

The logo consists of two stylized, overlapping crescent shapes. The left one is blue and the right one is green, both with a slight gradient and a white highlight on their inner curves.

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World Perspectives, Inc.

Technology, Finance, Geopolitics and Demographics

The Economy in 2016: Three Bright Spots

2016 Fertilizer Price Drivers and Direction

2016 Soy Sector Outlook

Commodity Market Review



WORLD PERSPECTIVES: AG REVIEW

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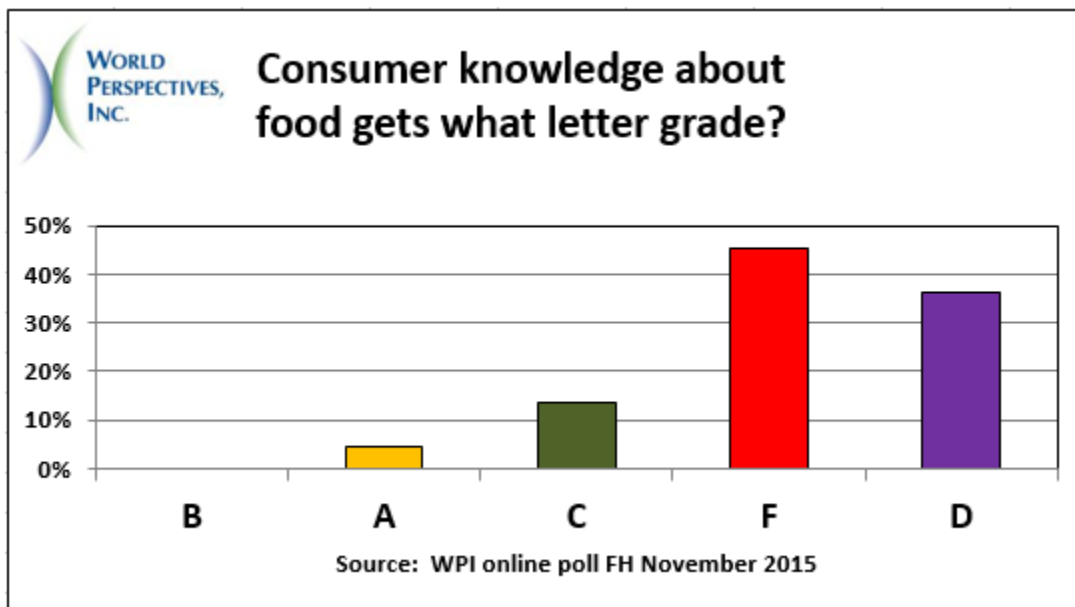
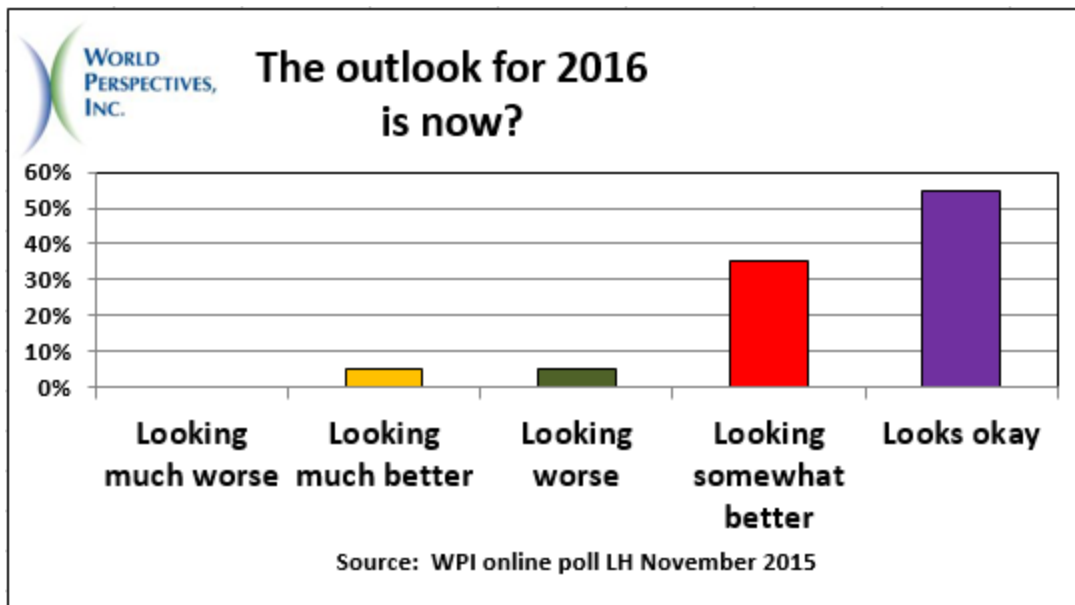
“No act of kindness, no matter how small, is ever wasted.”

— *Aesop*

<i>HARVESTED DATA</i>	
Livestock	
Hold the Meds	73 percent of consumers said in a recent multi-country survey that farmers should give fewer antibiotics to food-producing animals. World Health Organization
Holiday Fare	
Feast Dreams	When asked to name the one food or dish they most looked forward to eating during the holiday season, 32 percent opted for turkey, 9 percent said stuffing and 8 percent preferred ham. Harris Poll
Food for Thought	
Going Local?	A recent survey indicated Americans are evenly divided when it comes to buying “local.” While 50 percent of respondents said it is an important factor in their purchasing decision, 50 percent said it is not. Harris Poll
Mind Control	71 percent of those polled said that mass media has a big impact on consumer food opinion. 19 percent responded that the influence was small, while 10 percent indicated that it doesn’t matter. ZimmPoll

WPI POLLING

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



TECHNOLOGY, FINANCE, GEOPOLITICS AND DEMOGRAPHICS

By Gary Blumenthal

Some technological advancements are already viewed skeptically by some and as more innovative and disruptive products emerge, the debate over its implications will intensify. Around the time last month when the U.S. Food & Drug Administration gave approval to the genetically modified AquAdvantage salmon, a Chinese company called Boyalife announced that it has teamed up with South Korea's Sooam Biotech with the goal of producing 1 million cloned cows each year. Cloning isn't just about productivity since other successful events include mosquitoes that don't spread malaria, disease-resistant animals and produce with a longer shelf life. However, these developments raise ethical concerns. The EU has completely banned animal cloning under the pretense of protecting animal health but with a strong moral tone.

The U.S., United Kingdom and China host a debate this month entitled, Human Gene Editing: Scientific, Medical and Ethical Considerations. The same techniques that promise the end to human disease and suffering cause some to envision anomalies that violate their sense of nature. A similar debate was held in 1975 as the science behind biotechnology was becoming clear. If past is prologue, the result going forward will be continued disparate national policies on genetic engineering.

Meanwhile, Martin Ford is concerned about the mechanical revolution. He is the author of *Rise of the Robots: Technology and the Threat of a Jobless Future* and contends that the education and training that helped human laborers prosper during past bouts with innovation will not work in the age of robotics and artificial intelligence.

Whatever the impacts, they will soon be felt as the International Federation of Robotics says that sales were up 29 percent last year and are expected to keep climbing.

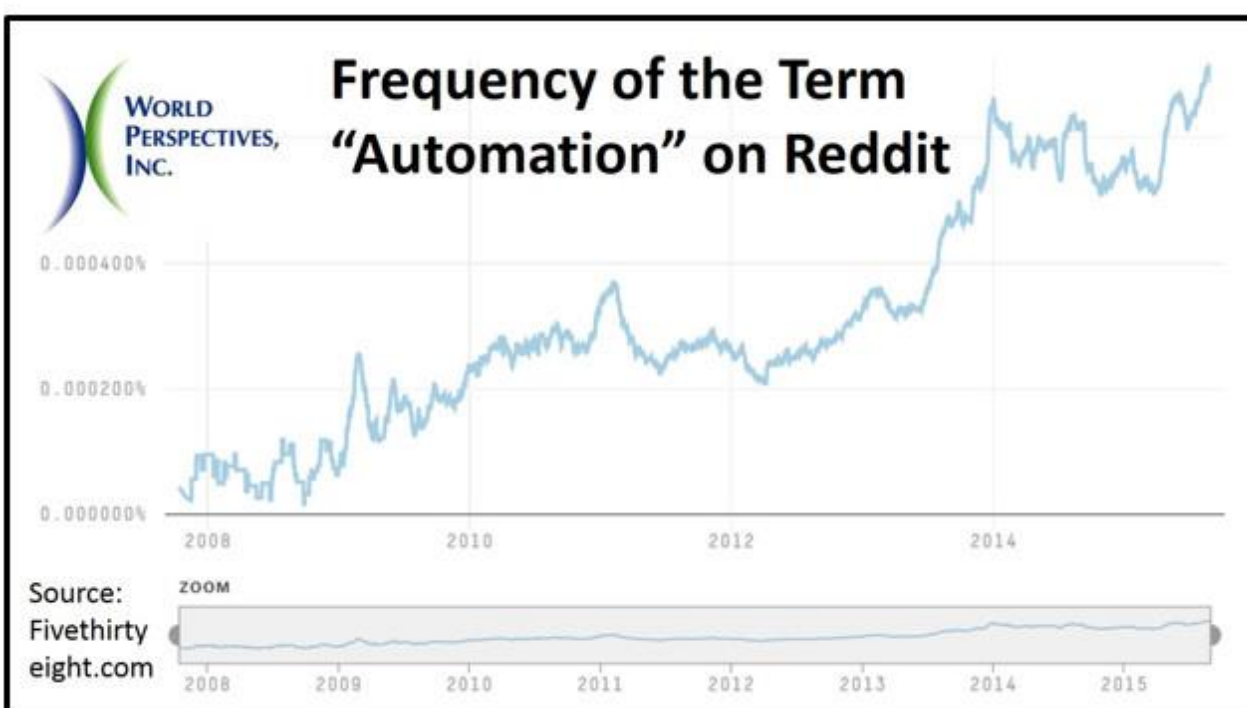
Most of the changes are in automotive and manufacturing companies, but the Robotics Industry Association reports that food and consumer goods companies increased their share of the robotics market from 3 percent to 7 percent over the past decade. So-called smart machines are predicted to reclaim all manner of manufacturing from foreign shores as technology trumps even the lowest-cost labor. The changes will also be at the individual level where virtual personal assistants are exploding in number and are offering to take the work out of every day activities.

All of this need not be bleak. David Willetts of the think tank Resolution Foundation wrote in the *Financial Times* that, "Cinema has not killed live theatre; easy access to recorded music has only increased the premium people pay to hear a performance live." Patent attorney David Leach has a more practical response by noting that education also needs to innovate, better providing the skillsets that employers are seeking. Job postings are at a record level and would provide income to more than a third of the currently unemployed except that they lack the skillsets. Indeed, a Manufacturing Institute study says that two-thirds of the jobs in American advanced manufacturing will go unfilled over the coming decade.

Agriculture provides the clearest example that automation need not hollow out an industry. It is true that the number of mid-sized farms continues

to decline as precision agriculture (GPS, auto-steer/robotics/Big Data) applications expand, and food manufacturing employment is up less than 1 percent from seven years ago while output grows at an average of more than 1 percent each and every year. Yet, overall employment in the agrifood sector remains robust. There are shortages of farm laborers at the same time schools like Iowa State University claim to place 97 percent of agriculture school graduates into jobs that earn around the median household income, which is double the nation's per-person median wage.

Premature deindustrialization is certain to occur in societies that do not evolve quickly enough. The political debate in 2016 is certain to oversimplify the current market dynamics. Mandating higher wages without a corresponding increase in productivity is considered inflationary by most economists and will only serve to hasten automation in some sectors. The year will prove pivotal for certain industries, depending on whether they adapt.



Financial Uncertainty

Ruchir Sharma at investment bank Morgan Stanley knows a wet towel as he forewarns to look out for a global recession. A small notch up in the Federal Funds rate seems unlikely to cause such a cataclysmic event, especially given that the move is already priced into the market. At this juncture, China appears to be more sure-footed than the EU's situation, and Argentina's newly-elected government offers hope for improvement while Japan is certain to muddle along as usual. Barbara Byrne at Barclays Bank even voiced

optimism that politics will force leaders to seek improvements in the natural resource markets.

The recent addition of the renminbi as the fifth currency in the International Monetary Fund's basket of currencies determining the value of the organization's lending power is unlikely to change anything. The Chinese currency is bounded up into a managed float against the U.S. dollar, meaning it provides little contrary or new information. Beijing may be tempted to devalue the yuan in 2016, but it will provoke a nasty reaction if it does so.

Geopolitics

There would be plenty of distraction without Russia's pot stirring in Ukraine and now Syria, but Vladimir Putin has a way of focusing the attention of Western leaders. Still, his resources are severely limited by the low value of fossil energy and the constraints imposed by a state-dominated economy. The world enters 2016 with a certain number of discomforts, including terrorism, although nothing that is severely destabilizing. The problem in geopolitics is not the known but the unknown, and while a number of potential "surprises" can be identified from collapse in Nigeria to even more catastrophic terrorism events, none carry a nickel of certainty.

Demographics

Buzzing with attention going into 2016 is perhaps one of the easiest to predict factors affecting growth and commodity demand – demographics. The malady of downward spiraling populations is acute in Asia, although it is also a factor in Russia and wider Europe. By contrast, the United States is the only developed nation amongst the top 25 countries with the largest population growth trends. In sharp contrast to other rich countries, the U.S. total fertility rate is near replacement level. The economic importance is that the vast majority of new demand for goods and services in the developed world will come from one nation – the U.S. This means that America will continue to be the single most important country to watch in 2016 and beyond.

THE ECONOMY IN 2016: THREE BRIGHT SPOTS

By Dave Juday

The U.S. economy has been growing at a rate of 2-2.5 percent for almost six years now, neither breaking out into more robust growth nor backsliding into another recessionary period like 2008-09 as feared and widely predicted. The commodities boom has run its course and ultimately collapsed. The Dow Jones Commodity Index is down 31 percent from a year ago. The drop in commodity prices has hit the developing world's commodity export-based economies particularly hard, devaluing currency, reducing economic growth and straining foreign currency reserves. What will all this mean in 2016? Below are three predictions focusing on bright spots in the U.S. economy, the global economy and the commodity sector.

U.S. Economic Prediction

With the Federal Reserve's accommodative policy coming to an end, the U.S. equities market will be bullish for most or all of 2016. While the U.S. economic expansion has been unimpressive in historical context, it has nonetheless been an expansion. The economy has remained slow and steady in its growth through a number of crises, including the financial problems in Portugal, Spain, Italy and Ireland, the actual default on obligations by Greece, the collapse of commodity prices, the devaluation of the yuan, the drop in the Chinese equities market, the fiscal cliff negotiations in the U.S. and a downgrading of U.S. federal debt. This is a strong sign of its resilience. Evidently, the Federal Reserve Board agrees as it has signaled that interest rates will soon be raised for the first time since 2008. According to the 30-day Fed fund futures prices, the CME is predicting a 74 percent probability that it will do so at its 16 December meeting, which will commence a period of rate hikes. Of course interest rates are a way to price money and

equilibrate the true value among its various uses. When money is more valuable, savings versus consumption increases, and equities markets are a primary form of savings.

There is obviously a period of uncertainty after any policy change, the length depending on the degree to which that change was priced into the existing market. Typically, there is a short period of volatility as investors are adjusting to the new policy and potential economic scenarios before things tends to smooth out into a trend as the market balances. The CME has charted the stock market reactions to rate hikes that followed long periods of steady rates, which are compiled in the table below:

U.S. Stock Market Reaction to Interest Rate Hikes			
Rate Hike Period	Duration (months)	Stock Market Gain After Adjustment (percent)	Length of Rally (months)
May 1983- Aug 1984	15	96%	28
Dec 1986 – Sep 1987	9	33%	17
Mar 1988 – Feb 1989	11	29%	10
Feb 1994 – Feb 1995	12	41%	17
June 1999 – May 2000	11	8%	5
June 2004 – June 2006	24	25%	27

Source: CME, CNBC, Deutsche Bank, WPI

It should be noted that after the brief period of expansion in 2000, the stock market ultimately dropped 51 percent during a recession that included a decrease in employment, consumer spending and savings. Recall that at the end of its timeline, this recession also included the aftermath of the 11 September 2001 terrorist attacks on the U.S. Again, however, this short rally and extended bear market were outliers.

The period of uncertainty should be shorter after the Fed decides to raise interest rates; the present rates are effectively at zero, being pegged at 0.25 percent. There is nowhere to go but up. The Fed

has been clear that it will be methodical when it does begin to tighten monetary policy and continues raising rates over a sustained period. In fact, rate hikes have been anticipated since June and may be so well assumed that the adjustment period will be exceedingly short or even non-existent. Indeed, as the expectation of a rate hike has increased over the past several weeks, so have stock prices. This pattern should continue when the rate hikes actually do occur.

Global Economic Prediction

Argentina could become one of the hot new destinations for foreign investment in 2016 and 2017. On 22 November, it made history by ending 12 years of Peronist policies from Cristina Fernandez de Krichner and her predecessor/late husband Nestor Kirchner in favor of the classical liberal economic agenda of Mauricio Marci. The pro-market Marci has promised to eliminate export taxes, remove capital controls and scrap the fixed foreign exchange rate. He's even committed enough to market and fiscal transparency that he's promised to overhaul the country's process of collecting and releasing official national statistics.

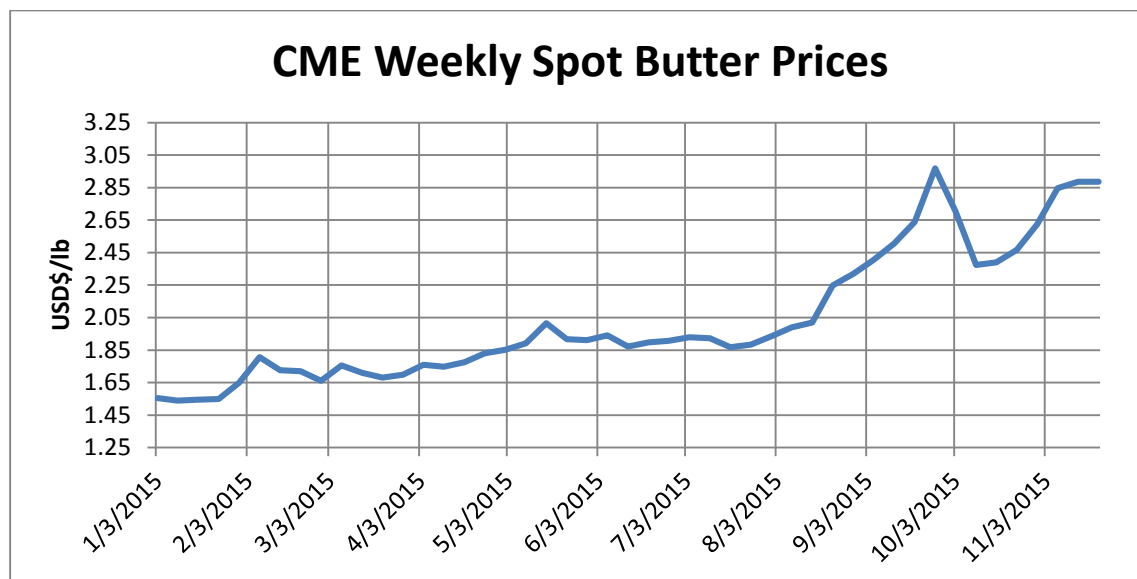
International investors and creditors have welcomed Marci's election and will follow his progress carefully. He can end the export taxes on corn and other commodities by presidential decree, which he is expected to do the day he takes office on 10 December. Marci has asked Central Bank President Alejandro Vanoli to resign even though his term runs through 2019. Upon a new president assuming control, Marci

plans to restore the bank's independence. He must devise a plan for negotiating credit terms and devaluing the peso, all of which will be challenging as his party has only 91 of the 257 seats in Congress. However, he is likely to form a coalition with other anti-Fernandez lawmakers.

Currently, the official exchange rate between the Argentine peso and the U.S. dollar is 10:1, but it is about 15 pesos per U.S. dollar on the black market. Depending on how fast and far Marci lets the peso drop, that action could, ironically, boost the value of the currency in a relatively short term. When capital is free to come and go and creditors have some expectation of being paid back with a positive return, the capital outflows from Argentina (both pesos and foreign currency) of recent years should reverse. Without the export taxes and having a new market-based exchange rate, Argentine commodities can be profitably exported again, generating economic growth.

Commodity Sector Prediction

Consumer demand for dairy fat will continue in 2016, benefitting milk production. Heading into the holidays at this time of year, butter is in high demand and prices normally are at seasonal peaks. While butter and butterfat are currently experiencing their typical high demand, prices haven't yet reached their level of September. After a steady decline that began around 1970, consumption of full fat dairy products has made a comeback, driven by butter. In July, butter sales rose by 17 percent over 2014. Following is a look at butter prices:



Source: CME, WPI

Research in the past few years has debunked many of the recommendations to consume lower levels of dairy fat. The new data shows that dairy fat consumption can help prevent obesity in adults and children, decrease the risk of heart attack among women and reduce the risk of colon cancer as well as lower insulin levels and the possibility of diabetes. Perhaps most interesting, the January 2013 *Journal of Nutrition* reported in its research on heart attack risk among women that eating butter on bread was associated with a higher chance of heart attack while using it in cooking did not. In short, butter fat is likely not the culprit in heart disease.

As consumers are more educated about the types of fat and their nutritional values, dairy demand has risen. Even McDonald's started transitioning away from margarine to butter at the beginning of November for use with its breakfast sandwiches, which are also moving to the all-day menu. Additionally, greater butter demand has also impacted milk component pricing, raising the price for butterfat that goes into other full fat dairy products from whole milk to ice cream, cheese and yogurt. The bottom line is that milk is made up of fat, protein and other solids in fixed proportions. A higher demand for dairy fat will benefit milk production as will the greater demand for dairy protein globally with dairy export demand continuing to exceed its historic levels.

2016 FERTILIZER PRICE DRIVERS AND DIRECTION

By Joost Hazelhoff

In its 2015-2019 forecast presented earlier this year, the International Fertilizer Association (IFA) included significant capacity additions for fertilizers in all nutrient sub segments. During the projected five-year time frame, IFA expects the total fertilizer supply to rise by 47 MMT on a nutrient basis. The increase is carried across nitrogen (+16 percent), phosphates and potash (+17 percent).

The extent to which planned capacity additions are realized depends on various factors, including construction delays and access to (project) financing. Especially in recent years, however, emerging supply and resultant product price projections have also proven to slow down/cancel new projects. Even when possible delays and cancellations are taken into consideration, though, completion rates could still be close to projected levels, putting downward pressure on fertilizer prices.

Fertilizer Nutrients Supply and Demand (MMT)		2015	2016	2017	2018	2019
Nitrogen	Supply	153.8	159.5	165.0	170.4	174.4
	Demand	143.8	147.3	150.7	153.7	156.6
	Stocks/Supply (Pct)	6%	8%	9%	10%	10%
Phosphates (phosphoric acid)	Supply	46.0	47.3	48.5	50.1	51.1
	Demand	43.7	44.8	46.2	47.3	48.2
	Stocks/Supply (Pct)	5%	5%	5%	5%	6%
Potash	Supply	44.0	45.4	47.5	49.9	51.8
	Demand	35.5	36.5	37.6	38.6	39.5
	Stocks/Supply (Pct)	19%	20%	21%	23%	24%

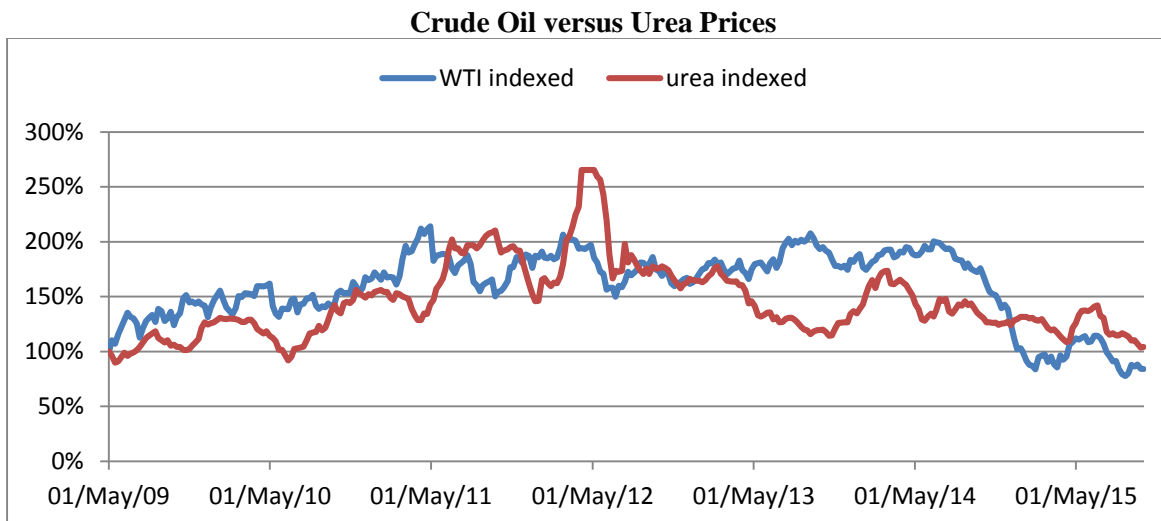
Source: IFA, WPI

Crude Oil versus Fertilizers

Since the summer of 2014, crude prices have declined significantly. The combination of greater supply (shale, OPEC, etc.) and weaker demand from emerging markets pushed crude oil prices about 50 percent lower. For 2016, the U.S. Energy Information Administration (EIA) assumes that production will continue to exceed demand, sustaining an overall surplus. Inventories have been building throughout 2015, but that will level off if production growth subsides as expected. As far as prices are concerned, the EIA forecasts WTI crude in

2016 will average \$51.31/barrel versus \$49.88/barrel this year.

Low oil prices and (subsequent) low natural gas prices have pushed the cost of production for fertilizers down as well as their delivered cost through lower raw material and shipping costs. While supply and demand remain the most important price drivers for fertilizers, especially nitrogen varieties, they do generally correlate (modestly) with energy prices. As 2016 energy prices are expected to be fairly stable from current levels, their impact on fertilizer markets should be considered neutral.

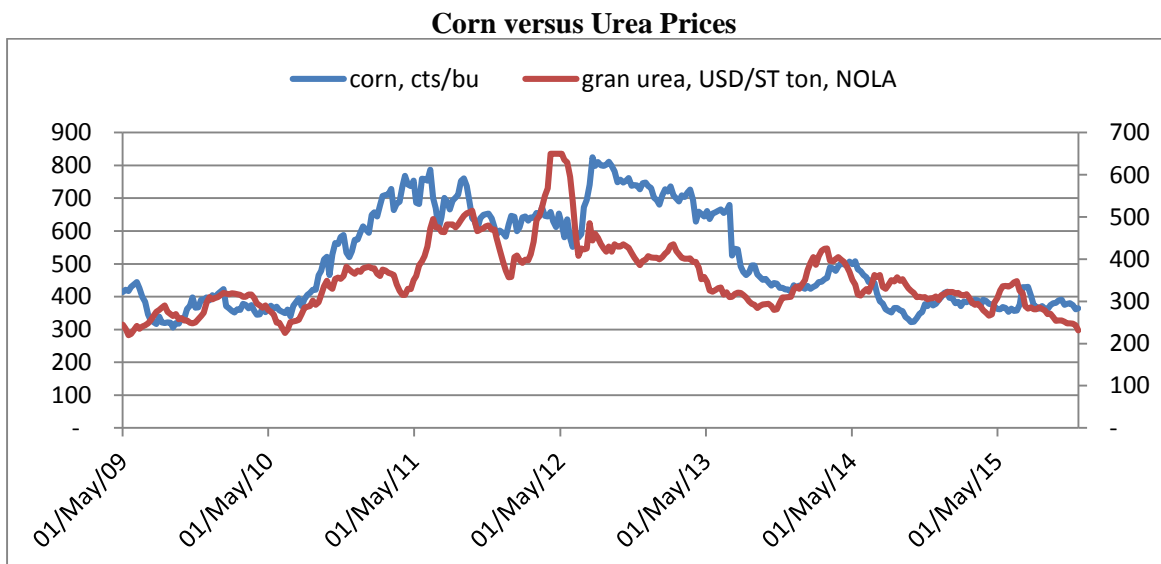


Source: CME, WPI

General Demand Projections and Lower Grain Prices

On numerous occasions, WPI has reported on the more than comfortable balance sheets for corn, soybeans and wheat. Unless serious weather problems arise in key production areas in the Southern Hemisphere and next spring in the Northern Hemisphere, this situation will likely continue well into 2016.

With urea and corn prices correlating quite strongly, the global grain outlook offers few if any reason to believe fertilizer prices will stage a grain-driven rally

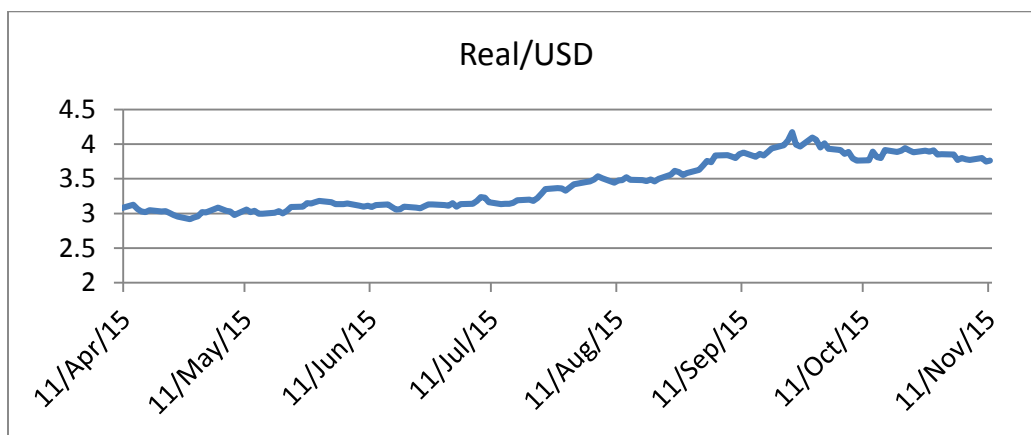
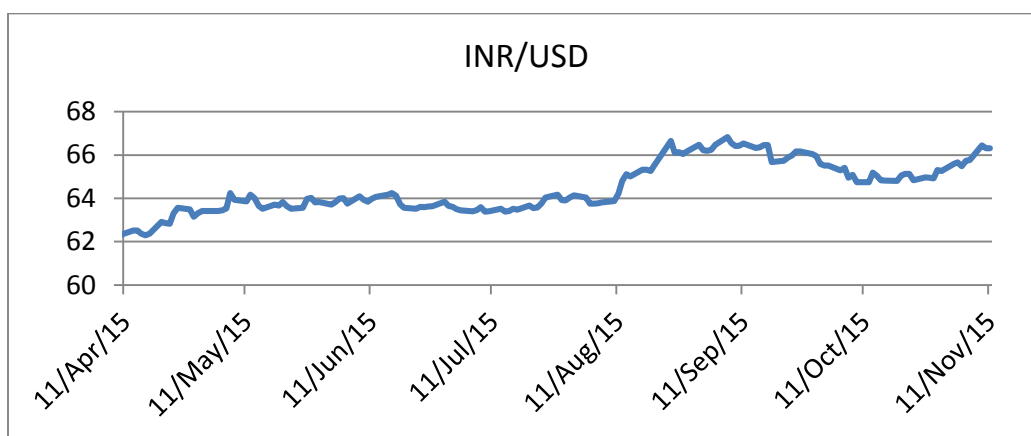


Source: CME, WPI

Emerging Currencies

The U.S. dollar is holding close to multi-year highs after investors increased bets on a U.S. rate rise in December. If that actually occurs, renewed strengthening of the U.S. dollar against most currencies seems intuitive, including the Indian rupee and the Brazilian real. Indirectly, a stronger USD is generally considered a bearish macro factor, and that also applies to fertilizer markets.

Nevertheless, the results may be mixed. In Brazil, a weak real has helped boost farm profitability and consequently aided corn and soybean plantings that otherwise would have suffered from low international prices. Higher acreage helped fertilizer demand, but a weak real has also made imports more expensive. This scenario certainly applies to the import of phosphates into India, which have been made very expensive by a weakened rupee. Weakening of the BRL and the INR has tapered in recent months or even reversed, but this may resume well into 2016 with a Fed rate rise in focus, and that will have an overall bearish impact on fertilizers.



Source: CSI, WPI

2016 SOY SECTOR OUTLOOK

By John Baize

2015, which will soon come to a close, has certainly been an interesting year for the world soybean industry. Argentina, Brazil and the U.S. all produced record soybean crops with global supplies vaulting from being relatively tight to the largest in history. Farmer profitability largely dissipated as cash soybean prices fell from well over \$10/bushel to less than \$8/bushel in some areas.

With the current year almost over, it is worthwhile to look ahead at what 2016 may bring to the soy sector. Weather events will likely have more impact on the market than any other factor, but other unforeseen issues will also have an effect. Among these could be the global and national economies as well as disputes, politics, labor strikes, elections and perhaps even armed conflicts among nations. Those that could be particularly influential include the following:

Increased Weather Problems - For the most part, the world's major soybean producers have enjoyed good weather over the last three years. The U.S. has seen above-average soybean yields during that time frame with record yields last year and again in 2015. Argentina produced a record soybean crop of 60.8 MMT in 2015, and Brazil has harvested three record soybean crops in 2013, 2014 and 2015. The only major country that has seen major soybean crop losses because of poor weather has been India. Even with record growth in world soybean consumption of 23.51 MMT in 2014/15, global stocks have increased because of the record production.

One or more of the major soybean-producing countries will likely not enjoy such favorable weather in 2016. It already is drier than normal in northern Brazil, which has delayed planting of the crop to be harvested next year. An El Niño weather pattern such as the one currently in place typically provides southern Brazil and Argentina with good rains during their growing season, but

northern Brazil has experienced drought at times. If that occurs as some Brazilian weather forecasters are predicting this year, it may have a major impact on yields in the states of Mato Grosso, Para, Tocantins, Rondonia, Maranhao and Piaui. This could substantially reduce Brazil's 2016 soybean crop.

The U.S. too is unlikely to see the same positive weather in 2016 that it did in the last three years. El Niños tend to bring increased rainfall to California, which would be a very positive outcome. However, they also are associated with dryness in the eastern Corn Belt and Southeast. If that is the case in 2016, the U.S. will likely see a significantly smaller soybean crop next year. Additionally, if the current El Niño shifts to a La Niña next year, it could especially cause lower rainfall in the eastern Corn Belt, given prior patterns for this phenomenon.

Global palm oil production is likely to be negatively impacted as well by the El Niño. This is because less rainfall is normally received during this type of weather event in Malaysia and Indonesia, the world's top palm oil-producing nations. If palm oil output does decline, it will be positive for soyoil demand and other competing vegetable oils.

Use of Less Crop Inputs - For the last few years, the world's soybean farmers mostly have had a profit maximization mindset because of high prices and the potential for high profits. As a result, they tended to use more fertilizer, better seed and additional crop protectants to maximize yields. Now that soybean prices and profitability have sharply declined, farmers are likely shifting into a risk minimization attitude. This will tend to cause producers to reduce their financial outlays by using less fertilizer and possibly fewer crop protectants. There is evidence that this already has occurred with farmers in South America who are in the midst of planting their next soybean

crop. Because of the use of less inputs, there is a likelihood that soybean yields in 2016 will be below those in 2015.

Liquidation of Argentine Soybean Stocks -

Because of Argentina's 30 percent inflation rate and 25 export tax on soybeans, farmers there have chosen to store an inordinately large share of their production, mostly in silage bags. USDA estimates Argentina's farmers will have 14.585 MMT (536 million bushels) of soybeans on hand at the end of March 2016, while the country's ending stocks in the past have normally been less than 4 MMT (145 million bushels).

Argentine farmers are retaining their stocks as they expect the government will devalue the peso in the next few weeks or months and are hoping President-elect Mauricio Macri will sharply reduce the export tax on soybeans as he has promised after taking office on 10 December. Both of these actions would boost the number of pesos farmers would earn from selling their soybeans and encourage them to sell more.

If Argentina's farmers do sell a large share of their soybeans in a relatively short period of time, there could be a strong drop in global prices. Most of the soybeans likely will be sold to the country's soybean processors to crush for export. Thus, most of the impact would be on global prices of soymeal and soyoil. However, soybean prices also could be substantially affected. The likelihood is that most of the stock liquidation will occur in the first quarter of 2016. U.S. farmers should be very leery of having large amounts of unsold soybean supplies when Argentina's farmers begin to sell their holdings.

Indian Soybean Imports - India has seen its domestic soymeal consumption surge from 1.02 MMT in 2006/07 to an estimated 5.22 MT in 2015/16. The result of this and declining soybean production has been a drop in its soymeal exports from a high of 5.29 MMT in 2007/08 to a forecasted 700,000 MT in 2015/16. Domestic soymeal consumption is expected to continue to grow rapidly in the future as a result of rising income and increasing consumer demand for poultry meat and farm-raised fish, which are fed with soymeal.

It will be very difficult for India to substantially boost its soybean production due to a lack of land and competition for farmland from other crops. Therefore, it is certain that India must soon import additional soybeans or soymeal to supply its growing domestic soymeal demand. Reportedly, Indian firms have already contracted to import some soymeal this year from Ukraine and China. As it stands now, the Indian government does not allow the importation of biotech crops or their derived products. Therefore, importers can presently import only non-biotech soymeal, which is far more expensive than that made from biotech soybeans.

The Indian government will likely change its policy sometime in the next year to allow the importation of biotech soymeal and possibly biotech soybeans for processing. Indian Prime Minister Narendra Modi has spoken very positively about biotech crops. The government also is being advised by a wide array of scientists to embrace these crops, including permitting their domestic cultivation. Therefore, it makes sense for it to now allow biotech imports as a first step toward sanctioning actual production of such items in India in order to better supply the market with commodities like corn and soybeans.

Of course many unanticipated events likely will occur in the year ahead that will have a major impact on the markets for soybeans and soy products, although they are simply unknown at this point. That is what makes the future interesting.

COMMODITY MARKET REVIEW

By Robert W. Kohlmeyer

USDA's November WASDE contained its next-to-last estimates of yield and production levels for U.S. fall harvested crops, primarily corn and soybeans, along with updated 2015/16 supply/demand estimates for U.S. and world grains and oilseeds. The final production estimates will appear in the January 2016 WASDE as USDA does not provide any in the December edition.

There is an oft-repeated grain trade adage that big crops tend to get bigger. When USDA's September production estimates are larger than those in August and October's top those in September, there is a fairly strong statistical tendency for the November estimates to be still larger. In this regard, USDA's November U.S. corn and soybean production estimates did not disappoint. What did result in a bearish surprise was the size of the increases. USDA estimated 2015 U.S. corn production to be 13.654 billion bushels based on a national average yield of 169.3 bushels/acre. That is an increase of 1.3 bushels/acre and about 100 million bushels of corn production compared with its October estimate. The trade consensus ahead of the November WASDE was that both yield and production would be virtually unchanged from October. USDA's November estimates project the second-highest yield and third-largest U.S. corn crop on record.

USDA raised its 2015 U.S. soybean production estimate to 3.981 billion bushels from a national average yield of 48.3 bushels/acre, up 93 million bushels and 1.1 bushels/acre, respectively. The average trade guess ahead of the report was for a yield of 47.5 bushels/acre and production of about 3.910 billion bushels. Both USDA estimates would set new records.

Unlike the spring and summer growing season in 2014, which featured near perfect weather conditions, this year's had periods of being too

wet or too dry for important Midwestern crop-producing regions. Grain trade and crop production analysts are left to ponder how the 2015 crop yields and production could produce record or near-record results under those circumstances. The answer seems to lie with continually improving seed varieties and production technologies. And if the old adage is to be believed, the big crop production will again increase at least slightly in USDA's final January estimates. Meanwhile, it appears that 2015/16 will be another stock-building year for U.S. grains and soybeans.

There were more bearish surprises to be found in world production and supply/demand estimates. USDA forecast that 2015/16 world wheat production will be a record 733 MMT, nearly unchanged from October. Ending world wheat stocks for 2015/16 were called 227 MMT, which would be about 32 percent of total world wheat use. The U.S. will continue to lose market share of world wheat trade with USDA estimating that it will only have about a 14 percent share in 2015/16.

World corn production was estimated to be 975 MMT, down about 33 MMT from 2014/15. However, to the market's surprise, ending 2015/16 world corn stocks were put at a record-large 212 MMT, up 4 MMT from 2014/15. This apparent sleight-of-hand came as a result of a recalculation of China's corn feed use and ending corn stocks from 2013/14 to the present that lowered annual feed use and raised ending stocks accordingly. Thus, the November estimate of China's 2015/16 ending corn stocks was raised to 114.4 MMT, up about 24 MMT from the October projection. USDA's rationale for this radical adjustment is that China's government supported domestic corn prices at such a high level in recent years that many Chinese users turned to imports of cheaper substitutes such as grain sorghum and DDGS, thus lowering corn consumption.

The adjustments in China's corn supply and demand in the November WASDE no doubt bring USDA's numbers much closer to reality, but does anyone, even the Chinese government, really know what China's corn stocks are? Some private Chinese analysts contend that they are closer to 150 MMT. Whatever the actual stocks may be, they are too large, and the government is taking steps to encourage more domestic corn consumption including lowering the price support level, selling reserve stocks to domestic users and possibly considering measures to discourage the import of substitutes.

USDA upped estimated world soybean production for 2015/16 slightly to a record 321 MMT. Brazil's production was left unchanged at 100 MMT and Argentina's at 57 MMT. China's imports were increased to 80.25 MMT. World ending soybean stocks were lowered slightly to 82.9 MMT, still by far a record and 27 percent of estimated world consumption. The world remains awash in soybeans.

It is worth noting that based on USDA's forecasts, the combined ending global stocks of wheat, coarse grains and soybeans for 2015/16 are record-large at about 557 MMT.

What about Demand?

With U.S. crop production now closely identified, attention quickly turns to potential demand, and here the picture is not very encouraging. In a nutshell, U.S. domestic demand for wheat, corn and soybeans in 2015/16 is seen as being relatively flat compared with 2014/15. Any significant growth will likely have to come from exports. For much of the summer and early fall, U.S. corn and soybean prices have been higher than other origins. U.S. wheat prices have not been competitive in the world market for two years. Export sales of both grains and soybeans have been running well behind last year's volumes. By mid-October, U.S. new crop soybean prices dropped below South American offers, and U.S. corn prices became competitive with South American and Ukrainian corn offers by early November. This year's export sales volumes began to slowly close the gap with last

year. However, we see little hope for U.S. wheat, which consistently remains \$10-\$20/MT higher than offers from Black Sea exporters and the EU. This limits export demand for U.S. wheat to specialty users and neighboring destinations that are close enough for lower freight costs to overcome its higher prices.

The presumption of large U.S. and world crops, lagging demand and building stocks has pressured grain and soybean futures prices since mid-summer. To this has been added the persistent strength of the U.S. dollar, which harms the competitiveness of U.S. crops while encouraging farmers in other countries to expand their own production. USDA's production and supply/demand estimates contained in the November WASDE were taken as surprisingly bearish confirmation of big supplies, mediocre demand and growing stocks.

Following the release of the report at mid-session on 10 November, grain and soy futures prices fell rather sharply, although they actually traded in a rather narrow range during that month. Comparing the closes on 2 November, the first trading day of the month, with the closes of 27 November, soybean futures lost about \$0.06 and corn futures dropped about \$0.16. Wheat futures showed the biggest decline with CME soft red winter wheat futures down about \$0.42 and hard red winter wheat futures down about \$0.33. Those losses, though, still represent less than 10 percent of total value. Nothing drains volatility out of commodity futures markets more effectively than abundant supplies chasing slack demand.

Market bulls, if any remain, are mostly left to pin their hopes on crop production problems somewhere else in the world, and there are some potential ones. Dry conditions over the winter wheat areas of Russia and Ukraine during much of the autumn have likely left those crops less well-established as they headed into winter dormancy. Good spring precipitation will be needed to produce reasonably good wheat crops.

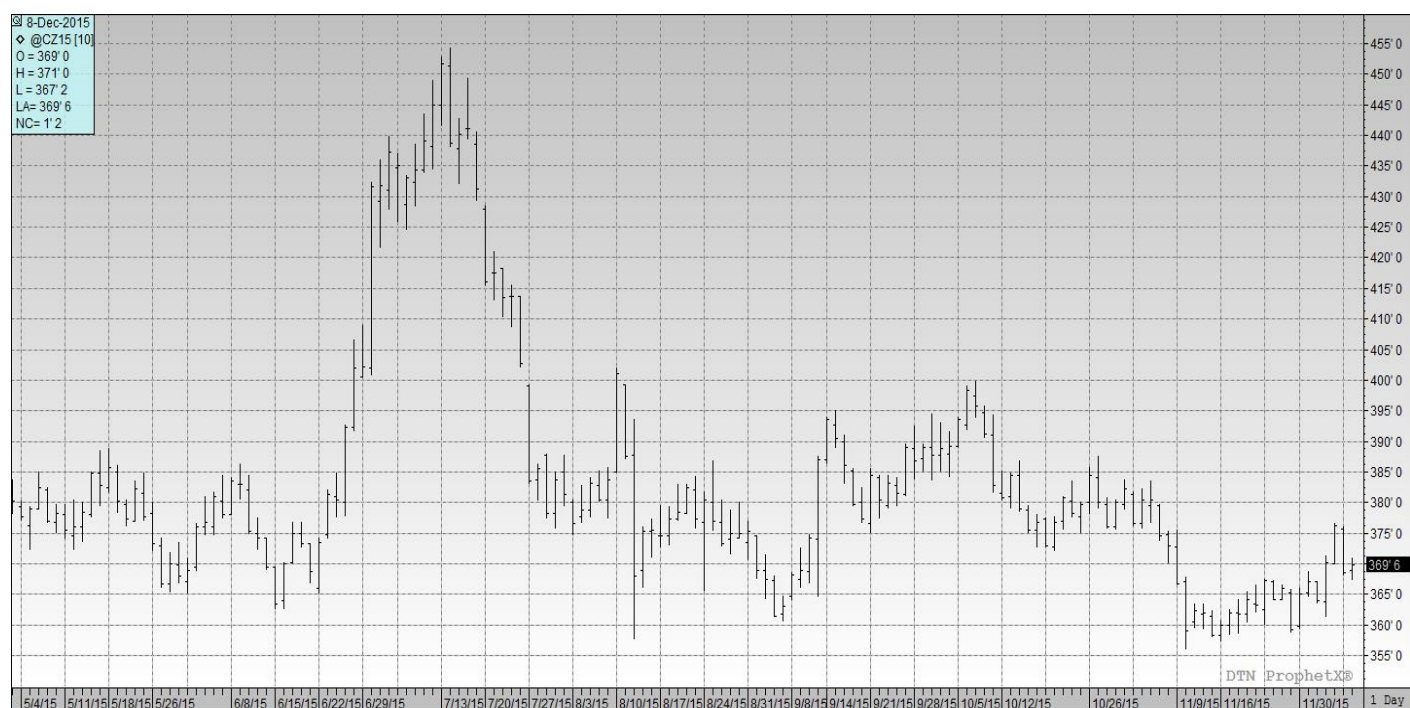
The presence of a strong, mature El Nino condition in the central Pacific Ocean is apparently having some impact on Brazilian weather. Conditions have been too wet in southern Brazil but too dry in the west central portions of the country. The result has been a delay in planting the Brazilian soybean crop. It also raises questions about what kind of a growing season South American soybeans and corn will have. Traders will be watching weather forecasts there very closely during the next three months.

We would be remiss if we did not mention the possibility that conflicts in the Middle East, the Russia/Ukraine situation and the recent tensions between Russia and Turkey might develop in ways that affect trade flows and commodity markets. That risk is always present in today's world.

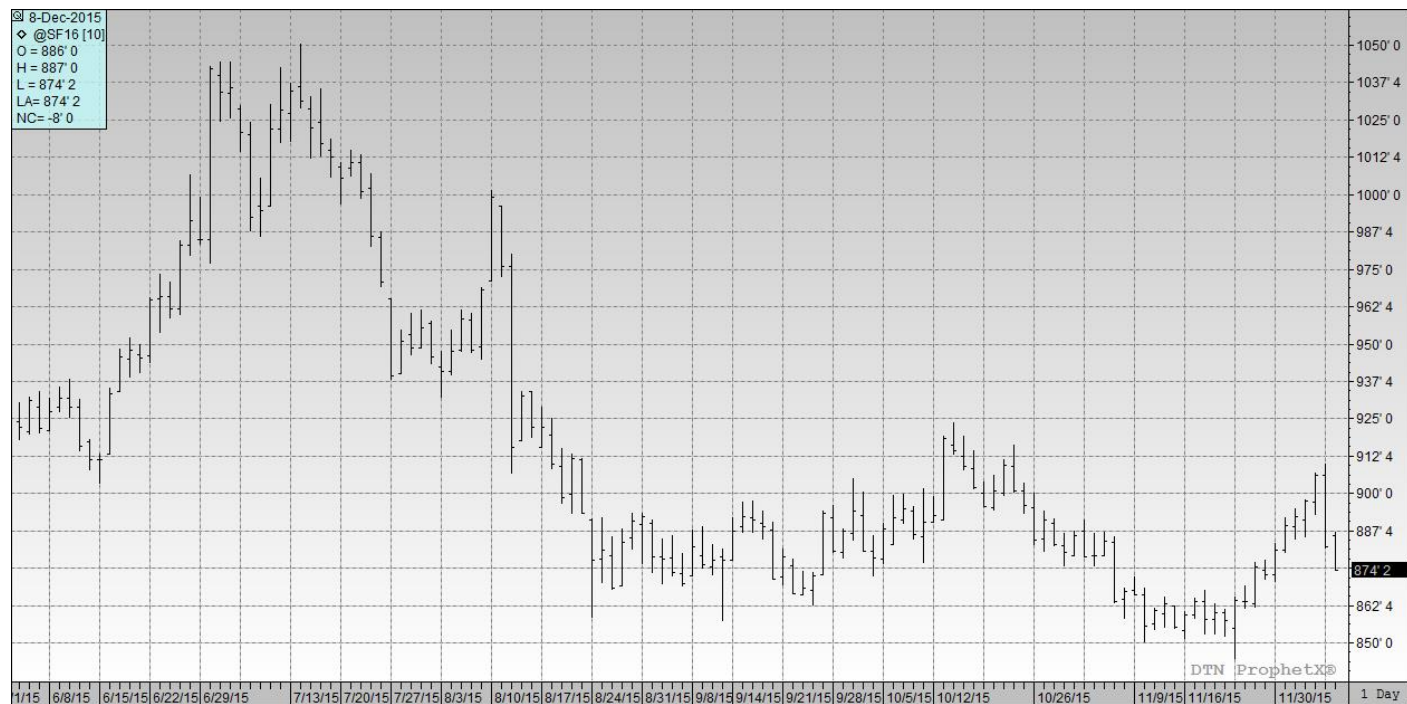
December Chicago Wheat Futures Prices



December Corn Futures Prices

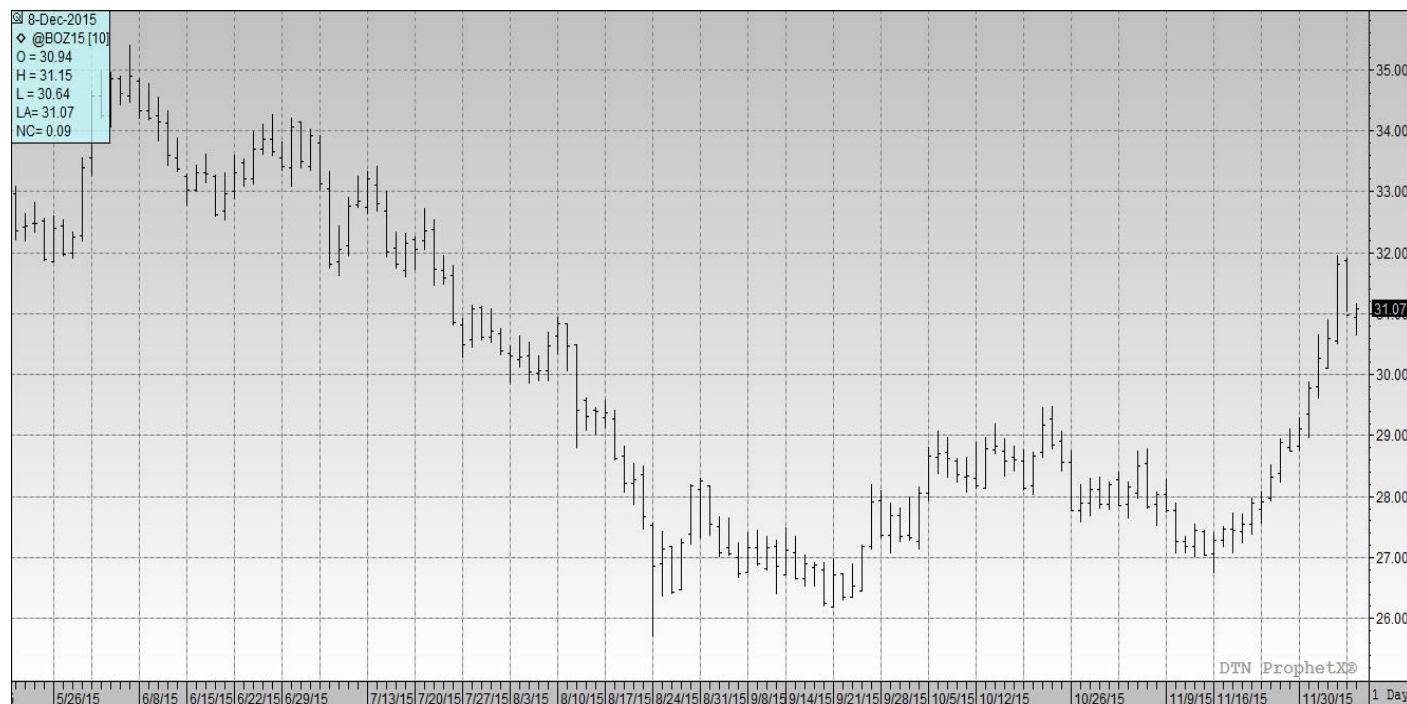


January Soybean Futures Prices



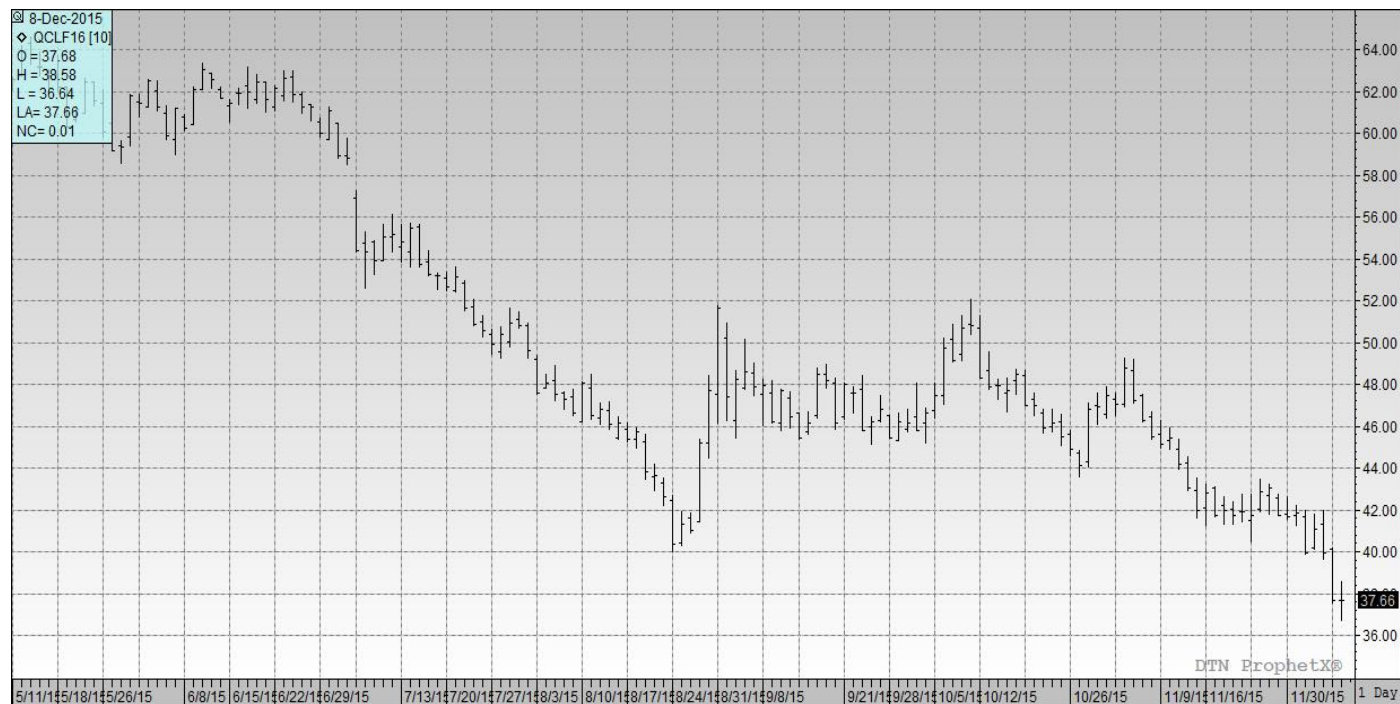
Source: Prophet X (12/8/2015)

December Soyoil Futures Prices



Source: Prophet X (12/8/2015)

January Crude Oil Futures Prices



Source: Prophet X (12/8/2015)