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Frorward Pricing Grain with No Cancellation Penalties; Livestock Outlook

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FORWARD PRICING GRAIN WITH NO CANCELLATION PENALTIES

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For grain producers to have a dependable cash flow, they must manage production and price uncertainties. Production uncertainty involves unpredictable crop yields. Among possible strategies to manage production risk is the purchase of Multiple Peril Crop Insurance or Federal Crop Insurance. Indemnities are paid if production is less than a specified percentage of the average historical yield. The size of the indemnity also depends upon the price-per-bushel coverage that is selected.

Price uncertainty exists because market prices are constantly changing. To manage price uncertainty, a significant portion of producers have traditionally depended upon government programs. Nine month nonrecourse loans provide a "basement" price for grain harvested by farmers.

Crop failures do not adversely affect crop prices received by producers through the nonrecourse loan program. Using forward pricing contracts available through elevators has risks -- particularly if producers attempt to forward price major proportions of their "new crop" production. A producer has to pay cancellation penalties if the number of bushels produced is less than the amount contracted, and market prices are higher than the forward contract price.

This article is directed toward a recent innovation in forward pricing contracts. The innovation is the introduction of an "Act of God" clause to forward pricing contracts for corn, oats, soybeans and wheat. If a producer has a crop failure, the "Act of God" clause results in the producer being required to deliver only the number of bushels harvested rather than the number of bushels contracted.

LIVESTOCK OUTLOOK*

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This Spring the cattle and hog industries have been worlds apart. While fed cattle prices reached $80 in late March and feeder cattle prices were above that level by $10 to $20, hog prices slipped below $40. Fed cattle prices are about double the level of hog prices. While the cattle industry was being supported by lower supplies and increased exports of beef, the hog industry was pressured by higher than expected slaughter levels and large supplies of pork in cold storage. Can the two industries expect more of the same? What price levels can be expected by the two industries later this year?

The cattle industry should continue to see near-term support from both the supply and demand sectors. However, high levels of placements of cattle on feed in February and March likely will mean price pressure within a few weeks as those cattle come to market. That means prices likely will peak in April this year compared to May last year. Prices later this Spring probably will be below 1988 levels, but still could hold in the mid-$70 area. Much will depend on demand, both domestic and foreign. If foreign demand remains strong, especially from the Japanese, and if the U.S. economy does not experience a major setback, demand should be sufficient for 1989 prices to be above 1988 levels by Summer. That probably means prices in the low $70's this Summer compared to the upper $60's last year.

Feeder cattle prices are more difficult to forecast. The supply side is

(cont'd. on page 4)

*Grain Outlook information is provided --beginning on page 4.

This innovation is currently available only from Harvest States Cooperatives (HSC) through their CROP-SURE Program. A comparison of HSC's CROP-SURE program with "Act of God" clauses of other grain companies is therefore not possible. The CROP-SURE program is used in the article for example purposes only.

With the availability of an "Act of God" clause, grain producers can more effectively use forward pricing contracts to establish forward prices independent of their actual production level and government programs. A major requirement of CROP-SURE is that a producer must have crop insurance for the crop.

In this article, the risks associated with the forward contracting of "new crop" production without an "Act of God" clause are first reviewed. Attention is then given to how CROP-SURE works and the requirements to participate in the program.

Producer Situation

Assume that on June 1 a wheat producer decides to forward price spring wheat at a price of $4.10 per bushel. S/he has purchased crop insurance and has selected the 65 percent yield coverage option. [The yield selections available through crop insurance are 50, 65, and 75 percent of APH yield.] If the final crop yield is less than 65 percent of the producer's actual production history (APH) yield, the producer will receive indemnification payments at a pre-selected price for the production shortfall below 65 percent.

Assume the producer has an APH yield of 40 bushels per acre. The producer would receive crop insurance indemnification payments, when the spring wheat yield is below 26 bushels per acre, i.e., 40 bu. multiplied by 65 percent.

The maximum number of bushels that can be forward contracted with CROP-SURE can not exceed the crop insurance coverage. Therefore, 26 bushels is the maximum quantity that this producer could forward contract with CROP-SURE.

Forward Contracting without CROP-SURE or Crop Insurance

Assume the producer forward contracts 26 bushels at a price of $4.10 per bushel and the delivery date would be August 15. The producer has a projected revenue of $106.60 (26 bu. x $4.10).

What happens if the producer has a crop failure and spring wheat prices increase to $5.10 per bushel? Assume the producer was able to deliver only 10 bushels per acre. Because the producer cannot deliver the specified amount in the contract, the producer has to pay a cancellation penalty equal to the difference between the current market price and the forward contract price or $1.00 ($5.10 - $4.10) per bushel. The producer is essentially "buying" grain (16 bu.) at the higher price from the elevator so the number of bushels contracted are delivered.

In this case, the per acre gross revenue from selling the grain would be $41.00 (10 bu. x $4.10). The cancellation penalty would be $16.00 (16 bu. x $1.00). Thus, the producer would receive only $2.50 per bushel (($41 - $16)/ 10 bu.) for the grain delivered to the elevator.

Indicated in the above example is a major reason why grain producers have not used forward contracting more extensively in the past. A crop failure with rising prices resulted in forward contracting making a "bad" revenue situation even "worse". This risk was and is particularly significant for high risk production regions such as South Dakota.

CROP-SURE and Crop Insurance

Assume a producer instead buys crop insurance and elects to use CROP-SURE. The net price received by the producer on the bushels delivered would equal the forward contract price minus a deduction for CROP-SURE from the price. Assume the deduction for CROP-SURE is 10 cents per bushel. The size of the actual deduction will vary with location and market conditions.

The net price for the spring wheat delivered to meet the contract requirements would be $4.00 or $4.10 minus the 10 cent deduct. Total forecasted revenue per acre would be $104 per acre (26 bu. x $4.00).

Again assume the producer has a crop failure with only 10 bushels available to deliver on the contract and prices have increased to $5.10. The producer would receive $4.00 per bushel or $40.00 for the

grain delivered. However, unlike the example without CROP-SURE, the producer does not have to pay a cancellation penalty. So the actual price received per delivered bushel would be $4.00 or what the producer had planned.

CROP-SURE is a deduction off the price paid on only the bushels actually delivered to the elevator. So if producers would have a total crop failure--zero production--they would not have to make any payments to their elevator.

This feature is particularly attractive when one considers the fact that this program is associated with crop insurance. This means producers can forward price grain and be absolutely certain that they will at least receive the price specified by their crop insurance contract on their insured yields.

For example, assume a producer selects the $3.00 price option when purchasing crop insurance for the spring wheat acreage. The producer would receive a $48 indemnification from crop insurance ($3.00 x 16 bushels), or in total $88 per acre (including the $40 from the forward pricing contract).

Where Can CROP-SURE be Obtained?

At the current time, CROP-SURE can be obtained only through HSC affiliates or line elevators. If a local cooperative manager is not familiar with the specifics of the CROP-SURE program, additional information about the program can be obtained by the manager from HSC's St. Paul office.

Other grain companies will probably offer this type of product in the future. Producers will have to evaluate carefully the contract conditions specified by each grain company. Much like the private insurance industry, the author expects major differences in the types of "Act of God" policies and premiums among companies.

Crop Insurance Is a Requirement

HSC will be using crop insurance contracts and claims to verify crop losses. If producers want to use CROP-SURE when forward pricing their grain, they **MUST** have crop insurance. Federal Crop Insurance and Multiple Peril Crop Insurance meet this requirement. Private hail/fire insurance cannot be used with this program.

For corn, soybeans, spring wheat and oats, the last sign-up date for crop insurance is April 15, 1989. Producers must purchase their crop insurance on or before that date. The sign-up date for winter wheat has already passed.

CROP-SURE will not be available through the whole growing season. CROP-SURE is available for oats only until May 15, 1989, while the final contracting date for corn, soybeans and spring wheat is June 15, 1989.

A Warning

With "Act of God" clauses, a major risk to the grain company is inaccurate reporting of yields by producers and/or insurance appraisers. Dishonesty in the reporting of yields will result in increasing the cost of "Act of God" clauses to honest producers. This program is not subsidized by the Federal government. Economic incentives exist for grain companies to closely monitor the accuracy of the yields reported.

For example, HSC's commitment to ensuring the accuracy of the yields is clearly indicated in the Crop-Sure Contract Addendum. One provision is the following: "Harvest States will report any attempts to disguise actual yields to the Federal Crop Insurance Corporation (FCIC) and will cooperate fully with the FCIC in investigating any suspected illegal activity related to the Multi-Peril or Federal Crop Insurance Program."

Conclusions

An "Act of God" clause represents a major innovation in forward pricing contracts for grain. Producers will be able to use forward contracts to safely price significantly higher proportions of their grain production. This provision will be particularly important if the 1990 farm bill results in further reductions of support prices and lower levels of income support.

Producers must identify private market alternatives for managing the combined impact of price and production uncertainties. This is particularly true for soybean producers because soybean producers do

not receive increased deficiency payments if market prices decrease. Nonrecourse loans are the only Federal program available to soybean producers.

For producers with high leverage levels, "Act of God" clauses will be beneficial in their efforts to ensure adequate cash flows to meet loan payments. Bankers and producers can work together to reduce the risk contained in cash flows through effective use of crop insurance, forward contracting and "Act of God" clauses.

The concept of CROP-SURE was based on research conducted by the author. The impact of economics research is often difficult to measure because the research results are incorporated into decision processes rather than the development of "new" products. This particular situation is different. CROP-SURE is an example of how economic research occasionally results in a product which directly enhances producer and agribusiness profitability.

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(Livestock Outlook ...)

favorable. The calf crop in 1988 was equal to 1987 levels but was small compared to the calf crops of the early 1980's. And, the calf crop in 1989 probably won't be much different than in 1988.

The big swing factor for feeder cattle will be demand, and that is highly weather dependent. If normal or above normal rainfall results in a good corn crop at lower prices and also promotes good pasture conditions, feeder cattle prices could stay at or above 1988 levels. Low grain prices promote the demand for feeder cattle and help producers obtain higher feeder cattle prices. Good pasture conditions will stimulate the demand for "grass" cattle and for herd rebuilding. However, high corn prices, poor pasture conditions, and lower fed cattle prices could cause sharply lower feeder cattle prices.

The hog situation should improve during 1989, but probably not to the level desired by producers during April. Continued large supplies, both from current slaughter and from cold storage, will be a problem at least through April. Prices probably won't get above the mid-$40's until May. Lower supplies by early Summer should help prices move up close to $50 then. The usual seasonal weakness by Fall may be less severe than it was in 1988. However, once again, much will depend on weather and the price of grain. The Hog and Pig report issued on March 31 supports the above possibilities.

Feeder pig prices should improve once slaughter hog prices improve. However, as was true for feeder cattle, much will depend on grain prices. If grain prices come down, feeder pig prices will improve.

The sheep industry also will be somewhat weather dependent, at least from the cost viewpoint. Prices should hold close to year-ago levels if the economy remains strong. Slightly larger supplies won't be as much of a burden as higher costs, which could occur if it doesn't rain.

In total, 1989 livestock prices for the rest of 1989 may be close to what they were in 1988. The main factors to watch are weather and its impact on grain prices and pasture conditions, demand (both domestic and foreign), and supply, which should remain favorable for beef and mutton and is expected to improve for pork.

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GRAIN OUTLOOK

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The USDA Prospective Plantings report, released on March 31, 1989, was friendly to the grain market complex. However, the Grain Stocks report released the same day will more than offset the friendliness of the plantings report.

Pre-report expectations called for an average of 75.4 million acres of corn to be planted across the nation, with the range of analysts' guesses running from 73.1 to 77.5 million acres. USDA reported that farmers intend to plant 73.3 million acres (Table 1).

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Table 1. Prospective Plantings, 1989, Major Crops (million acres)

Crop	U.S.	Percent of 1988	S.D.	Percent of 1988
Corn	73.3	108	3.5	111
Soybeans	61.7	105	1.9	108
All Wheat	74.3	113	3.9	107
Winter	54.7	112	1.6	94
Spring	15.7	117	2.2	119
Durum	3.9	116	0.1	110
Sorghum	11.8	114	0.5	100
Oats	13.2	95	1.6	114

Source: USDA

This implies that farmer participation in the 1989 government program will be near the 87 percent signup rate of 1988. The 0/92 program will probably attract over 2.0 million acres which is higher than pre-report expectations, but down from 3.1 million acres in 1988.

The reduction in intended acres compared to pre-report expectations would result in a 230-250 million bushels reduction in expected corn supply for 1989. This would normally lead to a rally in corn prices, but the corn in storage as reported in the Grain Stocks report was 300 million bushels more than expected so the growth in ending stocks will more than offset the supply reduction from lower production. From a price point of view, these numbers support a continuation of the current downtrend in corn prices and a narrowing of the spread between near term and new crop futures contracts.

Corn market prices will remain volatile as moisture conditions change in the corn belt. Currently, the market is anticipating a slightly below normal corn crop. The psychology of the market probably won't change unless drought damage begins to become apparent as the growing season progresses.

Soybean planting intentions were reported at 61.7 million acres or only 0.4 million acres less than the pre-report expectation of 62.1 million acres. Market impacts from this report should be negligable. Also, the amount of soybeans in storage was only 20 million bushels more than expected. Collectively, these reports should have a neutral impact on soybean complex prices and the market will continue to be very volatile based on rainfall conditions in the United States. The market has already worked a large South American crop into current price levels. The current market is anticipating a near normal soybean crop for 1989. The mood of the market will not change unless drought appears once again in the corn belt.

Winter wheat plantings were reported by USDA in January at 54.456 million acres. Expectations of 15.1 and 3.7 million acres for spring wheat and durum, respectively, were combined with the winter wheat acreage to come up with a pre-report total wheat acreage expectation of 73.3 million acres. According to the report, wheat acres that farmers intend to plant total 74.3 million, with 15.7, 3.9, and 54.7 million acres for spring, durum, and winter wheat, respectively. These figures, plus 40 million bushels more than expected in storage, should be slightly negative for wheat prices in the near term.

Weather conditions in the southern and northern plains have been friendly to wheat prices as a lack of moisture continues to be a problem. Timely rainfall for the remainder of the growing season will be necessary to the development of a normal wheat crop and slightly lower prices for 1989 as compared to 1988.

Worldwide wheat stocks are lower than in 1988. A shortfall in the wheat harvest in any of the major wheat producing countries would be friendly toward wheat prices. Earlier dryness in Canada and part of Europe has been alleviated by winter moisture. Except for Argentina, most other wheat growing areas of the world are experiencing near normal conditions.

Farmers in Canada intend to plant 33.5 million acres of wheat compared to 32.3 million acres in 1988. Durum acreage is expected to increase 12 percent. Durum prices in the U.S. will very likely run 50 to 75 cents per bushel lower in 1989 compared to 1988.

Oat production intentions for 1989 were reported by USDA at 13.2 million acres or 95 percent of 1988 planted acres. This number is misleading because oats are used

as a cover crop on many of the government program set aside acres. Idle crop acres will be much lower this year because of reduced set aside requirements. Oat acreage for harvest is expected to be over 7.0 million acres compared to 5.6 million acres harvested in 1988. A normal oat crop could lead to harvest time prices near the target price or below.

Canadian oat producers reported intentions to increase plantings by 11 percent or 0.5 million acres in 1989 compared to 1988. Canada was a major supplier to the U.S. in 1988 and much if not all of the expected increased production in Canada may be exported to the U.S. in 1989.

Minor crop prices for 1989 are expected to be similar to their prices in 1988. Barley price will trend along with corn as the feed grain competition is felt. Sunflower price per hundredweight has been around 140 to 160 percent of soybean price per bushel. With the decrease in intended sunflower plantings (Table 2), the 1989 price should be near the upper end of the price relationship with soybeans. Flaxseed will turned down with the other oil seeds and hay prices should remain above average. Even with a normal hay crop, prices should be above average because of the very low stocks of hay on hand in many parts of the country.

Table 2. Prosepective Planting, 1989, Minor Crops (million acres)

Crop	U.S.	Percent of 1988	S.D.	Percent of 1988
Barley	9.6	99	0.7	100
Sunflower	2.1	97	0.3	116
Flaxseed	0.3	106	0.05	125
Hay	63.1	96	4.3	105
Dry Edible Beans	1.7	111	N/A	N/A

Source: USDA