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DECEMBER 2017

Your resource for understanding the margin management approach

Dear Ag industry associate:

The passage of recent tax reform legislation prompted many agriculture producers to review their financial statements. Although they may have initially focused on tax implications from the new law, several producers found that their balance sheets weren't as strong as they would like, and asked how they can improve their cash flows in the coming year.

While maintaining strong financials is always desirable, it may be especially important at a time when tight margins characterize many agriculture sectors. Our feature article this month, "Keep Your Balance Sheet Strong" explores why and how producers can use hedging to improve cash flows and strengthen an operation's balance sheet.

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

Best wishes for good health and prosperity in 2018. As always, if you have questions, please feel free to contact me.

Happy New Year!

Chip Whalen
Managing Editor

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UPCOMING EDUCATION EVENTS

**Beef Margin Management
Seminar**
Omaha | Feb 27-28

Hog Margin Management
Indianapolis | Mar 1-2

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Keep Your Balance Sheet Strong



The idea of “saving for a rainy day” traces its roots back to at least the 16th century, but it may as well have originated on an American farm.



Most producers inherently understand that they operate in cyclical industries. These cycles ebb and flow with strong profitability in some years followed by very weak or negative margins in others. Because most producers realize that there will be challenging years in their operations, they know to hold onto profits in a strong year to ride out the weak part of the cycle. For that reason, they may allow their balance sheets to expand in good years with solid margins, and then let the ledger erode during bad times. But leveraging hedging tools to maintain a consistently strong balance sheet may offer a better alternative.

Hidden Value

Some producers mistakenly think that the costs involved with hedging means that active risk management is not worth the effort. In order to remain viable for the long term, they may focus on being the lowest-cost producer, in the hope of simply outlasting their neighbors.

A producer, or their accountant, analyzing hedge performance over several years of active risk management would likely see realized hedging gains in some years offset by losses in others. From a purely numbers perspective, they may reasonably conclude that there was little or no net long-term benefit. This is especially true when one considers the expense of hedging in terms of transaction fees, interest expense, staff time and other costs.

However, while the balances of a hedging account or group of accounts may fluctuate over time with the volatility in the underlying markets, they also help stabilize the balance sheet. In bad years, the operation will likely lose money in the open market on spot purchases and sales, but to the extent these losses are offset by hedging gains in a brokerage account, the balance sheet will not experience the erosion that would otherwise have occurred. The reverse is also true: in very good years, the losses in a brokerage account will not allow the balance sheet to expand as much as it would have otherwise.

This steadying of the balance sheet also helps to improve cash flows. By actively managing forward profit margins, agricultural operations narrow the range of possible outcomes in a given marketing year or period. As an example, let’s say Producer A made \$6 million in 2015, then lost \$4 million in 2016, resulting in a net outcome for the two-year period of a \$2-million gain. Contrast that with Producer B who made just

\$2 million in 2015, then broke even in 2016. While he ended up with the same \$2 million net gain, unlike his counterpart, Producer B maintained a positive cash flow over the two-year period. As a result of that difference, he would likely have been better able to stay current with the operation's bills.

Benefits of a Steady Balance Sheet

Besides positive cash flow, there can be other benefits to reducing variability in the balance sheet. In consideration of the desire for most operations to remain viable for the long-term, gaining stability and predictability in cash flows can allow a business to confidently make decisions about long-term operational improvements that might require multi-year investments. For example, by expanding or incorporating improved technologies, an operation may be able to gain economies of scale that serve to lower the costs of production.

A bank will most likely have more confidence in lending to an operation with a stable balance sheet and cash flows, making funding easier to facilitate these investments – particularly in down years or negative parts of the cycle when the investments might be less costly. By contrast, operations with eroding balance sheets may forgo investing in their businesses. Restricted cash flow may also lead to strained relationships with lenders and input suppliers.

Reducing variability in earnings and cash flows will also assist in transitioning the business to the next generation through succession planning. In addition, the business will be less likely to fail if the balance sheet is more stable from year to year. Perhaps most of all, a strong balance sheet helps empower you to achieve your long-term vision for your operation.

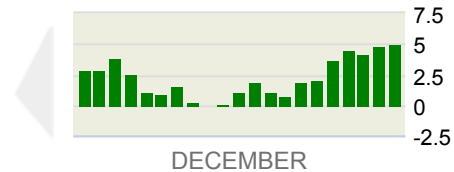
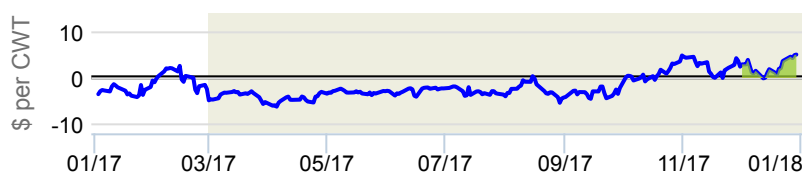
If you would like to learn more about how you can keep your balance sheets strong throughout the year, please call CIH at 1.866.299.9333.

Hog Margin Watch: December

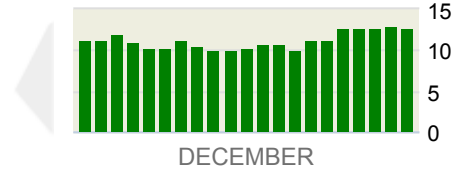
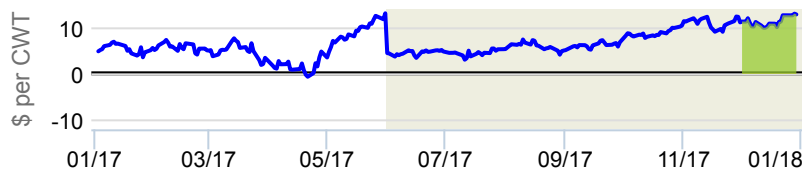


Margins improved over the second half of December following a hog rally in response to the latest USDA quarterly inventory report. Feed costs held relatively steady as a slight increase in corn prices was offset by lower trade in soybean meal. Hog margins remain at or near the 80th percentile of the previous ten years through the first half of 2018, with the best forward margin opportunity currently in Q2. The hog market has been moving higher recently despite the December Hogs and Pigs report, which was considered neutral to slightly bearish relative to pre-report expectations. USDA pegged the December 1 all pig inventory at 73.23 million head, up 2.35% from last year and basically in line with pre-report estimates of a 2.0% average increase. The kept-for-breeding inventory of 6.179 million head was up 1.12% from 2016, versus average estimates for a 0.8% increase, while the kept-for-marketing figure of 67.051 million head was 2.47% higher than last year. The Sep-Nov pig crop, Sep-Nov farrowings, and the forward farrowing intentions for Dec-Feb and Mar-May were all over 1.0% above average industry estimates, suggesting larger pork production for 2018 than the market had been expecting. Despite these signs, all forward contracts have moved higher since the report's release, in many cases, to new life-of-contract highs. Demand expectations are no doubt similarly strong for 2018, and the latest monthly Cold Storage data seems to back this up. USDA reported 505.0 million pounds of pork in cold storage at the end of November, down 2.7% from last year and 5.7% below the five-year average. Moreover, pork inventories declined 15.6% from the previous month, versus the average seasonal drawdown of 7.8% during the month of November. Our hog producer clients are making adjustments to strengthen their hog hedges following the recent increase in price, while maintaining strong feed hedges.

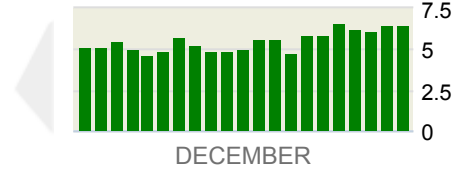
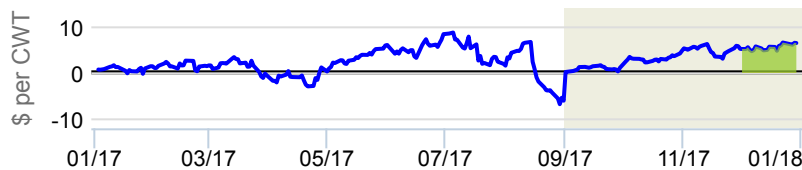
1st Qtr '18 2017 2018 Q1 2018: HIGH \$5.07 LOW (\$6.22) LAST \$5.07 10YR PERCENTILE 79.0%



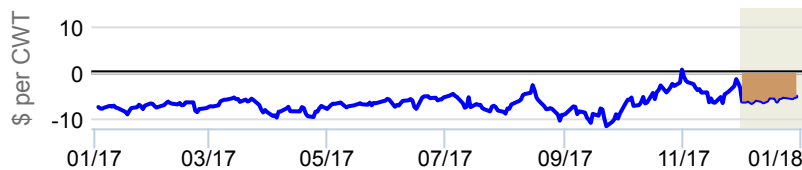
2nd Qtr '18 2017 2018 Q2 2018: HIGH \$13.06 LOW \$3.09 LAST \$12.89 10YR PERCENTILE 80.2%



3rd Qtr '18 2017 2018 Q3 2018: HIGH \$6.59 LOW \$0.21 LAST \$6.48 10YR PERCENTILE 62.6%



4th Qtr '18 2017 2018 Q4 2018: HIGH (\$5.12) LOW (\$6.52) LAST (\$5.12) 10YR PERCENTILE 39.3%



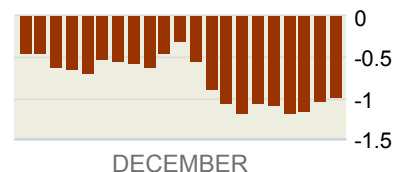
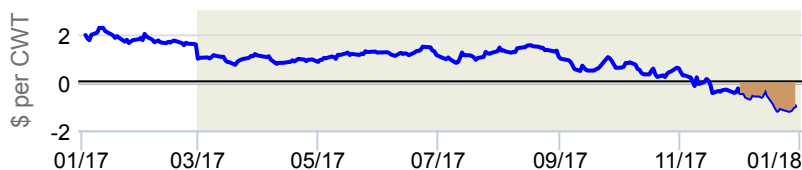
The Hog Margin calculation assumes that 73 lbs of soybean meal and 4.87 bushels of corn are required to produce 100 lean hog lbs. Additional assumed costs include \$40 per cwt for other feed and non-feed expenses.

Dairy Margin Watch: December

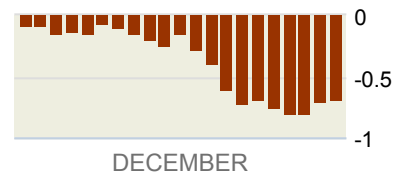
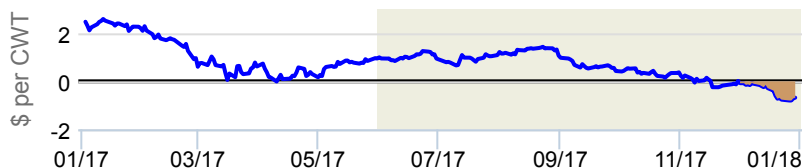


Dairy margins ended the month of December slightly weaker as milk prices continued to drift lower while feed costs held relatively steady. Margins remain negative through the first half of 2018, and projected only slightly above breakeven through the second half of the year. Milk prices languish heading into 2018, with little optimism that the bearish tide is turning. USDA reported November milk production at 17.3 billion pounds, up 0.4% from October on a daily average basis and 1.0% higher than last year. The U.S. milking herd remained unchanged from October at 9.4 million head, suggesting that the rate of growth is starting to slow, with increases coming from higher productivity. The USDA's FAS meanwhile recently estimated that the world's largest dairy exporting regions will add 3.3 million tonnes of milk production in 2018 following a 2.2 million increase in 2017, compounding the global glut of dairy products. We are starting 2018 with 542,000 metric tons of SMP inventories held between EU intervention, private stocks, and the U.S., while New Zealand's milk output in November was up 4.2% from last year without a commensurate increase in exports. These factors portend larger stockpiles of dairy products available for marketing later in the season to compete with supplies from the Northern Hemisphere during their spring flush. USDA reported butter stocks in Cold Storage on November 30 at 158.8 million pounds, down 59.1 million from October and 1.5% from last year. The drawdown also surpassed the five-year average of 46.3 million pounds between October and November. U.S. total cheese stocks were pegged at 1.26 billion pounds, down 9.3 million from October, but still 76 million or 6.4% higher than last year. Our dairy producer clients continue to add flexibility to milk hedges in order to benefit from higher prices over time.

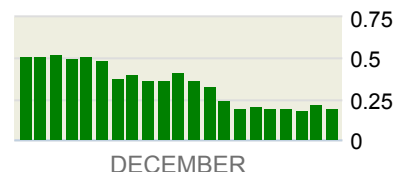
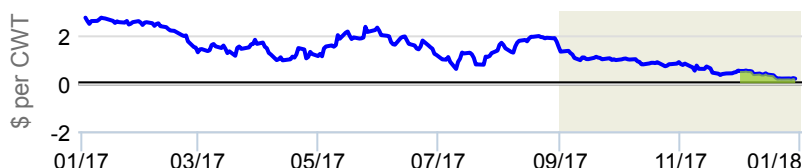
1st Qtr '18 2017 2018 Q1 2018: HIGH \$1.55 LOW (\$1.19) LAST (\$0.99) 10YR PERCENTILE 28.2%



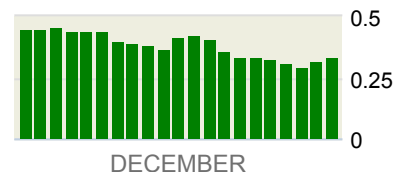
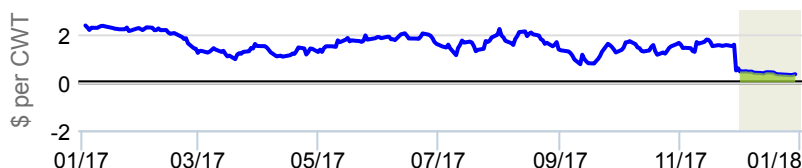
2nd Qtr '18 2017 2018 Q2 2018: HIGH \$1.44 LOW (\$0.80) LAST (\$0.68) 10YR PERCENTILE 42.0%



3rd Qtr '18 2017 2018 Q3 2018: HIGH \$1.35 LOW \$0.19 LAST \$0.20 10YR PERCENTILE 43.4%



4th Qtr '18 2017 2018 Q4 2018: HIGH \$0.46 LOW \$0.30 LAST \$0.34 10YR PERCENTILE 46.1%



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

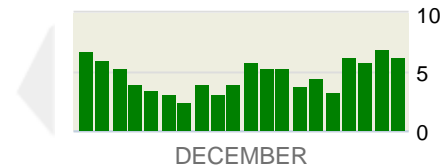
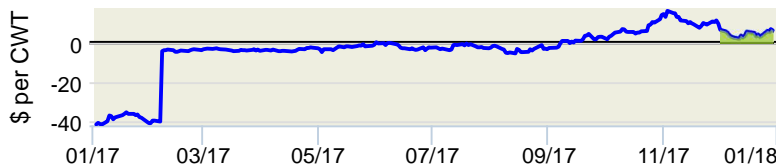
Beef Margin Watch: December



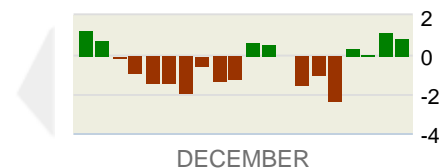
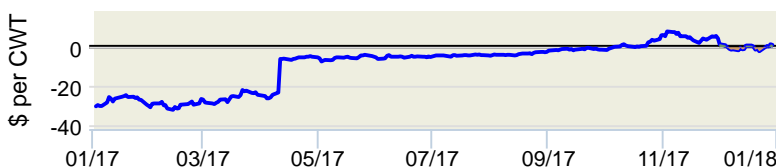
Beef margins were mixed over the second half of December, improving in some marketing periods while deteriorating in others. Cattle finishing margins remain above breakeven through spring marketing periods, but are negative against forward placements through the second half of 2018. Cattle prices ended the year flat to slightly higher while corn prices likewise moved up slightly. USDA released their monthly Cattle On Feed report, which pegged feedlot supplies on December 1 at 11.516 million head, up 8% from last year when the market was expecting an average increase of 6.7% from 2016. November placements of 2.099 million head rose 14% from last year when the market was expecting an average increase of only 5.8%, while marketings of 1.844 million head were up 3% from 2016, and in line with pre-report expectations. Beef demand, meanwhile, continues to be quite strong, although the pace of exports has slowed recently. USDA reported total beef supplies in Cold Storage on November 30 at 487 million pounds, down 4.0% from October and 8.3% lower than last year. Beef stocks also declined contra-seasonally, as the average monthly build between October and November has been 2.1% over the past 10 years. This is particularly impressive given that beef production during November increased 2.2% from October. Total beef exports for the week ending December 21 were 16,176 MT, down 13% from the same week last year, while exports for the past four weeks have averaged 16,338 MT – down 3.7% from a year ago. Corn futures, meanwhile, have increased slightly with some concern that Brazil's second corn crop will be much lower than a year ago. Following the recent increase in price, our beef producer clients continue to evaluate targets to strengthen cattle hedges.

Live Cattle Marketing Periods:

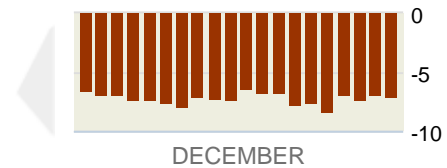
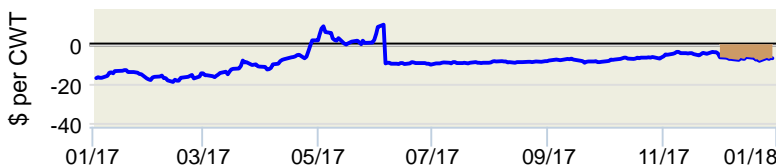
Feb '18 2017 2018 Feb 2018: HIGH **\$16.41** LOW **(\$41.63)** LAST **\$6.35** 10YR PERCENTILE **88.6%**



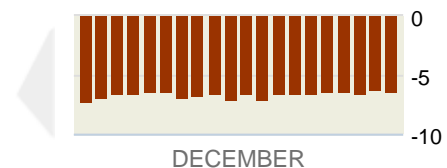
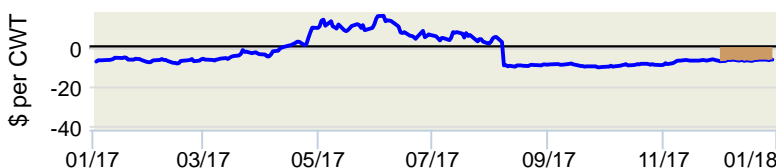
Apr '18 2017 2018 Apr 2018: HIGH **\$7.88** LOW **(\$32.23)** LAST **\$0.90** 10YR PERCENTILE **75.0%**



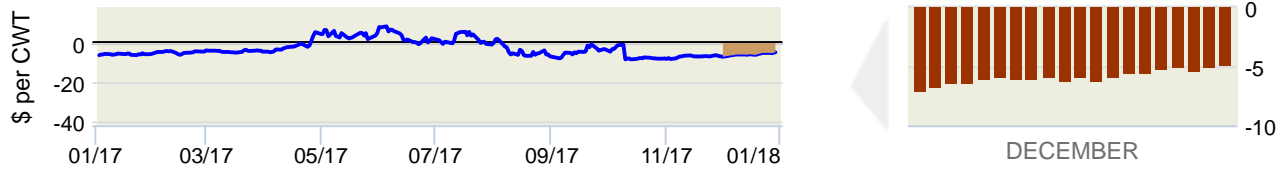
Jun '18 2017 2018 Jun 2018: HIGH **\$10.18** LOW **(\$19.10)** LAST **(\$7.02)** 10YR PERCENTILE **34.0%**



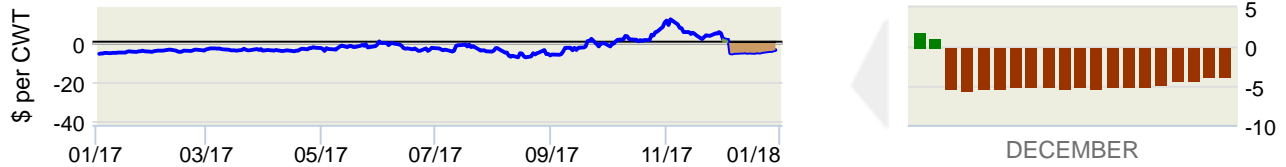
Aug '18 2017 2018 Aug 2018: HIGH **\$16.06** LOW **(\$10.15)** LAST **(\$6.30)** 10YR PERCENTILE **44.5%**



Oct '18 2017 2018 Oct 2018: HIGH **\$8.37** LOW (**\$8.36**) LAST (**\$4.81**) 10YR PERCENTILE **34.2%**



Dec '18 2017 2018 Dec 2018: HIGH **\$11.96** LOW (**\$7.49**) LAST (**\$3.82**) 10YR PERCENTILE **39.2%**



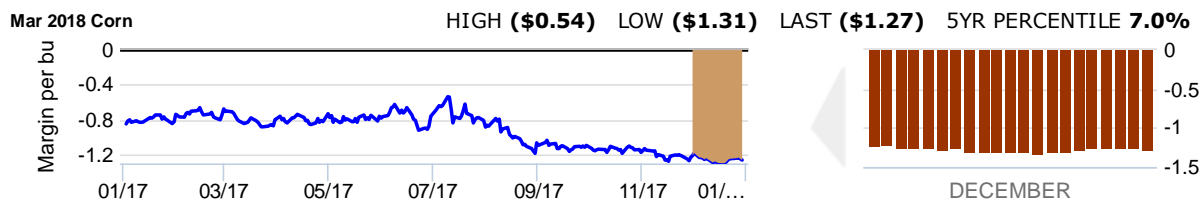
The Beef Margin calculation uses Feeder Cattle futures to price inbound animals and assumes each will consume 55 bushels of corn and cost approximately \$250 per head (for other feed and non-feed expenses) to gain 550 pounds and reach a market weight of 1,250 pounds.

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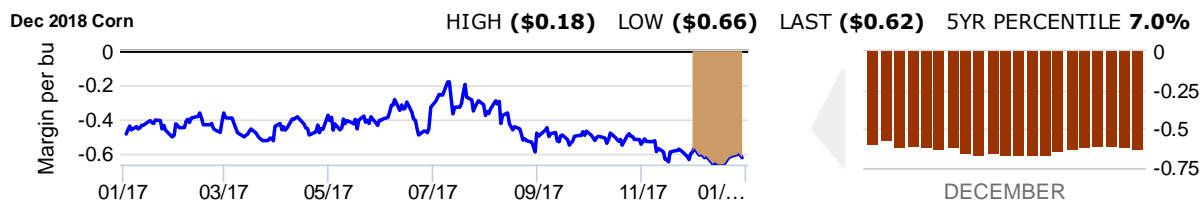
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Corn prices and margins moved up over the past two weeks, and finished the period near their December highs. The market fully acknowledges the ample U.S. carryout and robust global stocks, but perhaps is looking ahead to reduced production projections in Brazil. The later start to soybean seeding this fall in Brazil has pushed some potential second crop seeding past the ideal planting window. Any corn seeding after mid-to-late February exposes the corn pollination to periods where dryness is more likely, stressing the process and impacting yield potentials. Also, Brazilian farmers are feeling discouraged by low prices, and given the potential increased risk to pollination, may pull back on maximum second crop seedings. As a result, some private forecasters are trimming expectations for Brazilian production coming off the record 97.7 million metric tons set with last year's total crop. CONAB will release the initial survey estimate of the Safrinha crop in the February report. Ethanol production continues at breakneck levels. The last six readings have been above what had been a record level daily average of 1.060 million barrels per day, set back in August. The new record, set the last week of November, stands at 1.108 million and the most recent reading, for the week ending December 22, was an average of 1.090 million. Expectations for exports to Brazil, China and Japan are rumored to be the driver for the production bulge, even as margins have recently pulled back as a result of ethanol price drops. Corn export sales stand at almost 7% ahead of the average pace needed to meet the USDA expectation, while actual shipments lag the average by 1%. The USDA will offer the final production and stocks figures for the 2017/18 corn crop later in January.



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 \$-0.2 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 \$-0.25 per bushel.

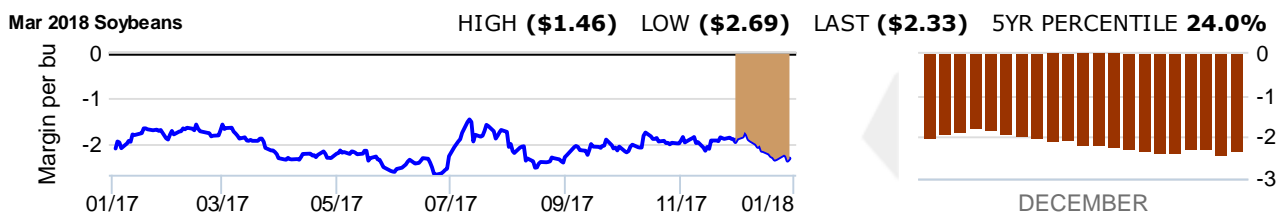
¹ The Corn Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University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

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Soybeans Margin Watch: December



Soybean prices and margins were down over the past two weeks, finishing the month near the lows. The month of November saw record soybean imports into China of 8.7 million metric tons, with the U.S. portion making up just over half of the total. The New Year will bring enhanced foreign matter restrictions for beans entering China however, decreasing the allowance to 1% from 2%. It is estimated that up to half of last year's exports exceeded the new threshold. The weekly export sales and shipment totals are telling contrasting stories, the shipment pace is running right on the average pace to meet the USDA estimate, while the sales pace is currently almost 10% behind. The weather in Argentina has offered sporadic desired moisture, but concerns are growing that the La Niña pattern persists, with forward outlooks mainly dry. The Brazilian weather has been mostly favorable and has some private forecasters raising production projections. The USDA will offer the final yield, production and stocks estimates for the 2017/18 bean crop later in January.



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 \$-0.35 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 \$-0.35 per bushel.

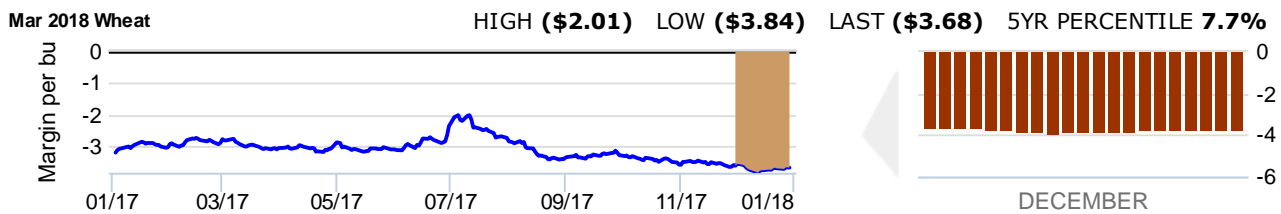
¹ The Soybeans Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University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

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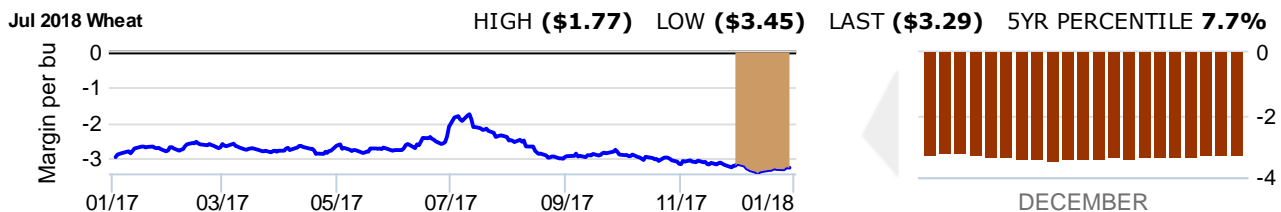
Wheat Margin Watch: December



Wheat prices and margins were higher over the past two weeks and finished the month on a strong note. In spite of more news of growing global stocks, weather worries drove wheat prices upward. Russia recently upped the forecast of this year's production to a record 85.8 million metric tons, almost three million greater than the December WASDE estimate. The increased supplies will sharpen competition on the export market, even as the U.S. export sales and shipments have yet to keep pace with the average rate to meet the USDA expectation all year. Currently sales and shipments trail the needed pace by 7% and 5% respectively. The weather on the plains has been very dry and extremely cold, raising vulnerability to increased winter crop issues. Persistent below-normal arctic temperatures have gripped much of the U.S., with the winter wheat fields in the Plains right in the center of this pattern. Informa recently estimated total all wheat seedings at 44.6 million acres, a record low, compared to this year's plantings of 46.0 million, leaving less room for production deficits should the current cold trend continue.



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 \$-0.25 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 \$-0.35 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.

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