

## Guaranteed Minimum Price (GMP)

bushel requirement	cost of contract	notes
5,000 bushel increments	may have small service charge	option cannot be rolled, but can be priced at any time up until expiration

- A hedging tool to lock in a floor on a cash sale, where a producer concurrently sells cash and the elevator buys a deferred call option to allow the producer to participate in any market rallies. Depending on cash flow needs and the seller's view of the market, this contract can take on a few different expirations. Grain delivered against these contracts in the fall are eligible for payment amount equal to the cash floor agreed upon unless the seller has chosen to defer payments. Then, at any time throughout the life of the attached option, the seller can price the remaining part of their contract if there is any value in the contract.
- Advantages?
  - Sets a minimum price 'floor' that also allows the opportunity to participate in market rallies before contract expiration.
  - Any carry or price appreciation before expiration will also be realized to some extent through the use of this contract.
- Disadvantages?
  - While a floor is set, it will be below current cash sale levels and a higher price is not guaranteed.
  - Contract cannot be rolled once a target date is set.
  - If the market trades flat for the duration of the option, it won't recover the cost of the premium spent to lock in the floor price.
- Example:
  - On September 1, Farmer Joe decides to call the elevator to lock in a minimum price. Current cash price for fall delivered corn is \$3.20. After discussing his choices, he decides to attach a May call option to his contract. May futures are trading at \$3.77, so he decides to use a May 380-strike call, essentially giving him the option to go long futures at \$3.80 against the May if he chooses, and the current premium for the option is valued at \$0.20. Farmer Joe's cash floor price has then been established at \$3.00, and he has a May 380 call option at his disposal. Fast forward to February where Farmer Joe sees that the market has rallied a bunch on expectations of a disappointing South American crop and he remembers he has that call option. So he calls the elevator to see what it is worth, and May futures have rallied to \$4.12 and his option is worth not just the \$0.32 of intrinsic value (difference between futures price and option strike price), but also has a little bit of time value since it won't expire for another 2 months. He decides rather than keep holding onto it, he's going to price it then, and receives a check from the elevator for \$0.32+ (per bushel), which gives him a net cash price of \$3.32 (\$3.00 min price in fall plus \$0.32+ option premium when priced in February).
  - What if the market had gone the other way on news Brazil planted a record corn crop? Well come February when Farmer Joe remembered about his option, the May futures price was \$3.22, and the option was worth virtually nothing, so he holds onto it, still having his cash floor of \$3.00 for those bushels. Come end of April when the option is set to expire and there still hasn't been much change in the market, the option expires worthless and Farmer Joe still has his \$3.00/bushel while the elevator is showing a cash bid of \$2.81 perhaps. BUT, anyone who sells corn on that day has storage charges that Farmer Joe did not have because of making his fall sale. Joe has avoided paying nearly \$0.27-0.30 in storage and shrink charges because of selling his corn during fall delivery and attaching a minimum price contract to those bushels.

## Basis Contract

bushel requirement	cost of contract	notes
no bushel minimums	\$0.00	contract can be rolled to later months but at a cost of 2c/bu plus any spread costs

- The basis is locked in against a future's month and fixed at the time of contract. These can be written at any time, and if written before harvest and delivered against like a cash contract, will avoid the shrink down to 14%. The quickest way to get an idea of how these contracts work is similar to selling grain out of the field and then buying futures - if the market goes up, the seller can profit, if the market goes down, the seller will see their contract value erode.
- Advantages?
  - A basis sale allows a farmer who would plan on carrying some grain the ability to get one portion of the cash sale locked in.
  - An advancement can be had by the seller up to 70% of the contract value even if the contract isn't going to be priced until some deferred month. [Any income taken in advancement **will be** considered taxable in the calendar year it is taken.]
  - A basis contract stops storage, and if set ahead of fall delivery and delivered against, will avoid shrink costs.
- Disadvantages?
  - The seller is left with full downside price risk as the only part that has been locked in is the basis portion. Any decline in the futures market will also be reflected in their contract pricing.
  - If the seller took an advancement, could cause a call from the elevator for repayment of that and the risk of having their grain priced before they are ready.
- Example:
  - Farmer Joe decides to price some of his corn on a basis contract ahead of fall delivery. He calls Tremont Coop and finds out basis contracts with May expiration (must be priced by end of April) are valued at 60 cents under the May contract; he decides to put 10,000 bushels on basis contract against the May, and at delivery time instructs the scale house this is for delivery against his basis contract. At present he chooses not to take an advancement, but say for example on January 1 he figures out he's going to need to make some payments for inputs, so calls up the elevator and asks for an advancement on the contract. Again, keep in mind he still has downside risk, much like grain in storage, the main difference being he can take advances on this grain he hasn't priced yet and he has no storage costs.
  - Concurrently at the same time Farmer Joe is delivering his 10,000 bushels against his basis contract, his brother, Farmer John, delivers his grain and decides to place it in storage. John's bushels are shrunk to 14%, Joe's bushels weren't, and John now has a minimum storage charge to get to January 1st of 17-cents (15 if he chooses Price Later instead). Come January 1, John also needs to pay some bills, but he cannot get an advancement on the grain, so he instead sells some of his 9,865 bushels (after the 1.35% shrink charge), leaving him with just under 9,000 now. Again, keep in mind that John also has downside risk, much like Joe does with his basis, but he's restricted in getting cash and has 17-cents of accumulated storage on unpriced bushels still.
  - April 1st brings a big rally to the market after the March Acreage report, and John and Joe determine this will be the best time to price their grain. Joe sells his 10,000 bushels and receives a check for the posted cash price less any advancements he has had; he does not have any storage costs to pay. John sells his remaining 9,000 bushels and receives a check for the posted cash price less his accumulated storage of 26-cents/bushel (17-cent minimum, 3 cents for each Jan, Feb and Mar).
  - While it worked out that the market rallied in the example above, keep in mind that the market could keep moving lower and both brothers have downside risk, but Joe could also be asked to pay back some of that advancement he took.

## Hedge-to-Arrive (HTA)

bushel requirement	cost of contract	notes
5,000 bushel increments	variable	cost plus any additional fees will be applied at time of contract fulfillment

- Utilizes the futures market to lock in the futures portion on a cash grain contract. The basis portion of the cash grain contract will be locked in at a later date per contract specifications. This contract is for a seller who believes that futures market prices will fall and basis will improve. If the basis is not locked in ahead of delivery in the fall, the customer must deliver the grain under a storage or Price Later obligation and the HTA contract will not be fulfilled until a basis is locked in, which would then include any incurred storage/PL charges. HTAs can be rolled within the same crop year (July futures are the last available option), but there is a charge to roll from contract to contract.
- Advantages? Allows the seller to lock in what they perceive to be a favorable futures market price, and provides the farmer time to set his basis at a later date. Also, if there is carry in the market, it allows the seller to lock in the futures carry.
- Disadvantages? HTA's do not allow the seller to benefit if the futures market rallies after the futures price has been locked in, and they do not lock in the basis portion of the trade - the seller is exposed to any potential declines in basis.
- Examples:
  - On June 1st, posted cash bid for fall delivery is \$3.85, and December futures are trading at \$4.15, so the fall basis level is 30 cents under. The farmer likes where the futures price is trading knowing we have a good start to planting, but is hoping for a bit better return and thinks there's a chance we could see basis improve if fall prices fall with the onset of a bumper crop and no grain moves. So instead of locking in a cash sale of \$3.85, the farmer chooses to do an HTA with Tremont Coop. Now a few things can happen come harvest:
    - On September 15th, a week before the farmer expects to start harvesting, he sees that basis has improved for fall delivered corn to 20 cents under. The farmer calls up the coop and says he wishes to price his HTA, at which point the \$4.15 futures contract will have the 5-cent charge and now the 20 cents under basis applied, and the farmer will have set his cash price at \$3.90.
    - However, it could be the opposite where on September 15th fall basis has widened to 45 cents under, and the farmer decides he'll price it now as it looks like basis should keep widening/worsening. At this point their \$4.15 futures contract will have the 5-cent charge and the 45 cents under basis applied, and the farmer will have set his cash price at \$3.65 instead.