ABOUT GRAIN CONTRACTING

Commonly Used Grain Contracts

Increased risks in grain marketing create a greater need for risk management tools.

U.S. and global agricultural policies have dramatically increased the risks in grain marketing. NAFTA and GATT bring greater global orientation to U.S. grain markets, and new U.S. policies eliminate the long-standing deficiency payment system that helped protect farmers from low prices. Policies to maintain price-stabilizing reserve grain stocks have been de-emphasized or eliminated in the United States, Europe, and Canada.

Also contributing to price variability are expanded U.S. grain processing demand and structural changes in the livestock industry. Both developments create new demand that cannot easily be curtailed when supplies are short, except at very high prices. This new marketing environment sets the stage for highly volatile grain prices for the foreseeable future. Also, as farm size increases, expanded capital requirements for grain production limit some farmers' ability to bear the increased price risks. That creates a greater need for risk management tools.

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

In some cases, you may need more information to effectively use available marketing tools and market information. This publication is part of a series to help farmers improve their risk management and more effectively use available tools. It explains risk-management features of various grain contracts and important business practices needed for successful contracting.

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, delayed price, minimum price, maximum price (for feed purchases), and hedge-to-arrive contracts. Other publications in this series discuss factors important for each kind of contract.

Important business principles apply, regardless of the type of contract:

1. 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.
2. 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.
3. 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.
4. 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.
5. Understand the implications if your production falls short of the quantity you have contracted to deliver. A production shortfall can have implications for your net income and financial risk exposure, as well as for meeting contract obligations. The contracting firm establishes a position in the futures or options

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Ames, Iowa

PM-1697a | December 1996

market to support your contract, and hence has financial obligations that depend on timely fulfillment of your contractual obligations.

6. Maintain good communication with the other party to the contract before signing and throughout the life of the contract.
7. Work through a sensitivity analysis using extreme price movements and with your production dropping well below the contractual volume.

Examine and thoroughly understand each of these areas before you enter into a sale or purchase contract. Remember that the contracts are legal instruments that obligate both you and the other party to certain financial commitments.

Key elements in grain contracts

While some details of grain sale or purchase contracts may vary, seven key details should be present in all contracts:

1. The quality (grade) of grain delivered or to be delivered
2. The date by which delivery is to be completed
3. The location for delivery
4. The price or formula to be used in determining the net price
5. Price adjustments if you are unable to meet the specified grade
6. The quantity being contracted
7. Signatures of both parties and date of signing

More complex types of contracts require additional details. For example, with hedge-to-arrive contracts, alternative delivery dates may be allowed, with extra costs involved. Changes in delivery dates, in turn, may affect price and risk-exposure. The specific process for changing delivery dates should be spelled out. The delivery details are important to both farmers and grain elevators since delivery is required for completion of contractual obligations. 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 due to adverse weather or other unforeseen conditions.

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. (See tables 1 and 2.)

Price-related risks are not the only areas of risk exposure facing grain farmers. Other risk areas include **production risk** and **the potential failure of the contracting party to fulfill its obligation.** When a farmer prices a crop before harvest, he or she increases exposure to production risk but, depending on the kind of contract used, may reduce exposure to price risks. If production risk is large enough to cause serious financial concerns, farmers using pre-harvest grain contracting may want to consider crop insurance to help manage such risks.

Some kinds of grain contracts require only one 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. This 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 action.

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 profits 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.

About this series

Other publications in this series provide more detail on risk-management features, pricing processes, and considerations in using specific types of grain contracts. Contracts covered in the series include forward cash, basis, delayed pricing, minimum price, maximum price (for feed purchases), and hedge-to-arrive (HTA) contracts.

Tailoring choice of contract to your marketing, risk management needs

The type of contract that best fits your marketing objectives and risk management needs probably will vary with market conditions. Figure 1 illustrates market conditions that best fit various types of contracts. 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. For example, suppose the basis is unusually strong for your area at the time you are making a pricing decision. This means local cash prices are unusually strong relative to the nearby futures market.

Table 1. Risk exposure with various grain pricing alternatives and contracts[1]

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				Not applicable	?	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 due to 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 provide the farmer with 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.

Adapted from National Grain and Feed Association, "Hybrid Cash Contracts" white paper, April 1996.

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 reducing the net price to the seller. This risk usually is much smaller than price level risk and inter-year spread risk. It has a strong seasonal pattern in major corn and soybean producing areas, 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 reducing 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.

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 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 loss is deductible unless matched by capital gains. Elevator contracts typically do not separate these price components, but tax issues can still be critical.

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. This risk is especially important for credit-sale contracts, in which the title of grain has been transferred to the buyer but payment has not yet been made. In Iowa and many other states, credit-sale contracts do not have the same financial safeguards available for storage under warehouse receipts. This risk also may be a consideration with other types of contracts.

Control risk—the risk that contracts will get out of control. Some contracts require several stages of decision-making beyond the initial contract 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.

Suppose that you believe there is a good chance the level of prices (as reflected by the futures market) will rise. Also suppose that you are concerned that the basis may weaken, but would like to participate in higher prices. Alternatives to manage 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 grain, or selling on a delayed price contract or minimum price contract. If you expect both the futures price and the basis to weaken, you may want to consider selling the grain immediately in the cash market or forward contracting. When you expect the level of prices to decline but the basis to strengthen, risk management alternatives include sales on (non-roll) HTA contracts or sales on futures contracts. Local basis patterns and market conditions must be studied to successfully anticipate basis changes.

Consider minimum price contracts when you are unsure of the direction that price levels will change but believe there is a good chance prices will rise. Minimum price contracts are based on options markets. Structured in that way, these contracts give you the ability to benefit if the futures market prices rise sharply.

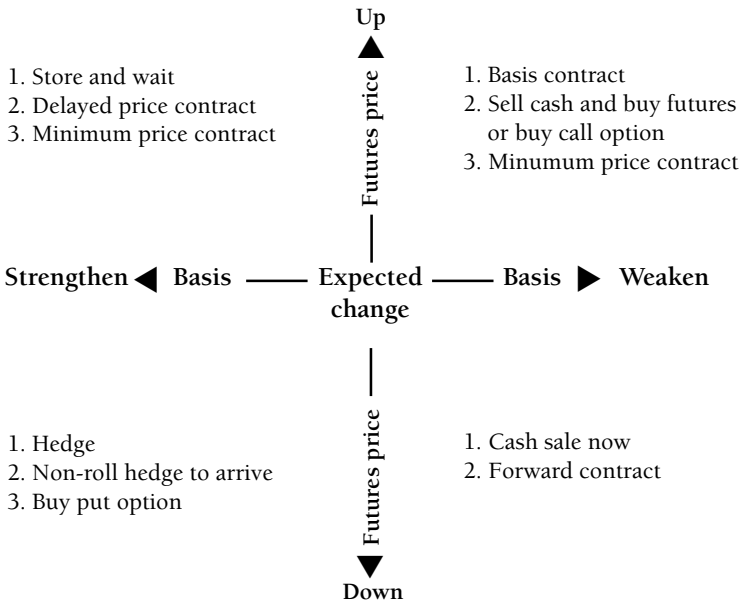
Conclusions

Grain contracts are important tools for managing price and income risk in the volatile price environment of the late 1990s and beyond. Successful use requires a complete understanding of how various contracts work, the kinds of risk they are designed to control, and the areas of risk that remain after the contract is signed. Some contracts require only one decision: whether to use the contract. More complex types require one or more decisions after the contract is signed. Good business rules in grain contracting are (1) understand the contract **before** you sign it, (2) know and communicate with the firm or individual with whom you are doing business, and (3) understand the decision processes required for successfully using the contracts you select.

Disclaimer

This publication provides educational information to help you understand risk-management features of grain contracts. It is neither a legal document nor an endorsement of any type of contract by Iowa State University Extension or any other member of the Farm Bureau Risk Management Task Force. Contract details vary. Some contracts may have provisions not included here. Understand a contract **before** you sign it. Seek professional assistance if there are details you do not understand. Before entering into the contract, each individual should evaluate his or her risk exposure with extreme market movements.

Figure 1. Best-fit alternatives for selected market conditions*



*Adapted from NCR 215-4, Developing Marketing Strategies and Keeping Records on Corn, Soybeans, and Wheat. John Ferris. December 1985.

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Stanley R. Johnson, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

File: Economics 1-6