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Economy: Heading for Another December Hike

U.S.
• The Fed signalled a Q4 hike at its September meeting. The FOMC thinks that GDP growth has picked up in 2H, that risks to the outlook are now roughly balanced, and that the case for a rate hike has strengthened. However, for the time being, the Committee is waiting for further evidence of continued progress toward its employment and inflation objectives. In particular, Chair Janet Yellen said that the scope for further improvement in the labor market remains. While the unemployment rate is close to target, there are no signs of overheating, so the economy has a little more room to run than thought. She also stressed the asymmetry in policy response with the fed funds rate close to zero, which explains the cautious approach.
• The median of the rate projections for this year shows that the Committee now expects to hike only once this year, instead of twice in the previous projections in June. There are only two meetings left in 2016. Since the November meeting of the FOMC takes place only a week before the elections, we see the December meeting as the most likely option for a rate hike. Meanwhile, we expect the ECB to extend its asset purchase program. Therefore, we expect EUR/USD to fall to 1.09 in the next 12 months.

Mexico
• One of the key risks facing MXN of late, namely the U.S. Presidential elections, could be a temporary headline risk or could prove a far longer lasting economic risk for Mexico. Indeed, over recent months Mexico has faced FX volatility as MXN became the 'Trump trade' of choice amongst speculators playing the U.S. Presidential elections. Indeed, we would argue that this is the one of, if not the, main dynamic influencing the currency at the moment. On balance, we expect USD/MXN at 19.00 in the next 12 months.

Canada
• Despite rising expectations to the contrary with a 15% chance of a 25bp cut priced in, we still expect the Bank to refrain from cutting rates and stay on the side-lines for now. The Bank of Canada still expects a rebound in growth during the second half of the year as the impact of the Alberta wildfires on economic data begins to fade. As the Fed is likely to resume hiking before the BoC, we expect USD/CAD to rise to 1.32 in the next three months before falling back to 1.28 at the 12 month horizon.
Consumer: Rising Optimism

- Our measure of consumer confidence (the average of the two leading indicators of consumer sentiment from the University of Michigan and Conference Board) stood at 97.7 in September, the highest level recorded since mid-2015 (with the Conference Boards indicator at its highest level since the Great Recession).
- With about two-thirds of GDP driven by consumer spending, rising confidence is expected to lead to a continuation in economic growth helping to offset any decline in business or government expenditures. The latest jobs report from the Labor Department reported 156,000 jobs were added in September, continuing the long but relatively slow growth in employment. Despite this, the unemployment rate rose slightly to 5.0%, due to an increase in the labor force participation rate. As of August, the misery index stood little changed at 5.9.
- Over the last 12 months to August 2016, the rate of inflation as measured by the Consumer Price Index (CPI) rose slightly, to 1.1%, largely on the back of higher energy prices. Over the same period, food prices did not move with retail food prices down 1.9%, offsetting restaurant prices which were up by 2.8%.
- In the U.S., about half of every dollar spent on food goes towards food prepared away from home, mainly at restaurants and other food service establishments. For the 12 months prior to June 2016, consumer expenditure on food away from home rose by 4.1% and food at home by 7.8%.

### Food Sales

<table>
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<th>Food Sales (USD bn)</th>
<th>Annual</th>
<th>YTD Cumulative</th>
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<tr>
<td></td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td>Food at home</td>
<td>670</td>
<td>686</td>
</tr>
<tr>
<td>YOY change</td>
<td>3.6%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Food away from home</td>
<td>619</td>
<td>644</td>
</tr>
<tr>
<td>YOY change</td>
<td>5.6%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Total</td>
<td>1,289</td>
<td>1,330</td>
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Source: USDA ERS, Rabobank 2016
Climate: Warm Summer Ending

- Unseasonably warm conditions prevailed throughout the eastern two-thirds of the country in the past month, while most areas west of the Rocky mountains recorded normal or below normal temperatures.

- Precipitation was variable across the country. Tropical storms brought heavy rains along the southern Atlantic Coast, while moisture from several Pacific tropical cyclones reached the Southwest. Downpours impeded fieldwork and resulted in late month flooding across parts of the upper Midwest, with MN, WI, IA leading the nation in surplus topsoil moisture. The plains and the remaining of the Midwest were not as wet, allowing fieldwork to proceed.

- In contrast, the interior Southeast experienced a hot, dry month, promoting summer crop maturation and harvesting but depleting soil moisture. The Northeast continues to endure its worst drought since 2002, despite occasional showers. Pastures in the region (MA, NH, RI, ME, and CT) topped the nation’s rankings in terms of very poor to poor conditions.

- Late month heat and lower than normal precipitations favored crop maturation and fieldwork in California, while continuing to support the drought.

- The warm weather across major agricultural producing regions of the nation facilitated the maturation and harvest of fall-harvested crops, except in areas saturated by excessive moisture.

U.S. Drought Monitor
October 4, 2016

[Map of U.S. Drought Monitor]

Author:
Brian Fuchs
National Drought Mitigation Center

http://droughtmonitor.unl.edu/
**Beer: Imports Outpace Domestic Consumption Growth**

- Combining domestic tax-paid shipments with imports, total U.S. beer consumption appears to have risen 0.6% over the eight months of 2016.

- The Beer Institute shows domestic tax-paid shipments declined 0.7% through August 2016. Although consumption of domestic beer had been flat in the first six months of the year, trends slowed in July and August, despite dry, hot conditions.

- Beer imports are outpacing domestic beer, rising 6.7% through August 2016, and now represent more than 18% of the total U.S. beer market. Mexico maintains its positions as the largest foreign supplier and continues to grow, rising 14.3% YTD ending August 2016. The growth in imports from Mexico was greater than the overall growth in beer imports, suggesting that Mexico’s growth more than compensated for the declines in imports from other countries.

- U.S. beer exports dropped 1.7% in the first eight months through August. Weak export to Mexico is one of the major causes for the decline.

- With some fluctuations, malting barley prices are relatively stable in the 2015/16 season compared to the 2014/15 harvest. The average malting barley price in the U.S. stayed within the USD 5.6-6.0 range for the past year while finishing off June at USD 5.70 per bushel. Going forward, we are seeing a significant drop in malting barley prices across the major production states, now trading at USD 5.32 per bushel—representing a 10% decline on the same period last year.
Cattle: Markets Continue to Go From Bad to Worse

- Overall conditions in the North American Cattle Complex continue to go from bad to worse. The counter seasonal price erosion in fed cattle prices in Q3 have expanded to all classes of cattle so far in Q4. Fed cattle prices have eroded to under USD100 per cwt. Making the decline in fed cattle prices even more disheartening is the fact that cutout values, retail beef prices and overall beef clearance has remained very positive.

- The bottle neck in the fed beef complex appears to be packers inability to increase fed slaughter rates in order to clear the seasonal supplies of fed cattle. Plant closures during the years of tight cattle supplies, additional FSIS requirements and difficulties in ramping up staffing have all contributed to the slow build up in slaughter rates.

- Based on both beef production totals as well as live to cutout ratios, fed cattle prices look way under valued at current levels. Unfortunately, given current prices, even a strong seasonal rally will be well short of earlier projections. Our latest price revisions place price expectations to USD 110 to 115 per cwt.

- Feeder cattle prices have declined in reaction to lower fed cattle prices as well as increased offerings. Besides fighting equity erosion cattle feeders are seeing increased offerings of cattle and have become increasingly selective in selection and bids.

- Calf prices have been under severe price pressure. 450 to 550 pound steer calves that were selling at USD 200 to 220 per cwt a year ago are currently selling at USD 130 to 135 per cwt. Opposition to the lower bids forced many sellers to defer sales during the summer video season that is placing additional numbers of calves in the open market this fall.

- Lower calf prices and steep declines in cull cow prices has forced a radical slow down in herd expansion. While increased, cow slaughter rates and percentage of heifers in the slaughter mix imply herd expansion in still in play but at a substantially slower rate.
Combines across the US are moving on the 2016/17 corn crop. According to USAD, as of the sixth week of the crop year, harvest is running over 7% ahead of the previous year. The final barrier to producing a record US crop, harvest, is likely to wrap up at a fast pace.

The October Crop Production Report from USDA held few surprises for the corn market, dropping one bushel per acre (173.4) from the national yield expectation compared to the September estimate (174.4). The CBOT trade largely yawned off the resulting 64 million bushel reduction in ending stocks (-2.6%) and resumed a largely sideways trade pattern base on a stocks-to-use level that is at 16%.

The most significant change over the past two months and continuing into the beginning of harvest is an increasingly wide negative basis. As has been the case since June 2016, the DTN Western Kansas index has been the most active, moving to USD -62 per bushel (-24%) since the last day of May. The trend of downward pressure on cash price is expected to continue through December 2016 as Plains Region grain buyers deal with a 20%+ increase in corn harvest on top of a 22% increase in hard red winter wheat stocks.

Exports are the clear positive for the US corn market so far in 2016. As of the sixth week of the 2016/17 crop year, US exports of corn are running 70% higher YOY. While USDA recognized this in the October WASDE report by increasing exports by 50 million bushels (2.3%), it is likely that the market has already included this in the current price.

Due to the strength of exports, the corn basis in the Illinois area had held reasonably level until the mid part of September when it grew more negative by 44%. With the gut-slot of harvest approaching, basis in the export corridor of Illinois is expected to have additional pressure to widen.

With Brazil looking to expand corn planted area in the main crop (generally available beginning the end of February through May), it is important for the first part of the US crop year to maintain a strong pace of export. Competition from South America makes exports in the second half of 2016/17 less predictable.

The eastern corn belt and Lake States have dropped from a positive basis in April to USD -23 per bushel. However, the eastern half of the US is expected to remain tighter than the west due to the 2016/17 harvest. Despite this, corn stocks should be plentiful with a 16% increase in Indiana production and over 5% increase in Ohio.
Dairy: Chutes and Ladders

- We have international prices continuing to move higher—up 35% in the three months to October. Meanwhile the U.S. domestic market faces challenges as butter and cheese stocks both remain heavy on the market having moved out of whack with where they should be relative to demand growth. This brings the national stocks-to-use ratio to a high enough level that we have seen October CME prices slip around 15% for both cheese and butter.

- While cheese and butter continue to face pressure to move lower, the U.S. has continued to grow its national milk supply—up 1.9% in the month of August. U.S. farmers appear to not be reacting to pricing pressures. There are numerous cases throughout the U.S. where farmers are losing money but still building barns, a bold strategy in such an up and down market. Perhaps there is some sense to the farmer expansions however, considering U.S. demand continues to show consistent growth, and the rest of the world has put the breaks on milk production growth—with the EU, NZ, Australia, Argentina, and Uruguay all seeing milk production growth.

- Moving through the second half of 2016, Rabobank is forecasting for the world's exportable surplus of milk supply to contract the most on record since 2009. Driven by falling international supply and continued demand growth from emerging and developed markets alike.

- This contraction of supply will continue to push international prices higher in the coming 6-12 months, as major export regions struggle to turn their regional milk taps back on for a number of reasons including fewer cows and now incentives in Europe to encourage farmers to reduce supply.

- However, there are a few more chutes to be considered for prices and these are the strong USD, lower than expected global economic growth, and global inventories of nearly 7 million MT above what is normal in liquid milk equivalent terms. These chutes will continue to counter some of the upside we see in prices, and effectively act as a ceiling for how the international rally will go.

- So while we expect U.S. prices of cheese and butter to fall in the near term, the international rally in prices will help offset some of these losses. This will help to keep the average margins for U.S. producers above breakeven, but with limits to how high prices are likely to go the outlook remains somewhat uninspiring for U.S. producers.
Feed: Ample Substitutes

DDGs

• DDG prices continue to move downward as a result of bearish news from Asia and low prices of competing feed ingredients.

• China’s Ministry of Commerce announced two measures at the end of September that impact U.S. DDG exports: the imposition of an anti-dumping (AD) duty on U.S. DDGs, and the introduction of an import duty. Export prices dropped after the announcement as the market digested the news. Domestic buying remains subdued as buyers hold off while prices continue falling. Meanwhile, a record corn crop is expected, which is likely to increase downward pressure on prices.

Hay

• Across the U.S. sales are slow and those sales that are happening are focused on premium hay. A glimpse of fall-like temperatures across much of the U.S. has prompted buyers to start thinking about preparing for winter.

• In many of the Northwestern states, rain has impacted quality, especially for those producers who had hay which was recently cut and not yet baled. Moving into the winter months finding quality hay will become more challenging for dairy producers.

• In the Central and Southern states, many feed yards are purchasing hay ‘as needed’ and cutting back when possible as cattle futures are struggling.

• In the Gulf Coast regions, Bermuda producers in the east and south were busy finishing up their last cutting for the season and report plenty of hay available and small bale movement increased.

• In California, most dairies are still struggling to make money, subsequently many are taking delivery of corn silage, which is reducing the demand for alfalfa hay. Those dairies that are looking for high quality hay are having to import it from other states, as California stocks are in tight supply.
Fruits: It's All about the Variety

• Hot coastal temperatures reportedly did little damage to the California strawberry crop in September, as weekly volumes hit record levels. However, a big contributor to supply was the 18 percent increase in Santa Maria Fall harvested acreage. As the Salinas-Watsonville area winds down, Oxnard should be in full-swing by mid October, with Florida beginning in November.

• Table grape prices are generally in line with last year, with specific prices depending heavily on variety. Shipping volumes were strong last month, up 17 percent during the week ending September 26. Season-to-date volumes, as of mid September were off about 5 percent YOY.

• The 2016/17 navel orange season is rapidly approaching, with an expected 8 percent reduction in supply versus last year. This has growers optimistic that prices will be more robust than last season.

• The 2016/17 shipping season for Washington apples is underway, with YOY price movement dependent on variety. Volumes of organic apples and new varieties continue their upward trend and create specific marketing opportunities.

Washington Apple Shipping Point Prices – 88s – WA Extra Fancy

Table Grape Shipping Point Prices – Kern District, CA

Strawberry Shipping Point Prices – Primary U.S. Districts

Source: USDA/AMS, Rabobank 2016

Sizes range from Large to Large-Ex. Large depending on year and variety.

Source: USDA/AMS, Rabobank 2016
Pork: Unbalanced Supplies

U.S.

- Overall pig crop will remain flat compared to the year 2015. A modest decline in the farrowing levels was offset by a near equal level of improved pigs per litter. However, farrowing and pig litter levels have remained above consensus, indicating a 2% larger than a year ago. Pork production is expected to increase by 3% for 2016, slightly above the USDA forecast of 2%.

- Prices have remained below the five year average since August. The sharp decreased in prices and with the E.U. prices on the rise, we would expect the trend to improve in Q4.

- Supply glut is expected to continue with minimal supply growth, market volatility in hog supplies makes it hard to estimate a forecast for 2017. However, with two more packing plants coming online, we would expect at least growth from 2016.

Mexico

- Despite an increase of 50 thousand heads to a total of 875 thousand sows in the current year, pork production will remain flat when compared to previous year at 1.3 million tons. PEDv continues to be a factor constraining the amount of pork production. A decline in the domestic production was lessened due to improving genetics that produce more pigs per sow and biosecurity.

- Domestic prices reached a national average of 28 pesos/kilo during the first week of October. Prices are expected to remain high for the upcoming months due to the lasting effects of the PEDv and the strong appreciation of the dollar.

- Imports are expected to increase to cover the gap between domestic production and consumption. At the end of the year, imports should reach over 1.07 million tons (carcass weight equivalent) up from 990 thousand tons in 2015. Imports from the United States are expected to be offset due to a stronger dollar.
Poultry: Prices Climbing but Volatile

U.S.

- Chicken prices in the U.S. have increased since the beginning of 2016. The increase in domestic prices have been mainly driven by producer behavior and the hot summer. These factors have kept supply tight while lifting prices. By the second quarter, operating profit margins were up 11%, nearly as strong as same quarter last year. We expect that for the remainder of 2016, meat prices will finish high as prices follow a favorable trajectory.

- While future projections for the poultry industry in 2017 looks favorable, the market remains with some challenges. At the domestic market, poultry is facing increasing competition from other proteins. In general, animal proteins are currently under a period of expanding supplies. Lower beef prices are expected to put pressure on poultry price.

- Other challenges that the poultry industry is facing, is going back to previous export levels due to the HPAI outbreak. As exports continue to increase this year, they have not reached pre-export ban levels, despite most of the bans being lifted. China continues to hold the ban on imports of poultry from the U.S. Although an impending production deficit in China is beginning to take shape, U.S. poultry exports should benefit.

Mexico

- Mexican biosecurity continues to be the number one priority for industry and government. Despite the challenges of the Avian Influenza, Mexican poultry production continues to expand. Anticipated production at the end of this year, is expected to reach a record high of 3.3 million tons up from 3.2 in 2015. That is, an expected increase in domestic production of over 3 percent.

- Domestic consumption in Mexico is expected to grow, while chicken continues to be competitive with other proteins. Consumption is expected to reach 4.1 million tons (CWE) at the end of this year. The increase in demand continues to outpace domestic production. In August, chicken prices increased 20% over a year ago but this hike was lower than a 35% increase in pork prices. Currently, chicken producer margins continue tight as feed cost remain high.

- Imports from other countries continue to increase, especially from the United States. However, the government opened a 300 thousand tons of duty free import quota from Brazil, Chile and Argentina.
As expected, the USDA raised 2016 U.S. soybean production to 4.269 billion bushels on a record yield of 51.4 bushels per acre. Nearly all reports from the field are indicating that soybeans yields are outstanding and expectations are that yields will increase in subsequent reports.

With both the October Crop Production and WASDE behind us, we have a better picture of what the 2016/17 U.S. soybean supply/demand situation is going to look like. With ending stocks hovering around 400 million bushels, the highest level in ten years, and the stock-to-use ratio between 10-11%, our demand curve shows a futures price around the USD 9.40 area which is where futures are currently trading. In other words, futures are fairly priced at current levels.

The current U.S. soybean supply/demand projections by the USDA generally match up well with our model’s projections except exports. The USDA’s export projection is an optimistic 2.025 billion bushels, while our model is showing just 1.975 billion. However, both projections show solid increases from the 2015/16 crop year. Based on weekly export inspections, U.S. soybean exports are off to a robust start, up 17.3% year-to-date. However, in the last several weeks, export inspections have retreated much closer to the seasonal levels of past years.

The wildcard for 2016/17 U.S. soybean exports will be soybean plantings in Brazil and Argentina. In Brazil, the pace of soybean planting is running ahead of last year, but high corn prices in Brazil are a strong incentive to plant more corn. Likewise, in Argentina, the export tax on corn is lower than soybeans. However, Argentina is an exporter of products, not soybeans, and so they need soybeans to crush. Therefore, keep a close eye on planting and crop developments in South America and the potential impact on U.S. exports.

With declining soybean and soybean meal prices, crush margins have been more variable. This has resulted in a need for soybean oil to take on a greater share of the crush, which has helped support soybean oil futures and bases. In addition, soybean oil ending stocks continue to tighten and the market is concerned about declining soybean meal demand—and therefore smaller crush—which could very well translate into the soybean oil market being the upside surprise of the year.
The pistachio crop is truly a ‘limb breaker’. As of September 19, deliveries to processors were 655m lbs, suggesting the total could be more than 800m lbs. Pistachio harvests in Turkey and Iran are small—though global supply is expected to be similar or slightly more than last year. Prices are falling at the wholesale level. Prices to growers will follow suit for the ’16/17 crop.

The California almond harvest appears to be as large as the USDA had estimated and shipments are up significantly, especially exports. Prices have strengthened some, Nonpareils and California’s are respectively trading at USD 2.60/lb. and USD 2.20/lb. to the grower, reaching the 10-year historical average all variety price of USD 2.40/lb. to the grower.

The walnut harvest appears large, but will likely not be as big as the USDA forecasted 670,000 tonnes. It may still be slightly larger than the handler forecast of 649,000 tonnes. Shipments are higher—especially exports—however, the price has yet to improve.

The U.S. pecan harvest appears to be as much as 15% larger than last year, which may bring down wholesale prices by 50 cents during the upcoming marketing year, down from extraordinarily high levels. Shipments to China were down this last year, but it was most likely a lack of product, not reduced demand.

Hazelnut shipments are slow as there is little carryover and holders are hanging on to what they have. The harvest looks like it will come in between 38,000 and 40,000 tonnes, slightly larger than the USDA estimate. The price agreed upon this year is USD 1.18/lb., lower than the pay-out for last year’s crop of USD 1.38/lb., but this is still profitable.
Strong regional supplies during late summer pressured vegetable prices, but some crop prices are showing signs of life as regional deals have wound down and we prepare for the transition to the desert. Excessive September heat in west coast growing regions created some quality issues and slowed supplies as work days were cut short. Hail and rain has negatively impacted Mexican production. These factors contributed to a rise in broccoli prices during the second half of September. Bunched broccoli prices were almost double their summer lows, but still down 28 percent YOY. Crown prices experienced a more significant bump and traded at a significant premium over bunched.

Romaine prices were firming up slightly in early October, but ample supplies still held prices to 50 percent lower than they were at the same time last year.

Iceberg lettuce prices continued their lower summer trend as of October 4, with the transition looming. Huron production is expected to begin in mid October, with Yuma coming online in early November. Forecasted rain for California in mid October could squeeze supplies and bolster prices.

Vegetables: Will the Transition Bring Higher Prices?
Wheat: Prices Remain Under Pressure

- At the end of September, the USDA confirmed the size of the U.S. wheat crop. The 2016/17 wheat crop—at 2.310 billion bushel—is the largest wheat crop in eight years. In addition, it was the largest HRW crop (1.082 billion bushels) since the 1985/86 crop of 1.230 billion. If you add the very large wheat crop to a record corn crop of 15.057 billion bushels, you will see that wheat prices are expected to remain under pressure.

- With the large crops this year we have seen some quality issues arise, particularly low protein. As we discussed previously, the protein content of this year’s HRW crop was 11.2%. This compares to an average protein level of 12.3% in 2015 and 13.3% in 2014. Flour millers and bread bakers who require a higher protein wheat will need to blend HRW and spring wheat. This is going to be expensive.

- The hard red spring crop is projected to be only 493 million bushels this year, down 13% from the 2015 crop. Not only have we seen Minneapolis wheat moved higher and separate itself from the Chicago and Kansas City markets, but the spread between Minneapolis and Kansas City has gone out to over USD 1.20 per bushel. A strong indicator of the demand for high-quality (protein) wheat. This is the widest spread since 2012, when the spread went out to USD 2.00, so the spread has more room to widen.

- There were also challenges for end users of the SRW. SRW in the Central states was of good quality after two comparatively poor harvests, but millers in the east will forced to reach further west to procure the quality desired. Not only we will have rising protein premiums, widening spreads between classes, but the widening of the spreads between growing regions.

- Due to poor weather, India’s wheat crop is expected to be closer to 85m-86m metric tons (MT) versus USDA’s 90m MT projection. Government wheat procure was down this year to 23m MT from an estimated target of 28m MT. The government said this was due to large private purchases, but the trade is not seeing it. The 5.0m MT difference is likely to be made up by imports. India has gone from just 20,000 metric ton of imports in 2012/13 to potentially 5.0m MT in a short four years...stay tuned.
Wine: California Supply Situation Remains Tight

- Although the 2016 wine grape harvest is estimated to be moderately larger than the previous year’s, the increase in volume is not large enough to offset the tight supply caused by the light 2015 harvest in California. Prices across varietals in California continue to stay at a high level, as suggested by Ciatti’s bulk wine pricing report.

- Imported bottled wine saw a moderate lift in the first half of 2016, through June—a 1.5% increase in value terms. It was mainly due to an average price increase of 1.8%, as volume stayed flat (-0.2%). Upon closer examination of importing countries, Australia, Chile, and Portugal imports were suffering due to wine offerings at the lower end, priced at USD 3.5 – 5 per liter. On the other hand, premium wines from France and New Zealand are enjoying healthy growth for this period, although wine prices have come down slightly for both countries. The premiumization trend is likely to continue as U.S. consumers become more savvy and trade up in wine consumption.

- Similar phenomenon are observed in bulk wine imports with volume suffering 9.5% decline in the first half of 2016 while average unit price hiked 10.1% during the same period.

- On the export front, both bottled wine and bulk wine declined significantly for the first half of 2016, likely driven by tight supply in California, steering focus away from export markets. Although the price increase for bottled wine exports is in line with that of the domestic market at 12.4%, it was not large enough to offset total export value decline at -3.8% for the first half through June 2016. Bulk wine exports suffered a worse decrease, down double digits in both volume and value terms.
Fertilizer Remains Affordable, Broad Sector Consolidation Continues

- Fertilizer prices, as measured by the composite Green Markets Weekly U.S. Fertilizer Price Index, have rebounded from the summer lows but remain very affordable both on an absolute level and relative to other input costs (namely seed and crop protection chemicals). In nominal terms, fertilizer prices are up 9% vs. recent lows and down -12% since the beginning of 2016.

- Over the past six months, several interesting developments have taken place which are likely to have marketplace implications for the 2017 buying season. Most notably, Agrium and PotashCorp announced they would engage in a merger of equals business combination, thereby creating one of the largest global integrated producers and sellers of the three principal crop nutrients (nitrogen, potassium and phosphate). The transaction continues a trend of several other mega-mergers in the farm inputs space, namely Bayer-Monsanto, Dow Chemical and DuPont and ChemChina-Syngenta.

- Farmers could stand to benefit incrementally in the event that lower prices follow the achievement of enhanced economies of scale resulting from the recent mergers.

Nutrient Price Change Index

![](image)

Source: Bloomberg, Green Markets, Rabobank 2016

Industry Highlights

<table>
<thead>
<tr>
<th>Industry Highlight</th>
<th>Sept. or most recent</th>
<th>Last month</th>
<th>Last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Yellow Pine Stud lumber, USD/mbf</td>
<td>305</td>
<td>319</td>
<td>265</td>
</tr>
<tr>
<td>Oriented Strand Board 15/32&quot;Shipped to Los Angeles, USD/mbf</td>
<td>334</td>
<td>336</td>
<td>243</td>
</tr>
<tr>
<td>NBSK from North America to China, USD/mt</td>
<td>712</td>
<td>710</td>
<td>747</td>
</tr>
<tr>
<td>U.S. Housing Starts (thousands of units)</td>
<td>1,142</td>
<td>1,211</td>
<td>1,116</td>
</tr>
</tbody>
</table>

Source: Random Lengths, Forest2Market, RISI 2016
Sweeteners

• Uncertainties are helping to give a firm tone to domestic sugar prices. Hurricane Matthew caused the shutdown of two sugar refineries in the southeast. The greater concern is condition of the Florida cane crop, which is susceptible to wind and rain damage just as harvest begins at the end of October.

• Besides uncertainty over the condition of the Florida cane crop, the market remains concerned about tight cane sugar supplies (as evidenced by record beet/cane spread), plus potentially lower-than-expected beet outturn in the Red River Valley and ongoing talks with Mexico to revise the suspension agreement have slowed.

• Sugarbeet harvest is running slightly behind the five-year average. While the wet weather of late have has boosted tonnage in the Red River Valley, it has lowered the sugar content. Lower sugar content translates into lower producer payments, but could be supportive to overall beet prices longer term.

• Corn sweetener negotiations are mostly completed for 2017. Corn wet millers were able to push contract prices higher as compared to 2016. Net corn costs are below year ago levels and have declined significantly in the past three months. As a result, corn wet millers have been able to increase their margins.

Cane Sugar Price Remain Firm and Increase Premium to Beet

Florida Orange Juice

• The forecast for the Florida orange crop for the 2016/17 season continues with negative trends for a small crop. Elizabeth Steger has released an unofficial projection of 60.5 million boxes, a 25% decline from last year’s already small harvest. Although many industry experts consider this an extreme situation, the general outlook for next year’s harvest remains gloomy, affected by various diseases such as Postbloom fruit drop and Greening.

• The FCOJ futures are approaching record levels at 2.09 USD/lb at the end of September but have slightly declined since then. Higher prices are driven by both low forecasts in Florida for the upcoming season and tight supply from Brazil.

Brazilian Orange Juice

• Projected orange crop size in Brazil for 2016/17 season represents a 18% drop compared to last year, according to Brazil’s Fundecitrus and USDA. As a result, spot prices surged to historical high levels at BRL 20-23 per box currently.

• Low stocks in Brazil, in addition to small crop sizes, are not favorable supply conditions. Without contraction in consumption, inventories will become depleted to worrying levels.


Source: Bloomberg-ICE 2016
Cotton

- The ICE #2 continues to trade in a wide 6 USc range, largely remaining at levels in the high 60 USc/lb range since late August. We forecast an average price of 68 USc/lb in the remainder of 2016, as nearby tightness is relieved by the Northern Hemisphere harvest, but trading higher in 1H 2017 to 70 USc/lb. However, we see short-term downside risks remaining, given a persistently high Managed Money net position and total open interest across the ICE #2.

- The USDA October WASDE brought a drastic, but somewhat expected, cut to the global balance sheet, with Chinese domestic consumption boosted by 1m bales in both 2015/16 and 2016/17. This revision highlights a quickening pace of Chinese new season stock erosion, reaching 48.1m bales in 2016/17—down 2.5m bales MOM—a constructive factor for prices longer term.

- Hurricane Matthew’s path has driven quality and yield concerns, with 80% of bolls open nationally. Passing over North Carolina, South Carolina and Virginia, some 1m bales nationally can be described as at risk.

- Prospects for the Australian 2016/17 crop are improving, given excellent water availability and high chances of full water allocations. Our preliminary 4m bale new season production forecast—on par with the USDA’s latest estimate—is highly dependent on plantings, which conclude in November.

Rice

- Harvest is underway, and as of mid-September, nearly 50 percent of the U.S. rice crop has been harvested. The USDA reports that 2016/17 will likely be the second largest crop on record with an estimated 237 million cwt. being harvested. This is 7 million cwt. below the original projection as heavy rains in much of the South have impacted yields.

- Above-average summer temperatures and early season rains in the South, along with higher ending stocks will likely put further downward pressure on already low prices. The USDA estimates rice prices for ‘16/17 crop to be between USD 9.20-11.20/ cwt. for long grain, USD 9.70-10.70/ cwt. for Southern medium grain, and USD 14.50-15.50/ cwt. for California medium grain.

- NASS expects California growers to yield 8,200 lbs. to the acre—which is just two percent below last year. Given the increased acreage and good yields, it will likely provide opportunities for growers to market product to the Middle East and northern Africa, where product hasn’t been sold in a couple of years.

- Gov. John Bel Edwards and officials with Louisiana’s ports have signed memorandums of understanding with Cuba in an effort to explore trade opportunities. This signing represents a commitment from Cuba and Louisiana to actively pursue new opportunities for trade. This will prove beneficial to the surrounding rice growing region as Cuba has the potential to be a significant buyer of lower quality long grain rice.

Source: USDA, Rabobank 2016

The U.S. Cotton Crop Is Currently Has 80% of Bolls Open, with 22% of the National Crop Harvested—2% Ahead of Last Year.

12 Month Historic U.S. Short/Medium and Long Grain Prices

Source: USDA/NASS 2016
**Input Costs**

**As of October 13, 2016**

**Corn Belt Input Prices***

![Graph showing Corn Belt Input Prices with timelines and USD/short ton values.](source)

*Note: granular potash*

**Diesel — Midwest**

![Graph showing Diesel prices with timelines and USD/gal values.](source)

**Ocean Freight**

![Graph showing Ocean Freight with timelines and USD/ton values.](source)

**Natural Gas Spot**

![Graph showing Natural Gas Spot with timelines and USD/million BTU values.](source)

*Source: Bloomberg 2016


Source: EIA 2016

Source: NYMEX 2016
Forward Price Curves

As of October 17, 2016

CBOT – Corn

Source: CBOT, Rabobank 2016

CBOT – Soybeans

Source: CBOT, Rabobank 2016

CBOT – Soymeal

Source: CBOT, Rabobank 2016

CBOT – Soy Oil

Source: CBOT, Rabobank 2016
Forward Price Curves

As of October 17, 2016

CBOT – Wheat

Source: CBOT, Rabobank 2016

CBOT – Feeder Cattle

Source: CBOT, Rabobank 2016

CBOT – Lean Hogs

Source: CBOT, Rabobank 2016

CBOT – Live Cattle

Source: CBOT, Rabobank 2016
Forward Price Curves

As of October 17, 2016

ICE – #2 Cotton

Source: ICE, Rabobank 2016

ICE – Cocoa

Source: ICE, Rabobank 2016

ICE – FCOJ

Source: ICE, Rabobank 2016

ICE – #11 Sugar

Source: ICE, Rabobank 2016