Understanding New Generation Grain Contracts

November, 2005

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Introduction

Grain marketing and related cash and futures marketing strategies are important to nearly every row-crop farming operation. Since the year 2000, the availability of risk management tools has expanded with the advent of new generation grain-marketing contracts (NGC). These contracts are specially designed to address some of the problems that producers have in executing their crop marketing plans:

- inability to "pull the trigger,"
- excessive emotion that leads to indecision,
- complexities from a wide variety of traditional marketing tools, and
- lack of discipline in following a marketing plan.

Megatrends

In recent years, farm consolidation and specialization has led to a trend nationwide toward larger row-crop commodity farm operations.

In order to manage production costs and reduce risks associated with managing more acres, producers have attempted to drive down fixed costs by utilizing capital and technology.

To capture higher market prices above the county loan rate, producers employ strategies that include:

- pre-harvest sales of bushels for delivery directly out their fields,
- use of on-farm storage to capture carry in the futures markets and better basis after harvest, and
- trucks that move the grain from the farm on which the grain was produced.

To manage the larger volume of grain being handled and elusive profit margins, a portfolio of marketing tools are available. These allow producers to achieve realistic pricing goals and reduce their overall risk caused by market price fluctuations.

Consolidation has also occurred in the handling, storage, merchandising and processing portions of the grain industry.

Efficiencies are gained through economies of scale, which includes an expanded use of futures contracts to originate larger volumes of grain.

Traditional Marketing Tools

Traditional grain marketing strategies involve discretionary sales made by the producer. These decisions are sometimes based on advice given by professional market advisors, commodity brokers or grain originators. However, the final marketing decision is typically left up to the producer.

Grain-marketing tools commonly available to producers today include; **direct cash sales**, **forward contracts**, **basis contracts**, **options contracts**, and direct use of **futures**.

Producers are most dependent on the direct cash sale, which commits bushels to delivery and thus accepts both the futures price and the basis. However, variability of both futures price and basis exists.

For new crop sales, many producers use forward contracts that fix both the futures price and the basis. A small number of producers use basis contracts that fix the basis, but leave the futures price open.

Other marketing tools available but not used extensively by a majority of producers are options and futures contracts.

Options contracts are not always well understood by producers even though they have been available since 1984. The direct use of futures contracts has been available for over 50 years, yet producers often see such use of futures as “speculating” even though their cash commodity prices directly reflect the nearby futures contracts.

Neither options nor futures contracts require that a producer commit bushels directly to delivery. Limiting factors for the use of options contracts are likely the cost associated with the option premiums. Terms associated with option contracts include: puts, calls, strike price, cash value, intrinsic value, buy options, sell options, exercise the options and let the option expire.

Direct use of futures contracts means that a producer must establish a commodity brokerage account, provide maintenance and margin funds and provide instruction to their commodity broker regarding when and at what price to buy and sell futures contracts.

These contracts typically represent 5,000 bushel quantities of grain. Should the sale of a futures contract be initiated and the futures contracts increase in value beyond the maintenance fees provided in the brokerage account, a "margin call" is given to the producer who must provide additional funds immediately into their brokerage account. Thus there is typically an emotional dilemma associated with making a "margin call."

New Generation Grain-Marketing Contracts (NGC)

Many elevators and processors that originate grain across the Corn Belt now offer New Generation Grain-Marketing Contracts (NGC). These contracts are simple to understand and will hopefully capture higher market prices. They can overcome some of the emotion that comes with "pulling the trigger" and "margin calls" that lead to not getting crops priced.

These NGCs include the following 3 categories:

- **automated pricing** (**averaging**),
- **managed hedging**, **and**
- **combination contracts.**

Each of the NGCs requires some producer intervention regarding the establishment of the contract and follow **predetermined** and **non-discretionary** price rules over a specific time frame. Futures prices are triggered by certain market criteria that the producer selects from. These contracts require the commitment of delivery of the grain, typically in 5,000 bushel increments.

The producer works with their grain originator and must establish the basis, usually at least one month prior to the delivery date of the contract. If not, the current basis must be accepted at the time of delivery.

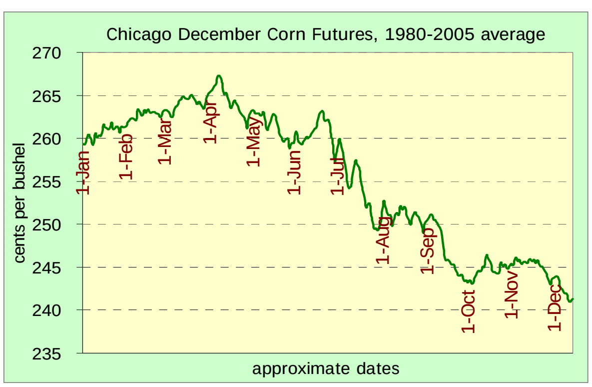
Futures prices will fluctuate each weekday based on global supply and demand components. The producer is still responsible for the production risk and delivery of the grain to fulfill the contractual obligation. For pre-harvest sales, the producer typically commits only a portion of their grain they plan to produce. NGCs are commonly offered for pre-harvest sales strategies with delivery to take place at harvest or later. Those producers with on-farm storage would price new crop bushels for the following winter or spring months. This is done to capture carry in the futures market and/or better basis opportunities.

To obtain a good overall price average, producers may set time and price objectives, using a variety of marketing tools to help them achieve their goals.

Many NGCs have proven successful because they take advantage of the seasonal price trends that typically occur each marketing year.

Seasonal Price Trends

The new crop seasonal price trend for corn favors the spring pricing period. In the chart below, the December corn futures weekly average prices represented by the line graph are usually highest in the February through June time frame over.



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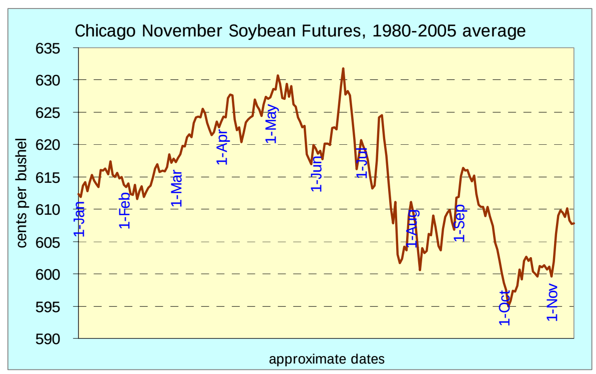
In the past 26 years, 19 of those years (73% of the time) the December corn futures price fell from May 1st to October 1st by an average of 20 cents per bushel.

The new crop seasonal price trend for soybeans favors both the spring and summer pricing periods. The highest new crop soybean prices typically occur in the mid-March through mid-May pricing period, but those prices can sometimes extend into the early summer months.



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In the chart above, the November soybean futures weekly average prices reflect greater price volatility than does December corn futures.

In the past 26 years, 17 of the years (65% of the time) the November soybean futures fell from May 1st to October 1st by an average of 30 cents per bushel.

By understanding when the futures price trends have the greatest odds of being at their peak, producers can take advantage of this information to price new crop corn and soybeans.

Automated Pricing

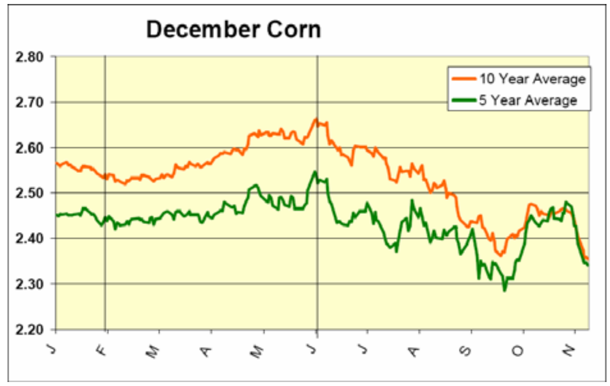
Contracts in this category follow **predetermined**, **non-discretionary** pricing rules for marketing grain. These contracts give the producer the average futures price over a set pricing period.

Automated pricing contracts (averaging) guarantee producers at least the average futures price for that set pricing period. The producer typically has to elect when to set the basis on that contract.

Generally automated pricing contracts price equal amounts of grain each trading day of a pricing period. Some contracts establish a determined pricing range within a predetermined amount of time.

The final futures price is based on the market price average during that period that is typically the seasonal high, such as the spring months.

For example, in the chart in the adjacent column, the average 10-year and 5-year December corn future prices typically have their highest levels in the spring period.



Source: www.cargillaghorizons.com

Using an automated pricing contract, producers can price grain based on the average futures price for this defined spring period established by the contract.

For example, a producer signs an automated pricing contract based on the average price of December corn futures between February 1st and June 30th. Each week day that the CBOT trades between these dates, December corn futures representing this contract are sold. At harvest or another delivery period specified, the producer receives the average futures price for this five month period.

Automated pricing contracts have advantages that includes;

- automates marketing decisions and provides a consistent average price,
- takes the emotion out of the pricing decision,
- maintains a solid pricing strategy during volatile periods,
- optimizes producer time,
- eliminates margin calls,
- can capitalize on futures price based on a seasonal average, and
- leaves the basis open.

There are some risks when using automated pricing contracts including;

- the contract will carry risk when grain prices are below your county loan rate,
- requires the delivery of grain, thus the risk of production, and
- a service fee will be applied, usually around $0.05 per bushel.

Contracts may average futures prices over periods of time with higher probabilities of seasonal price trends, such as during the spring months. Averaging periods are at the discretion of the provider, but each will have averaging periods stated in the contract.

One variation of the averaging contract is the floored average. In this contract, a floor is placed under the average price. This guarantees the producer a floor price for their grain plus the upside benefit if the average price is higher.

Example

How do averaging contracts work? In December, a producer signs up for an averaging contract to market 5,000 bushels of new crop corn for next fall's delivery. The final price paid to the producer will be based on the daily average for December corn futures over the period from February 1st to June 30th. A service fee of $0.05/bushel will be paid upon final settlement of the grain.

Each weekday between February 1st and June 30th, a percentage of those 5,000 bushels are sold using the December corn futures contract. The producer sets the basis on this contract on July 1 when it is offered at $0.25 under the December futures.

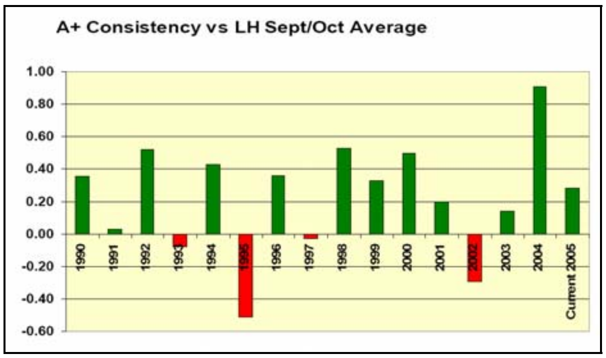
By the end of June, the final contract futures price is determined to be $2.60/bushel. At harvest, the producer delivers 5,000 bushels of corn and receives a final cash price of $2.30.

- Average price of December corn futures = $2.60/bushel
- Minus basis = $0.25/bu
- Minus the service fee = $0.05/bu
- Final cash price = $2.30/bu

Cargill AgHorizons ™

Cargill AgHorizons™ offers two types of automated pricing contracts, **A+** and **Target Range.**

Over the past 16 years, the February to June averaging period for contracts such as A+ exceeds the September to October harvest period price in 12 out of 16 years.



Source: www.cargillaghorizons.com

Cargill's A+ contract guarantees producers at least the average futures price during a set period, February 1st to June 30th. The producer's final futures price is based on the market average during this period which typically provides the seasonal high.

The chart in the adjacent column illustrates how the February to June averaging period falls into the target range ($2.40 to $2.80/bu.) 12 out of 16 years. Only in 2001 and 2002 did it fall significantly below the floor price of $2.40/bu. In 1996 and 2004 futures prices during this averaging period were greater than the $2.80/bu. ceiling.

Source: www.cargillaghorizons.com

Cargill's **Target Range** contract offers producers an opportunity to benefit from the average futures price - up to a predetermined maximum price level.

The producer is guaranteed a futures price at least equal to the floor price. The final futures price is based on either 1) the higher of the market average over a set period, up to the pre-set maximum price or 2) the established floor price.

Decision Commodities™

Decision Commodities™ has three automated pricing contracts available; Index, Rally and Accelerator.

The **Index** contract prices an even increment of bushels each weekday for a given pricing period.

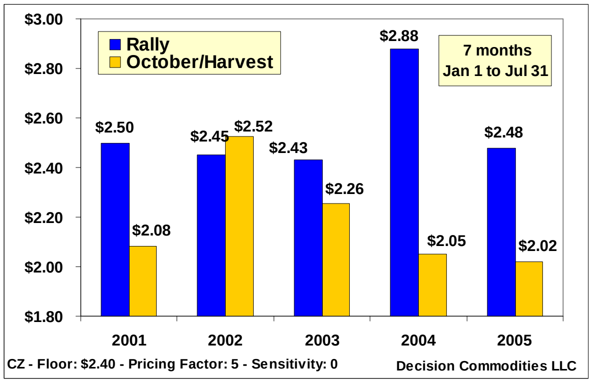
The **Rally** contract prices bushels on days during the automated pricing period when: 1) the settlement price of the referenced futures price exceeds the floor price and 2) the one day price change is less than the sensitivity level.

The **Accelerator** contract prices more bushels (accelerates) as the futures prices increase and slows pricing bushels as futures price decreases.

The Rally contract can be set up to price over different pricing periods. The goal is to catch as much of a price rally as possible relative to your delivery date.

Using October harvest delivery with the December futures reference, the chart in the adjacent column compares a 7-month, (January 1 to July 31) averaging period for each year since 2001.

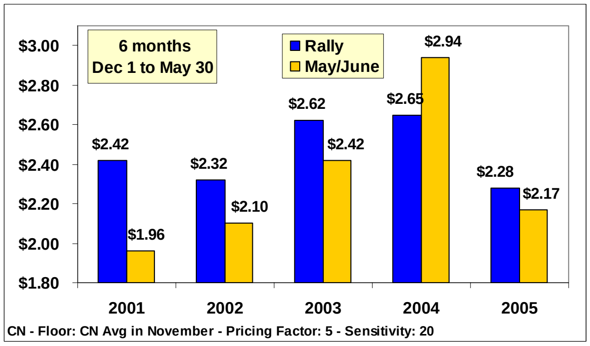
Over the last five years, the Rally automated pricing contract out performed the October harvest price four out of five years. Only in 2002 did the market out perform the Rally contract.



Source: www.decisioncommodities.com

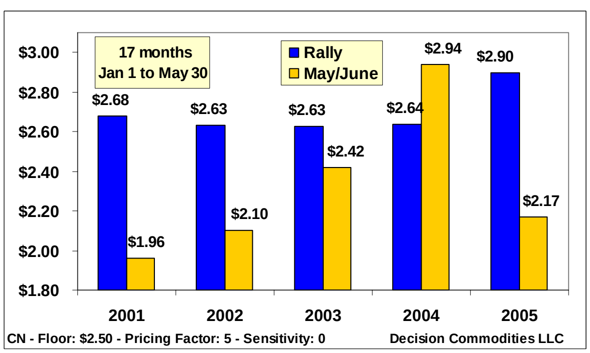
A Rally contract can also be established for months when better basis opportunities exist. Using May/June delivery with a July futures reference, the chart compares a 6-month, (December 1 to May 30) averaging period for each year since 2001.

Over the last 5 years, the Rally automated pricing contract out performed May/June price four out of five years with the exception of 2004 when strong spring futures prices occurred.



Source: www.decisioncommodities.com

Another strategy to consider when using the Rally contract is a longer pricing period that allows for greater odds of capturing higher prices. Using this same May/June delivery with the July Futures reference, the chart compares a 17-month (January 1 to May 30) averaging period for each year since 2001.



Source: www.decisioncommodities.com

Note for most years, the Rally contract for a 17-month period reflects much higher prices than the 6-month period. Averaging for a longer period of time using July futures and Rally contracts typically improves performance, with the exception of 2004. However, the high July futures prices during 2004 resulted in higher 2005 prices.

Managed Hedging

Managed hedging contracts price a contracted amount of grain according to the recommendations of a professional market advisory service.

There may be a predetermined minimum price for these contracts, but they offer no guarantee of generating average or above average performance. Furthermore, the pricing strategy will not be transparent to the producer.

How do managed hedging contracts work? **Market Pros™** use confidential approaches to improve the producers' futures price. Managed hedging relies on the expertise of marketing knowledge held by these Market Pros. Their methods include using

- futures,
- options,
- spreads, and
- combinations.

Managed hedging contracts have some advantages that includes;

- locking in a higher futures price,
- an added incentive if the Market Pros™ exceed the futures price,

- leaving basis open, and
- taking the emotion out of the pricing decision.

There are some risks when using managed hedging including:

- producers are dependent on the Market Pros™ pricing decisions and must accept the futures price received,
- no guarantee that final price will equal or exceed the average or be above the county loan rate,
- a minimum contract size is required, and
- a service fee that ranges from $0.05 to $0.08/bushel.

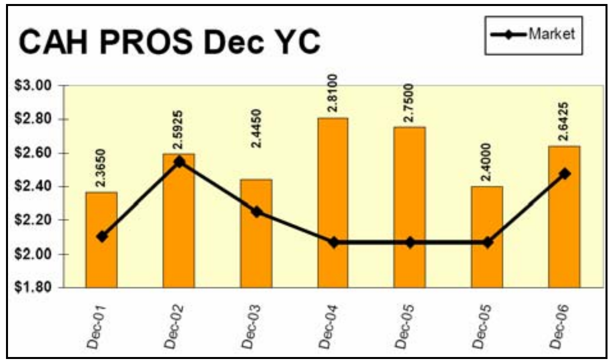
Cargill AgHorizons ™ Market Pros

Cargill AgHorizons™ typically offers three managed hedging contracts using three hedging experts: Cargill AgHorizons Pros (CAH Pros), Brock Associates and Northstar Commodities. Producers may choose one, or any combination of the three.

Participants benefit from the expertise of hedging professionals who spend every day analyzing markets. The Market Pros hedge price received becomes the producer's futures price established for grain sold under this contract.

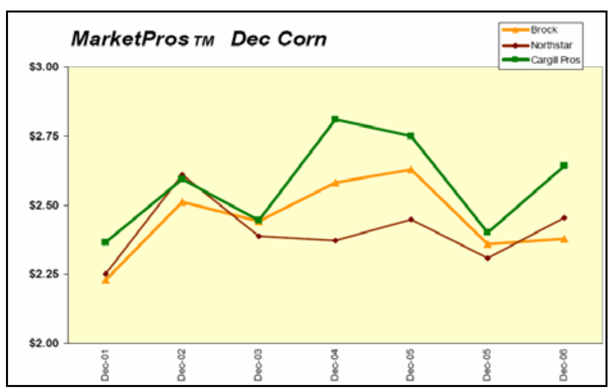
Performance

Since December 2001, Cargill AgHorizons™ Market Pros have consistently outperformed the Market which reflects the nearby December futures prior to delivery.



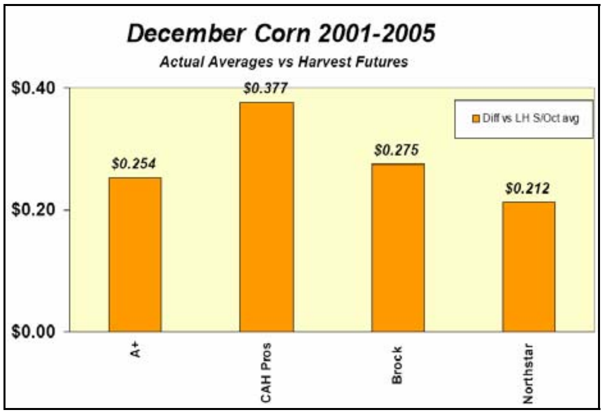
Source: www.cargillaghorizons.com

Within the group of three MarketPros, their performance varies from year to year. The Cargill AgHorizons Pros hedging strategy for corn outperformed Brock and Northstar in 2004 and 2005 with similar results in 2001, 2002 and 2003.



Source: www.cargillaghorizons.com

The ability to pre-harvest sell a portion of not only your next year's crop, but subsequent years of crops can also be utilized. Producers that elected to utilize A+ and Market Pro contracts each year since 2001 would have outperformed harvest futures price in excess of $.20 per bushel on average.



Source: www.cargillaghorizons.com

Combination Contracts

Combination contracts combine characteristics of both automated pricing and managed hedging contracts. These contracts price an amount of grain according to automated pricing rules, but allow the producer to share in some of the gains, if any, garnered by the pricing analyst.

See your local grain merchandiser for contracts that combine the characteristics of automated pricing and managed hedging.

Remember that automated pricing contracts capture their value from the futures prices on the CBOT during pre-established pricing periods and may include specific timing requirements. Managed hedging contracts typically use Market Pros to establish a futures price.

Summary

Cautions

Whenever signing a grain contract, the producer must understand the risk associated with contractual arrangements associated with production, delivery and market price determination.

A small service fee is common on most NGCs, but is not subtracted until the grain is delivered and the cash settlement for the contract made.

NGCs place the responsibility for triggering a grain sale on computers for automated pricing and/or marketing professionals for managed hedging.

On some automated pricing contracts, if the futures price falls below a certain predetermined price, open bushels of grain will no longer be priced. It will then be up to the producer to re-price the open bushels.

Producers must understand that grain may not be priced if specifications of the contract are not met. In addition, the contract price achieved may be below a producer's price expectations.

The decision regarding the timing for fixing the basis prior to delivery of the grain is the responsibility of the producer.

Conclusions

A recent study compiled by Purdue University in August of 2004 found that NGCs provide the following benefits:

- discipline for producers in their pricing strategies,
- creates diversification for pricing,
- reduces the emotion and time associated with pricing, and
- producers eliminate margin calls.

Glossary

At-the-money: An option that conveys the right to buy or sell futures for about the price they're trading.

Basis: The difference between a cash grain price and a futures grain price.

Call: An option that conveys the right, but not the obligation, to buy futures for a predetermined price in exchange for a premium paid in advance.

Discretionary Sale: A decision to "sell futures" would be triggered by a human decision, e.g. MarketPros.

Forward cash contract: Agreement between a buyer and seller covering a quantity of grain to be delivered at a specified location and time for a specific price.

Futures Contract: An exchange traded contract to buy or sell a specific quantity and quality of a commodity, to be delivered at a specific time at a specific location.

Futures Only: The sale of an underlying futures contract by a grain merchandiser through a commodity broker that requires the physical delivery of grain against that contract, but usually leaves the basis open.

Hedging: A marketing strategy that uses the futures or options to price a commodity.

In-the-money: An option having value. A call option is in-the-money if its strike price is below the current price of the underlying futures contract.

Non-Discretionary Sale: The price level, technical signal or date (e.g. A+ Average) determines when to "sell futures," rather than a human decision.

Options: Contracts that give the buyer the right to buy a commodity or futures contract; or sell a commodity or futures contract. (The right to buy a commodity is a CALL; the right to sell a commodity is a PUT.)

Origination: The purchasing activity of elevators, brokers or processors undertaken to acquire commodities for the purpose of trading or processing. Origination can be further defined as either "1st hand" (from producers) or "reseller of grain" bought from resellers, brokers, processor merchandisers, elevators or government agencies.

Out of the Money: An option that cannot immediately be exercised to profit.

Predetermined: parameters of a grain contract that are determined in advance of implementation of the actual contract

Premium: The amount paid to purchase an option.

Put: An option giving the buyer the right to sell futures at a specified price (strike price) for a specified time.

Sell Order-Cash: A request for elevator staff to watch the cash bid for the desired price.

Sell Order-Futures: A request for pricing the futures and waiting to establish basis when you deliver. This is used when producers want to price new crop for a spring or summer delivery.

Settlement Price: The price used by an exchange that represents the final commodity price of the day, which is used to determine gains and losses in margin accounts.

Spread: The difference between two futures contracts of the same or different commodoties.

Strike Price: The price granted by an option at which a position in the futures market may be taken.

Volume: The number of futures or options contracts that change hands during a period.

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