

The logo for AgReview, featuring a stylized green and blue circular graphic to the left of the text.

AgReview

October 2017

Volume 29, No. 8

World Perspectives, Inc.

A close-up photograph of a corn cob with its husk partially removed, showing the golden-yellow kernels. The background is a soft, out-of-focus field of corn.

Biofuel's Long Road Ahead

U.S. Farm Profitability Outlook

Changing Dynamics in Fertilizer Prices

Global Trade's Changing Winds

WORLD PERSPECTIVES: AG REVIEW

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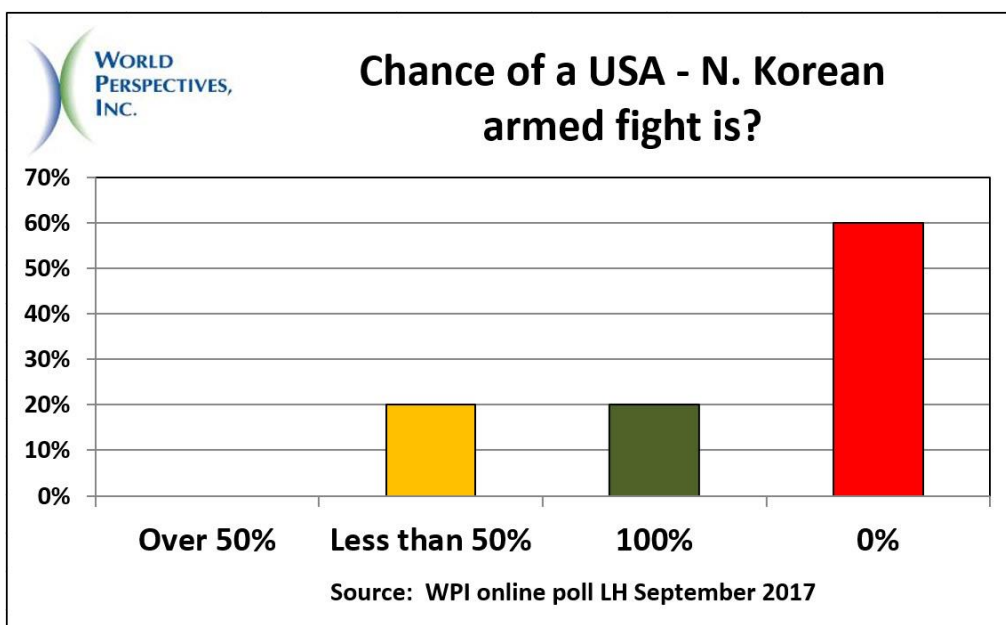
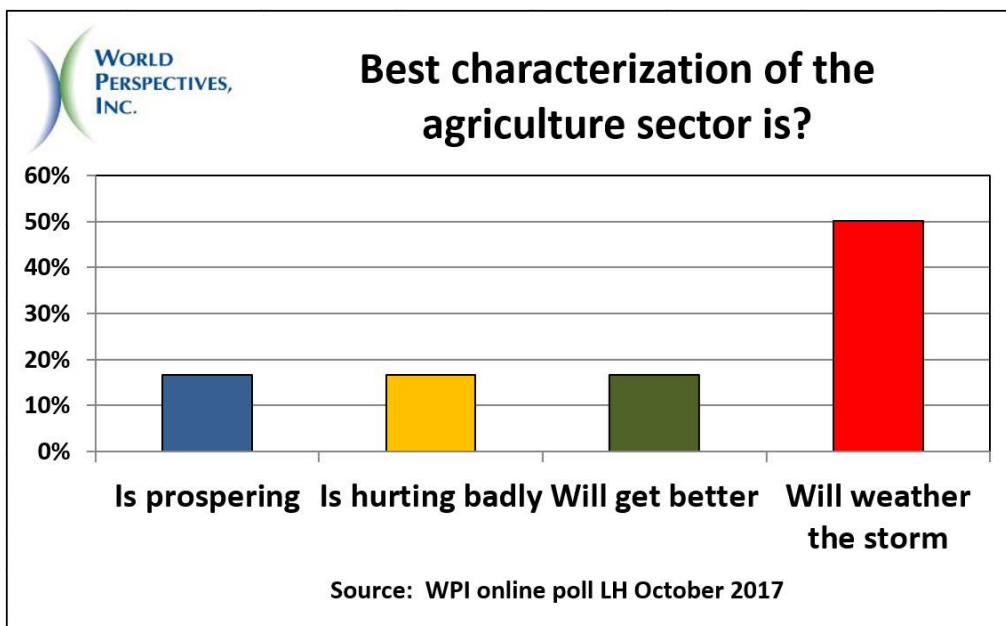
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WPI POLLING

Below are the results of two recent WPI polls. Visit www.worldperspectives.com to cast your vote in our current survey.



WPI AGRIBUSINESS SUBSECTOR OUTLOOK

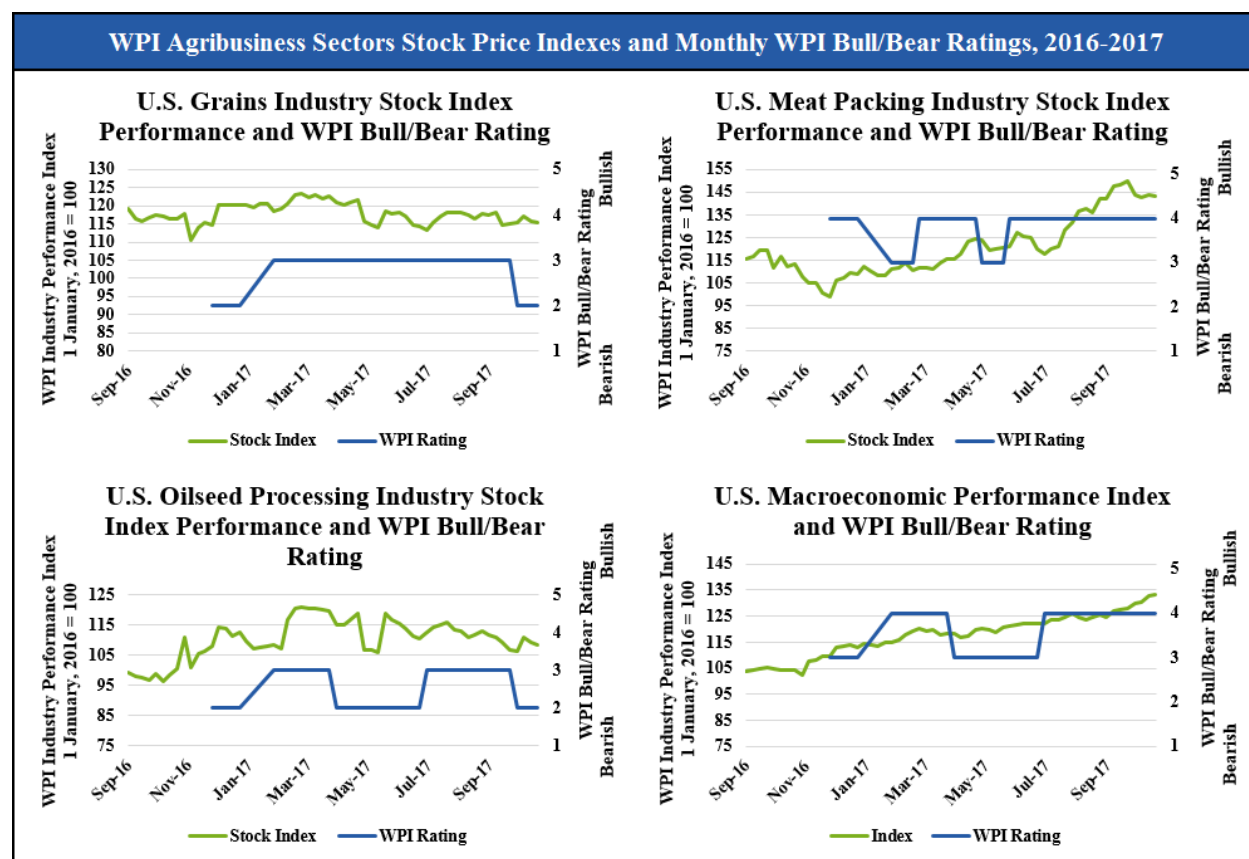
By Matt Herrington

The macroeconomic outlook remains strong for U.S. businesses and others worldwide. The U.S. labor market is increasingly strengthening, sending bullish signals to the stock market. Agribusinesses have been recipients of broader stock market enthusiasm, and WPI's industry indexes have broadly improved.

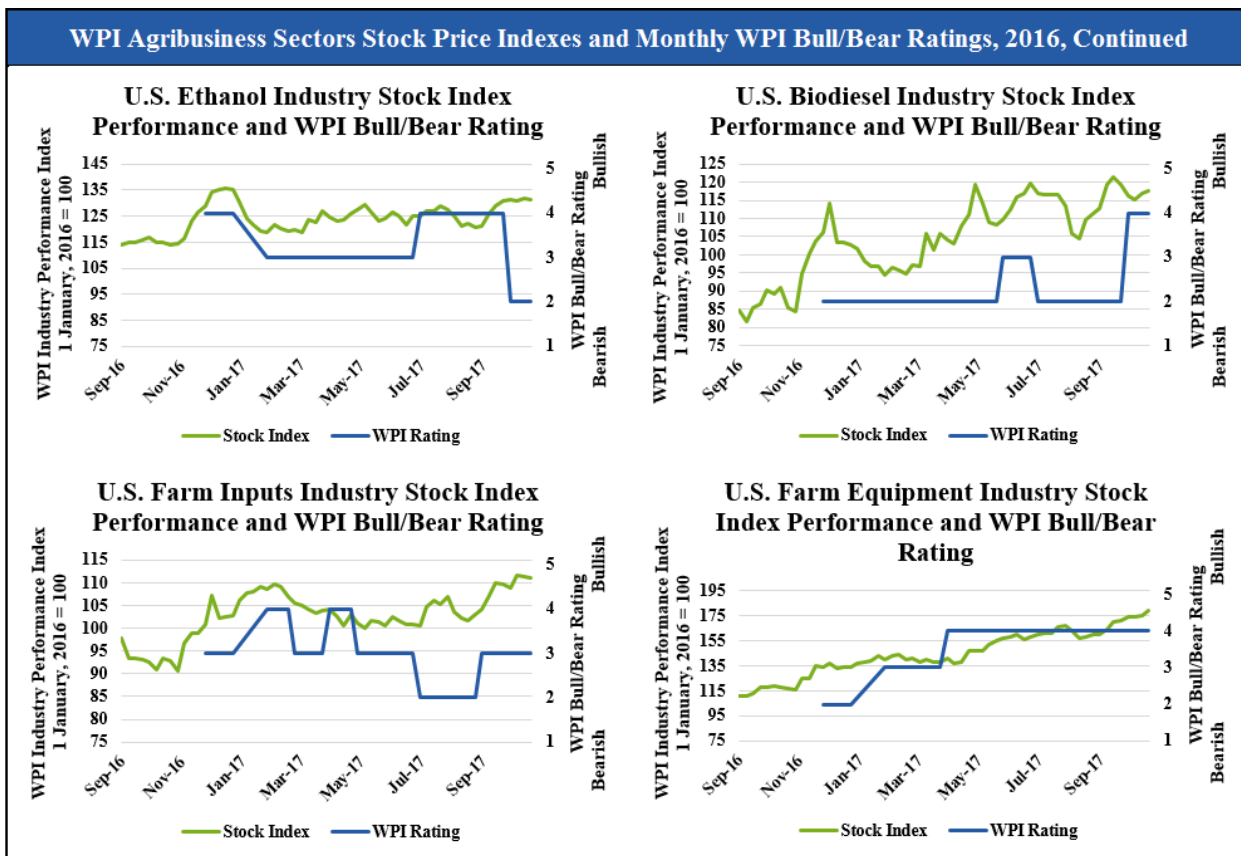
WPI's Macroeconomic Index rose 4.5 percent from the September issue and shows little sign of slowing down. The WPI Farm Machinery industry index gained 5.9 percent, while the WPI Farm Inputs index rose 1 percent from September. Some weakness is seen in the meat

packing sector, which saw its index fall 3.5 percent in October after several months of impressive gains. Similarly, the global oversupply situation present in the grain and oilseed markets has limited stock price gains in those industries.

On balance, WPI sees broad-based improvement in U.S. equity prices, including those for agribusiness. As always, commodity prices and volatility will determine differing outlooks for different sub-industries and policy actions, particularly those regarding biofuels, and should be closely monitored.



Source: WPI



Source: WPI

WPI BULL/BEAR LEANINGS FOR AGRIBUSINESS

By WPI Staff

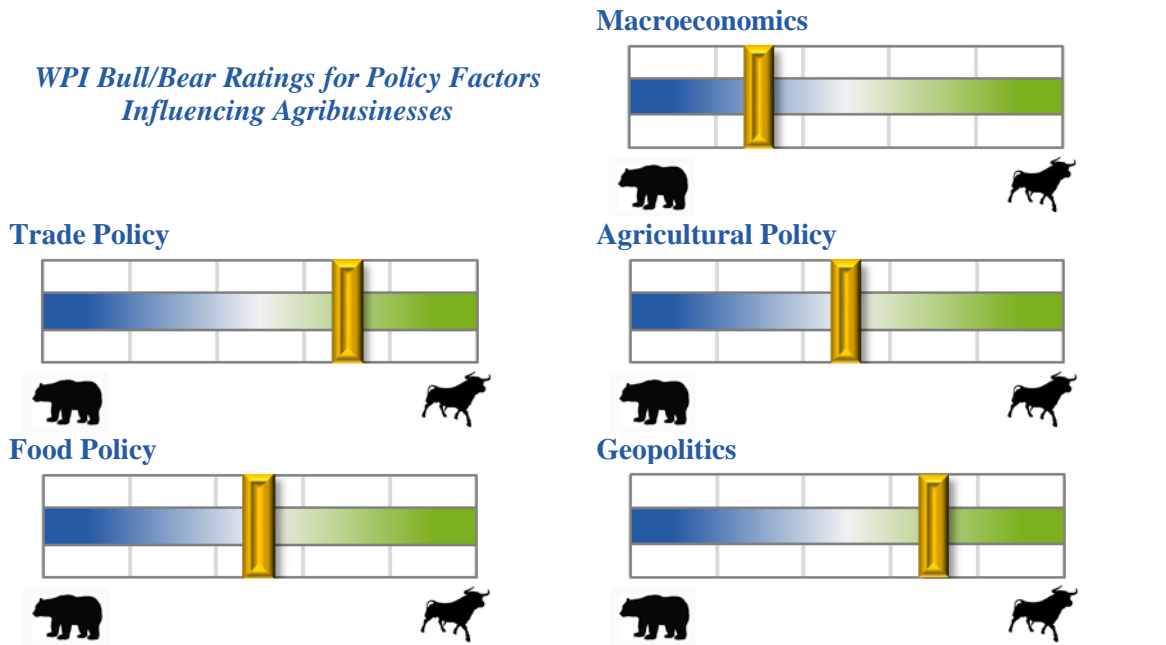
Industry	WPI Industry Bull/Bear Rating	Predominant Influencing Factors
Grains		<ol style="list-style-type: none"> 1. The current large corn crop and near-record soybean crop will keep supplies ample. 2. Growing world corn supplies offer little chance for prices to move appreciably higher. 3. Wheat prices are increasingly being set by international ports, causing U.S. producers to cut acres. 4. Global soybean demand remains robust, and the oilseed offers U.S. farmers the best chance at financial profits this year. 5. The only shock that can seemingly rally prices is a severe production shortfall in a major producing country.
World Oilseeds		<ol style="list-style-type: none"> 1. Production has steadily outpaced demand. 2. Poor profitability in other crops is encouraging farmers to continue producing soybeans. 3. If production does not taper off, government farm program expenditures will increase substantially. 4. Low prices for oilseeds and other crops are reducing grain trading companies' profitability. 5. The odds of a poor weather year in a major producing country are increasing.
U.S. Biofuels <i>Ethanol</i>		<ol style="list-style-type: none"> 1. Domestic biodiesel prices will at least be supported by a minimum price for Argentine imports. 2. The EPA is committed to maintaining or increasing overall advanced biofuel volumes for 2018, and biodiesel is the primary fuel used to fill that mandate. 3. Ethanol margins are squeezed by low prices. 4. Total motor fuel use is likely to remain steady while ethanol production is high.
<i>Biodiesel</i>		
Farm Inputs		<ol style="list-style-type: none"> 1. Nitrogen and DAP prices have improved further since last month. 2. Increasing prices are driven by both supply and demand. 3. Seasonal demand in international markets is strengthening, including India and Latin America. 4. On the supply side, a combination of late start-ups, turnarounds, and production issues are compounding current market strength. 5. Upcoming earnings reports will reflect improved market conditions, although they may have already been priced in.

Source: World Perspectives, Inc.

Policy Factors

1. Political stability is increasing in the Mercosur region.
2. China's new ethanol policy will likely be bullish global commodity trade.
3. The U.S. has trade negotiation power from NAFTA withdrawal threats and the upcoming WTO ministerial.
4. The EU is seeking new policies that will improve producers' bargaining position.

WPI Bull/Bear Ratings for Policy Factors Influencing Agribusinesses



Source: World Perspectives, Inc.

U.S. FARM INCOME AND PROFITABILITY

By Robert W. Kohlmeyer

Top Five Reasons WPI is Bearish the U.S. Farm Sector

- The current large corn crop and near-record soybean crop will keep supplies ample.
- Growing world corn supplies offer little chance for prices to move appreciably higher.
- Wheat prices are increasingly being set by international ports, causing U.S. producers to cut acres.
- Global soybean demand remains robust, and the oilseed offers U.S. farmers the best chance at financial profits this year.
- The only shock that can seemingly rally prices is a severe production shortfall in a major producing country.

USDA's Economic Research Service (ERS) is the agency that first forecasts U.S. farm income. It then collects farm income and wealth data for the preceding calendar year to refine those predictions. ERS releases three sets of farm income forecasts each year with the first occurring in February before most field crops are planted. The second set is issued in late August when reasonable crop production forecasts for the current year can be made, and it also reworks ERS's forecasts for the preceding year into estimates as well as revises estimates for prior years if needed. The third updated farm income forecast comes in late November after most of the year's crops have been harvested and some sense of price prospects can be developed.

In February 2017, ERS predicted net farm income for the year would be \$62.3 billion, very slightly below 2016. If realized, 2017 would be the fourth year in a row that income declined. However, ERS raised that forecast to \$63.4 billion in its 30 August 2017 report, making it 3 percent greater than the previous year. In February, the agency predicted that the farm sector's net cash income for 2017 would be \$93.5 billion, a small increase over 2016. It then raised the estimate to \$100.4

billion in its August release, 12.6 percent more than the previous year's and mainly due to cash sales during 2017 of inventory held over from the previous year. Effectively, net cash income represents the farm sector's cash flow.

Annual U.S. net farm income is the most closely-watched measure of the farming sector's financial status because it reflects all related economic activity, including production, inputs and marketing. Net farm income has fallen 50 percent since its peak in 2013. This income and ERS data on the national farm debt-to-asset ratios together provide a quick snapshot of the U.S. farm economy's well-being. The debt-to-asset ratio in 2017 is estimated to be the highest in 15 years at 13.9 percent, thanks mainly to lower land valuations, but that is still well below where it was in the late 1980s when excessive debt forced many farm operators out of the business.

Net farm income includes estimated results from a wide variety of diverse farming operations, ranging from income derived from farms growing varietal wine grapes in the Napa Valley on land worth \$34,000/acre to those primarily producing fruits, vegetables, tree nuts and ground nuts. It includes income from small organic farms,

30,000-acre cattle ranches, operators producing 50,000 hogs annually, and small so-called hobby farms.

The diversity of U.S. farming operations means net national farm income estimates reveal little about where how those earnings are derived or whether they cover both fixed and variable costs. The ERS will use both predictions of the production volume that is marketed and price trends as part of the construction of its national net farm income estimates. However, this process tends to mask the reality that cash income per unit of production will vary widely among different geographic regions and even among farm operators within a single such region.

WPI's focus tends to be on production of traditional field crops and livestock. With no disrespect intended for growers of wine grapes, fruits, and vegetables, we are more interested in the production and marketing of wheat as well as other small grains, corn, soybeans, rice, cotton, hogs, cattle and poultry. The ERS paints its picture of the contribution these make to net national farm income with a broad brush. It also forecasts expected trends in cash receipts.

Net farm income is the total of cash receipts and direct government payments received for crops and livestock less farm sector costs. The ERS forecasts expected trends in cash receipts for specific major production categories, both in prices and quantities sold. In its analysis for 2017, it predicts that cash receipts for cattle/calves, hogs, dairy products, and broilers will see strong growth after declining in 2016. However, cash receipts for all crops are expected to be just 0.3 percent higher. Crop prices are expected to drop overall, but a higher volume of sales should offset those declines and lead to the small net increase.

As always, some crops will fare better than others. Cash receipts for soybeans are expected to grow 6.3 percent in 2017, but corn receipts are predicted to fall for the fifth year in a row. Cotton is forecast to be the star performer with cash receipts up more than 25 percent. Receipts for wheat and rice appear to be headed lower, though. Interestingly, the total value of major crops is forecast at \$180.5 billion, down 4.5 percent from

2016. However, this is partially covered by a 7.3 percent increase in the total value of livestock and poultry. Cash receipts due specifically to a greater volume of grain, soybean and livestock sales make up for the rest of the decline of crop value and are enough to result in the small 0.3 percent increase in net farm income from crops.

Nominal Cash Receipts by Commodity 2014-2017* (million USD)				
	2014	2015	2016	2017*
All Commodities**	424,217	376,949	352,437	366,551
Wheat	12,545	9,427	8,856	8,562
Barley	959	940	934	819
Corn	54,473	47,019	46,059	45,755
Sorghum	1,733	1,837	1,475	1,156
Soybeans	40,838	33,112	37,970	40,373
Sunflower	455	567	511	243
Fruits and Nuts	31,931	28,418	28,715	23,767

Source: USDA/ERS, WPI

*2017 Forecast

** Includes items not shown in this table

One cannot say that the outlook for net farm income in 2017 is likely to lead to a turnaround for the U.S. farm economy, but the slow leakage lower seems to have been halted for at least a year.

Looking Ahead

U.S. farmers are harvesting another large corn crop and a potentially record-large soybean crop. They will also be adding substantial quantities of last year's crops that have been carried into the 2017/18 crop year. Earlier last summer, U.S. wheat growers harvested a very small crop that resulted from their collective decision to reduce the planted areas. The amount of land planted to all classes of winter wheat in the autumn of 2016 was the smallest in more than 100 years. However, the potential impact of this year's small crop has been softened considerably by the historically large volume of wheat carried over from the 2016/17 crop year, and total available U.S. supplies remain ample. The world also remains well supplied with wheat, although

supplies of higher protein hard classes of milling wheat appear to be rather tight.

The question is whether U.S. farmers can expect a reasonable profit in the 2017/18 crop cycle from growing wheat, corn and soybeans. The ERS will count their cash receipts from these crops toward net farm income for 2018.

Wheat

The current odds of growing wheat profitably for 2017/18 appear to be small. Farmers are presently planting hard red winter wheat (HRW) in the southern and central Plains. The poor prospects for profits persuaded HRW growers from Texas to South Dakota to decrease their intended plantings to a record-low level a year ago. Most in this region do not view the chances of profiting from HRW as being any better in the fall of 2017. Current cash prices for HRW are even lower than they were last year, and the sense is that Plains wheat growers will cut back even more on how much land they plant this fall. They will then wait until next spring and turn to other crops if they can. The comparative lack of profitability from growing wheat led Plains farmers to plant soybeans in areas where that crop had never been planted before, and more of this can be expected in 2018.

Spring wheat and durum farmers in the Dakotas, Montana and northern Minnesota saw their 2017 crop production reduced by a severe drought that hit the northern Plains in the summer of 2017. This has widened the price premium for hard red spring wheat (HRS) over winter wheat classes. It remains to be seen whether this price spread will still prevail in the early spring of 2018 when northern Plains farmers will make planting decisions, or whether prices will be higher enough to keep farmers from switching land planted with HRS in 2017 to other crops.

A longer view is that the multi-year buildup of wheat stocks in the U.S. and the world has peaked with levels in decline, although current wheat market prices certainly do not indicate this. Prices also do not reflect that the combined wheat production in major wheat-exporting countries this year is significantly lower than in 2016. The

aggregated lower production in competing countries for world wheat trade may well open opportunities for U.S. exports during the last half of the 2017/18 wheat crop year. This situation could improve the profit opportunity for those producers willing to store their wheat crop for several months. However, this possibility is not going to change winter wheat growers' planting decisions.

Corn

The grain crop that currently seems most "profit-proof" is corn. U.S. farmers are harvesting a 14.1-billion-bushel crop, the second-largest ever in the U.S. It will be added to corn stocks of about 2.3 billion bushels that were carried over from 2016/17. USDA foresees unchanged domestic corn use in 2017/18, but it predicts U.S. corn exports will fall more than 300 million bushels below the total in 2016/17. As USDA now sees it, corn stocks at the end of 2017/18 will be about the same as 2016/17 and 16.2 percent of use.

It is very hard to imagine a bullish corn market with well over 2 billion bushels left to carry into the following year. This is particularly true since the world is expected to carry over more than 200 MMT into the next marketing year. The estimated world corn stocks-to-use ratio is over 19 percent. Without some sort of unexpected demand surge, corn prices seem destined to stay quite low throughout 2017/18, making it difficult to achieve much profit from growing corn.

Soybeans

The best opportunity to score profits from traditional crop production in 2017/18 appears to come from soybeans. Recall that among the grains and oilseed crops, ERS found that soybeans' contribution to national net farm income increased more on a percentage basis than other crops in 2017. This is likely to be the case again in 2018. The U.S. is harvesting a likely record soybean crop of around 4.4 billion bushels for 2017/18. However, demand for U.S. soybeans is forecast to be almost as large, powered by apparently insatiable Chinese demand and a potentially record-large domestic crushing volume. The ending stocks-to-use ratio for

2016/17 is about 7 percent, lower than for either corn or wheat. That ratio is not likely to grow much, if any, at the end of the 2017/18 soybean crop year. That does not translate into a runaway bull market for soybeans, but it does suggest that expecting soybean futures prices of \$10.00-11.00/bushel in 2017/18 is reasonable. That should translate into decent soybean production profits for most commercial farms.

It is worth noting that prices for U.S. corn, wheat and soybeans are dependent on happenings elsewhere in the world more than ever. During some portion of each crop cycle, world market values are set by export offerings from other countries. While Russia and Ukraine are frequently the world's price-setters for wheat, Brazil and Argentina often offer world users the lowest prices for soybeans and/or corn. Under normal circumstances, U.S. exporters can expect fierce competition for market share of world trade in all three.

The most likely event that could move U.S. prices higher is an unexpected crop production problem, perhaps weather-related, that reduces export availability and price competitiveness of an important competing exporter country. Something like this cannot be excluded from occurring in 2017/18, and it will happen sooner or later. When it does, previous demand and price predictions can be rendered useless. Such situations can rather suddenly create profits from heretofore unprofitable crop production prospects.

WORLD OILSEED INDUSTRY OUTLOOK

By John Baize

Top Five Reasons WPI is Bearish the World Soybean Market

- Production has steadily outpaced demand.
- Poor profitability in other crops is encouraging farmers to continue producing soybeans.
- If production does not taper off, government farm program expenditures will increase substantially.
- Low prices for oilseeds and other crops are reducing grain trading companies' profitability.
- The odds of a poor weather year in a major producing country are increasing.

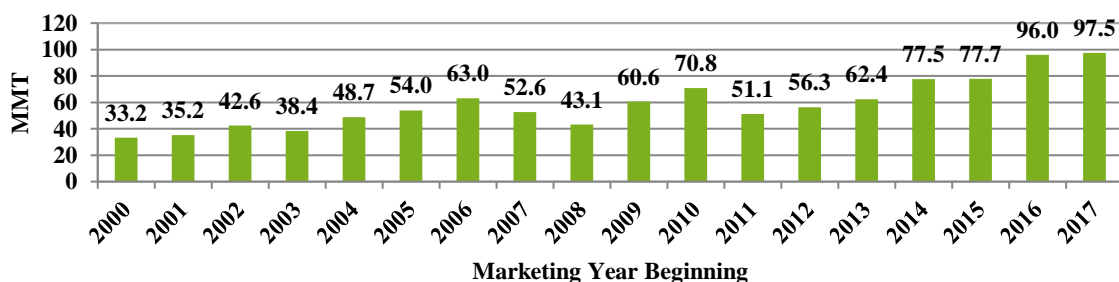
Anyone paying attention to the global soybean industry knows the world is awash in soybeans. In its September WASDE report, USDA estimated global soybean stocks on 31 August 2017 at 95.96 MMT (3.526 billion bushels), a record by far and 23.4 percent greater than one year earlier. To make matters worse, it expects the total on 31 August 2018 to be even higher at 97.53 MMT (3.583 billion bushels).

Record global soybean stocks are a result of production rising faster than demand. That in

itself is rather amazing since global soybean demand has increased by an average 16.16 MMT (594 million bushels) each of the past four marketing years.

To put this in perspective, only the U.S., Brazil and Argentina produced more soybeans than the annual average global increase in demand over that period. While no other commodity has seen such rapid growth in demand in recent years, that has not been enough to offset the record increase in global stocks.

**Global Soybean Ending Stocks
2000/01-2017/18***



Source: USDA

*Forecast

The growth in global soybean production has been the result of rising harvested area and sharply higher average yields in key producing countries. The harvested area has been expanding because farmers have seen greater profit potential from growing soybeans instead of corn or other crops. The higher yields have been a result of better, higher-yielding seed varieties and generally excellent weather.

The key factor in the U.S. has been excellent growing season weather each year since the 2012 drought. The U.S. national average soybean yield set record highs from 2013 through 2016 and is forecast to be the second-highest ever in 2017. The 3.5 MT/hectare (52 bushels/acre) in 2016 was 30 percent higher than the 2.69 MT/hectare (40 bushels per acre) in 2012. USDA is forecasting the average yield in 2017 at 3.36 MT/hectare (49.9 bushels/acre) even though the summer growing season was far less positive than last year.

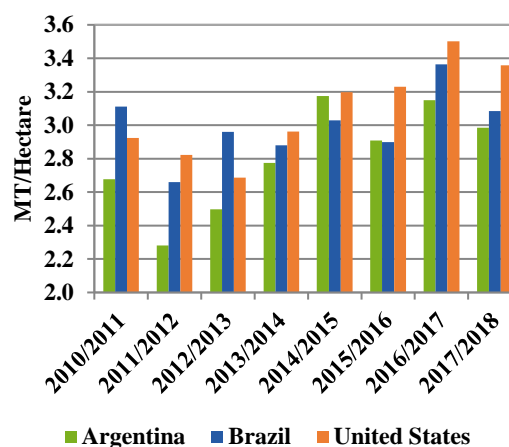
Brazil, the world's second-largest soybean producer, also had mostly good weather in the last few years. Its best year was MY 2016/17 when almost ideal conditions covered the country and set a record soybean yield of 3.36 MT/hectare (49.9 bushel /acre). Its average yield over the past four years has either been above or very close to its 10-year average of 2.94 MT/hectare (43.7 bushels/acre). The last year that Brazil suffered a major yield decline because of weather was in MY 2011/12 with a drop to 2.66 MT/hectare (39.6 bushels/acre).

Argentina's average yields have also been above the past 10-year average of 2.72 MT/hectare (40.4 bushels/acre) in each of the past four years, reaching a record 3.17 MT/hectare (47.1 bushels/acre) in 2014/15. The last year it had a very low average yield was 2011/12 when there was a drop to 2.28 MT/hectare (33.9 bushels/acre). However, its average yields in the past two years have been hurt by excessive rainfall in some areas and drought in others.

History teaches that the odds are good that one or more of the three top soybean-producing nations will suffer a major weather problem in the next two-three years, which will sharply reduce

output. The first chance for that to occur in the upcoming growing season will be in Brazil, Argentina, Paraguay, and Uruguay. Weather forecasters are indicating a good possibility that a La Nina will develop this fall and extend through the first few months of 2018. During such weather events, there is a tendency for southern Brazil, Argentina, Paraguay and Uruguay to have below-normal rainfall while northern Brazil receives above-average amounts. The La Nina of 2012 was blamed for the severe drought in Argentina that led to sharply lower yields in 2011/12 as well as 2012/13. It also reduced yields in southern Brazil.

**Average Soybean Yields in
Argentina, Brazil and the U.S.
2010/11-2017/19***



Source: USDA
*Forecast

Argentina's soybean crop will likely be smaller in 2018, regardless of the weather. Analysts expect farmers there will plant about 1 million hectares fewer soybeans in 2017/18 in favor of more corn, which is expected to be more profitable. Flooding in Argentina also resulted in large areas being inundated or saturated with water, which may prevent a substantial portion from getting planted.

If South American soybean production were to decline 10 percent in 2017/18 versus 2016/17, it would mean a reduction of 18.8 MMT. That would likely cut global soybean stocks to around 80 MMT. While still a very large volume, this

would also be a signal to the market that users cannot take for granted that the world will continue to have very large soybean stocks available at low prices. If U.S. soybean production were to also fall substantially in 2018, the world supply could fall even more.

A reduction in global soybean production and ending stocks would be very positive for the sector. Because of the large stocks and low prices, growing soybeans is now either unprofitable or only marginally lucrative for many farmers. Lower stocks would most certainly result in higher farm-gate prices that would boost overall farm income. This would also be very positive for grain processors and merchandisers since these sectors tend to have higher profitability during periods of increased price volatility. Downstream industries like equipment manufacturers along with fertilizer and pesticide producers would probably see an improvement in their profits as well.

If the growing season weather continues to be good in South America and North America over the next few years, global soybean stocks will undoubtedly continue to rise to extremely burdensome levels. The result, of course, would be prices falling to very unprofitable levels. That would cause farmers to turn away from growing soybeans to more profitable alternative crops, which would reduce global stocks over time. However, it would also cause farmers everywhere to clamor for government assistance to offset their financial losses. For that reason, one can only hope for poor weather to bring supply and demand back into a better balance.

THE U.S. BIOFUELS INDUSTRY

By Dave Juday

Top Four Reasons WPI is Bullish Biodiesel, Bearish Ethanol

- Domestic biodiesel prices will at least be supported by a minimum price for Argentine imports.
- The EPA is committed to maintaining or increasing overall advanced biofuel volumes for 2018, and biodiesel is the primary fuel used to fill that mandate.
- Ethanol margins are squeezed by low prices.
- Total motor fuel use is likely to remain steady while ethanol production is high.

On 26 September, the U.S. EPA released a notice of data availability (NODA) on 26 September that provided:

- additional data on production, imports and cost of renewable fuel
- several options for how that data may be considered under the current waiver authorities to reduce the biomass-based diesel volume or advance overall biofuel volume

The NODA was triggered by a number of issues, but it was primarily driven by the Commerce Dept.'s announcement of the preliminary determination that U.S. imports of biodiesel from Argentina and Indonesia were receiving subsidies that would trigger countervailing duties.

Biofuel Politics

The imposition of antidumping (AD) and countervailing duties (CVD) was a top priority of the National Biodiesel Board (NBB), and it petitioned the Commerce Dept. to pursue trade remedies against Argentina and Indonesia. According to the NBB, the biodiesel imports from the two countries surged 464 percent from 2014 to 2016, taking 18.3 percent of market share from U.S. manufacturers. Those from Argentina

again jumped 144.5 percent following the filing of the petition in May.

In August, a victory appeared likely for the U.S. biodiesel industry when the Commerce Dept. issued its initial ruling. When the EPA then used that as rationale for the NODA and a means to consider reducing the overall volumes of biofuels, the NBB's victory looked to be Pyrrhic until the biofuel advocates in Congress along with several governors became engaged. The EPA heard from a group of Midwestern Republican governors and the 22 House members of the bipartisan Congressional Biofuels Caucus.

Having the biggest impact, however, was a group of Republican senators, led by Charles Grassley (R-Iowa), who secured a face-to-face meeting with EPA Administrator Scott Pruitt. Their message: don't jeopardize Republican votes for tax reform over changes to the Renewable Fuel Standard (RFS). Moreover, the confirmation vote for EPA political appointees was held up over the imbroglio. This included the vote on William Wehrum, nominated to be assistant administrator for the Office of Air and Regulation, the position that administers the RFS.

During his confirmation hearing before the Senate Environment and Public Works Committee, Wehrum was drilled by Senators

Joanie Ernst (R-Iowa) and Deb Fischer (R-Nebraska). Ernst asked about the RFS and whether Wehrum would uphold the “letter of the law” at the EPA. She also offered to help him and Administrator Pruitt in the “education process about the RFS.” Meanwhile, Fischer pushed him to comment on the “attacks on RFS we’ve been seeing lately” from the Trump administration. The high intensity lobbying efforts was effective; on the evening of 19 October, EPA Administrator Scott Pruitt sent a letter to the senators with whom he had met, promising no cuts in the biofuels volumes and addressing other pending issues.

Biofuels Policy Outlook

Per the NODA, the EPA had considered applying the 15 percent biodiesel waiver authority, which it has been statutorily invested in by the Energy Independence and Security Act of 2007 (EISA). This waiver would theoretically reduce the biodiesel amount, at least initially by 315 million gallons (subsequent waivers could be implemented), and thus also be tied to a commensurate decrease in the overall advanced biofuel volume. In turn, that could have been used to lower the total amount of biofuel, including ethanol, mandated for next year. As the NODA explained:

... an equivalent reduction in advanced biofuel and total renewable fuel would be 473 million ethanol equivalent RINs. This would bring the 2018 advanced biofuel volume requirement down from the proposed level of 4.24 billion gallons to 3.77 billion gallons and the 2018 total renewable fuel volume requirement from the proposed level of 19.24 billion gallons to 18.77 billion gallons.

Instead, however, Pruitt’s letter pre-empted any consideration of a waiver and outlined what would be the baseline for biofuel volume in the upcoming final rule as well as the approach toward a number of other issues, noting the following:

- “Preliminary analysis suggests that all of the final [renewable volume obligations (RVOs)] should be set at amounts that are

equal to or greater than the proposed amounts, including at least 2.1 billion gallons for biomass-based diesel in 2018 and 2019.”

- Moving the point of obligation from refiners to blenders “would not be appropriate,” and this decision will be made final in 30 days (from 19 October).
- Despite getting a late start on the rulemaking for the required biofuel volumes for 2018 (the proposal was published in July rather than May), the EPA will still meet the statutory deadline of 30 November.
- The EPA would “welcome the opportunity to work with Congress” on a definitive analysis of allowing year-round E15 blends.
- The EPA has not, and will not, “pursue regulations” to implement the idea of allowing ethanol exports to generate Renewable Identification Numbers (RINs).

Indeed, Pruitt’s letter was bullish news for biodiesel, soyoil and RINs. Moreover, his outline for upcoming policy decisions most closely aligns with what the ethanol sector wanted.

Biodiesel

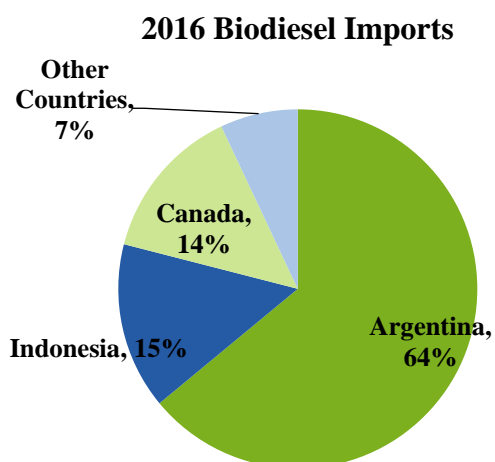
In 2016, 731 million gallons of advanced biodiesel and renewable diesel were imported into the U.S. Following is the breakdown of the RIN generation for compliance with the RFS:

Fuel	Imports (million gallons)	RIN Value (ethanol equivalent)	Total RINs (million)
Biomass Based Biodiesel	561	1.5	842
Renewable Diesel	170	1.7	289
Total	731	N/A	1,131

Source: EPA, WPI

Of the EPA-reported 4,003 million D4 RINs generated in 2016, 28 percent were from biodiesel imports. According to the U.S. Energy Information Administration (EIA), 93 percent of the imports were from Argentina, Indonesia and

Canada. Now imports from two of those origins will face significant import duties.



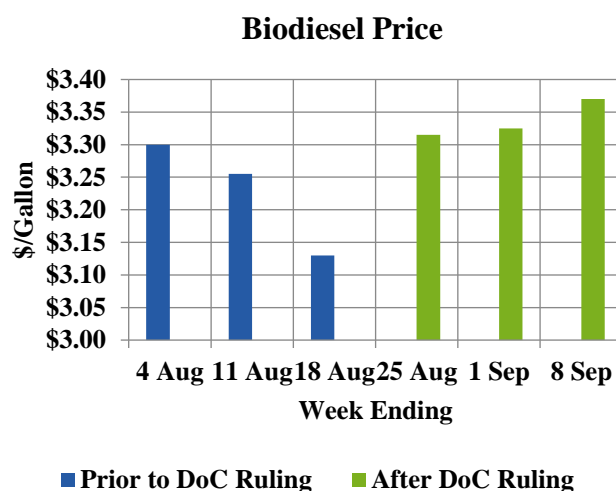
Source: EIA, WPI

On 23 October, the Commerce Dept. confirmed its initial findings against imported biofuel from Argentina and Indonesia, setting antidumping duties in the range of 54.36-70.05 percent on soy-based biodiesel from the former and 50.71 percent on palm oil biodiesel from the latter. Maintaining the overall RVO for 2018 in combination with what is likely to be a dramatically reduced import volume could result in domestic biodiesel production expanding up to 20 percent beyond 2016 production. That implies soyoil use for biodiesel of at least 7.3 billion pounds and canola oil use of 1.36 billion pounds.

For the 2017/18 crop year, USDA’s World Agricultural Supply and Demand Estimates (WASDE) report forecasts 7 billion pounds of soyoil use and a seasonal average price of 32.5-36.5 cents per pound. Based on the coming RVO and increased soyoil demand for biodiesel pushing the biodiesel utilization higher (and food use lower), prices are likely to be at the top end of that range.

Biodiesel prices, however, are also likely to rise given the large volume obligation, especially since the preliminary countervailing duties have already been put in place since August, thereby slowing imports. The Argentine Foreign Ministry said that with the new duties, “access to the U.S.

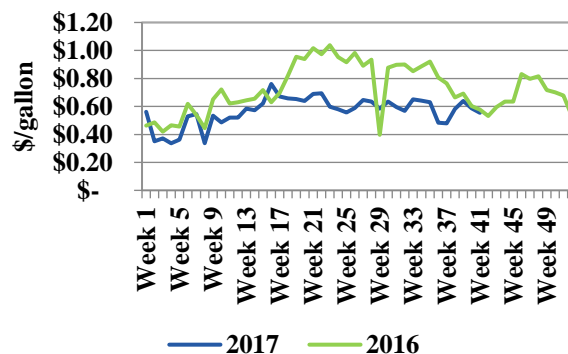
market is impossible.” As a result, biodiesel margins are likely to improve moving forward.



Source: EIA, WPI

Both the U.S. and Argentina are looking to come to a negotiated settlement, known as a suspension agreement, that would suspend the new duties. The most likely scenario would involve a minimum sales price for the imported biodiesel that would maintain improved margins for U.S. producers moving forward.

WPI-Estimated Biodiesel Gross Margins (returns per gallon for soyoil methylester)



Source: USDA, EIA, WPI

Ethanol

The policy declarations in Administrator Pruitt's letter were less dramatic on the ethanol side, but there were some nuggets of welcomed news, mostly in the form of the EPA's decision to reject a number of provisions opposed by the industry. First, the agency indicated the overall biofuel volume would not be reduced, which includes the conventional biofuel category consisting primarily of corn-based ethanol.

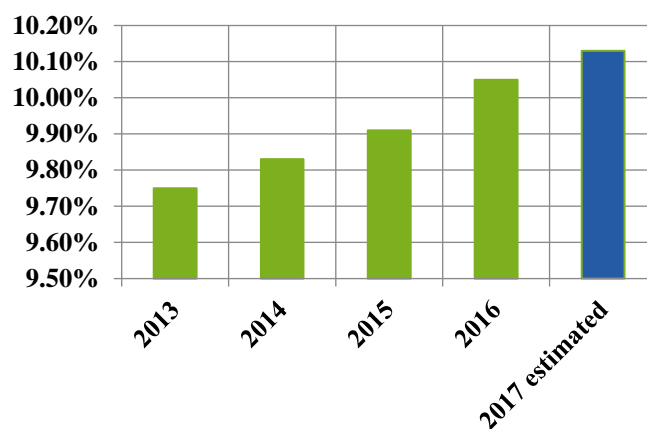
Secondly, as the advanced and biomass-based diesel categories have become more reliant on imports, conventional ethanol production has conversely and increasingly become dependent on exports. Ethanol exports totaled 1.05 billion gallons last year, putting production at more than 16 billion gallons and well above the 15-billion-gallon statutory cap for ethanol use under the RFS. It was proposed to the EPA during this rulemaking process that ethanol exports be allowed to generate RINs. Were this recommendation accepted, an additional billion or more potential RINs could be generated from exports, which would reduce the value of D6 ethanol RINs.

Third, the point of obligation will be moved from refiners to blenders, but a final determination will be announced within the next 30 days. Currently, refiners and importers are the "obligated parties" under the RFS, which means they are responsible for complying with the annual volume standards to blend biofuels into the gasoline and diesel supply. Ethanol producers want to keep it that way. Obligated parties with limited blending capacity want to move the point of obligation downstream to blenders and distributors or those who ultimately own the fuel, known as position holders.

Finally, the EPA said it would be happy to consider E15 fuels with Congress. Indeed, the percent of ethanol in the fuel supply has been growing each year beyond the expectations of the original EISA schedule. Last year marked the first time that the national average ethanol content in finished motor fuel exceeded 10 percent, reaching 10.05 percent. Based on 14.561 billion gallons of ethanol in 143.683 billion

gallons of total motor fuel, it is expected to reach 10.13 percent this year. The ethanol industry has been aggressive in pursuing E15 approval to generate more room for ethanol in the fuel market.

Average Ethanol Content of U.S. Finished Motor Fuel



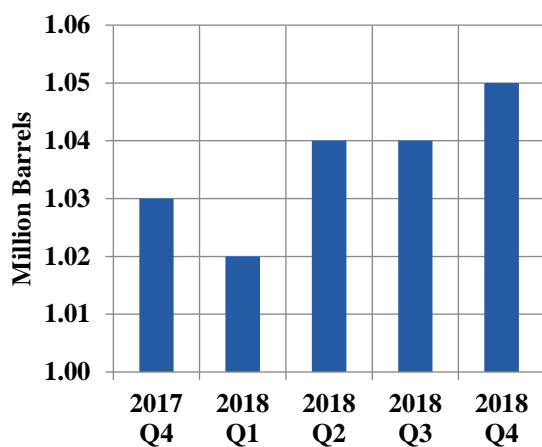
Source: EIA, WPI

Supply and Demand

The effect of Hurricanes Harvey and Irma on the gasoline market have all but fully dissipated. Refinery shutdowns impacted ethanol blending and motor gasoline prices, sending regular retail gasoline prices to a two-year high of \$2.69/gallon on 1 September. Those prices then returned to an average \$2.57/gallon by the beginning of October as refinery capacity and gasoline production came back online. In the October Short-Term Energy Outlook (STEO), the EIA forecasts ethanol production will average 1.03 million barrels/day this year and increase to 1.04 million barrels/day in 2018, which would equate to 15.943 billion gallons for that year. Below is a look at the quarterly production forecasts.

Ethanol consumption is expected to reach 960,000 barrels/day in 2018 or 14.7 billion gallons for the year.

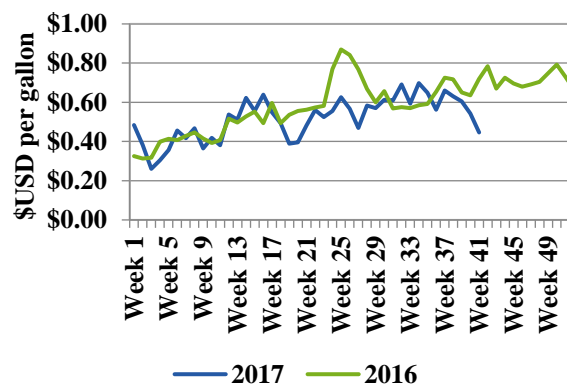
Average Daily Ethanol Production



Source: EIA, WPI

Weak ethanol prices have squeezed producer margins. As a rule, the primary drivers of ethanol prices are gasoline prices (35 percent), corn prices (30 percent) and ending stocks (10 percent). Gas and corn prices are down, but ending stocks are still about 13 percent above their five-year average despite dropping from their peak in March and April. That should keep pressure on margins moving forward.

WPI-Estimated Gross Margins for Ethanol Including Corn Oil Extraction



Source: USDA, WPI

FARM INPUTS

By Joost Hazelhoff

Top Five Reasons WPI Is Neutral the Farm Inputs Industry

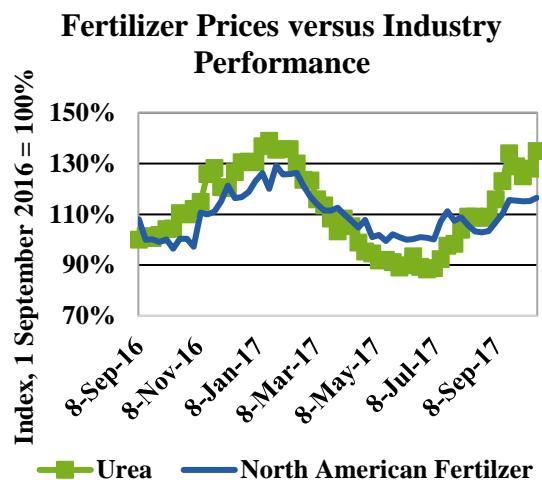
- Nitrogen and DAP prices have improved further since last month.
- Increasing prices are driven by both supply and demand.
- Seasonal demand in international markets is strengthening, including India and Latin America.
- On the supply side, a combination of late start-ups, turnarounds, and production issues are compounding current market strength.
- Upcoming earnings reports will reflect improved market conditions, although they may have already been priced in.

Last month fertilizer markets were anticipated to remain tight, and they will no doubt see even higher prices with India's next tender. As such, WPI reported a neutral-bullish outlook for fertilizers. Prices have indeed moved up accordingly, albeit at a lesser extent than expected, and share prices in the fertilizer industry increased as well.

New pockets of demand such as India's two tenders for urea are the primary drivers of higher prices. In its second tender, India was already facing higher prices. As a result of that and increasing freight rates, the tender did not attract sufficient volumes, and so a third tender is likely. At the same time, the Brazilian market strengthened. Even the U.S. market benefitted from these international market dynamics despite otherwise low seasonal spot demand, and U.S. prices continue to do so without any significant supply pressure.

Overall, fertilizer markets are now in a phase of seasonal demand strengthening, while the outlook on the supply side is considerably stronger than anticipated a few months ago. As noted in the September 2017 *Ag Review*, total availability for the remainder of the year is much more a question than expected in the summer.

Indeed, late start-ups, turnarounds, and production issues are compounding to the improved market outlook.



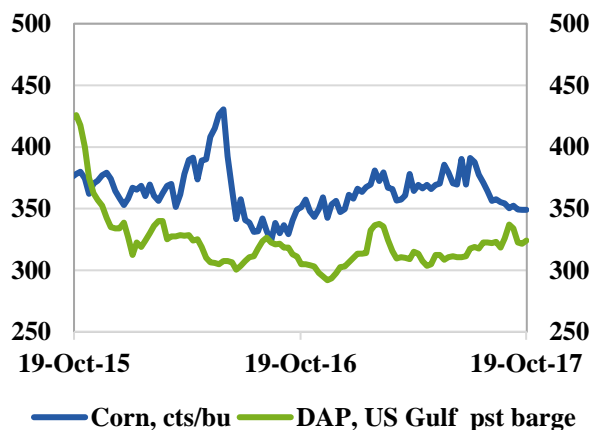
Source: CSI datasystems, World Perspectives, Inc. The Index is the unweighted average of PCS, Agrium, Mosaic and CF.

Near-Term Grains versus Fertilizers

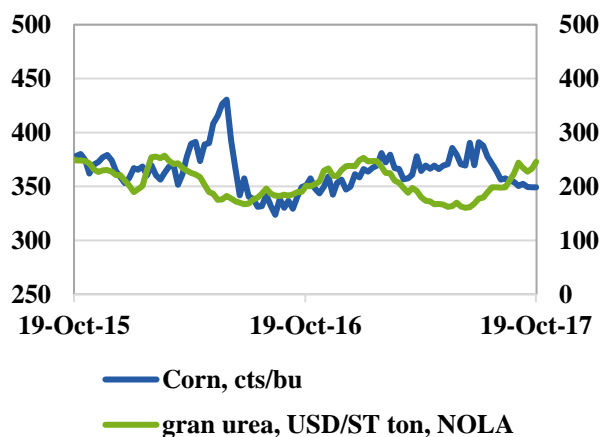
After a five-month disconnect between nitrogen and corn, that spread closed in early September. Since then, however, corn prices have drifted

lower after USDA confirmed its optimistic take on corn supply in the October WASDE. In contrast, fertilizer prices moved higher on the back of industry supply and demand fundamentals.

Corn versus DAP



Corn versus Urea



Source: CME, CSI data, WPI analysis

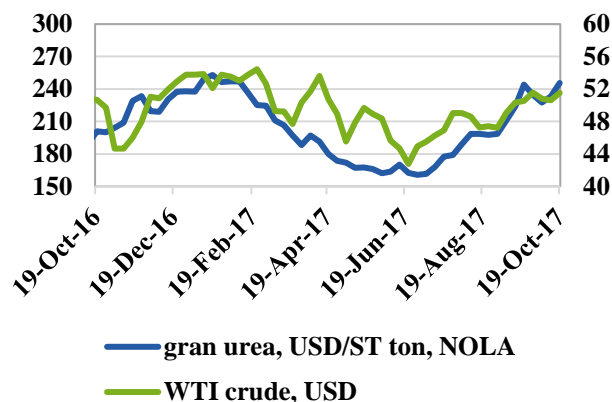
Latin America is in the very early days of possible weather issues, which could shift market away from the bearish U.S. corn supply narrative if they continue and cause grain prices to firm from current levels. This will likely help fertilizer prices to consolidate at current price levels into the next three months and possibly move even higher.

Crude Oil versus Fertilizers

Since crude oil bottomed out in June, the market has been on a steady path of strengthening. In line with the historical correlation between crude and fertilizers, crude strength over the past four months has contributed to that of fertilizer markets. According to the U.S. Energy Information Administration's (EIA's) Short-Term Energy Outlook (STEO), declining global inventories as well as (anticipated) growing economic growth and crude demand are expected in the near term. On the back of further demand growth in 2018, EIA expects crude prices (WTI and Brent) to be 2-3 percent higher on average.

At the same time, natural gas prices have remained relatively stable in North America, keeping production costs for nitrogen in check. Combined with prices for the finished product, production margins stand to benefit. In this context, rising share prices for North American fertilizer producers have responded intuitively.

Crude versus Urea



Source: UA Dataservice, WPI analysis

POLICY TRENDS

By Gary Blumenthal

Top Four Reasons WPI is Bullish Global Macroeconomics

- Political stability is increasing in the Mercosur region.
- China's new ethanol policy will likely be bullish global commodity trade.
- The U.S. has trade negotiation power from NAFTA withdrawal threats and the upcoming WTO ministerial.
- The EU is seeking new policies that will improve producers' bargaining position.

Global Policy Roundup

China: Sensing that it over-incentivized the corn market after surpluses rose above a full year's demand, the government has been backing down its support policy and suggests taking account of not just production costs but also global pricing. At the same time, it remains enamored of government solutions and announced an aggressive goal of 10 percent ethanol blends in gasoline by 2020. The International Grains Council calculates that this will boost China's corn consumption by 14 percent in 2017/18 alone.

The new policy will prompt markets to be cautious that ethanol plants do not become overbuilt, overindebted and high-priced like the Middle Kingdom's real estate. The key difference between real estate and ethanol is that any resulting oversupply of the latter will be dumped on the global market.

Europe: Political leaders in Europe remain skeptical of markets as farmers blame low prices on unfair trade practices by downstream processors and retailers. Brussels will continue to seek a policy solution that enhances the bargaining position of producers, such as strengthening their ability to control production volumes and pricing.

Meanwhile, frustration over dependence on imports of plant proteins has prompted the call for a centralized policy that will lead to greater self-sufficiency. There is also talk of restructuring the Common Agricultural Policy (CAP) with lower direct payments to larger producers and other policies intended to remedy the disadvantage of being small and consequently less efficient. Boosting prices through supply controls and favoring less efficient producers will only increase the pressures for imports. Moreover, incentivizing the production of vegetable proteins will prompt challenge from the Western Hemisphere suppliers of this key feed ingredient.

United States: After meeting with President Trump, key members of Congress report that his threat to withdraw from NAFTA is merely a negotiating ploy. That is no surprise, but how effective is it as a tactic? The administration has more power in the WTO where consensus is required to move forward on any possible outcome from the upcoming ministerial in Buenos Aires. Reportedly, the U.S. Trade Representative has announced that there will be no ministerial declaration, a precedent that is certain to annoy most other nations. No is not an answer, and this is a missed opportunity for the U.S. to have put forward a market access proposal that would have contributed toward a reduction in the American trade deficit.

While policy makers in Europe are looking for ways to more widely distribute the benefits of the CAP, the goal of those in the U.S. Congress dealing with agriculture is to tweak the 2014 Farm Bill so that the 2018 version is more to the liking of incumbent beneficiaries. Both the CAP and the farm bill have a historic bias, but Europe has a larger problem with geographic distribution due to the more recent accession of Eastern European members. The critics of direct commodity supports are also more influential in Europe than in the U.S.

Private companies are not standing still, even if government policy making is unimaginative. They are moving forward on a Global Trade Initiative that is intended to use the availability of Big Data and information technology to provide efficient, fast-moving product information. Key to its success is the integrity it delivers by being centrally driven but broadly distributed, making it less susceptible to bias.

Japan: Fresh off a Parliamentary win sealing a two-thirds majority in the Diet, Japanese Prime Minister Shinzō Abe may be more focused on his national security goal of constitutional reform and rearming his pacifist nation. His trade policy team has thus far pushed back on efforts by U.S. Vice President Mike Pence to initiate a bilateral free trade agreement. Historically, the U.S. has sacrificed national economic interest to pursue national security goals. Nations such as Japan have said that its national economic success is critical to American national security goals. The Trump administration is reversing this dynamic by demanding trade (economic) concessions in exchange for providing security guarantees. Only time will tell the outcome of this new paradigm.

Mercosur: Brazilian President Michel Temer has escaped political turmoil, and Argentine President Mauricio Macri won political backing in the October mid-term elections. This puts the Mercosur region on firmer footing for the period ahead. Both major agricultural suppliers are pressing the European Union for a bilateral trade agreement with more favorable terms than have been offered thus far. Either way, there is no major market drama in the near-term except perhaps that offered by La Niña.

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