

VAntAGE

Value Added News to Agricultural Entrepreneurs

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Director's Corner

"Prices are too low, we got to do something!"

You will nearly always hear versions of that statement when producers begin the process of establishing a value added effort. While establishing a value added enterprise sometimes results in some small price premiums for farm production, higher prices or reducing farm price risk are not the primary objectives. The primary objective is to obtain added returns by creating or capturing more of the final user value of the product. In order for the farmer owned value added enterprise to be competitive with others in the industry, it cannot afford to pay higher than market price for the product and reduce the farmer's low price risk.

The value added enterprise attempts to enhance income and offset some of the impact of low prices. This potentially spreads income risk, but it does not necessarily reduce price risk. In fact, value added enterprises may actually increase producer price risk. For example, consider a farmer-owned ethanol plant. USDA's October '03 Supply and Demand Reports lowered the expected U.S. average corn price from \$2.30 per bushel in the September report to a projected \$2.10 in October. The same 20-cent drop in expected price suggests risk for lower farm prices and reduced farm returns. However, the projected 20-cent corn price decrease would have a significant positive impact on the cost of producing

ethanol. Corn accounts for more than 60% of the operating costs for ethanol production in most farmer-owned plants. The 20-cents lower corn prices would lower the cost of producing ethanol by approximately 7-cents per gallon or as much as \$2.8 million in operating costs for a 40-million gallon ethanol plant! The added ethanol return on investment can offset lower farm income. With ownership in an ethanol plant, price risk effects corn producer's income on both sides of the farm gate and the need to manage price risk is still present—the farmer needs to avoid pricing corn near price lows and the plant manager needs to "lock-in" favorable corn input prices.

The October USDA reports suggested downside corn price risk for the farmer and potential opportunities for the ethanol plant manager to purchase the major input at lower prices. However, since the reports, the exact opposite has occurred! During the week of October 20-24, corn prices increased more than twenty-cents per bushel. In this very short period of time, market volatility turned expectation of lower corn prices into the actual occurrence of higher prices. Instead of anticipating an LDP (loan deficiency payment) and trying to avoid low prices, corn producers may face the possibility of having to repay the advance CCP (counter cyclical payment) along with finding strategies to capture higher prices. In contrast, the ethanol plant managers are now looking at increased

costs, lower ethanol profits and the need to manage the risk of higher corn prices. In this case higher farm income may be offset by lower ethanol profits, but managing price risk remains critical to both.

Market price risk for both producers and value added enterprises is not just limited to corn either. Soybean prices have increased more than \$2.40 since early August. Recently steer prices have been more than \$25 per cwt. higher than in early summer. Wheat prices have varied over a nearly 60-cents per bushel range. These market price changes far overshadow any price premiums the producers could expect to obtain from their value added enterprise and further illustrates the importance of market risk on both sides of the farm gate.

Investing in a value added enterprise obviously does not eliminate price risk. The conflicting goals of the farm need to sell high and the value added enterprise need to buy low increases the

importance of price risk management. Even with ownership in a value added enterprise, producers still have the risk of selling to early and missing out on higher prices or waiting too long to sell and having to take a lower price. At the same time, the value added plant manager also risks buying too early or waiting too long to price the input for the value added production. Value added agriculture provides income opportunities, but does not make market price risk go away.

Melvin Brees

Co-Director of the Missouri Value Added Development Center

“Enhancing intellectual competencies and practical capabilities of value added agriculture to increase economic viability of agricultural producers and of rural communities.”

A Producer Group's Lessons Learned—Alma Farm Fresh Meats

Kelly Dyer, Ag Business Counselor

Approximately five years ago, the Board of Directors of Alma Farm Fresh Meats decided they needed to take on a new direction. Their business model (cooperative) was not adapting to changing demographics of the area along with a processing plant that was also getting old and needed upgrading. They began the process to reorganize the business structure as a new generation cooperative and acquire capital needed to expand and upgrade the facility.

The current members of the producer group, including the Board of Directors along with an advisory committee, are volunteer members from West Central and Central Missouri. All members of the group are interested in keeping the livestock industry viable in this region of Missouri and also in the state as a whole. They believe in this group project and want to insure that their vision will be a reality. Many of these dedicated people have now invested more than five years without any compensation, willingly sitting through many meetings into the late evening hours discussing the process that needed to be followed. Along the way, the group has invited several new people to get involved with the company building process. While some former members have moved on, new members have taken their place and have become believers in the project. It is impressive that the people who have been involved throughout the process work well with each other and get things done. They sometimes disagree, but they do it professionally and work things out—avoiding divisive arguments or behind the scene bickering.

In the early stages of the effort, several grants were written and those received were used to fund feasibility, marketing, engineering studies and a business plan. Consultants were needed to do these project studies. The Board of Directors investigated two different consulting firms to do the feasibility and marketing studies. Neither one of the firms had much experience with agriculture. The consulting firm that was chosen had a client list that was impressive, so the directors decided to contract with that firm. The firm's lack of knowledge about agriculture proved to be a challenge for completing the projects in a timely manner. Some of the data they presented in the studies was gathered directly by

the consulting firm through surveys and retail outlet visits. Other data they used was not detailed or targeted research, but USDA data that is available to anyone. Some of the statistics were questionable and a more comprehensive presentation resulting from detailed research would have enhanced the studies. The experience illustrates the importance of a firm's knowledge of the agriculture industry and insuring that the expectations of the work needed are spelled out in the beginning.

Important lessons learned have to do with the equity drive phase for the group's project. The group considered hiring the same consulting firm that put the feasibility studies together for preparing the presentation and coordinating the equity drive meetings. The firm wanted 2% to 3% of the equity raised in return. That would have amounted to \$150,000 to \$225,000 going to the consulting firm! The firm was asked to develop one presentation for the lenders the group was inviting in for a preview. However, the presentation was not used as it was not appropriate for lenders or farmers.

The group decided to put the equity drive presentation together themselves. While this took a lot of the group's time to put together, it enabled them to take ownership of the presentation and know exactly what was in it. This made the presentations at the equity drive meetings go a lot smoother because the group was knowledgeable about the content of the presentation.

The first group of equity drive meetings was coordinated by the Board, advisory committee, and employees. The meetings were scheduled to occur in short period of time as spring planting season was fast approaching. These meetings required considerable member time to plan and attend. Looking back the group decided that they should have scheduled more of the meetings at earlier dates and offered a meal instead of company product samples.

The second round of equity drive meetings took place in the summer months after planting, haying, and wheat harvesting were complete. The group decided to hire a temporary part-time person to coordinate and organize the second round of meetings. Money paid into the membership fund by the stockholders was used to fund the temporary coordinator position. Fortunately, a person fitting the job description was available and has proven to be an integral part of Alma Farm Fresh Meats. This person

offered a lot of good ideas and observed things that the Board and advisory committee missed. It also provided relief and time off for members of the group as they could delegate some of the duties they were all doing voluntarily.

Many lessons have been learned from the experience. The seven members of the Board of Directors were actually the ones that took on the most responsibility as they are the only ones allowed to actually sell the shares. This has stretched them out because they had to dedicate a lot of their time. Looking back it might have been better to have more Board members. With only seven members they could not hold as many equity drive meetings as they would have liked because there weren't enough people to conduct more meetings. Additionally, some Board members did not feel comfortable talking in front of groups.

Looking back there are a lot of things that could have been done differently, but this is the first time any had been through the process of building a new company or conducting equity drive meetings. Members of the group would probably be good advisors to share their experiences for someone else interested in the doing a similar group project. This group was not afraid to seek out professionals to help them turn in the right direction and they have a long list of people to thank once this project reaches completion. However, one final note of advice... Make sure the consulting firms you hire are familiar with the topic you are investigating!

Ethanol Profitability Outlook (the “Crunch”)

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Melvin Brees, Extension Associate, Agricultural Economics

Summary:

The six-month ethanol forecast indicates declining ethanol profitability. Increasing corn prices and decreasing fuel prices are the reason for the crunch approaching historical average levels. The ethanol profitability outlook is greatly changed from the October situation and outlook for crunch profitability. Should corn prices continue to creep up and fuel prices continue to drop by more than the seasonal trend, profitability in ethanol production

could go below the long-term average breakeven ratio.

Background

Production costs of most commodities are relatively fixed over a short period (3-6 months). Unlike these commodities, ethanol production is a flow process in which costs and revenues are constantly changing. Therefore, an ethanol forecast must consider costs, as well as output co-product prices, while a crop forecast only considers prices. Profitability in ethanol production is forecast using a combination of historical data and statistical models. Ethanol processing is focused on one cost center: corn and two value centers: ethanol and distillers dried grains (DDGs). “Crunch” is the spread between the value of ethanol production outputs and the cost of ethanol production inputs. In crude oil processing, it is known as “crack,” and in soybean processing “crush” is the term used.

The forecast values are industry averages for the Midwest. A crunch yield of 2.75 gallons of ethanol and 17 pounds of DDGs per bushel of corn processed is assumed. All other costs associated with the crunch are assumed to be fairly constant. While other costs do vary, corn, approximately 70 percent of the per gallon cost of creating ethanol, is the primary cost center for ethanol production. State subsidies vary greatly across states, so they are not taken into account.

The crunch ratio, DDG prices, and historical and forecast ethanol prices are discussed. Combining the expected value of inputs and outputs provides for an approximation of the crunch, a good indication of ethanol production profitability. The approximate breakeven crunch ratio (considering corn as the variable input and ethanol and DDGs as the output) is 1.8. Thus, values below 1.8 indicate a negative return and values above 1.8 indicate a positive return.

Note: These forecasts are averages and may vary by individual plant, due to location and technology used. State-level ethanol subsidies are not considered. This information should only be used to assess trends in profitability over the next six months.

The Crunch Outlook

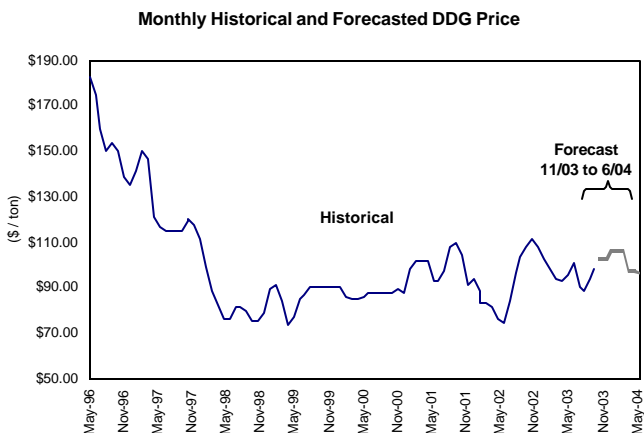
Ethanol

The graphic to the right represents the historical and forecast cash ethanol value for a

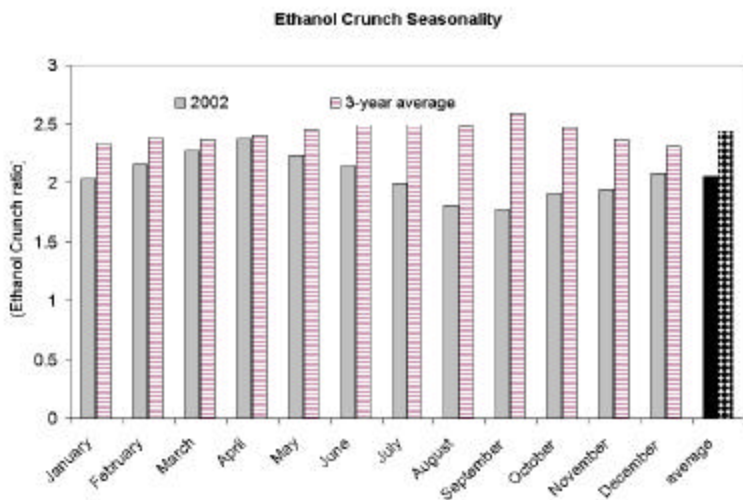
location in the Midwest. Historically, ethanol prices have been quite volatile.

Changes in gasoline supply-demand factors, e.g. OPEC supply controls or seasonal consumption trends, affect ethanol, a close substitute for gasoline. Over the past three years, ethanol has been priced relatively high to historical averages. Ethanol prices are expected to follow seasonal trends over the next several months. Although ethanol prices will probably weaken slightly, this is only one chapter in the revenue story.

Distillers Dried Grains (DDGs)



The graphic to the left represents the historical and forecast DDG value for the Midwest. DDG prices, which follow corn and soybean meal prices, are projected to hold steady over the next few months, and decline due to seasonal factors. DDGs and ethanol are the two primary value centers of ethanol production. If a corn price increase causes higher input costs, it will be absorbed by an increase in the value of DDGs, because DDG prices and corn prices



tend to move in the same direction. And, now for the rest of the story....

The Crunch

It is critical to think about both revenue and cost centers when considering ethanol profitability. The graphic to the right is the historical and forecast profit ratio for ethanol production. This ratio is computed by dividing the weighted average ethanol and DDG value from one bushel of corn by a corn price for the Midwest. This ratio indicates the level of profitability in ethanol production.

The three-year average is around 2.35. During this three-year period, record fuel prices have been observed (2000-2001) and a war-related increase in fuel prices occurred (Spring 2003). These factors, in addition to low corn prices since 1998, have allowed for relatively good profits in ethanol processing. The mid to late 1990s was a different story. The grain price increase in 1995-1997 pushed profits below break-even levels.

The six-month forecast indicates above profits declining to near to a breakeven level. Potential world demand for U.S. corn is outpacing the record U.S. corn crop, keeping input costs up. The ethanol price continues to be relatively strong, but is weakening and following seasonal patterns. A portion of the crunch ratio change is because of the seasonality of supply-demand factors for corn, DDGs, and ethanol (see figure to the left). The beyond six-month out forecast looks stable, as ethanol prices should bump up during the summer months and corn prices look to the 2004 crop for direction.

Websites of Interest

[Agricultural Marketing Resource Center](http://www.agmrc.org)

www.agmrc.org

Welcome to the Agricultural Marketing Resource Center -- your source for value added agriculture information! Please visit our general information categories listed above, or jump to the commodity you are interested in. Under each commodity are subcategories of value added projects with additional specific resources and case studies. Email us with any question or concerns you may have!

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Please include the activity name, date, time, your group or organization name and a contact name and number for more information. You can check and see what is going on also by login on to the site. Thank you!

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