 435 lb. The price for the 435 lb steers will be more than the 500 lb steers.

Shrink = 435 × 0.03 = 13 lb
Pay weight = 435 - 13 = 422 lb
Weight subject to the price slide = 490 lb - 422 = 68 lb = 0.68 cwt
Price slide adjustment = 0.68 cwt × $10.00/cwt = $6.80
Adjusted sale price = $155 + $6.80 = $161.80
Sale price per steer = 4.22 cwt × $161.80 = $682.80

The price slide was based using 490 lb because a 10 lb window on either side of the estimated pay weight was agreed to at the time of the sale. The pounds within the window are not subject to the price slide (500 lb ± 10 lb = 510 to 490 lb = 20 lb); therefore, 500 lb - 10 lb = 490 lb. The 68 lb is multiplied by the price slide to arrive at the price slide adjustment. The $6.80 is added to the negotiated bid price to arrive at the adjusted sale price of $161.80/cwt. Note that in this example, had the price slide only applied to weights exceeding the base weight, no price adjustment would have been made. The pencil shrink would have applied, though. In this case, the price paid is $654.10/head (4.22 cwt × $155/cwt).

Resources

Dhuyvetter, K.C., T. Schroeder, and W. Prevatt. *The Impact of Corn and Fed Cattle Prices on Feeder Cattle Price Slides.* Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2504. April 2001. Available online at *http://www.agmanager.info/livestock/marketing/bulletins_2/marketing/feeder_cattle/mf2504.pdf*.

U.S. Department of Agriculture (USDA). Agricultural Marketing Service. *Nebraska Weekly Feeder Cattle Auction Summary.* WH_LS795, various issues. (1999-2010).

This publication has been peer reviewed.

UNL Extension publications are available online at *http://extension.unl.edu/publications*.

Index: Beef
Business Management
Issued June 2011