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NOVEMBER 2017

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Dear Ag industry associate:

In this season of Thanksgiving, as we look back on a busy and productive year, we can all find many things to be thankful for. However, unfortunately, for many agricultural producers contemplating forward profitability in the months ahead, strong margins are not one of them. In particular, crop, dairy and hog operations are all struggling with historically low margins that are, in many cases at or below breakeven levels well into 2018.

Our feature article this month, “Strategies for Low-Margin Environments” discusses contingency planning in the current margin management, and how to incorporate backup strategies to address risk when margins are poor. As sports enthusiasts know, playing defense is important for remaining competitive, and we explore examples of defensive strategies that can be a critical way to stay competitive in the current margin environment.

Our latest Margin Watch reports also review the current profitability projections for the crop and livestock industries, with updates on recent market developments and their impact on forward margins.

As always, if you have questions, please feel free to contact me.

Respectfully,

Chip Whalen

Chip Whalen
Managing Editor

Chip Whalen is the managing editor of MarginManager and the vice president of education and research for CIH. He teaches classes on margin management throughout the country and can be reached at cwhalen@cihedging.com

UPCOMING EDUCATION EVENTS

Hog Margin Management
Ames, Iowa | Dec 7-8

Crop Margin Management Seminar
Chicago | Dec 13-14

IN THIS ISSUE

FEATURE

Strategies for Low-Margin Environments

Although it is easier to strategize about protecting profitability when times are good, a sound risk management plan applies to all margin environments, and is especially important when the outlook is bad.

When margins are low and opportunities are hard to find, producers may not consider it worthwhile to initiate margin coverage and may prefer to stay open to the market. While understandable, that tactic leaves operations vulnerable to further margin deterioration. For instance, many operations may now be in the situation where they don't have adequate coverage in place for the current margin outlook because profitability projections over the past several marketing periods never presented a catalyst to trigger a risk management decision.

As an example, a crop producer may have set targets this past growing season to establish sales on expected production. Looking at CBOT December Corn futures, the producer may have picked $4.00/bushel as their first target to initiate sales, with a plan to scale up commitments in 10-cent increments. But unless the producer had started managing margins well in advance of this year's marketing period, that plan would have led to only a couple of sales by early July, when the price reached $4.17. But after mid-summer, the price of corn proceeded to decline steadily and offered no further opportunities to capture attractive margins. (see Figure 1).

Contingency Planning

The example of the crop producer's marketing plan is a common one and may be thought of as "Plan A." In a best-case scenario, the market will cooperate and allow the producer to scale into selling targets at incrementally higher prices, thus establishing favorable margins over time if all of their planned targets are triggered. A hog or dairy producer likewise may select thresholds of historical profitability to initiate strategies to protect forward margins, though these also rely on the market cooperating and delivering those opportunities such that the margin coverage is established.

While having Plan A is a good starting point for a sound margin management policy, all risk managers also need a Plan B. This plan addresses the possibility that the preferred course of action can't be executed due to unfavorable market dynamics. While contingency planning is not exactly fun and no one wants to think about what they will do when things go wrong, a thoughtfully crafted backup plan can provide many benefits.

FIGURE 1

December 2017 Corn Futures (Year-to-Date)

A good starting point for a backup plan might be addressing catastrophic risk. As an example, a producer could look at their margin history and determine some threshold level where they would absolutely want to have protection against a worst-case scenario. In the current environment where many producers are either at, or slightly below, breakeven levels, they might start by considering their cash flow situation. They could work with their lender to determine at what point they would no longer be able to afford a loss exceeding "x" amount of money for "y" period of time before things became problematic financially with their loan covenants. This could help to define that line in the sand.

As an example, following a $2.00/cwt. drop in the price of milk futures from earlier this summer, a dairy producer might opt to purchase out-of-the-money put options in deferred months to protect their revenue from any further declines. This strategy would help to mitigate catastrophic losses in the case of a market that moved sharply lower. A crop producer might likewise choose to purchase put options on deferred corn, soybean and wheat contracts for unpriced inventory they have in storage from this past year's harvest.

One important component of this type of planning though is determining when to pull the trigger. Ideally, it would be best to wait for the market to provide opportunities to execute Plan A. While a producer is waiting however, it is necessary to consider whether that plan may need to be adjusted. A football analogy might be a quarterback calling an audible at the line of scrimmage because they don't like the defensive setup against the play that was planned to be executed. This is when Plan B comes into play.

The producer may determine ahead of time, based on some sort of secondary trigger, when they will proceed with implementing their backup plan if their primary one can't be executed. One example of this might be the dairy producer deciding that they won't let their projected margins drop below a loss of $0.50/cwt. before deciding to act and purchase the defensive put options against their forward milk revenue.

Another example might be the crop producer choosing a point in time during the growing season, such as early to mid-summer, as a seasonal threshold to establish protection. The benefit in both cases is that the producer will know ahead of time that they will have some protection in place, regardless of how the market unfolds. This will also help to assure that a catastrophic event with extremely negative margins is avoided before it becomes a problem that needs to be managed under duress.

Be Ready to Adjust

A contingency plan is meant to address a worst-case scenario, but ideally the margin profile improves over time. If a producer is implementing Plan B, there should also be a corresponding strategy to adjust their position and protection to capture better margins. In the previous example, the dairy producer may purchase out-of-the money puts on milk to protect the catastrophic risk of prices declining further; however, they should also incorporate into that plan a strategy for capturing any improvement in forward margins in a recovering market.

For instance, if the dairy is purchasing Class III Milk put options at the 14.50 strike price, they might set up an alert to be notified if milk prices rise above a certain target price, such as 15.50/cwt. In this scenario, they could opt to roll their put options up to a higher strike price, and possibly pay for this increased cost by selling call options. Alternatively, they may simply decide to execute fixed sales if they are projecting a profit margin they consider acceptable for the operation.

To illustrate this example, consider a hog operation that was monitoring their risk on forward production looking at Q1. There has been much discussion recently about hog slaughter weights increasing and the possibility of larger supplies coming to market that may be getting backed up on farms. There is also concern about prospects for forward demand given intense competition from competing proteins. While projected forward Q1 margins have improved recently and are currently above the 80th percentile of the previous 10 years, they have mostly existed below breakeven until earlier this fall (see Figure 2).

FIGURE 2

Q1 2018 Hog Margin

While many operations took advantage of the strengthening margins during the month of October to scale into Q1 coverage, some became concerned as margins deteriorated into early November due to the aforementioned market dynamics. With perhaps no more than 50% coverage in place against Q1 amidst a questionable outlook, some operations may have chosen to implement a Plan B strategy in mid-November to increase coverage and offset more risk. With projected margins around $1.50/cwt. on November 17 and April Hog futures trading at $71.00/cwt., a hog producer may have opted to purchase a slightly out-of-the-money put option at the $68 strike price for a cost of around $2.50/cwt.

While the worst-case scenario in this example would equate to a loss on that portion of their production in a falling market, it would nonetheless be a defined loss and mitigated to some degree by the portion of the production that was protected at stronger margins. This may also have helped the producer in year-end discussions with their lender feel better about cash flow projections, particularly given that most operations are currently faced with negative spot margins in Q4.

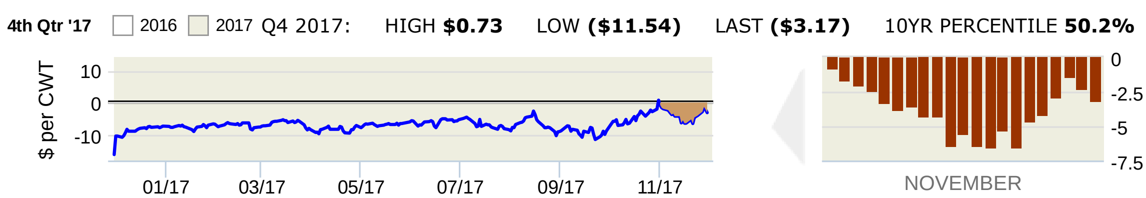
As it turns out, hog prices and margins have recovered over the second half of November. With April Hog futures recently trading over $75.00, the producer would have been able to take advantage of the increase in price by strengthening their protection. For instance, they may have set an alert to trigger an adjustment if Q1 margins got back above, say, the 80th percentile, which they did recently on November 28.

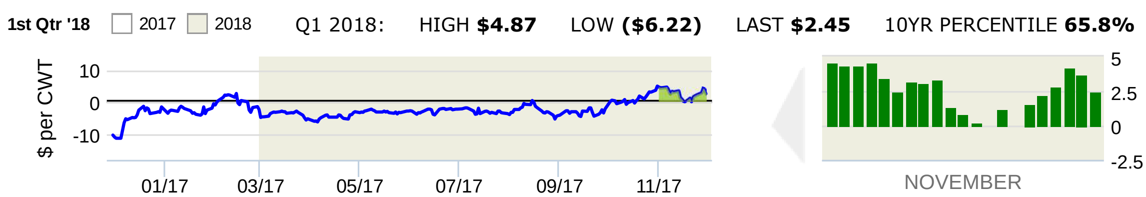
As an example, they could have rolled up their floor from $68 to $74, and basically paid for that adjustment by selling the April $80 call option. For a very limited cost of around $0.50/cwt., this would have raised their hog price floor above the cost of production, thus preserving a positive margin on that portion of their risk. It also would have allowed the margin to continue strengthening above the 90th percentile before the operation would be obligated to a sale on that portion of their hogs.

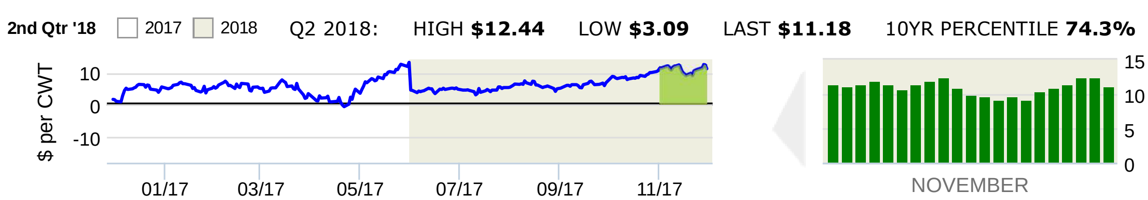
Some other producers may have opted to simply liquidate their $68 puts, realizing a loss of around $1.00/cwt. against a fixed sale of futures or a commitment in the cash market with their packer. Regardless of how they may have reacted to the recent increase in hog prices and strengthening margins, it is important to have a plan in place to adjust Plan B protection into Plan A.

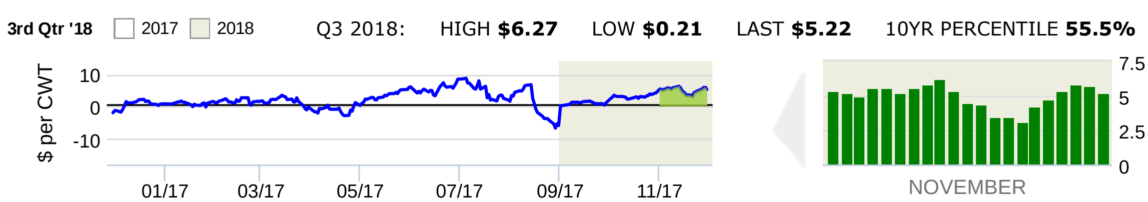
If you have questions or would like to discuss how to incorporate contingency planning into your margin management policy, please call 1.866.299.9333.

Margins recovered over the second half of November following higher trade in the hog market that was partially offset by increasing feed costs. While spot Q4 margins remain negative, deferred margins through the first half of 2018 are positive and above average from a historical perspective. Projected Q2 margins in particular recently got back to the 80th percentile of the previous decade, offering the best forward opportunity for producers. The hog market has been supported by strength in the pork cutout amidst strong demand, as well as weekly hog slaughter that has trailed what was expected based on the September Quarterly Hogs and Pigs report. The current pork cutout value of $84.30/cwt. is up 12% from the same period last year, with strength in all of the primals with the exception of hams, which are down 15% from 2016. The belly value in particular is up $44.69/cwt., or 47%, from last year and is alone responsible for $7.00 of the overall higher carcass value. Meanwhile, weekly hog slaughter continues to trail what would have been expected based on the USDA September inventory report, while current slaughter carcass weights of 213.7 lbs. are up 3.4 lbs., or 1.6%, from a year ago. Some analysts have expressed concern that supplies could be backing up on farms, and this may become problematic in Q1 if increased supply coincides with reduced demand in the post-holiday period. Feed costs have increased slightly since the middle of November, with strong soybean demand in particular helping meal prices to recover while corn prices have held relatively steady. Our hog producer clients have benefited from adding upside flexibility to existing hog positions, and are now working to capture the benefit of higher prices by strengthening those hedges.







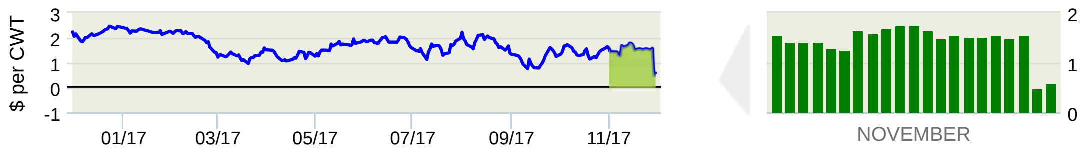


The Hog Margin calculation assumes that 73 lbs of soybean meal and 4.87 bushels of corn are required to produce 100 lean hog lbs. Additional assumed costs include $40 per cwt for other feed and non-feed expenses.

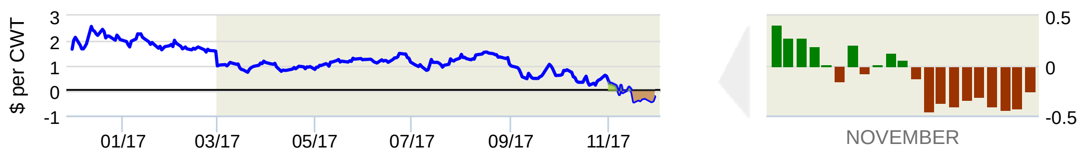
Dairy Margin Watch: November

Dairy margins were mixed over the second half of the month, as spot Q4 slipped while deferred margins into 2018 all improved. Milk prices have recovered somewhat in deferred periods following recent news that China will lower their current tariff on U.S. cheese imports from 12% to 8%, while some other dairy products, such as hydrolyzed protein formula and pre-packaged infant foods, will likewise drop effectively immediately. Chinese demand has been quite firm and the move should help the U.S. reduce the current high stockpile of cheese. U.S. October milk production totaled 17.8 billion pounds, up 1.4% from last year, with most of the strong year-over-year gains in production coming from key cheese-producing states. Meanwhile, the monthly Cold Storage report showed a seasonal decline in dairy product stocks, although stockpiles remain historically high. Total natural cheese in cold storage as of October 31 was 1.268 billion pounds according to USDA, down 40.2 million pounds, or 3.1%, from September as compared to a 10-year historical average drawdown from September to October of 1.9%. While the seasonal drawdown was higher than average, October stocks still remain 45.5 million pounds or 3.7% above 2016. Butter stocks in cold storage at the end of October totaled 219.8 million pounds, down 36.1 million, or 14.1%, from September as compared to a 10-year historical average drawdown of 15.5% for that period. Year-over-year butter inventories were down 8.4 million pounds, or 3.7%, from 2016. Feed prices held relatively steady over the past two weeks, although soybean meal prices have begun moving higher on indications of strong soybean demand at current price levels. Our dairy producer clients continue to adjust existing milk hedges by adding flexibility that will provide a benefit from higher prices over time.

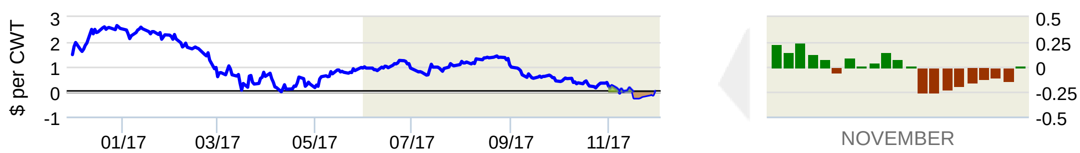
4th Qtr '17 2016 2017 Q4 2017: HIGH **$2.47** LOW **$0.49** LAST **$0.59** 10YR PERCENTILE **52.1%**



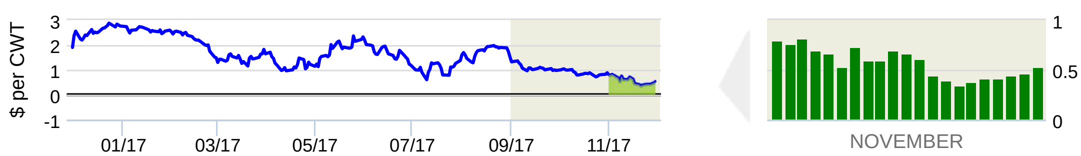
1st Qtr '18 2017 2018 Q1 2018: HIGH **$1.55** LOW **($0.45)** LAST **($0.25)** 10YR PERCENTILE **50.4%**



2nd Qtr '18 2017 2018 Q2 2018: HIGH **$1.44** LOW **($0.25)** LAST **$0.02** 10YR PERCENTILE **58.9%**



3rd Qtr '18 2017 2018 Q3 2018: HIGH **$1.35** LOW **$0.35** LAST **$0.53** 10YR PERCENTILE **52.3%**



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.

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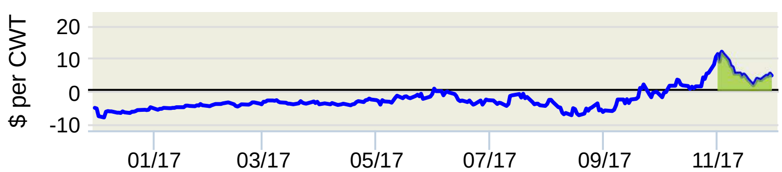
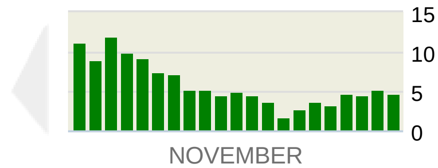
Beef Margin Watch: November

Beef margins were steady to a little better over the second half of November as higher cattle prices more than offset a corn market that was flat to slightly higher. Margins for nearby marketing periods against existing placements remain historically strong through the spring, while deferred slots against forward crushes are still negative. Although cattle futures prices held steady through late November, recently they have started to slip. In addition to the bearish monthly Cattle on Feed report, the USDA reported boneless beef in Cold Storage at the end of October totaled 462.3 million pounds, down 6.5% from 2016, but 12.2% higher than the five-year average. While strong weekly cattle slaughter recently has largely gone to fill holiday orders as slaughter weights are tracking below year-ago levels, increasing beef production from higher cattle placements moving forward into 2018 may become more problematic if demand begins slowing down after the holiday season. Meanwhile, feed costs have held relatively steady with little feature in the market. USDA released their long-term baseline forecasts, which preliminarily projected a further build of corn ending stocks to 2.607 billion bushels by the end of the 2018-19 crop marketing year. Combined, Brazil and Ukraine provide stronger competition in the global export market, which should mitigate any significant price advances over the medium term. Our beef producer clients have benefited from having recently adjusted cattle hedges to stronger delta positions following the price advance, and are now looking to add flexibility back to those positions and reduce delta should the market continue to correct.

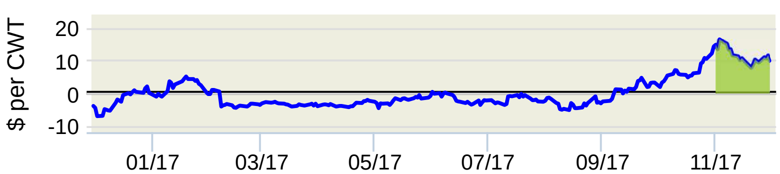
Live Cattle Marketing Periods:

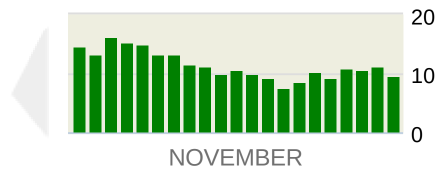
Dec '17 2016 2017 Dec 2017: HIGH **$11.96** LOW **($8.15)** LAST **$4.70** 10YR PERCENTILE **91.5%**



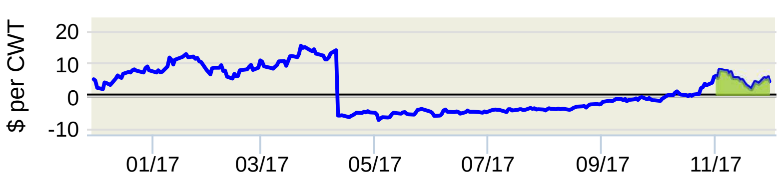


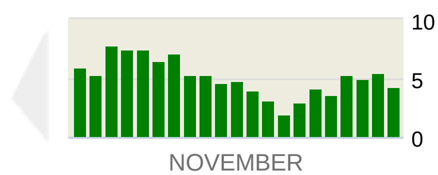
Feb '18 2017 2018 Feb 2018: HIGH **$16.41** LOW **($7.10)** LAST **$9.78** 10YR PERCENTILE **91.4%**



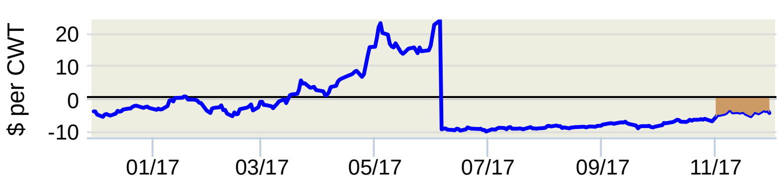


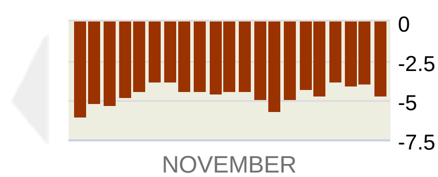
Apr '18 2017 2018 Apr 2018: HIGH **$15.25** LOW **($7.54)** LAST **$4.29** 10YR PERCENTILE **87.9%**



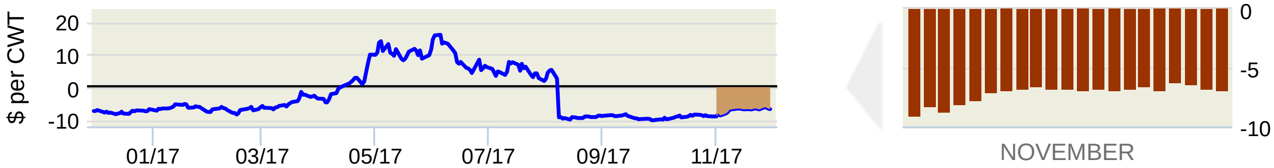


Jun '18 2017 2018 Jun 2018: HIGH **$23.69** LOW **($10.24)** LAST **($4.62)** 10YR PERCENTILE **65.6%**

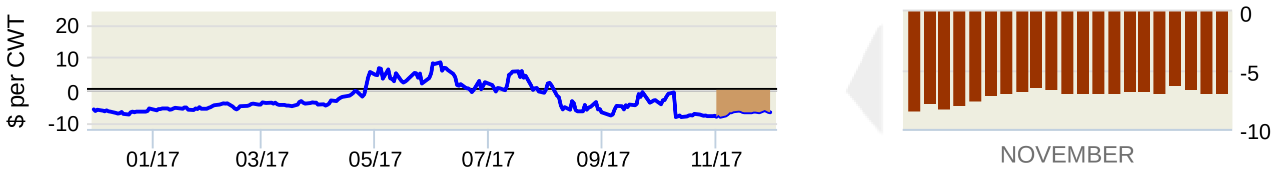




Aug '18 2017 2018 Aug 2018: HIGH **$16.06** LOW **($10.15)** LAST **($6.75)** 10YR PERCENTILE **37.7%**



Oct '18 2017 2018 Oct 2018: HIGH **$8.37** LOW **($8.36)** LAST **($6.89)** 10YR PERCENTILE **19.5%**



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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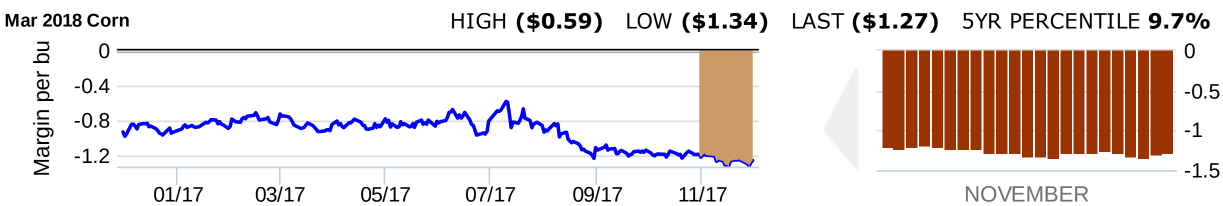
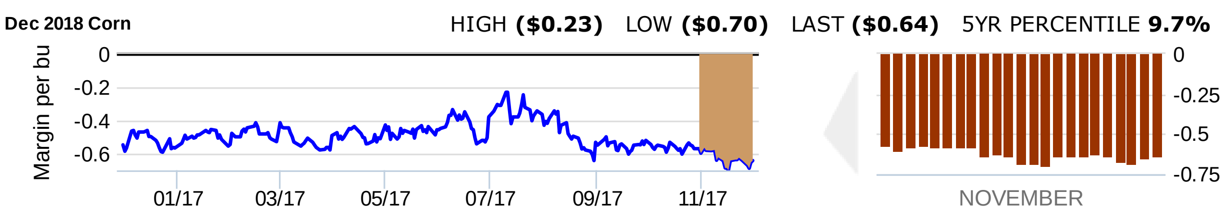
Corn Margin Watch: November

Corn prices and margins moved slightly higher over the past two weeks, but remain in an extremely tight trading range. The USDA this week published its 10-year baseline projections of the U.S. agricultural landscape. While mainly for budgetary purposes, these baselines also serve as a rough glimpse into the USDA's opinions for the next year's official balance sheet. The corn numbers look similar to last year, with total planted acreage at 91.0 million acres, yields at 173.5 and greater estimated carryout of 2,607 million bushels. The weekly ethanol production numbers have rebounded off the seasonal maintenance slowdowns and again are at record levels. The past two weeks of daily average readings were 1.066 and 1.074 million barrels per day, the latter a record. The EPA has set the RFS mandate for conventional ethanol at 15 billion gallons, unchanged from this year's requirement. The pace of U. S. corn export sales stands at 45.0% of the USDA expectation, behind the average pace to meet the 1,925 million bushel estimate. The largest USDA survey conducted by NASS is now underway. NASS will ask almost 90,000 producers for the specific results of their 2017 row crops, namely harvested acres, production and storage intentions. The results of the massive survey will be released in January on the Annual Crop Production Summary. The market continues to concentrate on supply clearance and extended South American weather outlooks.



The estimated yield for the 2017 crop is 182 bushels per acre and the non-land operating cost is $595 per acre. Land cost for 2017 is estimated at $238 per acre [1]. Basis for the 2017 crop is estimated at $-0.25 per bushel.

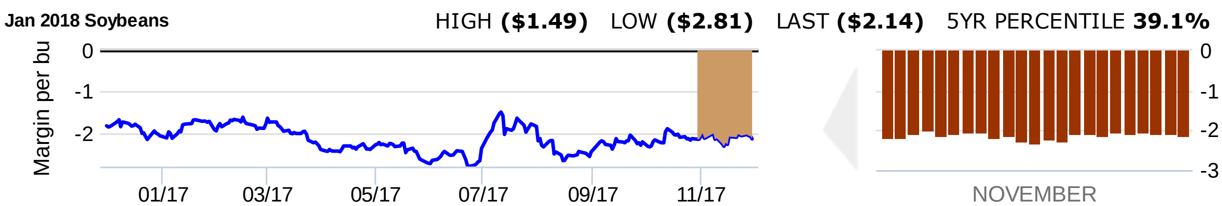


The estimated yield for the 2018 crop is 184 bushels per acre and the estimated operating cost is $547 per acre. Land cost for 2018 is estimated at $228 per acre [1]. Basis for the 2018 crop is estimated at $-0.3 per bushel.

[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.

Soybeans Margin Watch: November

Soybean prices and margins were up slightly over the past two weeks; however the market remains extremely range-bound. The USDA released their annual 10-year baseline projections of the U.S. agricultural sector. Although the report serves mostly as fodder for analysts during a slow news period, it does offer a glimpse into changes in next year's row crop balance sheets. The soybean picture does not change much, with assumptions of 91.0 million acres planted, yields at 48.4 bpa and carryout of 376 million bushels. Currently, soybean export sales data continues to run behind the pace needed to meet this year's expanded expectation of 2,225 million bushels, at 56% compared to the needed average of 67%. This week did bring large sales announcements to China and unknown destinations, perhaps shifting the tides of slow sales. Seeding progress in Brazil at 84% has caught up to average levels after a slow start, while the latest reading in Argentina stands at 42% seeded. There are some concerns developing over historically low levels of soil moisture throughout Argentina; widespread rains are needed to alleviate these worries. The largest USDA survey conducted by NASS is now underway. They are tasked with asking almost 90,000 producers how their 2017 row crops turned out, specifically harvested acres, productions and storage intentions. The answers will be revealed on the January Annual Crop Production Summary. Until then the soybean market will continue to monitor both weather and production progress in South America, particularly in the parched parts of Argentina.



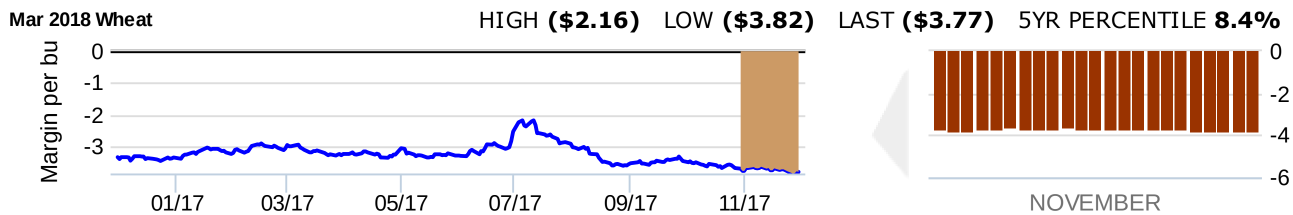
The estimated yield for the 2017 crop is 52 bushels per acre and the non-land operating cost is $365 per acre. Land cost for 2017 is estimated at $238 per acre [1]. Basis for the 2017 crop is estimated at $-0.4 per bushel.

The estimated yield for the 2018 crop is 53 bushels per acre and the estimated operating cost is $290 per acre. Land cost for 2018 is estimated at $228 per acre [1]. Basis for the 2018 crop is estimated at $-0.5 per bushel.

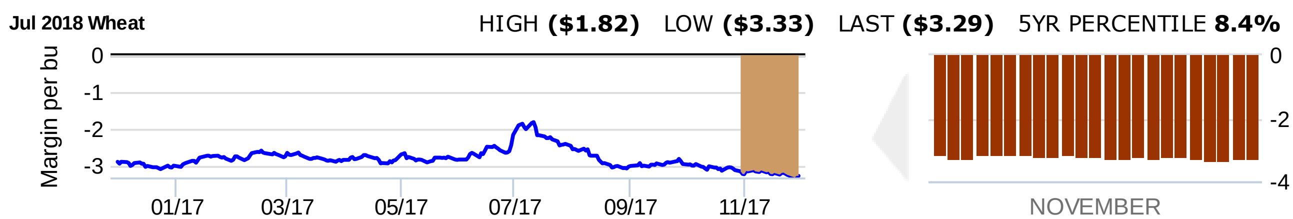
[1] The Soybeans Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University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

Wheat Margin Watch: November

Wheat prices and margins were again little changed over the course of the past two weeks and continue to be mired in an extremely tight trading range. The USDA released their annual 10-year baseline projections of the agricultural sector. While mostly for budgetary purposes, these projections do offer an idea of what the USDA has in store for the initial new crop balance sheets. The all wheat projections assume another reduction in planted acres to 45.0 million, on higher yields of 47.4 bpa and a smaller carryout of 813 million bushels. All wheat export sales stand at 63% of the expectation sold, well behind the pace needed to meet the estimate of 1,000 million bushels this year. Winter wheat conditions are currently 50% in the Good/Excellent categories, dropping 2% from last week and 8% from last year. This was the final reading from the USDA this year; the next crop conditions report is due out next April. Until then the market will rely on more localized state and county reporting, as well as weather outlooks across the plains.



The estimated yield for the 2017 crop is 67 bushels per acre and the non-land operating cost is $358 per acre. Land cost for 2017 is estimated at $158 per acre [1]. Basis for the 2017 crop is estimated at $-0.4 per bushel.



The estimated yield for the 2018 crop is 68 bushels per acre and the estimated operating cost is $358 per acre. Land cost for 2018 is estimated at $150 per acre [1]. Basis for the 2018 crop is estimated at $-0.4 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.