

# May 2012 – Crop Market Update

## Department of Economic Analysis



### **In this edition:**

- CME Expanded Trading Hours: John Anderson, Senior Economist
- Crop Situation and Outlook: Todd Davis, Senior Economist
- Energy Update: Matthew Erickson, Economist

### **Recommended links:**

- [Recent Analysis and Presentations on SILO](#)

### **Next Market Update:**

- Livestock Market Update: Week of May 21<sup>st</sup>

### **CME Group – and Everyone Else – to Expand Trading Hours on Key Agricultural Contracts**

Earlier this month, the Intercontinental Exchange (ICE) announced that it would start trading essentially the same corn, wheat, soybeans, soybean oil and meal contracts as are currently traded in Chicago on the CME (and for many decades prior to that on the Chicago Board of Trade). The major difference between the new ICE contracts and existing CME contracts is that the ICE contracts will be traded electronically 22 hours a day.

Not surprisingly, within hours of the ICE announcement, the CME group announced that it would be expanding trading hours for its grain, oilseed complex, and ethanol contracts. Currently, CME Group contracts trade in the traditional open-outcry format from 9:30am to 1:15pm. In addition, contracts trade on the electronic Globex platform in conjunction with open-outcry trading from 9:30am to 1:15pm as well as from 6:15pm-7:30am. Now, in response to the competition from ICE, electronic trading at the CME will extend from 6:00pm each weekday to 4:00pm the following day. The exception is that for Monday business, trading will begin at 5:00pm on Sunday evening. These new hours will be implemented on Sunday, May 20.

Clearly, no Exchange wants to cede trading volume to a rival offering a longer trading window. In fact, the Kansas City Board of Trade (KCBT) and Minneapolis Grain Exchange (MGE) have also already announced their own plans to move to 22 hour electronic trading on their wheat contracts, with hours to match CME's electronic trading. With the growth in electronic trading in recent years, this change has been inevitable for some time. Still, the move to essentially round-the-clock trading does give rise to a number of concerns.

First, round-the-clock trading complicates the release of USDA reports. Traditionally, these reports have been released when markets are closed to give the market time to digest any new information before trading occurs. The purpose, of course, is to reduce the kind of market volatility that could occur from traders acting on an incomplete or erroneous "instant" analysis of the report information. With expanded trading hours, USDA will now either need to shift the release of all reports to the two-hour window late in the day (a very difficult logistical feat), or the reports will have to be released while

trading is actively occurring. The release of reports into an actively trading market is likely to increase the market volatility around those reports.

Second, the CME Group currently has well established rules for how much prices are allowed to change on a given day. These limits, when hit, essentially lock the market for the remainder of that trading day. Given that the trading day will now last 22 hours, it is likely the exchanges will suggest that daily limit locks should instead shift to the kind of ‘circuit breaker’ arrangement that is used in equities markets. In that system, when the market locks limit up or down, trading is halted for a set period of time then limits are reset to their prescribed higher level and trading resumes. This is essentially the same procedure that is currently followed except that it now plays out over multiple trading days rather than over the course of several hours, potentially within a single trading day. While a circuit breaker arrangement for limits does give the market some time to catch up and for new information to flow into the market, it will be nothing like the full day halt that now exists for these grain and oilseed contracts.

Finally, both of the preceding factors contribute to the third concern, which is that the increase in volatility in these markets could lead to changes in margin requirements. Producers, as hedgers, need access to the futures markets for risk management purposes, as does much of the grain/oilseed handling system. Higher volatility and a consequent increase in margin requirements will just make using these markets that much more expensive for those true hedgers, whether farmers, elevator operators or other processors of the physical product.

### **Crop Situation and Outlook: “May 2012 WASDE – A Tale of Two Diverging Markets”**

The May 2012 WASDE provides the first projections of supply and demand for the 2012-13 marketing-year. The report confirmed pre-report expectations of an abundant supply of new crop corn and potentially historically tight stocks for new crop soybeans. The only “curveball” in the report was a surprise increase in old crop corn stocks as pre-report estimates called for a decrease in stocks to reflect the continued strong demand for the old crop corn.

#### ***Corn: 2012-13 Marketing-Year***

The WASDE adopted the acreage projections from the March 31 *Prospective Plantings* report which were 95.9 million planted acres and 89.1 million harvested acres assuming an average rate of abandonment (Table 1). Because planting and emergence are progressing at a faster than average pace (71% planted and 36% emerged as of May 6), a better than trend-yield of 166 bushels/acre was adopted in the report and would be a record yield if achieved. Currently USDA is projecting a record crop of 14.8 billion bushels which would be 2.4 billion bushels more than was harvested in 2011.

The report also projected much greater demand with feed use increasing 900 million bushels to 5.45 billion bushels and exports projected to increase 200 million bushels to

<b>Table 1. U.S. Corn Supply and Use</b>				
	2009-10	2010-11	2011-12	2012-13
	Actual	Estimated	May Forecast	May Forecast
<b>Million Acres</b>				
Planted Acres	86.4	88.2	91.9	95.9
Harvested Acres	79.5	81.4	84.0	89.1
% Abandoned	-8.0%	-7.7%	-8.6%	-7.1%
<b>Bushels per Acre</b>				
Yield	164.7	152.8	147.2	166.0
<b>Million Bushels</b>				
Beginning Stocks	1,673	1,708	1,128	851
Production	13,092	12,447	12,358	14,790
Imports	<u>8</u>	<u>28</u>	<u>20</u>	<u>15</u>
Total Supply	14,774	14,182	13,506	15,656
Feed & Residual	5,140	4,792	4,550	5,450
Food, Seed & Industrial	5,939	6,428	6,405	6,425
Ethanol for Fuel	4,568	5,021	5,000	5,000
Exports	<u>1,987</u>	<u>1,835</u>	<u>1,700</u>	<u>1,900</u>
Total Use	13,066	13,054	12,655	13,775
Ending Stocks	1,708	1,128	851	1,881
Avg. Farm Price	\$3.55	\$5.18	\$6.10	\$4.60
Stocks-Use	13.1%	8.6%	6.7%	13.7%
Days of Ending Stocks	48	32	25	50

1.9 billion bushels (Table 1). This increase in demand will be spurred by lower prices which will make corn more competitive with alternative feedstuffs in the domestic and international markets. Ethanol demand is projected to be unchanged from 2011-12 at 5 billion bushels. This is a very significant change as ethanol demand has been a key driver in demand growth since 2006. The ethanol market is approaching the blending-wall where demand for ethanol is capped by demand for unleaded gas. As Matt Erickson describes, current demand for unleaded gas is about 135 billion gallons/year so the blending the demand for ethanol is 13.5 to 14 billion gallons. This would translate back to about 5 billion bushels of corn needed for the ethanol market. This slowing demand for corn for ethanol is a significant fundamental change in the corn market.

Ending stocks for the 2012-13 marketing-year is projected to increase to 1.88 billion bushels, more than a 1 billion increase from 2011-12, which is a stocks-use ratio of 13.7% or about 50 days of inventory at the end of the marketing-year. With stocks projected to more than double, the 2012-13 U.S. marketing-year average price is projected to be sharply lower to \$4.60/bushel.

### ***Corn: 2011-12 Marketing-Year***

As stated earlier, the pre-report expectations were for stocks to decrease to 758 million bushels as there has been a lot of talk about strong demand for old crop corn. Instead, the May report reduced feed demand by 50 million bushels to 4.55 billion, reflecting increased feeding of wheat. Ending stocks are projected to increase to 851 million bushels, a stocks-use ratio of 6.7% or 25 day of inventory. Stocks are still tight, but USDA is projecting both increased feeding of wheat and above average availability of new-crop corn during the last month of the 2011-12 marketing-year. This is projected to provide enough cushion until the new crop is harvested and available to the marketing pipeline. The 2011-12 U.S marketing-year average price is projected to be \$6.10/bushel.

The World balance sheet is projecting a record corn crop of 945.8 Million Metric Tons (MMT) which will cause global stocks to increase to 152.3 MMT. This would be the largest level of stocks since 2000-01. The domestic and global fundamentals are pointing to lower corn prices for the next marketing-year barring any production problems somewhere in the World.

### ***Soybeans: 2012-13 Marketing-Year***

USDA also adopted the acreage from the March *Prospective Plantings* survey of 73.9 million planted acres which is 1.1 million less than 2011 (Table 2). The amount of planted acres are expected to increase in the June 30 *Acreage* report due to some changes in the crop-mix after the March survey was conducted and a much larger level of double-crop soybeans due to an early wheat harvest coupled with tremendous profitability potential. Harvested acres, assuming average abandonment, are projected to be 73 million acres. The May report adopted a trend yield of 73.9 bushels/acre which is 2.4 bushels/acre higher than 2011. The projected production is 3.205 billion bushels which is 149 million bushels more than the 2011 crop.

	2009-10	2010-11	2011-12	2012-13
	Actual	Estimated	May Forecast	May Forecast
<b>Million Acres</b>				
Planted Acres	77.5	77.4	75.0	73.9
Harvested Acres	76.4	76.6	73.6	73.0
% Abandoned	-1.4%	-1.0%	-1.9%	-1.2%
<b>Bushels per Acre</b>				
Yield	44.0	43.5	41.5	43.9
<b>Million Bushels</b>				
Beginning Stocks	138.0	151.0	215.0	210.0
Production	3,359.0	3,329.0	3,056.0	3,205.0
Imports	<u>15.0</u>	<u>14.0</u>	<u>15.0</u>	<u>15.0</u>
Total Supply	3,512.0	3,495.0	3,286.0	3,430.0
Crushing	1,752.0	1,648.0	1,645.0	1,655.0
Exports	1,501.0	1,501.0	1,315.0	1,505.0
Seed & residual	<u>108.0</u>	<u>130.0</u>	<u>116.0</u>	<u>125.0</u>
Total Use	3,361.0	3,280.0	3,076.0	3,285.0
Ending Stocks	151.0	215.0	210.0	145.0
Avg. Farm Price	\$9.59	\$11.30	\$12.35	\$13.00
Stocks-Use	4.5%	6.6%	6.8%	4.4%
Days of Ending Stocks	16	24	25	16

Total demand is projected to increase 209 million bushels to 3.285 billion (Table 2). Crush demand is projected to increase by 10 million bushels to 1.655 billion and exports are projected to increase 190 million bushels to 1.505 billion. The growth in exports is being driven by the severe South American drought which has greatly reduced the Argentine and Brazilian soybean crops. The May report reduced Argentina's soybean crop by 91.8 million bushels and Brazil's crop by 36.7 million bushels. The total reduction in projected production since December 2011 has been 349 million bushels and 367 million bushels for Argentina and Brazil, respectively.

The 2012-13 ending-stocks are projected to decline to 145 million bushels which is a stocks-use ratio of 4.4% or 16 days of inventory. The USDA projections were significantly lower than the pre-report forecast of 170 million bushels which was a very bullish report for the market. This is a historically tight level of stocks which, if achieved, will support prices to reach historic levels. The U.S. marketing-year average price is projected to be \$13 per bushel with a range of \$12-\$14 per bushel. The price has the potential to eclipse the 2011-12 record price of \$12.35 per bushel.

### ***Soybeans: 2011-12 Marketing-Year***

The May report increased the crush demand by 15 million bushels to 1.645 billion and exports by 25 million to 1.315 billion. This increase in demand reduced the projected ending-stocks to 210 million bushels which was lower than the pre-report estimate of 221 million bushels. This was a very bullish report for old-crop soybeans as the projected ending-stocks are at a stocks-use ratio of 6.8% or about 25 days of inventory. The soybean market is projecting declining stocks for the old and new crop in contrast to the building of stocks projected for new crop corn.

### ***Wheat: 2012-13 Marketing-Year***

The 2012 winter wheat crop is progressing faster than average due to the mild winter. The projected all wheat yield is 45.7 bushels/acre which is a 2 bushel/acre increase from 2011 (Table 3). This above trend yield, coupled with a 3.5 million increase in harvested acres, leads to a projected wheat crop of 2.245 billion bushels which would be the largest crop since 2008-09.

Total use is projected at 2.398 billion which is a 184 million bushel increase from 2011-12 (Table 3). The growth in demand is from an increase in exports of 125 million bushels and a 50 billion bushel increase in feed use.

Ending-stocks are projected at 735 million bushels which is a 33 million bushel decrease from 2011-12. This was a little lower than the pre-report estimates of 805 million bushels. However, wheat is projected to have a stocks-use ratio of 30.7% or about 112 days of inventory. This will cause prices to decline with the U.S. marketing-year average price projected at \$6.10/bushel.

Global wheat stocks are projected at 188.1 MMT which is 9 MMT less than 2011-12 but is still sharply higher than the tight stocks level of 125.6 MMT in 2007-08.

	2009-10	2010-11	2011-12	2012-13
	Actual	Estimated	May Forecast	May Forecast
Million Acres				
Planted Acres	59.2	53.6	54.4	55.9
Harvested Acres	49.9	47.6	45.7	49.2
% Abandoned	-15.7%	-11.2%	-16.0%	-12.0%
Bushels per Acre				
Yield	44.5	46.3	43.7	45.7
Million Bushels				
Beginning Stocks	657	976	862	768
Production	2,218	2,207	1,999	2,245
Imports	<u>119</u>	<u>97</u>	<u>120</u>	<u>120</u>
Total Supply	2,993	3,279	2,982	3,133
Food	917	926	930	945
Seed, Feed & Residual	219	203	259	303
Exports	<u>881</u>	<u>1,289</u>	<u>1,025</u>	<u>1,150</u>
Total Use	2,018	2,417	2,214	2,398
Ending Stocks	976	862	768	735
Avg. Farm Price	\$4.87	\$5.70	\$7.25	\$6.10
Stocks-Use	48.4%	35.7%	34.7%	30.7%
Days of Ending Stocks	177	130	127	112

### Cotton: 2012-13 Marketing-Year

Again, USDA adopted the acreage estimates from the March *Prospective Plantings* survey of 13.16 million acres planted and 10.5 million acres harvested. This is a projected increase in harvested acres of 1.04 million as abandonment is projected to be at more average levels instead of the record 33% in 2011. Assuming a trend-yield of 777 pounds/acre, production is projected to increase 1.43 million bales to 17 million bales (Table 4).

Domestic use is projected to increase by 100 thousand bales to 3.5 million and exports are projected to increase by 600 thousand bales to 12 million bales. Production is projected to out-pace demand and stocks are projected to increase to 4.9 million bales which is 1.5 million more than in 2011-12. This is a stocks-use ratio of

31.6% or about 115 days of inventory. In contrast, the 2011-12 stocks were at an 84 day supply. This increase in stocks will drive prices lower with a projected U.S. marketing-year average price at \$0.725/pound which is down from the 2011-12 price of \$0.91/pounds.

Global fundamentals for cotton are not any more optimistic. The May report is projecting World ending-stocks at record level for the consecutive marketing-year. World stocks are projected to be 73.75 million bales which is about a 50% stocks-use ratio.

### Corn and Soybean Market Sensitivity Analysis

Both the corn and soybean markets will be dealing with the uncertainty over planted acres and yield. The November 2012 soybean contract increased from \$13.04/bushel before the *Prospective Plantings* report to a high of \$13.92 on May 1 in an attempt to buy acres for both full-season and double-crop production. Dr. Chris Hurt, an Agricultural Economist at Purdue University, has reported that double-crop soybean acreage could reach 6 – 6.5 million acres. How will changing acreage and yields affect corn and soybean stocks?

**Table 5. Projected 2012-13 U.S. Corn Production and Ending Stocks for Varying Acreage and Yield.**

Planted Acres	Harvested Acres	2012-13 Corn Ending Stocks				
		166	164	162	160	158
---(Million Acres)---		---(Million Bushels)---				
96.0	89.2	1,897	1,719	1,540	1,362	1,183
95.9	89.1	1,882	1,703	1,525	1,347	1,169
95.8	89.0	1,866	1,688	1,510	1,332	1,154
Planted Acres	Harvested Acres	2011-12 Corn Ending Stocks-Use Ratio				
		166	164	162	160	158
---(Million Acres)---		---(Stocks-Use)---				
96.0	89.2	13.8%	12.5%	11.2%	9.9%	8.6%
95.9	89.1	13.7%	12.4%	11.1%	9.8%	8.5%
95.8	89.0	13.5%	12.3%	11.0%	9.7%	8.4%
Beg. Stocks	851					
Imports	15					
Total Use	13,775					



The take-away message from Table 5 is that a significant reduction in acreage or yield is required reduce stocks to below a 10% stocks-use level. This suggests that the new-crop corn will greatly increase stocks and corn profit margins will be much tighter than the previous years. Again, take advantage of risk-management tools and pricing opportunities to protect your margins.

In contrast, the soybean market would have to see a large increase in both planted acres and yield to change the fundamentals enough to lower prices (Table 6). Soybean harvested acreage would have to increase to over 74 million AND yields would have to be record levels (greater than 44 bushels/acre) to build stocks above this level of historically tight stocks (unless demand decreases significantly). The questions remain on how successful the soybean market was in buying acres and the percentage of acres in full-season versus double-crop soybeans due to the lower yield potential for the double-crop soybeans.

**Table 6. Projected 2012-13 U.S. Corn Production and Ending Stocks for Varying Acreage and Yield.**

Keep in mind that the May report is forecasting South America returning to trend production next year. The 2013 South American crop will enter the market in March/April 2013 and curtail some of the export demand. This means that greater competition will be on the horizon in 2013 in the soybean market.

Planted Acres	Harvested Acres	2012-13 Ending Stocks				
		45.9	44.9	43.9	42.9	41.9
----(Million Acres)----		----(Million Bushels)----				
75.4	74.5	360	285	211	136	62
74.7	73.7	323	249	175	102	28
73.9	73.0	291	218	145	72	-1

Planted Acres	Harvested Acres	2013-13 Ending Soybean Stocks-Use Ratio				
		45.9	44.9	43.9	42.9	41.9
----(Million Acres)----		----(Stocks-Use)----				
75.4	74.5	10.9%	8.7%	6.4%	4.1%	1.9%
74.7	73.7	9.8%	7.6%	5.3%	3.1%	0.9%
73.9	73.0	8.8%	6.6%	4.4%	2.2%	0.0%
Beg. Stocks	210					
Imports	15					
Total Use	3,285					

**Energy Update: “Ethanol Inventories Putting Strain on Margins”**

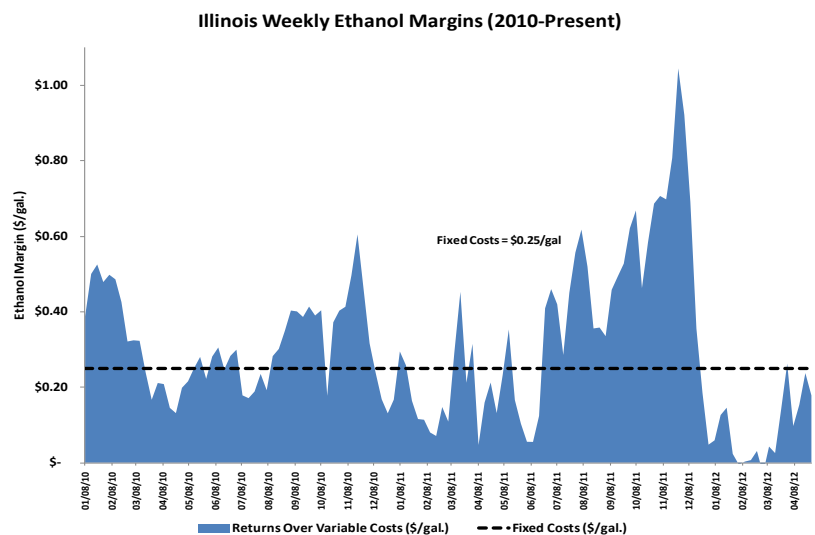
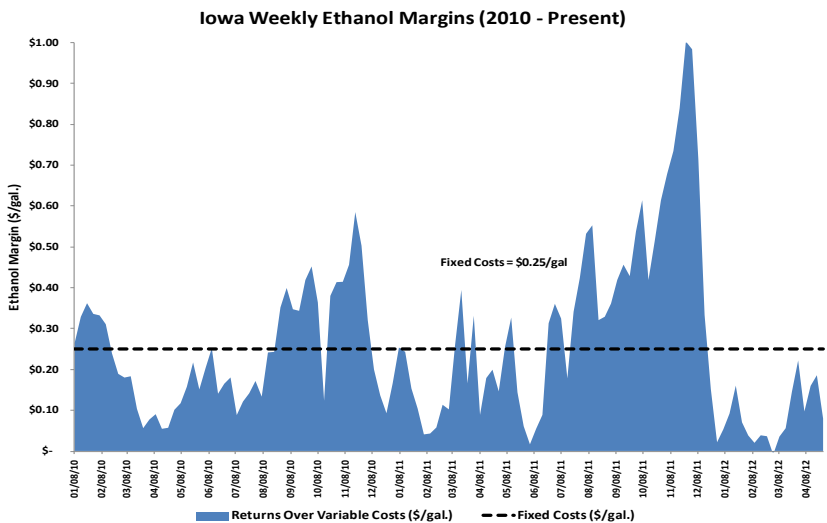
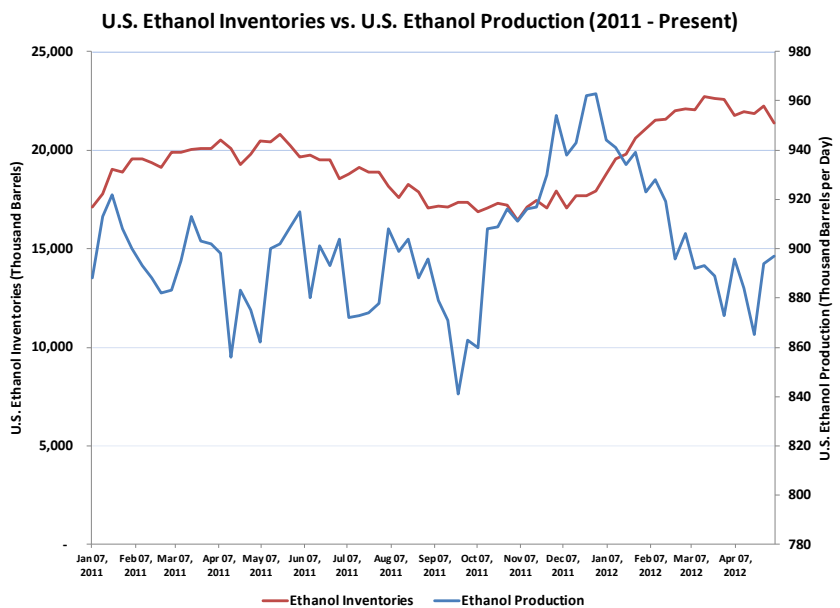
***Ethanol Inventories Putting Pressure on Margins***

Ethanol inventories continue to post above average levels. In fact, ethanol inventories have been above 21 million barrels since February 2012. During the month of April, inventories increased by 2 percent, but subsided 4 percent during the first week of May. However, weekly ethanol inventories have yet to see a dramatic decrease since the elimination of the \$0.45 per gallon tax credit at the end of last December. The loss of the tax credit has greatly hindered ethanol economics and has reduced demand for ethanol. Proof of this can be seen by the dramatic decrease in ethanol prices and the dramatic increase in ethanol inventories since December 2011 when the expectation of the tax credit becoming eliminated had begun to affect the market for ethanol. Since that time, ethanol prices have decreased 27 percent while ethanol inventories increased 19 percent. Another factor leading to decreased demand for ethanol has been relatively high gasoline prices. Needless to say, 2012 has brought pain at the pump for farmers, ranchers and consumers alike. Over the past month, weekly U.S. gasoline prices peaked at \$3.94 per gallon, causing gasoline consumption to decrease by approximately 2 percent. In fact, consumers over the past month were spending approximately 9 percent of their household income on gasoline. All of these variables are leading to further pressure on ethanol margins. I expect margins to continue to be under pressure until inventories stabilize.

Ethanol production continues to be under tight pressure. Even though production increased 4 percent over the past two weeks, production was seen at a new 6 ½ month low of 865,000 barrels per day. Since the expiration of the \$0.45 per gallon tax credit, production has decreased 7 percent. However, production has increased over the past two weeks to end April and heading in to May. Currently, ethanol production is at 897,000 barrels per day, which annualized becomes approximately 13.75 billion gallons of ethanol which is just above the 13.2 billion gallon mandate set for 2012 from the Renewable Fuels Standard for conventional biofuel. The current level of ethanol production is equivalent to approximately 4.9 billion bushels of corn dedicated toward ethanol and by-products. With the trends being seen in ethanol production and inventories so far in 2012, U.S. ethanol production may need to decline further in order to bring U.S. ethanol inventories down to more sustainable levels in order to ease some pressure off of ethanol margins.

### Ethanol Margins

Ethanol margins lost ground over the past month. Producer margins continue to be above direct costs, however they continue to be below total costs. From the last two weeks in April, ethanol margins decreased approximately \$0.10 per gallon due to increased corn prices and decreasing ethanol prices. Even though margins are still positive, levels are not enough for producers to pay all other expenses including overhead, interest and equipment.



With an abundance of ethanol in inventory placing bearish intent on ethanol prices, considerable pressure on ethanol profitability should continue. Ethanol production may have to subside a little in order to stabilize ethanol inventories down the road.

Ethanol margins for Iowa and Illinois have been squeezed over the past month. Weekly producer margins over variable costs for Iowa started out April at approximately \$0.10 per gallon and decreased to approximately \$0.08 per gallon to end the month. With fixed costs assumed at \$0.25 per gallon, taken from Iowa State University, returns have been below total costs for over the past month and year. In fact, weekly returns over total costs have been in the red for all of 2012, putting pressure on ethanol producers to meet all total costs. Likewise, ethanol margins for Illinois have followed trend with returns staying below total costs, however, margins for Illinois ended the month higher than Iowa. Weekly producer margins over variable costs for Illinois started out April at approximately \$0.10 per gallon and increased to approximately \$0.18 per gallon to end the month. The range in margins ending in April between Iowa and Illinois was mainly from the range of weekly basis levels reported from USDA. However, the current message is clear with ethanol margins and profitability. I continue to expect ethanol margins to remain relatively weak heading into the summer months until inventories subside to sustainable levels.

### ***Fertilizer Update***

Fertilizer prices continue to be driven by demand for corn despite near-record low prices for natural gas. With over 95 million acres of corn projected to be planted for the 2012/13 marketing year, fertilizer is a necessity as corn is an energy intensive crop. For the month of April, fertilizer prices for Illinois increased, albeit minimally, while fertilizer prices for Alabama were mixed with liquid 28 percent reporting the largest increase and DAP reporting the largest decrease. For Illinois, anhydrous ammonia prices increased by a minimal 0.2 percent, nitrogen (28 percent) by 5 percent, DAP unchanged and potash by 0.2 percent. Reported bi-weekly average fertilizer prices in Illinois finished the month of April with anhydrous ammonia at \$833.85 per ton, nitrogen (28 percent) at \$429.51 per ton, DAP at \$634.42 per ton and potash at \$635.00 per ton, all of which continue to be well above their five-year average with the exception of DAP which is approximately \$5 per ton below its five-year average. As for Alabama over the past month, nitrogen (28 percent) increased over 3 percent, DAP decreased 7 percent and potash remained unchanged. Weekly average prices in Alabama finished the month of April with nitrogen (28 percent) at \$460.00 per ton, DAP at \$624.00 per ton and potash at \$647.00 per ton.

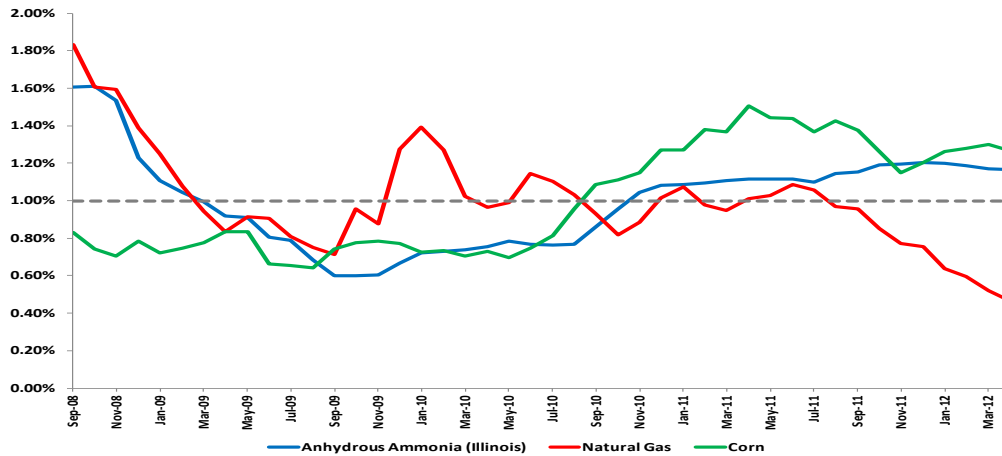
With planted acres, if realized, for corn projected at its largest since 1937, it's only expected that fertilizer prices are being driven by the demand from corn acreage. However, with regard to nitrogen fertilizer, an interesting shift seems to be taking shape. The two graphs below standardize Illinois anhydrous ammonia and liquid 28 percent prices along with the price for corn and natural gas. In particular, price movements in anhydrous ammonia can be dictated with supply and demand factors associated with anhydrous ammonia. Since corn is an energy intensive crop, this demand relationship would suggest that higher corn prices indicate the need for more corn acreage, thus requiring more use of nitrogen fertilizer – the exact situation we experienced last year heading into this year. On the other hand, natural gas serves as a key input, accounting for approximately 70 to 90 percent the cost of ammonia – a supply relationship. In essence, with natural gas prices posting near record lows over the course of 2012, one could suggest that lower natural gas prices should lead to lower costs of ammonia production. But let's take this a step further...

With the two graphs below, a fundamental shift in nitrogen fertilizer use could be taking place. With safety and hazard concerns over anhydrous ammonia, many farmers are switching from anhydrous ammonia to liquid 28 percent. This shift may be represented in the two graphs below starting at the

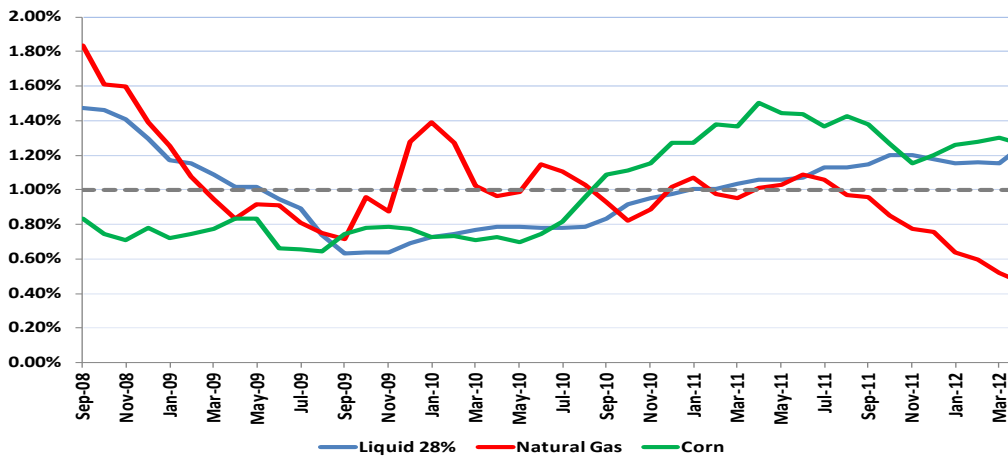


point March 2012 and moving forward. Since the March USDA plantings report indicated that farmers in the United States are preparing to plant 95.9 million acres of corn, the price of liquid 28 percent increased 10 percent while the price for anhydrous ammonia decreased slightly by less than 1 percent. This may seem to suggest that demand is more heavily “favored” toward liquid 28 percent with farmers demanding more liquid 28 percent for their nitrogen product. These price trends are implicitly shown in the two graphs below. Even though the data points are relatively minimal to capture this full affect, this is one area that I will be analyzing as we move forward into the summer months. I also expect low natural gas prices to ease some pressure off of nitrogen fertilizer in the coming months, as seen by the graph below for anhydrous ammonia.

**Anhydrous Ammonia, Corn and Natural Gas Prices Standardized by Average Period (September 2008 - April 2012)**



**Liquid 28%, Corn and Natural Gas Prices Standardized by Average Period (September 2008 - April 2012)**



American Farm Bureau Federation®