

MISSOURI FEEDSTUFF BASIS

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A Primer on Feedstuff Basis

Futures quotes are prices that the buyers and sellers agree today to dealing products in the future. Due to that, they can be interpreted as estimates of price expectations. For example, corn futures quotes today for contracts that will be closed by the next month represent a good estimate of corn prices for next month. Futures quotes are published daily by the Chicago Mercantile Exchange Group (CME), a marketplace based in Chicago.

Even though CME futures quotes are good estimates for future prices, they refer to specific types of products and conditions of delivery. Being so, local prices can differ from futures quotes for a variety of local factors that differ from the futures contracts, such as quality, location, transportation and supply and demand.

The difference between the local prices and nearby future quotes (the closest month after a physical transaction) is known as basis. Knowing historic basis estimates for a specific good and location allows you to better forecast local prices using futures quotes. For example, if you know that corn prices in June in Missouri are usually \$0.2 lower than the corn futures for July (the nearby futures contract), and that corn futures for July of next year are around \$5/bu, it is expected corn prices in June of next year will be around \$4.8/bu in Missouri.

To estimate Livestock Crush Margins for upcoming months, we need to forecast corn and soybean meal prices for Northeast Missouri. Those forecasts are updated weekly, and they are given as the sum of the corn price futures quotes, and the historical basis for Northeast Missouri.

It should be noted that basis happens due to local factors that differ from the futures contracts. Therefore, while basis estimates reflecting historical trends might be useful, they may not accurately reflect unanticipated shocks and should be used with caution.

Corn Basis

The United States Department of Agriculture's (USDA) Agricultural Marketing Service (AMS) publishes daily basis and average price estimates for corn in 11 Missouri locations. The [Missouri Daily Grain Bids report](#) includes data from 2020 to 2024.

Corn grain basis is estimated as:

$$B_{C_t} = P_{C_t} - F_{C_t}$$

B_{C_t} represents basis, in dollars per bushel

P_{C_t} represents the daily average price of yellow corn sold in northeast Missouri

F_{C_t} represents the nearby futures quote (gleaned from [CME Group data](#))

Soybean Basis

The USDA AMS publishes weekly basis estimates for soybean meal in Kansas City as part of the [National Grain and Oilseed Processor Feedstuff Report](#), covering the 2022-24 time period.

Soybean meal basis is estimated as:

$$B_{SM_w} = P_{SM_w} - F_{SM_w}$$

B_{SM_w} represents basis, in dollar per ton

P_{SM_w} represents the weekly average price of soybean meal sold in the Kansas City region

F_{SM_w} represents the nearby futures quote for Wednesday of week w (gleaned from [CME Group data](#))