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Rising Cost of Carry Will Force Co-op Grain Elevators to Lower Bids, Widen Basis

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Inside…

Key Points:

- Grain merchandisers have endured rising costs of storing, or carrying, grain and oilseed inventories over the past year due to rising interest rates, high crop prices and rising operating costs like transportation, insurance, fuel, electricity and labor. CoBank forecasts the financial cost of carry will reach record highs in the upcoming 2023/24 crop year for corn, wheat and soybeans.
- The rapidly rising cost of carry is motivating stakeholders in opposite ways: Grain merchandisers want to move inventory faster while end users want to delay taking ownership to minimize their own inventory costs.
- Cooperative elevators are required to buy and market their members' grain and oilseeds, regardless of whether the economics of storing and handling commodities are favorable. Grain co-ops, though, have control over their local bid.
- The inverted futures markets (when later-dated futures contracts are priced lower than nearby contracts and do not cover the cost of storage) further penalize elevators for storing grains and oilseeds.
- If interest rates maintain their current high level and futures markets remain inverted into the new crop year, many grain cooperatives will lower bids and widen their basis to cover the high cost of storing commodities.

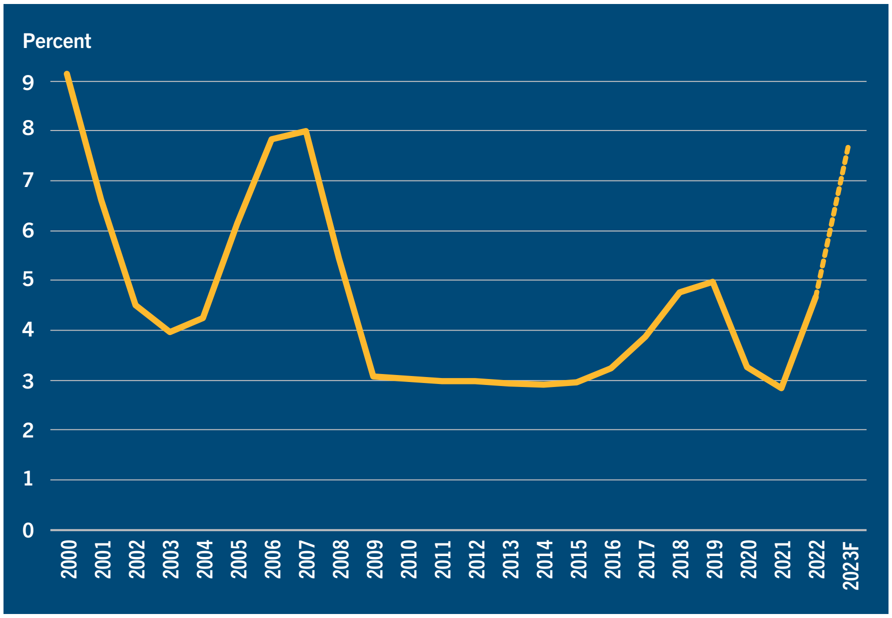
Cost of Carry Background

The cost of carry is the amount a company spends to hold a security or asset. For elevators, financing the ownership of the inventory of corn, wheat, soybeans and other commodities is a major cost of carry and depends on financial structure, interest rate, and the price of commodities. Interest expense as a percentage of the total cost of carry can vary widely among grain elevators and between crop years, but can normally comprise one-quarter to one-third or more of a grain elevator's total cost of storing grain and oilseeds. Shrinkage, transportation, insurance, labor and electricity also factor into a company's cost of storing commodities over time.

CoBank expects that the interest-related cost of carry will rise sharply for the crop year ahead. To calculate cost of carry, CoBank used a forecasted average annual interest rate for grain merchandisers of 7.75% for the 2023/24 crop year, with interest figured using Libor (London Inter-Bank Offered Rate) plus 275 basis points *(Exhibit 1).* Although U.S. markets are transitioning from Libor to SOFR (Secured Overnight Financing Rate), Libor provides consistency of comparison over years. The combination of rising interest rates and high commodity prices has lifted the cost of storing crops to record highs *(Exhibit 2).* Interest rates over the past year have climbed to the highest level since 2007, just as commodity prices also rose to multi-year highs. Although USDA forecasts corn, soybean and all-wheat prices to drop for the 2023/24 crop year from the year prior, prices remain historically high. The dual impacts of high commodity prices and rising interest rates are squeezing the operating margins of cooperative grain elevators, which are required to receive and market their members' harvests.

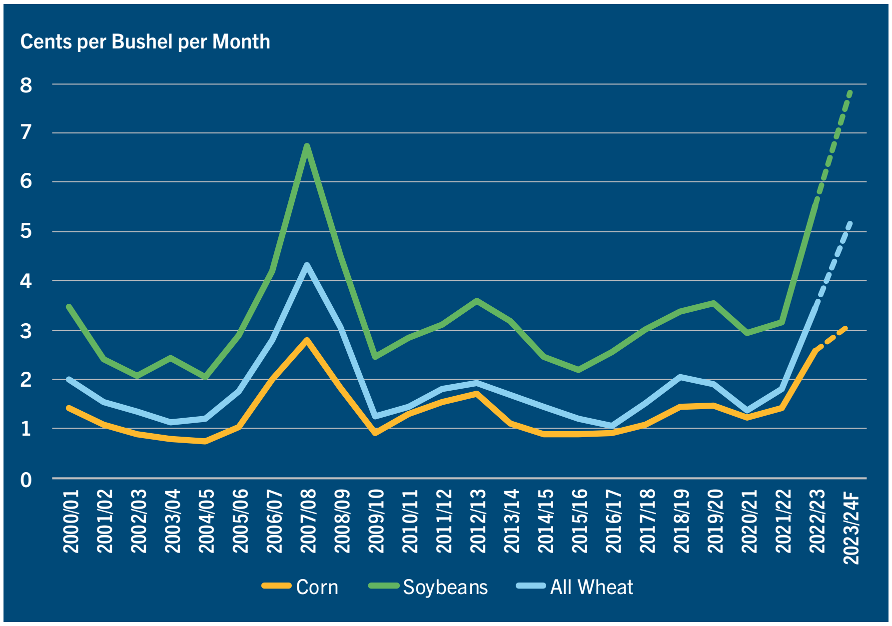
The positive news on carrying costs is that the Federal Reserve is expected to hold interest rates at current levels for the foreseeable future, pausing rate hikes as it waits for sufficient evidence that inflation has cooled to the desired level of 2%. But stubborn inflation, a tight labor market and rising wages mean interest rates will

EXHIBIT 1: Estimated Interest Rate Paid by Grain Merchandisers
(Annual Average of 1-Month Libor + 275 bps)



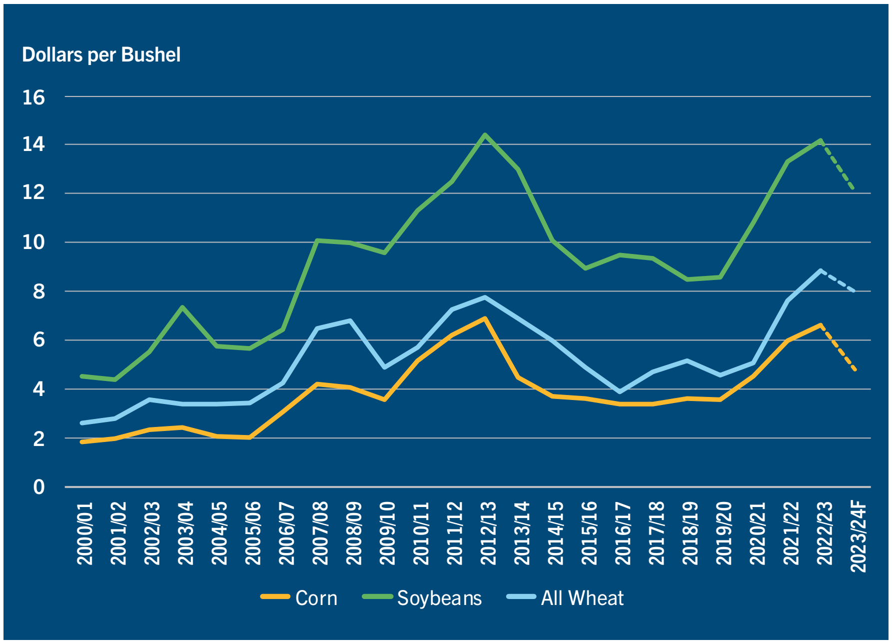
Source: CoBank

EXHIBIT 2: Estimated Financial Cost of Carry by Crop Year



Sources: CoBank

EXHIBIT 3: Marketing Year Average Price



Source: USDA-ERS

likely stay near these higher levels through 2023. USDA's 2023/24 marketing year average price forecasts are $4.80/bu. for corn, $12.10/bu. for soybeans, and $8.00/bu. for all-wheat *(Exhibit 3).* CoBank estimates that the interest-related cost of carry in the 2023/24 crop year will rise to the highest on record:

- Corn up 21% YoY to 3.1 cents/bushel/month
- Soybeans up 42% YoY to 7.8 cents/bushel/month
- All-Wheat up 50% to 5.2 cents/bushel/month

Other costs for grain elevators are also rising. The cost of insurance is climbing sharply following multiple weather disasters and insurance companies exiting agriculture to chase premiums in a rising interest rate environment. Important costs of operation like transportation, labor and utilities also remain high or are still rising, putting more upward pressure on grain elevators' operating costs. However, these operating costs are difficult for a grain elevator to reduce. An elevator's bid also must account for the recovery of fixed asset costs and any desired return to ownership, such as building retained earnings or paying patronage.

Inverted Futures Markets Complicate Storage

Complicating matters for grain elevators is the persistent inverse in futures markets, where prices of later-dated contracts are lower than spot prices and thereby do not cover the monthly cost of storage over time. In normal market conditions when supplies are more abundant, forward futures contracts are priced higher than the nearby month to account for normal storage costs and a risk premium.

The global stocks-to-use ratios in the current crop year for corn and soybeans are both the second tightest in the past decade, while the wheat stocks-to-use ratio is the tightest since the 2007/08 crop year. Tight global inventories for corn, soybeans and wheat amid high usage means nearby futures prices will remain higher. These are signals to producers to not only sell commodities now rather than store them for later use, but also to increase production.

However, several factors are maintaining the inversion in the commodity futures markets, including drought in the U.S. plains and Argentina, loss of production of grains and oilseeds in Ukraine due to ongoing conflict with Russia, other geopolitical concerns and rising global demand, combined with expectations for record corn and soybean harvests pending in the 2023/24 marketing year. The inverse in wheat futures market in particular is likely to persist through the 2023/24 marketing year due to the expected small U.S. harvest and rising global demand.

Effects of Rising Cost of Carry and Market Inversion

Just as grain elevators are motivated to move inventory as fast as possible to lower carrying costs, processors and end users like flour millers, ethanol plants, feedlots and soybean crushers are motivated to delay ownership of commodities to reduce their own inventory costs. Moving all the bushels instantly at harvest to avoid storage costs is also not possible due to logistical constraints in the system.

As a result, some grain elevators will be forced to carry inventory despite the economic disincentive of doing so. Holding commodities in high-interest-rate environments also ties up a company's working capital, thereby straining other business operations. This is especially problematic in volatile markets when elevators need liquidity to manage margin calls on futures hedges. Furthermore, cooperative grain elevators are obligated to post a bid for their members to allow producers to sell their crop.

Implications

Barring a severe recession that would prompt the Fed to cut interest rates, the long-term risk is for interest rates to remain elevated into 2024. Though commodity prices are expected to moderate, high interest rates will elevate carrying costs. With the cost of carry expected to rise further into the 2023/24 crop year due to higher interest expense and rising operating costs that are difficult to lower, elevators will lower local bids and widen basis.

Because high carrying costs and inverted futures markets penalize storage, cooperative grain elevators that are in business to take their members' grain will be at greater risk of incurring financial losses on storage in the year ahead if they do not manage basis appropriately. Elevators that have been proactive and have managed their interest rate risk will be positioned to handle the potentially lower-margin environment.

Elevators that lower their local bids and widen basis must closely examine their operating costs and margins. They will need to impose greater cost discipline where possible, and communicate early and consistently with farmer members impacted by widening basis. The wider basis could potentially attract more export business this fall, meaning domestic users may have to pony up if they want to assure their supplies through the 2023/24 marketing year.

CoBank's Knowledge Exchange Division welcomes readers' comments and suggestions. Please send them to KEDRESEARCH@cobank.com.