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January 2016

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INSIDE THIS ISSUE

Dear Ag Industry Associate,

We start off the New Year with a focus on technology and its contribution to the margin management process. Most readers can readily identify with the fact that the way we receive and process information has changed greatly over the past decade and impacted how we conduct business. This certainly has been true for CIH and our whole approach to helping producers manage forward profit margins. We sat down with Jason Block, CIH Vice President of Technology, to gather his insights on how technology has evolved since we began managing margins with the hog industry back in 1999. We discuss how advances in technology have not only changed how we work with this sector, but others in production agriculture. There have been many improvements to the way we help producers manage forward margin opportunities. Jason provides unique perspective from a software developer's point of view, having been involved in the process with CIH for most of this history and it was fun to share memories with him over the past several years of this evolution.

We also review the current forward margins for the crop, hog, dairy and beef cattle industries, and how our clients are managing these volatile markets to help secure their future profitability. January has been a challenging month to begin the New Year for not only the equity market, but for commodities as well and 2016 looks to continue posing difficulty for all of these livestock and crop sectors as they struggle with average to poor margins from a historical perspective. As always, having a carefully devised margin management plan and being ready to take action on opportunities when they present themselves will help producers manage this challenging landscape as we move forward through the rest of the year.

Sincerely,

Chip Whalen
Managing Editor

Managing Editor, Chip Whalen is the Vice President of Education and Research for CIH, a leader in Margin Management. He teaches margin seminars throughout the country and can be reached at cwhalen@cihedging.com

Upcoming Margin Seminars

Margin Management and Information Technology: An Interview with CIH V.P. of Technology, Jason Block

Recently we sat down with Jason Block, Vice President of Technology for CIH to discuss his role and perspective on how technology assists in margin management. As many readers are aware, CIH relies heavily on an objective, data-driven approach to managing forward profit margins, and his team's contribution in providing this data is key to our clients' decision making process.

Chip Whalen – Jason, you head technology development for CIH, tell us a little bit about your role and how it has grown over the years.

Jason Block – When I started with CIH, the immediate need was to provide IT support for the group and help build out the company's website. Today, in addition to our main website there are multiple client web applications that serve the various industry groups and unique client profiles we work with. Our goal is to provide a concrete, easy-to-use, data-driven foundation for risk management decisions. Today we offer clients an online resource in which we help them organize and track the inputs and outputs of their operation. These numbers are added to a margin management model that incorporates market price and position information to help clients identify their risk and make better decisions. Every effort is made to perfect these models and enhance the information that fuels them. My role revolves around detailing what and how we should improve these web based resources. If I'm lucky, I'll also get to help build some of it. We have a team of 5 developers with different areas of expertise: from database and data modeling, to user interface design, to financial and statistical analysis.

CW – Yes, I remember those initial meetings on our main company website. As I recall, we first had to meet offsite because the Chicago Board of Trade Building was evacuated as a precaution following 9/11. It's hard to believe that's more than 14 years ago now. I also recall that CIH started the margin management service for the hog industry back in 1999 as a calculator in Microsoft Excel, with printouts faxed to clients on a weekly basis. Can you explain how that has evolved over the years into the web application as it currently exists today?

JB – in the last 10 years the amount and variety of information available for analysis and interpretation has exploded. Likewise the ubiquity and speed of the internet has grown. We are constantly striving to take advantage of these advancements and cooperate across our product teams to build new and even more valuable resources. Since the spreadsheet days, CIH initially built a basic web-based model that combined clients' production projections, board traded positions and current market price activity. With feedback and more technical expertise, we added historical data, cash market information, hedge and spread position management, and other tools that reinforce our consulting service. In addition to harnessing and relaying important operation and market information, the website has become a great platform for collaboration between producers and our account executives. The numbers, visuals and reports have become like a 'centerpiece' in the

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weekly consultations. It successfully ensures that everyone involved in the discussion understands the issues and is on the same page. As a simple example, usually having a way to load, illustrate and talk about a position and how it will impact next year's profit margin makes a huge difference in the process.

CW – Besides swine, CIH helps producers in other industries manage profit margins including dairy, beef cattle and crop operations. Can you tell us how those web applications are both similar and different across these sectors and how those differences evolved?

JB – Every agricultural production process is different and of course each operation has varying inputs and outputs. Our first margin management model tackled swine production. We discovered much of the basic methodology strongly applied to other production types and we began to build out those tools over the course of several years. As we formed consulting teams around the different operation types, we worked to collect more information about how to refine the methodology and more specifically the actual web-based tools to get a better fit and just increase the value. For example in the Crop Margin product we started gathering cash market data from every location within a couple hundred miles of our clients' operations to help them track basis more accurately in the profit margin calculation. We've added feed management features to the livestock margin models to help producers derive a hedgeable corn or meal quantity from their varied feedstuffs. Dairies in particular depend on these correlation tools to project and protect margins. Luckily there are many enhancements that apply to all. Usually tools that relate to markets and position management have common appeal. For instance we are developing a new Risk Report to monitor current capital requirements and project the value at risk into the future. This kind of analysis is valuable to all of our account holders.

CW – Yes, that's a good point. The capital monitor tool that you reference and the risk report that is being spawn from that is a great example of how certain resources serve a broad base of clients. There have been some pretty amazing tools added recently besides the capital monitor including volatility studies for options and the spread manager. What has been the most challenging project you have worked on with your team?

JB – The development of the margin model for cattle producers presented one of the bigger challenges. Unlike other operations, feedlots buy all sorts of feeder types and weights and then sell them at optimal times. Coming up with a reasonable projection of forward profit margins was tricky. Our team has a good track record of experimenting with different models, working with clients to get feedback, and then making adjustments or sometimes building something entirely different. Another rewarding challenge relates to just keeping up with changes in technology. As compared to the spreadsheet fax machine days, guys today are checking their margins on iPads and getting text alerts about bumps in volatility. Our service has become much better thanks to these changes.

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CW – You are right that the way people receive and process information has certainly changed over the years. The CIH mobile app is another example of how technology advancements have allowed us to provide more up-to-date information to clients on the go and help them execute carefully prepared margin management plans when opportunities arise – regardless of where they are. When you are not working on technology development for CIH, what do you like to do in your spare time?

JB – I am an avid book reader, basketball fan and I like to play acoustic guitar; but truthfully, I spend all of my extra time chasing four kids.

CW – That definitely makes for a full house and I can imagine how busy that keeps you in your free time. As a final question, do you have a prediction for the Super Bowl outcome?

JB – Panthers. Defense wins championships.

CW – I think I would agree with you on that. Thanks for your time and insights Jason.

With the exception of far deferred Q4, margins generally improved since the middle of the month due to an increase in hog prices with feed costs largely flat over the past two weeks. Q2 margins are now back near the 70th percentile of the past 10 years while spot Q1 and deferred Q3 are about average from a historical perspective. Q4 margins remain negative and below average however. Hog prices are being supported by strength in the cash market and pork cutout despite a record January slaughter pace. Pork prices remain very competitive relative to beef, and this combined with very favorable packer margins has encouraged packers to bid up for animals. Meanwhile, NASS reported December Cold Storage figures with frozen pork stocks on December 31 at 545.6 million pounds which was down 15.3 million pounds or 2.73% from November but up 8.3% from the previous year. Another supportive feature is that frozen pork stocks have declined 17% since August, 2015 in response to an increased export pace late last year. Feed costs have held relatively steady although corn has had a slightly firmer tone while soybean meal has been weaker. The South American soybean harvest has just begun with Brazil 4% complete as of Friday according to AgRural. A record soybean crop from Brazil and weakness in their currency relative to the dollar should boost soymeal exports. Meanwhile, corn selling from U.S. producers has picked up recently as an increased need to pay bills ahead of the spring planting season and the firmer futures board has led to increased marketing in the cash market. Our clients have begun scaling into new coverage with the recent uptick in hog prices causing margins in some periods such as Q2 to reach pre-established targets to establish protection. Flexible strategies continue to be preferred in order to allow for potential future margin improvement.

The Hog Margin calculation assumes that 73 lbs of soybean meal and 4.87 bushels of corn are required to produce 100 lean hog lbs. Additional assumed costs include $40 per cwt for other feed and non-feed expenses.

Dairy Margin Watch: January

Dairy margins were flat to weaker over the past two weeks as milk prices deteriorated while feed costs were unchanged to slightly higher since the middle of January. From a historical perspective, margins remain below average with the exception of deferred Q4, and opportunities are better into 2017 where milk futures are indicating higher prices relative to spot values. Weakness in spot milk continues from heavy production and high stocks relative to actual demand. USDA's December Milk Production report showed total U.S. milk production at 17.5 billion pounds, up 0.7% from last year with November's production also revised higher to reflect a 0.7% increase from 2014. Meanwhile, revisions to the U.S. milking herd showed less contraction than expected suggesting that margins have not dropped enough to discourage expansion. USDA's monthly Cold Storage report reported December butter stocks at 152.9 million pounds, up 15% from November and 46% higher than last year. CME's recent revision to spot butter trade allowing Certificates of Analysis (COA's) to be accepted in addition to USDA grading certificates has caused butter futures to plunge with increased sale offers in spot butter trade. Feed prices have held relatively steady since mid-January, although higher futures trade in corn has encouraged additional sales in the cash market with producers needing to pay bills ahead of the spring planting season. Soybean meal prices have been pressured by the beginning of a record South American soybean harvest, with the expectation of added export competition given continued strength in the U.S. dollar relative to the Argentine peso and Brazilian real. Our clients remain focused on far deferred periods into 2017 where margins are historically stronger to establish new coverage while also adjusting existing positions including milk hedges to secure equity.

The Dairy Margin calculation assumes, using a feed price correlation model, that for a typical dairy 62.4 lbs of corn (or equivalent) and 7.34 lbs of meal (or equivalent) are required to produce 100 lbs of milk (includes dry cows, excludes heifers not yet fresh). Additional assumed costs include $0.90/cwt for other, non-correlating feeds, $2.65/cwt for corn and meal basis, and $8.00/cwt for non-feed expenses. Milk basis is $0.75/cwt and non-milk revenue is $1.00/cwt.

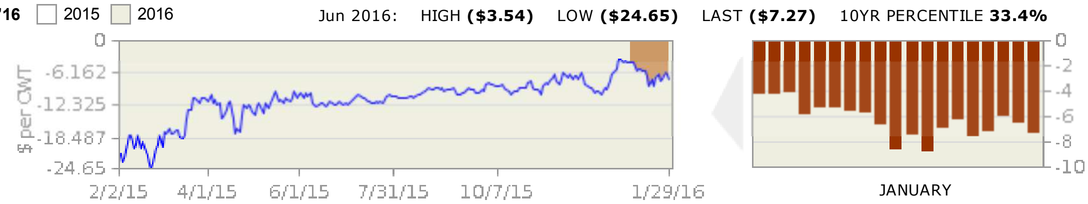
Beef margins continued mixed through the last half of January with nearby periods stronger where cattle are already on feed but weaker in deferred slots against future placements. Margins remain negative through the end of 2016 and below average from a historical perspective, continuing a trend that has been in place for quite some time now. Prices for both cattle and feed were higher over the past two weeks, with contradictory fundamental influences relative to the price movement. USDA's monthly Cattle on Feed report was considered slightly bearish relative to market expectations, with placements higher than trade estimates. Feedlot placements during December totaled 1.525 million head, down 1% from the previous year when the market was on average expecting a 5.3% decline. USDA also released the semi-annual cattle inventory report at the end of January which showed all cattle and calves up 3% from 2015 when the market was looking for a 1.8% increase. Beef cows and heifers calved was also slightly above expectations up 4% from last year. The monthly Cold Storage report showed beef stocks up 16% from last year, although the rate of increase in frozen beef storage has moderated since July. Meanwhile, corn prices were slightly higher since mid-January which has encouraged additional movement in the cash market as producers need to pay bills ahead of the spring planting season. Corn exports continue to struggle with strength in the U.S. dollar relative to the Argentine peso which may lead to further demand loss there as South American supplies become more competitive with the ensuing harvest. Our clients continue to focus on making adjustments to existing positions to take advantage of market volatility. Adding delta to cattle hedges and reducing corn delta following the recent increase in prices for both markets have been a recent focus.

Live Cattle Marketing Periods:

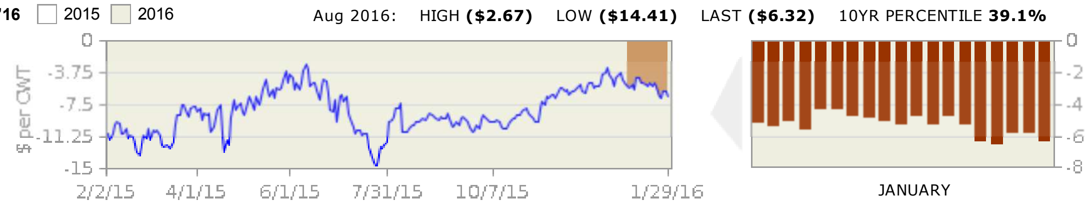
Feb '16 2015 2016 Feb 2016: HIGH **$8.16** LOW **($33.93)** LAST **($21.16)** 10YR PERCENTILE **2.1%**

Apr '16 2015 2016 Apr 2016: HIGH **($1.00)** LOW **($22.77)** LAST **($10.68)** 10YR PERCENTILE **5.1%**

Jun '16 2015 2016 Jun 2016: HIGH **($3.54)** LOW **($24.65)** LAST **($7.27)** 10YR PERCENTILE **33.4%**



Aug '16 2015 2016 Aug 2016: HIGH **($2.67)** LOW **($14.41)** LAST **($6.32)** 10YR PERCENTILE **39.1%**



Oct '16 2015 2016 Oct 2016: HIGH **($1.70)** LOW **($37.51)** LAST **($4.53)** 10YR PERCENTILE **27.2%**

The Beef Margin calculation uses Feeder Cattle futures to price inbound animals and assumes each will consume 55 bushels of corn and cost approximately $250 per head (for other feed and non-feed expenses) to gain 550 pounds and reach a market weight of 1,250 pounds.

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Corn Margin Watch: January

Corn prices and margins were steady to slightly higher the past two weeks. The corn market having received the final 2015/16 production, yields and stocks projections in early January has traded in a 10-cent range since. For the Midwest, Revenue Protection insurance levels will be determined this month via the average of December 2016 corn price through February. Until South American harvest gets underway and U.S. planting intentions are revealed the market will have to be satisfied focusing on demand categories. U.S. ethanol production the past two weeks has dropped off from record levels; ethanol like the entire energy sector is suffering from oversupply issues, with weekly stock levels running well ahead of maximum levels seen at this point seasonally in the past five marketing years. The strength of the U.S. dollar continues to pressure U.S. origin corn exports, with shipments currently running at 26% of the USDA expectation, compared to an average of 37% to be on pace to meet the current USDA estimate. One potential bright spot for U.S. exporters has been talk of firming Brazilian corn basis due to the record level of December shipments and from the strong shipment pace to date. Firming basis levels could potentially entice foreign buyers to find cheaper origins. To ease some domestic price pressures, the Brazilian Agriculture Minister announced an auction of 500 thousand tons of corn from government stocks specifically for livestock producers in an effort to keep a lid on prices until the current year's harvest gets underway. The slow progress of the Brazilian soybean harvest is creating concerns for getting the second crop corn in the ground. Although there is still plenty of time to seed, the second crop of corn is double the summer crop, so any issues that could arise would certainly impact the market. The South African production was officially estimated to be 7.44 MMT, a 25% reduction from last year. Even though the production estimate was greater than expectations the extreme drought of the past two years has created a shortage of corn by some estimates of at least 6 MMT, which will have to be made up from the highest imports in over twenty years. Our consultants are working with clients to set alerts at favorable deferred margin opportunities; many are presently also considering flexible protection strategies to exploit current levels of option implied volatility.

The estimated yield for the 2016 crop is 175 bushels per acre and the non-land operating cost is $400 per acre. Land cost for 2016 is estimated at $250 per acre [1]. Basis for the 2016 crop is estimated at $0.08 per bushel.

The estimated yield for the 2017 crop is 175 bushels per acre and the estimated operating cost is $400 per acre. Land cost for 2017 is estimated at $250 per acre [1]. Basis for the 2017 crop is estimated at $-0.2 per bushel.

[1] *The Corn Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.*

Soybean prices and margins were steady the past two weeks and after digesting multiple early January reports from the USDA on final 2015/16 soybean production, yield and stocks figures, the market remains largely range bound. For the Midwest, Revenue Protection insurance levels will be determined this month through the average of November 2016 soybean price through February. U.S. soybean export shipments remain on a brisk pace; currently running at 68% of the USDA annual estimate, 10% or roughly 170 million bushels ahead the average pace needed to meet the USDA forecast. China recently announced imports of soybeans for December of 9.1 MMT, a strong push at year end. Soybean shipments may ease to China in the coming weeks to accommodate the Chinese New Year celebrations. South American weather is in flux, with moisture hampering the soybean harvest in Brazil and dryness concerns in Argentina. The Argentinian dryness may not have an overly large impact on yields at this stage. However, the slow progress of Brazilian soybean harvest is worrisome to the seeding of the second corn crop which accounts for around twice the production of first crop corn. With Brazil and Argentina being the second and third largest soybean producers on the globe, the market will continue to closely monitor the weather and harvest progress in each location. Our consultants are working with clients to set alerts to capitalize on favorable deferred margin opportunities as they occur; many are also presently considering flexible protection strategies to exploit current levels of option implied volatility.

The estimated yield for the 2016 crop is 50 bushels per acre and the non-land operating cost is $325 per acre. Land cost for 2016 is estimated at $175 per acre [1]. Basis for the 2016 crop is estimated at $-0.01 per bushel.

The estimated yield for the 2017 crop is 50 bushels per acre and the estimated operating cost is $325 per acre. Land cost for 2017 is estimated at $175 per acre [1]. Basis for the 2017 crop is estimated at $-0.25 per bushel.

[1] The Soybeans Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.

Wheat Margin Watch: January

Wheat prices and margins were steady the past couple of weeks, and remain in a tight range similar to both the corn and soybean markets. Also similar to the corn and soybean market much of the news impacting the wheat market was global in nature. The International Grain Council raised the global wheat production expectation for 2015/16 by 5 MMT to 731 MMT, and at the same time the IGC lowered production for next year to 706 MMT. Another global development has been speculation Russia is considering changing their wheat, corn and barley export tax regimes. Nothing is definite, but the chatter is fluid. Also on the horizon is the fact that India will be importing wheat this year to make up for their production deficit that could run as high as 10 MMT. Indian millers are lobbying for the wheat import taxes be relaxed later this year. Brazil also could be a potential outlet for U.S. exports given the reduced wheat production there. The U.S. plains are bracing for a winter storm that will provide moisture and snow cover, two welcome developments for U.S. winter wheat production. Our consultants are encouraging clients to set alerts to capitalize on favorable deferred margin opportunities should they occur; many are also presently considering flexible protection strategies due to the current levels of option implied volatility.

The estimated yield for the 2016 crop is 70 bushels per acre and the non-land operating cost is $300 per acre. Land cost for 2016 is estimated at $125 per acre [1]. Basis for the 2016 crop is estimated at $-0.25 per bushel.

The estimated yield for the 2017 crop is 70 bushels per acre and the estimated operating cost is $300 per acre. Land cost for 2017 is estimated at $125 per acre [1]. Basis for the 2017 crop is estimated at $-0.35 per bushel.

[1] *The Wheat Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.*