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Using a basis contract to market corn

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with the forecast of tighter margins, a cash flow statement will become more important to determine the financial strength of an operation and its ability to meet financial obligations.

In addition to a complete set of financial statements, additional analysis should be completed to determine the financial health of an operation. The Farm Financial Standards Council (www.ffsc.org) identified 21 ratios that adequately measure the financial position and performance of an operation. Financial ratios are broken down into five categories: liquidity, solvency, profitability, financial efficiency and repayment capacity. Lenders often identify a few ratios they focus on to measure the financial position of an operation. Additionally, each operation should identify ratios that help to manage its financial stability from year to year.

**Analyze key data**

When key ratios for an operation are selected, it is then important to identify the corresponding benchmark measures based on demographic location, operation type or size. Financial ratio information and benchmark measures for Iowa farms can be taken from AgDM Information File C3-55, Financial Performance Measures for Iowa Farms. The publication reports farm financial measures for all farms by operation type and profit level; data is gathered from the Iowa Farm Business Association.

Production agriculture today is extremely volatile; sensitivity analysis should also be completed to evaluate the financial stability of the operation. Examples of changes to measure sensitivity are an increase in expenses, decrease in revenue or increase in interest rates. To measure sensitivity, one should shock revenue or expenses by 5 or 10 percent and interest by 3 or 6 percent. Net farm income is then evaluated to see where the farm's profit level is after each change. More detailed analysis can include specifically shocking or changing commodity prices or input prices to evaluate the impact of specific factors. Can your operation sustain a decrease in revenue due to changes in prices or yields and to what degree?

With proper financial analysis and planning, one can prepare an operation to be financially stable and successful for years to come. Additional information on financial statements and analysis is located on the Ag Decision Maker website.

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**Using a basis contract to market corn**

*by Steven D. Johnson, farm and ag business management specialist, Iowa State University Extension and Outreach, 515-957-5790, sdjohns@iastate.edu*

Despite a late start, the 2013 harvest progressed rapidly and yield prospects increased across most of the Corn Belt. The U.S. corn yield average rose by 5.1 bushels per acre from September to November, according to USDA's latest estimate. Farmers are expected to harvest a record 13.989 billion bushels in 2013. Final USDA estimates will be released on January 10.

From mid-June to mid-November, the December 2013 corn futures contract declined by more than $1.50 per bushel. The nearby futures market finally found support around $4.15 per bushel. A large movement upward in price isn't likely anytime soon without a global change to supply and demand fundamentals.

Farmers are holding a lot of unpriced grain. Iowa State University Extension farm management specialist Steve Johnson encourages farmers who have unpriced corn to consider using a basis contract to market at least a portion of those bushels, especially if these are stored commercially.

An attractive basis and need for cash will be the main drivers for farmers to move stored bushels. With high 2013 farm income levels, farmers may wait to sell bushels until after the first of the year or defer additional income. Johnson expects corn basis to remain attractive through year-end. Basis contracts encourage farmer movement of cash corn and should be considered. Commercially stored bushels will likely have higher fixed costs than on-
farm stored bushels. However, some on-farm bushels may need to be moved by late winter for cash flow purposes or because of corn quality concerns.

Seasonal futures price trends indicate corn futures prices don't typically rally in the fall and winter months. That's because most everything is known about northern hemisphere feed grain crops where nearly 85 percent of the world production takes place. However, most farmers will be reluctant to give up ownership of bushels at sub-$4.50 per bushel cash corn prices. The memory of $7 per bushel cash corn just a year ago still lingers.

The chart below compares the cost of storing corn at a commercial elevator to on-farm storage. Accruing costs per bushel are reported every three months or until nine months following harvest. The assumptions: cash corn is valued at $4.20 per bushel; interest rate of 4.5 percent on borrowed funds; handling charge of 20 cents per bushel paid up-front; on-farm storage at 2 cents per bushel per month; commercial storage at 4 cents per bushel per month.

The chart indicates how much cash corn prices need to improve over three, six and nine months to justify storage. Commercial storage will be higher than on-farm costs. The cash price received for commercially stored bushels will also reflect the basis offered at that facility when sold.

Using these assumptions, storing bushels until April means cash prices need to improve from 44 cents to 56 cents per bushel to break even. Odds are cash prices offered this coming spring may never reach breakeven. Also, higher moisture levels for on-farm stored corn may widen the basis in late winter months as larger volumes of bushels are delivered to avoid moisture discounts.

Most of the cash price movement in late fall and during winter months may come from better basis being offered. This will encourage farmers and elevators to move stored bushels. Iowa will become a net importer of corn from surrounding states during this marketing year, as Iowa will use more corn than it produced in 2013.

Merchandisers tend to offer basis contracts in 5,000-bushel increments to match the futures contract that underlies the transaction. A farmer delivers cash corn; the merchandiser buys or goes “long” futures on behalf of the farmer. The merchandiser will likely charge a small service fee of 1 to 2 cents per bushel subtracted when the basis contract is settled.

Upon delivery of the cash bushels, a farmer can collect 70 to 80 percent of the corn’s value. The merchandiser holds the remaining 20 to 30 percent balance of the cash value to make potential margin calls should futures prices decline. Any excess funds minus the 1 to 2 cent service fee are returned to the farmer upon settling the basis contract.

The farmer needs to convey to the merchandiser a date and price at which he or she wishes to have this “long” futures position lifted. Consider being “long” the May 2014 or July 2014 corn futures contracts when using a basis contract to increase the chance of benefiting from a spring rally. This is the typical timeframe when corn futures prices rally each year.
Discuss risks and rewards with your merchandiser when you’re initiating the cash sale and basis contract. Be sure you understand the risk of being “long” futures and the flow of cash funds. Advantages of the basis contract may include elimination of storage costs, removing basis risk and minimizing the concern for on-farm stored corn quality.

The farmer isn’t able to take advantage of the carry offered in the futures markets with a basis contract. Hopefully eliminating storage costs, basis risk and corn quality concerns will have greater advantages than just the loss of capturing futures price carry.

With large amounts of corn in commercial and on-farm storage, many farmers will wait impatiently for a “sell” signal in the December futures contract then the March futures contract. However, attractive basis and the need to generate cash may be the primary drivers as to when farmers will move their stored bushels onto the market this winter.

Consider using a scale-up selling strategy for using basis contracts and sell stored bushels incrementally. While most basis contracts are offered in 5,000-bushel increments, some merchandisers might be offering them in truckload quantities (1,000 bushels). This fits well with a scale-up selling strategy and spreads the basis risk.

The first step for a farmer is to determine the cost of storing corn and when cash will be needed to pay debts and generate funds for 2014. This winter a farmer might avoid delivery of spot cash sale bushels during the last half of February. That’s when income taxes are due along with other large payables in early March. Expect that basis may weaken during this time frame.

Greetings from CARD!

By Cathy Kling, director, Center for Agricultural and Rural Development, cking@iastate.edu, 515-294-5767

Center for Agricultural and Rural Development (CARD) researchers and affiliates have a long tradition of developing and applying the tools of economics to create knowledge that supports good agricultural policy. To help us continue that tradition, we have created the Agricultural Policy Review. I am delighted that economics faculty with extension appointments will join CARD faculty and staff in producing a timely, relevant publication that I am confident readers interested in many facets of agricultural policy, including energy, nutrition, food security, international trade and the environment, will find highly valuable.

Our goal for the Agricultural Policy Review is to create a publication that is not only succinct and timely but also two directional—an outreach publication to disseminate information from CARD researchers to readers and, in turn, from readers to us.

Readers familiar with the Iowa Ag Review, CARD’s previous outreach publication, will notice that we have continued the tradition of publishing articles firmly rooted in economic analysis. However, we have dropped the word “Iowa” from the title, as articles in the Agricultural Policy Review will have more national and international relevance. Some articles published will have an Iowa or Midwestern focus, but the fundamental issues addressed will go well beyond geographic boundaries.

Many of the short pieces published in the Agricultural Policy Review will be based on longer, more technical publications that the reader looking for more detail can consult, but each piece is intended to be understood on its own. (No need to pull out your college calculus book!) We hope to take advantage of rapidly changing and improving technology to produce concise visual displays to portray key insights, and we plan to experiment with a few new features. For example, in this issue we have begun our first “Ask an Ag Economist” segment in which we invite readers to submit questions to us. We will periodically choose questions...