AgriLIFE EXTENSION
Texas A&M System

Considerations When Using Grain Contracts

Overview

- The grain industry has developed several new tools to help farmers manage increasing risks and price volatility.
- Elevators can use grain options markets to offer minimum and maximum price contracts.
- Yield futures can help producers manage production risk.
- The rapid growth of electronic information systems has accompanied the new risk management tools.

Grain Contracting Requires Sound Business Principles

- Contract details vary from elevator to elevator, and with the type of contract being considered.
- Common types of contracts include forward cash, basis, minimum price, and hedge-to-arrive contracts.

Business Principles that Apply to Grain Contracting

- Before you sign a contract, know and understand all of its features and how they will affect your business.
- Understand how it reduces market risk, where it exposes you to risk, and your obligations.
- If in doubt, don't sign. Get assistance if you do not understand any aspect of the contract. Ask the elevator manager or other buyer and, if necessary, an attorney.
- Know the other party to the contract. If possible, have information on the party's financial condition and ability to perform obligations. Be sure the other party can explain to your satisfaction how the contract works under all possible market conditions.
- Know how your net grain price will be determined under all conditions. If a formula is involved, be sure you understand how it works. Use it to determine what your price would be with extreme market conditions.

Business Principles that Apply to Grain Contracting *cont.*

- Understand the implications if your production falls short of the quantity you have contracted to deliver. A production shortfall can affect your net income and financial risk exposure, as well as your ability to meet contract obligations. The contracting firm establishes a position in the futures or options market to support your contract, and hence has financial obligations that depend on timely fulfillment of your contractual obligations.
- Maintain good communication with the other party to the contract before signing and throughout the life of the contract.
- Work through a sensitivity analysis using extreme price movements and considering the possibility of your production dropping well below the contractual volume.

Key Elements in Grain Contracts

- The quality (grade) of grain delivered or to be delivered.
- The date by which delivery is to be completed
- The location for delivery.
- The price or formula to be used in determining the net price.
- Price adjustments if you are unable to meet the specified grade.
- The quantity being contracted.
- Signatures of both parties and the date of signing.
- More complex types of contracts require additional details
- Some contracts also have conditions that apply if special circumstances prevent an elevator from receiving the grain by the scheduled date.
- Contracts also may have provisions to be used when the farmer’s crop is below the contracted volume because of adverse weather or other unforeseen conditions.

Table 1. Risk Exposure with Various Grain Pricing Alternatives and Contracts

Pricing Alternatives					Areas of Risk Exposure					Industry Risk Rating
	Price level	Basis	Intra-year Spreads	Inter-year Spreads	Options Volatility	Production risk if pre-harvest	Tax risk	Counter party risk	Control risk	
Cash market	X	X	X						X	Moderate
Forward cash						X		X		Low
Basis	X		X[2]			X	X	X	X	Moderate
Price later	X	X				NA	?	X	X	Moderate
HTA: non-roll		X				X	X	X	X	Low
HTA:intra-year roll		X	X			X	X	X	X	Moderate
HTA:1-year inter-year roll		X	X	X		X	X	X	X	High
HTA:multi-year inter-year roll		X	X	X		X	X	X	X	Extremely High
Minimum price					X	X	X	X	X	Low

[1] An X in the table cell indicates the pricing alternative has significant exposure to the risk.

[2] Spread risk occurs if spreads change because of action in nearby futures, but basis contract is based on a later futures contract month, such as July. Narrowing spreads would mean the cash and nearby futures prices could rise more than the price obtained from the basis contract. Also, on rare occasions, basis contracts are rolled to give the farmer a longer period for choosing a price. This can involve spread risk if rolled to a later crop year, but nearby prices do not follow distant futures price moves.

Risk Management Features and Purposes of Various Contracts

- Grain prices and price risk can be separated into three components: price level (as reflected by nearby futures prices); the basis (difference between local prices and the futures market); and spreads (which reflect price differences for later delivery).
- Some grain pricing contracts manage only one or two of these sources of risk.
- Others are designed to eliminate or help manage all three types of market risk.
- Price-related risks are not the only risks facing grain farmers. Other risk areas include production risk and the potential failure of the contracting party to fulfill his obligations.
- Some kinds of grain contracts require only on decision – the decision to use the contract. Other contracts may require one or more decisions at later times. When a series of decisions must be made in order to complete contractual obligations, another type of risk, called control risk is involved.

Risk Management Features and Purposes of Various Contracts *cont.*

- Control risk is the risk that the market position will reduce income to an unacceptable level before the farmer is aware of the implications and is able to take preventative or corrective actions.
- View contracts either as a way to reduce risk exposure or, in some cases, as an alternative to storage that will accomplish similar purposes.
- Do not view contracts as a source of profit by themselves in grain contracting, the entire position should be considered, including the cash price, remaining areas of risk exposure, and the level of net income being protected.

Table 2. Types of Risk

- Price-level risk – the risk that futures prices will change in an adverse direction from the present level. This risk typically is large and difficult to predict.
- Basis risk – the risk that the difference between the local cash market and the futures price will move in a direction that reduces the net price to the seller. This risk usually is much smaller that price level risk and inter-year spread risk. For major crops such as cotton, corn, soybeans, and wheat there is a strong seasonal pattern, although transportation problems and other unforeseen developments can alter its seasonality.
- Spread risk – the risk that price differentials between nearby and distant futures will move in a direction that reduces your net price. This risk can be divided into intra-year and inter-year spread risk. Spread risk within a single crop year normally is relatively small, but it can be sizable in years when supplies are extremely tight. Inter-year spread risk is much larger and unpredictable. Its volatility increases sharply when supplies are small. This risk is involved when using hedge-to-arrive contracts that involve rolling the delivery date forward.

Types of Risk *cont.*

- Market volatility risk with minimum price contracts – the risk that the net price on such contracts will not change one-for-one with cash and futures prices as the price level rises. The same kind of risk exists with maximum price contracts used for feed purchases. The size of this risk varies with market volatility, distance between options strike price and the underlying futures price, and the length of time until contract delivery. It tends to be largest with volatile markets and when the delivery date is several months away.
- Tax risk – includes the risk of whether futures or options-based losses in contracts will be ordinary business expenses or capital losses, as well as other tax issues. For individuals, a maximum of $3,000 per year can be deducted as a capital loss unless offset by equal amounts of capital gains. Provision is made to carry capital losses forward to later years. For corporations, no capital losses is deductible unless matched by capital gains. Elevator contracts typically do not separate these price components, but tax issues can still be critical.

Types of Risk *cont.*

- Counter party risk – the risk that the buyer will be unable to perform part or all of his or her contractual obligations or will be unable to pay for your grain. In Texas, and many other states, grain buyers are not required to be licensed or bonded. This risk is especially important for credit-sale contracts for grain, in which the title to grain has been transferred to the buyer but payment has not yet been made. When a public warehouse acts as a grain buyer, they do have a bond, but this bond protects grain depositors for storage. Bond protection does not apply to forward contracts or other grain purchasing activities.
- Control risk – the risk that contracts will get out of control. Some contracts require several stages of decision making beyond the initial contact signature. With these contracts, there is risk that market action will move your net return to an unacceptable level before you realize what is happening and can take corrective action.

Tailoring Choice of Contract to Your Marketing and Risk Management Needs

- The type of contract that best fits your marketing objectives and risk management needs probably will vary with market conditions.
- Several of these types of contracts leave partial exposure to market risk. Market conditions are segregated by expected direction of price level and basis change.
- Suppose that you believe there is a good chance the level of prices will rise. Also suppose that you are concerned that the basis may weaken, but would like to participate in higher prices. Alternatives for managing these risks include using a basis contract, selling the grain and buying futures contracts, or selling the grain and buying call options.
- Suppose that you expect both the level of prices and the basis to strengthen. In that case, you might want to consider storing the gain, or selling on a delayed price contract or minimum price contract. If you expect both the futures price and the basis to weaken, you might want to consider selling the grain immediately in the cash market or forward contracting.
- Suppose that you expect the level of prices to decline but the basis to strengthen, risk management alternatives include sales on HTA contracts or sales on futures contracts.

Conclusions

- Grain contracts are important tools for managing price and income risk in the volatile price environment that exists today.
- Using them successfully requires a complete understanding of how various contracts work, the kinds of risks they are designed to control, and the areas of risk that remain after the contract is signed.
- Some contracts require only one decision – whether or not to use the contract.
- More complex types require one or more decisions after the contract is signed.
- Good business rules in grain contracting are:
  - Understand the contract before you sign it.
  - Know and communicate with the firm or individual with whom you are doing business.
  - Understand the decision processes required for successfully using the contracts you select.