

Commodities and Trading

Hedging

Cash Market: is the physical market where farm production is bought and sold.

Futures Market: the market where futures contracts are bought and sold.

Hedging: the act of taking opposite positions in the cash and futures markets to offset risk.

- **Short Hedge** (also known as a "sell" hedge): used to protect against falling prices and are used by those selling commodity.
- **Long Hedge** (also known as a "buy" hedge): used to protect against rising prices and are used by those buying a commodity.

Strategies for how much you should hedge?

1. Establish partial price protection when production is unknown. Execute scaleup hedges.
 - a. "1/3, 1/3, 1/3 Rule."
 - i. Hedge 1/3 before planting, 1/3 between planting and before when production is well known, and 1/3 after production is well known and before harvest.
2. Hedge up to the yield percentage chosen in your crop insurance product contract.

WARNING: If your futures contract falls below your long hedge or goes above your short hedge, margin calls will be required. These margin calls are to make up for the loss on the contract, but these losses will usually be made up for by the cash market.

Basis

Basis: the difference between your cash market and your futures market. (Basis = Cash Market vs Futures Market)

- Basis helps decide the best time to place our hedges or forward contract.

How to use Basis to choose when to hedge:

1. Use a contract that will not expire before you market the physical commodity. You also don't want to choose the month of delivery, unless your delivery date is the first week of the month.
2. Use a contract and a basis which gives a favorable forward price. However, recognize the potential for basis error (the difference between actual basis and expected basis).

Reminder: Use the basis from the month in which the cash transaction occurs, not the hedge transaction.

Once your basis and hedge are defined you can then calculate your forward price.

- **Forward Price:** The cash price you expect to get, calculated by futures price (hedge) + or - basis

Important: Your breakeven costs are important when looking at hedging because this will be the difference between making and losing money.

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Hedging Example

A Colorado Wheat Farmer plants 1000 acres of wheat. He calculates that his average yield is 82 bushels per acre. He wants to protect himself against moving prices and places a hedge by selling 16 contracts of July Hard Red Wheat where each contract is for 5,000 bushels.

Date	Cash	Futures	Basis
10/1/18	Forward Price = Futures + Basis \$4.23 per bushel	SELL JULY Hard Red Wheat @463'0	-0.40 (Found on Basis Tables and calculated by transportation, storage, and marketing costs)
7/1/19	Sell Cash Wheat @ \$4.00	BUY July Hard Red Wheat @ 450'0	-.50 (Calculated by our ending futures price minus our obtained Cash Price)

This got the farmer \$4.13 per bushel and he lost 10 cents more than expected due to basis risk.

After the hedge the farmer calculates his costs are \$170 per acre and his profit was \$338 per acre (4.13 x 82). The farmers made 13 cents per bushel more on the hedge then he would have on the cash market, which is \$10,660 more profit overall.

WARNING: Risk exists in production – don't over hedge (hedge more than your actual production)!

