Western Beef Resource Committee *Third Edition*

Cattle Producer's Handbook

Marketing Section 845

Evaluating Forward Prices with Basis

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An essential element to understand marketing and to successfully execute strategies is to develop a good working knowledge of basis. Basis is simply a measure of the relationship of two different markets for the same product. This measurement is determined by studying the historical price differences between two markets.

For example, the price paid for cattle in Billings, Montana, is usually (historically) different than the price paid for cattle in Dodge City, Kansas. Over time, you would expect this price difference to equal the cost of transportation between the two markets. Price differences can occur because of the location of markets, product quality differences, and time of delivery. All of these factors represent differing supply and demand forces affecting the two markets.

Basis affects all forward pricing activity. Most forward cash contracts are based on futures market prices. Futures market prices reflect national supply and demand expectations for future deliveries of a commodity. If a local feedlot is offering to purchase yearling steers for October delivery for $70 per hundredweight (cwt), and if cash prices for the last 3 to 5 years locally have usually been $1/cwt less than the expiring October futures contract and the October futures contract is trading at $71/cwt, then the previously mentioned forward cash contract is probably being offered at a reasonable basis.

In April, if a producer were to consider hedging an October sales directly by selling a October futures contract, they would need to estimate what an October futures price means in terms of an estimated local hedge price. This would be accomplished by using an historical basis estimate.

Historical basis data needs to have been evaluated for that location, type, and size of cattle and season of the year. You would want to know what the difference normally was between local cash market prices and the expiring futures contract. By using the previously mentioned minus $1/cwt, a producer would for instance estimate that if they sold an October futures contract today, in April at $65/cwt they would likely realize a local hedge price of $64/cwt when they sell cattle locally in October and buy back the futures contract. A $65/cwt futures price minus a $1/cwt estimated local basis equals an estimated hedge price of $64/cwt.

Location

Basis may vary from one location to another (Figs. 1, 2, and 4). Occasionally, one region is short on supply or may have several large orders to fill. This will create opportunities between local cash markets if a producer is fast to act and understands transportation costs.

Seasonal Variation

Basis is not the same all year long. In livestock, basis is usually most negative during the time period when the offspring of the breeding herd from the previous calving are coming to market. Basis is usually stronger (more positive) in the spring. So, use the correct basis for the time of year that you will normally be selling.

Quality or Grade

These differences are most apparent in livestock. Choice slaughter steers sell for a higher price and stronger basis than lower grade slaughter steers. Medium frame #1 feeder steers trade for more than medium frame #2 steers.

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