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This report is prepared by Rabobank’s Food & Agribusiness Research and Advisory (FAR) division, a team of leading agribusiness analysts from the United States and around the world. For further information: research@rabobank.com
Economy: headwinds from China

U.S.

- The slowdown of economic growth in China and other emerging economies is affecting the U.S. manufacturing and commodities sectors. Incentives to invest are under pressure again, after recovering only recently from the appreciation of the U.S. dollar and the decline in oil prices in the second half of 2014. Fortunately, the large and well-diversified U.S. economy continues to grow domestically, with a services sector that is largely shielded from the headwinds from abroad and that is still generating jobs at a decent pace.

- While employment growth appears to have slowed down, there may still be sufficient momentum to reduce the slack in the labor market. This means that we are getting closer to the Fed's first rate hike. If possible, the majority in the FOMC would like to hike before the end of the year. Therefore, unless we see a further deterioration in the data, we expect the Fed to hike in December. However, the risk of a delay to the first quarter of 2016 is considerable. While the exact timing of lift-off is highly uncertain, unemployment is close to target and the Fed’s hiking cycle should be underway in 2016. Meanwhile, the ECB is contemplating additional quantitative easing. Based on this divergence of monetary policies, we expect EUR/USD to decline to 1.05 in the next 12 months.

Mexico

- We view the recent pullback in USD/LatAm cross exchange rates as largely a product of the paring back of Fed rate hike expectations. However, we fully expect the China/commodity story, as well as domestic issues in the LatAm region, to resurface and push USD/LatAm crosses higher again. For Mexico, this fundamental theme shouldn't be as damaging as it is for the rest of LatAm given that Mexico is more closely linked to the U.S. business cycle than the commodity cycle despite Mexico’s revenues still heavily reliant on oil income. But MXN will still suffer. The main transmission mechanism in our eyes will be via MXN's role as a proxy hedge for the region which will see it hard hit on heightened stress. That being said, we do think that a stress driven move north of 17 in USD/MXN is likely to prove short-lived.

Canada

- The Canadian economy is more dependent on its oil sector than the U.S., which explains why the Canadian economy fell into recession in the first half of 2015 due to the decline in oil prices in the second half of 2014. In response, the Bank of Canada cut its policy rate twice this year. The return of positive economic growth in June suggests that this is sufficient monetary stimulus and we do not expect further rate cuts. However, we also do not expect the Bank of Canada to hike before 2017. With the Fed embarking on a hiking cycle well before the Bank of Canada, we expect USD/CAD to rise to 1.34 in the next 12 months.
Our two measures of consumer confidence (the average of the two leading indicators of consumer sentiment from the University of Michigan and Conference Board) moved in opposite directions in September, with a gloomier reading by the University overriding an improvement by the Conference Board. For October we expect an overall improvement in consumer confidence. Despite a slowdown in China, shaky financial markets, we believe consumers are feeling more optimistic buoyed no doubt by low inflation and falling unemployment.

Over the last twelve months to September 2015, the Consumer Price Index (CPI) remained flat as prices remained unchanged over the past year. The 30% fall in gasoline prices over the last twelve months has offset price rises in all other categories of the CPI. Over the same period, retail food prices rose by just 0.8% and restaurant prices up by 2.9% (after a 0.5% increase in September, the largest monthly increase since October 2008).

In the U.S., about half of every dollar we spend on food is on food prepared away from home, mainly at restaurants and other food service establishments. For the year to August 2015, consumer expenditure on food away from home rose by 7.1%, suggesting a strong rebound in restaurant sales. For food at home expenditures rose by just 0.3% reflecting strong retail competition.

### Food Sales

<table>
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<th>Food Sales ($bn)</th>
<th>Annual</th>
<th>YTD Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food at home</td>
<td>$650</td>
<td>$675</td>
</tr>
<tr>
<td>YOY Change</td>
<td>5.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Food away from Home</td>
<td>$590</td>
<td>$624</td>
</tr>
<tr>
<td>YOY Change</td>
<td>5.8%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Total</td>
<td>$1,240</td>
<td>$1,299</td>
</tr>
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Source: USDA ERS, Rabobank, 2015
Climate: some relief to the West

- Dry weather dominated much of the country in recent weeks, favoring summer crop harvesting and winter wheat planting. However, topsoil moisture shortages hampered wheat emergence and establishment in a variety of regions, including portions of the Plains, lower Midwest, and interior Northwest.

- The South continues to suffer from significant short-term drought, primarily from the southeastern Great Plains to the Mississippi Delta. In addition to concerns about recently planted winter wheat, Southern drought issues included stress on pastures and late-maturing summer crops, potential risk of wildfires, and diminishing surface-water supplies for livestock. Conversely, dry weather in South Carolina favored flood-recovery efforts. However, Hurricane Patricia is poised to provide much needed precipitation to drought stricken states around the Gulf of Mexico.

- Widespread freezes on October 16-17 ended the Midwestern growing season about 1 to 2 weeks later than the normal first freeze in some locations. Freezes into the mid-Atlantic region and interior Southeast on October 18-19 were roughly on or ahead of normal.

- Record-setting warmth in the West preceded the arrival of a slow-moving storm system. Showers overspread California by October 15 and over the next several days reached into the Great Basin, Southwest, and Intermountain West. The Western precipitation caused local flooding, but replenished topsoil moisture, benefited rangeland and pastures, and provided limited relief from long-term drought.
Beer depletion still remains underwhelmed through August 2015 according to Beer Institute’s domestic tax paid. During the first eight months of 2015, a moderate slow down was observed compared to last year, dropping 1.5% to 119 million barrels. Despite of monthly fluctuations of beer depletion, the mild improvement during August (+0.3%) was not enough to offset the dropped consumption in July (-1.9%). The summer heat did not boost consumption as expected after all. Along with Nielsen’s retail scan (xAOC + c-store) data, a similar trend is observed – underwhelmed beer consumption YTD and shifting consumption patterns from on-premise to off-premise as consumers are cautious in spending.

Brewer’s Association announced last month that the number of breweries in the U.S. has surpassed 4,000, perhaps for the first time in over a century. Record suggests that there were once 4,131 breweries in 1873 and the number has been on a downhill slide until the 1970s when numbers began to swell. With the current boom of craft beer, breweries open at an surprising rate of 1.9 per day and is on target to set a new record in early 2016. However, it does not suggest a saturated market yet as most breweries are small and only caters to their local customers.

Montana’s 2014/15 harvest for malting barley has completed by the end of September and beer manufacturers are now contracting extra acreage for 2016 to rebuild stocks to previous levels. On the other hand, delayed auctions for next year’s contracts are observed from other beer manufacturers as they await a price drop in wheat futures. As the winter wheat prices continue to stay depressed, it is possible that a small amount of acreage will be switched to barley planting. Current information suggests similar acreage of malting barleys for the 2015/16 season.
Cattle: after the break, where to from here?

• Since posting the spring high just short of the USD/CWT 170 level in early April, the cattle and beef complex has gone through one of the most tumultuous price swings in history with fed cattle prices crashing to the USD 118 to USD 120 level by the beginning of October only to see a recovery rally of USD 16 to USD 20 per cwt in the first three weeks of October.

• The price collapse resulted from three primary drivers; 1) consumer resistance to record retail beef prices, 2) an imbalance in import/export shipments due to the strong USD, and 3) build-up of all time record carcass weights driven by the economics of cattle feeders facing huge losses in their existing inventory, moderate feed grain prices and a horrible fed cattle to feeder cattle swap.

• While the combination of the imbalance of beef imports/exports and consumer resistance to retail prices was a warning, it was the growing pool of all time record carcass weights and excessive numbers of yield grade 4 & 5 carcasses that forced packers to re-implement discounts on out of spec carcasses that ultimately accelerated the market collapse.

• It should be pointed out that the complications of the market have been a tonnage problem with carcasses out of specs, not a numbers problem that forced the massive price correction.

• After posting a low of USD 116 to USD 120 in early October, fed cattle prices have seen an encouraging price recovery rally that is projected to reach the mid USD 140 level by late November. Given prices close the year in the low to mid USD 140 price area, fed cattle prices should be in position to see a spring peak in the mid USD 150 level and summer lows in 2016 in the USD 130 area.

• Feeder cattle and calf prices have also seen a steep correction as well. With fed cattle losses reaching the USD 500 a head level cattle feeders had no option other than buying replacement cattle sharply lower. After posting a corrective low in the mid USD 180 level, the CME Feeder Index has recovered to approaching the USD 2.00 level that could be about as good as prices get for the remainder of the year. Feed yard placements remain below year ago levels and commercial feeders continue to complain over the lack of supply of replacement cattle.
The August 12 low looks like the harvest low. December corn futures are content to trade in a sideways pattern, albeit in a narrowing trading range. While harvest is nearly 75% complete and producers are storing this crop, there will be less and less hedge pressure on this market, which should allow prices to migrate slightly higher than current trading levels. We still believe that corn futures prices during 2016 will likely trade around 3.80-4.05 USD/bushel.

Some areas of the Corn Belt, particularly the northwest Corn Belt, have experienced better yields than expected. For some farmers this has been the difference between losing money on this crop and breaking even/making a profit this year. This will allow producers to hold on to their crop longer than expected and be more patient in selling the crop. At the same time, rallies will be sold by farmers and dips supported by end users, setting up a market to trade side-ways for an extended period of time.

However, once harvest is complete, the corn market’s job will be to maintain and/or buy acres for 2016. The market will need to buy back 1.0-2.0 million acres to keep the balance sheet neutral. The new crop soybean/corn ratio has been hovering around 2.25, which would favour plantings over soybeans.

In the October Crop Production report, USDA forecast U.S. corn production at 13.555 billion bushels which is down less than 1 percent from the September estimate. Their yield estimate was 168 bushels per acre, up 0.5 bushel per acre from September. In addition, USDA did adjust planted acres and harvest acres down 500,000 and 400,000 respectively due to prevented plantings.

We are currently holding a 166.5 bushel per acre yield on our balance sheet. As farmers begin the last 25% of harvest, this will be the portion of the corn crop that was planted late and in very wet soils and therefore likely to have lower yields. However, the late planted corn has benefited from the excellent fall weather as many parts of the Corn Belt have still not having a killing frost. Consequently, the remainder of the harvest is going to play a big factor in future price direction.
Dairy: strong domestic demand helping farmers

• The only things separating U.S. dairy producers from the lowest farmgate prices since 2009 are high prices for butter and cheese. Meanwhile, protein prices (NFDM and whey) have followed the international market down to the lowest levels in more than a decade due to an oversupplied market.

• U.S. dairy commodity prices for butter and cheese have remained in place thanks to solid demand growth for both.

• U.S. consumers are reaping the benefits of a growing economy, low gas prices, and lower prices for dairy products. As a result, retail demand in volume terms for natural cheese were up 5.2%, yogurt up 2%, and ice cream and butter were both up 4% year on year for the month of September.

• The result of this strong demand has been a farmgate milk price which has provided marginal profitability to most dairy farmers throughout the U.S. This profitability has lead to a continuation in milk production growth, albeit minor, with September up 0.4% year on year.

• Moving forward, Rabobank believes that butter and cheese prices in the U.S. will ease in the fourth quarter of 2015 and remain lower through mid-2016. The drivers of this fall will be a combination of buyers of butter and cheese slowing as they reach comfortable stock levels for peak season and imports continue to flow in from Europe and New Zealand.

• As cheese and butter prices fall so will farmgate prices. Rabobank is forecasting all milk prices to fall below 15 USD/cwt by January 2016 and hold at these levels through Q1 2016 before slowly moving back to marginally profitable levels in mid-2016. As a result, domestic milk supply will hardly grow in the first half of 2016.

• In other related news, the TPP has been agreed but still needs to be ratified by all associated governments. Assuming that it does pass the U.S. can expect to have marginally improved access to some markets. Most importantly the U.S. will remain the key supplier to Mexico as Mexico’s concessions for dairy were minimal for other markets.
Feed: ample substitutes

DDGs
- The Chinese government has initiated a new policy to limit the importation of alternative feed grains. DDGs, sorghum, barley, and cassava must first be registered with the Chinese government to complete customs declaration. The process for importing these alternative feeds into China was less tightly regulated compared to corn until now.
- China has built large state-owned domestic corn reserves during the past three years and much of it is in poor condition. Beginning mid-2014, the government has sought methods to encourage domestic producers to use these stocks by limiting corn imports (e.g. MIR-162 ban), yet these efforts were circumvented by importing cheaper feed substitutes.
- This sudden influx in feed demand during mid-2014 caused a sharp rise in alternative feed basis in the U.S. and encouraged higher plantings this year for effected crops. For example, 2015/16 U.S. sorghum production is estimated at 14.1 million tonnes, up 28% YOY. With lower export demand expected from China, this extra product will be forced to compete with abundant corn supplies within the U.S. market.

Hay
- China has been the primary destination for this year’s crop, YTD they’re responsible for 47% of total exports—up 33% from a year earlier. Other notable increase are Saudi Arabia—up 140%, and South Korea—up 21%. Whereas the UAE is behind 50% from where they were last year. Total exports are up 9% to nearly 1.3 million tonnes.
- Although hay prices remain diverse depending upon the region, California dairies are seeing a large price spread between the low quality and premium hay. There is a surplus of poor quality hay in the state. Prices are ranging from 135 to 270 USD/Ton for the premium hay. Many Californian dairies are importing hay from Utah, Arizona, New Mexico, Nevada and Oregon. We expect this to continue with no end to the Californian drought in sight.
- Growers are slowly switching to subsurface drip irrigation as an alternative to flood irrigation. This not only save water, but is more efficient and leads to better yields.—increasing profitability and quality.
Fruits: the summer was berry challenging

- Through October 3rd, total U.S. strawberry shipments were up 7% YOY. Excessive overnight temperatures limited berry size this summer, with Salinas-Watsonville beginning to ship only medium sized berries beginning in August. Santa Maria retained size and quality advantages, which have resulted in price premiums over Salinas-Watsonville. Oxnard has begun shipments, with Mexico and Florida expected to come online next month. Prices are showing strength as we are in transition.

- California table grape shipments through October 10th were up 5% YOY, with the harvest being pushed forward 2-3 weeks due to high temperatures. Impacts from the heavy rainstorm during mid-October are still being assessed. Prices have been heavily dependent on variety, but are essentially on-par with last season on an overall basis.

- U.S. new crop apples are showing a bit of price strength, YOY, particularly for larger pack sizes (88s and larger), which have been in shorter supply. Fruit sizing is improving as the Washington season is progressing. Total U.S. apple production is expected to be 14% lower, with 18%, 15%, and 2% volume declines expected in Washington, New York, and Michigan, respectively.

### Washington Apple Shipping Point Prices – 100s – WA Extra Fancy

<table>
<thead>
<tr>
<th>Year</th>
<th>Composite of Fine Appear. &amp; Standard Appear. Prices</th>
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<tr>
<td>2011</td>
<td>Source: USDA/AMS, Rabobank, 2015</td>
</tr>
<tr>
<td>2012</td>
<td></td>
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<tr>
<td>2013</td>
<td></td>
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<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
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### Strawberry Shipping Point Prices – Primary U.S. Districts

- Salinas-Watsonville, CA
- Santa Maria, CA
- Oxnard, CA
- Central FL

- Source: USDA/AMS, Rabobank, 2015

### Table Grape Shipping Point Prices – Kern District, CA

- Crimson Seedless
- Flame Seedless
- Red Globe

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

- Source: USDA/AMS, Rabobank, 2015
After the large swings in the hog market at the start of the year and the PEDv impact of 2014, prices this summer have been far steadier and some level of profitability has come to producer margins. Rabobank estimates average producer profitability to be USD 14 per head in Q3; far better than the below break-even margins witnessed during the first-half of the year. With the seasonal decline in hog prices this fall and winter, 2015 looks to be a break-even year for unhedged producers, which is better than feared when the hog market was collapsing this spring.

There continues to be a high degree of uncertainty looking at 2016 driven by more than a few variables including: a strengthening U.S. dollar, possible resurgence of PEDv, continued supply expansion, limited available packing capacity in fall months, retaliatory MCOOL (mandatory country of origin labeling) tariffs, a final deal on the TPP, and the hope of increased exports to China. Despite all these variables, Rabobank has a relatively bullish view on prices and on producer profitability in 2016.

Both supply growth trends this summer and indications for Q4 continue to track our earlier expectations of a 5% to 6% increase in U.S. pork supply this year. Producers have more than recovered from the PEDv shortages of 2014, though this is being somewhat offset by lower hog weights. Expectations for 2016 are for a far more modest supply growth as indicated by the USDA hog report published on September 25th. The report was largely in-line with market’s expectations, which included a 1% increase in the U.S. breeding herd and fewer farrowings this fall and winter.

Trade continues to be a hot issue after the West Coast port shutdown earlier this year and with attention now on China and MCOOL. China has experienced a massive cull over the last 18 months which has driven a 50% spike in pork prices and improved competitiveness from the likes of the E.U., Canada and Europe. Despite the stronger dollar, the U.S. remains very competitive in the Chinese market and Rabobank expects the U.S. to increase its shipments to China in the remainder of 2015 and in to 2016. One limitation of these trade flows is a large number of U.S. packing plants been banned from exporting to the Chinese market restricting the available U.S. supply eligible.
Poultry: feeling pressure from competing proteins

- Poultry production growth has been quite steady in 2015 but the decline in the prices of competing proteins, especially beef this summer, has taken its toll on chicken prices and profitability. The year got off to a challenging start when the spread of avian influenza (AI) through the Northern Midwest put a serious crimp in the U.S.’ export potential, driving down leg quarter prices to 50%-60% below 2014 levels. The industry managed that challenge during this spring largely on the support of strong demand and pricing in the domestic market.

- Demand has held strong this summer but as prices of the beef complex have declined sharply, especially in August and September, it has put pressure on chicken prices. This is most clearly seen in breast meat prices which have fallen to USD 1.10 per pound currently or, a USc 0.30 per pound decline in the last two months. With breast meat accounting for a quarter of the bird on a live weight basis and nearly half of the value, this decline has had a meaningful impact on the chicken complex. The beef complex seems to have stabilized, which is a positive side for the poultry complex. However, with beef production expanding in 2016 for the first time in several years, the overall pressure on poultry prices may not subside any time soon.

- Not only is price competition from beef and pork an issue for the poultry sector, but the risk of AI reemerging in the U.S. this winter and the implications on trade, production, and overall supply is also a key issue. While it has been more than four months since the most recent case of the virus, there is a high degree of seasonality to the occurrence and spread of the virus with cool/cold, wet months being the highest risk periods. The industry is stepping up biosecurity protocols on the assumption that AI will return which is a good sign given the supply shock to the table egg sector this year.

- The supply outlook is mostly unchanged with eggs set and chick placements running 2.5%-3.0% above last year. We see another 1.5%-2.0% of growth coming from increased bird weights which drives our view that overall poultry supplies will increase 4% to 5% on a RTC basis.
Reports from the country suggest that soybean yields are higher than the current USDA projection and history would suggest the same. The reports from the country consistently indicate better than expected yields. USDA is currently forecasting a yield of 47.2 bushels per acre, up only 0.3 bushels per acre since August. This is below the historic increases which have ranged between 0.5-0.8 bushels per acre in the same time frame. The average change in yield projection from October to November ranges from 0.5-1.2 bushels per acre.

While yield projections maybe heading higher, it looks like the USDA may very well reduce planted and therefore harvested acres further in subsequent reports. In the October Crop production report, the USDA reduced planted and harvested acres 1.1 million acres due to prevent plant data. Again, recent history suggests planted and harvested acres could decrease further; perhaps by 300,000 to600,000 acres. Depending upon where yield lands, the U.S. soybean balance sheet may tighten further.

On the 2015/16 U.S. soybean balance sheet, USDA had reduced U.S. soybean exports 168 million bushels below 2014/15. This is due to a strong U.S. Dollar and outstanding sales lagging last year’s pace by nearly 30%. However, this year’s shipment pace contradicts that logical. Accumulated shipments and exports inspections are running 10.1% and 14.7%, respectively above last year’s pace. Buyer were not as aggressive upfront this year seeing that the U.S. had adequate supplies for the first time since the 2006/07 crop year.

We are looking for prices across the soybean complex to remain relative stable over the next 12-months, not much different from where prices are currently trading. The market has absorbed most of the bearish news, therefore limiting downside risk. At the same time, uncertainty over El Niño and 2016 palm oil production could lead soybean oil prices higher and continued growth in the broiler and pork sectors will lend support to soybean meal prices which the market, in our view, has already been absorbed. Only a macro shock, such as oil price, weather or geo-political could move prices in one direction or the other significantly.
Tree Nuts: 2015 harvest is early across the U.S.

- The almond crop is expected to be 1.75 million pounds—slightly off from the revised USDA estimates, however including a larger carry-in total 2015/16 inventory will be 2.1 billion pounds—just 5% off last year’s total available crop. Buyers are looking for prompt shipments on an as needed basis.

- The USDA estimated the 2015/16 U.S. Pecan crop to be 272.3 million pounds—some suggest this number to be as much as 20% low. New crop year prices are strong, with little discrepancy between pieces and halves. A recent hail storm Texas and New Mexico knocked upwards of 10 million pounds off the trees.

- California Pistachio growers are at the tail end of harvest, many growers are experiencing as much as 50% of their crop as blanks. The most recent crop estimate suggests a maximum crop of 275 million pounds—40% off previous estimates. However, with the large 2015 carry over, there should be enough crop available for a normal sale year. Iran’s 2015 crop is reported to be large similar to their 2014 crop.

- California walnut crop is estimated to be 575,000 tons. Moving into 2015/16 total shipments are up 20% YoY as prices have softened. Some have reported early Chandlers and Howards having more color than export markets typically like—lighter nuts will get a premium. Shipments to China are down, however additional shipments to the E.U. and Turkey more than make up for lost sales.

- Oregon Hazelnut’s were harvested several weeks ahead of normal as the warm summer months sped up the process. The crop is 5-10% below the anticipated 39,000 tons originally estimated, however processors are reporting good quality adding to the marketability of the crop. Initial prices are 30% off last year’s, but are the second highest price paid on record.
Vegetables: the yield versus price trade-off

- Lighter than expected volumes out of the eastern U.S. and Mexico, coupled with yield issues in California and the onset of school demand has broccoli prices trending upward. Heavy rains and flooding in the southeast have resulted in an estimated USD 45 million loss in total fall vegetable crop production in South Carolina. With the California broccoli crop being pushed ahead by excessive temperatures, there is a potential supply gap coming in November.

- A combination of excessive heat and untimely rain negatively impacted California iceberg lettuce availability, and drove yields down by as much as 25-40% in August and September. Regional deals also wound-down, and prices rose to above USD 30. High prices and quality issues, then resulted in lower quantity demanded, which has contributed to lower prices in recent weeks. The transition to Huron has begun, as Salinas winds down, and the desert deal will begin in November. Romaine prices have been trending upward, as there was more weather-related damage than originally expected.

Wrapped Iceberg Lettuce – U.S. Daily Shipping Point Price

Broccoli – U.S. Daily Shipping Point Price

Romaine Lettuce – U.S. Daily Shipping Point Price
Wheat: adequate global supply despite some dry conditions

- Despite the recent USDA reduction of the U.S. crop, the mostly consistent carry held through the KCBT, CBOT and MGE Dec. ’16 contracts indicates no major supply or demand concerns. Heavy global stocks will continue being burdensome to prices in the months ahead and curtail any sustained rallies. Although some price supportive weather challenges linger, Rabobank projects CBOT wheat to trade in a fairly narrow range in the months ahead, averaging USD 5/bu during Q4 2015.

- Originators in Russia and Ukraine are currently serving most competitive export tender and will continue doing so until their export programs wind down in November. The Russian lowering of their export quota earlier this month will likely hasten their export pace. During the winter months, E.U. exporters are best poised to prevail in tenders to Middle East buyers with prices expected to gradually strengthen through H1 of 2016, averaging USD 5.10 in Q1 2016 and USD 5.25 in Q2 2016 for CBOT. U.S. FOB prices are likely to regain some competitiveness later in the 2015/16 marketing year after E.U. and Black Sea exportable supplies diminish.

- U.S. winter wheat plantings are over 83% complete, yet progress is uneven with HRW areas generally behind and SRW states mostly ahead of average. The Southern Plains have been mostly dry, and although recent rains have slowed planting progress, much needed moisture was added to the area. Further precipitation to the region is projected in near-term weather forecasts.

- U.S. exports are setting the slowest pace since 2009/10, with only 288,000 tonnes accumulated so far this season. Lackluster HRW exports account for much of the decline thus far and the USDA lowered total 2015/16 U.S. exports by 50 million bushels this month. Although global trade levels are high, the U.S. share will stay subdued from currency and freight disadvantages through 2016.
Wine: early grape harvest

- The 2015 California wine grape harvest was one of the earliest in recent memory, and will likely be the lightest since 2011. Initial estimates from Allied Grape Growers suggest that this year’s crush will be 3.8 million tons, though this could still be revised—most likely to the down side.

- The lighter crop is already creating upward pressure on bulk wine prices in some parts of the state, particularly in the North Coast. Napa Co. Cabernet Sauvignon prices, which have already seen upward pricing pressure in recent years, increased an additional 25% since the harvest. Pinot Noir from Sonoma’s Russian River Valley have seen less pricing growth in recent years, but jumped nearly 40% since the 2015 crop came in, according to data from Ciatti Company.

- Demand for imported bulk wines remains soft, given the availability of supply in the San Joaquin Valley. Bulk wine imports were down 7% in the first 8 months of 2015, with Chile seeing the largest decline.

- Bottled wine imports—particularly from Europe, have enjoyed solid growth in the U.S. market, rising 3%, supported in part by the strong USD. Italian sparkling wines (+23%), as well as bottled wines from France (+11%) and New Zealand (+14%) were among the major gainers. Though starting from a smaller base, we also note that Portuguese table wines (+21%) and vermouth (+25%) also saw considerable growth among imports, according to the Gomberg Fredrikson Report.

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**California wine grape crush**

<table>
<thead>
<tr>
<th>Year</th>
<th>Crush (Million Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3.34</td>
</tr>
<tr>
<td>2012</td>
<td>4.02</td>
</tr>
<tr>
<td>2013</td>
<td>4.25</td>
</tr>
<tr>
<td>2014</td>
<td>3.89</td>
</tr>
<tr>
<td>2015e</td>
<td>3.8</td>
</tr>
</tbody>
</table>

**Change in pricing for Napa Cab. Sauv. and Russian River Pinot Noir pre and post harvest, 2015**

<table>
<thead>
<tr>
<th>Wine Type</th>
<th>Pre-Harvest</th>
<th>Post-Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Napa Cabernet Sauv.</td>
<td>3.3</td>
<td>3.95</td>
</tr>
<tr>
<td>Russian River PN</td>
<td>3.7</td>
<td>4.25</td>
</tr>
</tbody>
</table>

*Source: Allied Grape Growers, 2015*

*Source: Ciatti, 2015*
Forestry

FERTILIZER

• Field crop margins remain under pressure in the U.S. Midwest with very little chance for improvement later this year or next year. If our thesis is correct, 2016 will mark the third consecutive year of negative returns which will place incremental downward pressure on prices for farm inputs, a positive for farmers but a negative situation for the industry overall.

• The global/macro backdrop also remains challenging for production agriculture, amidst economic volatility in China and ongoing challenges in Brazil including a slowdown in exports to China, high inflation and a continued weak currency.

• Fertilizer prices, as measured by the Green Markets Composite Index, have declined to 367 compared to 402 since our August report, representing a drop of 8.7%. With positive farm progress underway, markets should have greater visibility on grain prices in the coming weeks, however, we expect fertilizer prices to continue trending lower for the balance of 2015.

Price Highlights

<table>
<thead>
<tr>
<th>Price Highlights</th>
<th>Oct./ most recent</th>
<th>Last month</th>
<th>Last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Yellow Pine Stud lumber, Price per mbf</td>
<td>$275</td>
<td>$265</td>
<td>$380</td>
</tr>
<tr>
<td>Oriented Strand Board 15/32”Shipped to Los Angeles, Price per mbf</td>
<td>$248</td>
<td>$243</td>
<td>$263</td>
</tr>
<tr>
<td>Douglas Fir #2 Saw Log NW Oregon, price per mbf</td>
<td>$618</td>
<td>$621</td>
<td>$624</td>
</tr>
<tr>
<td>NBSK from North America to China, price per mt</td>
<td>$746</td>
<td>$747</td>
<td>$834</td>
</tr>
<tr>
<td>U.S. Housing Starts (thousands of units)</td>
<td>1,206</td>
<td>1,161</td>
<td>963</td>
</tr>
</tbody>
</table>

Source: Green Markets, Rabobank, 2015
Sugar prices are being pressured lower on record sugar beet production. The latest USDA production projection has the crop at 34.8 million tons. This is 1% higher than the September estimate and up 11% from the 2014. USDA is also forecasting a record yield of 30.4 tons per acre, highest yield since the previous record of 29.3 set in 2012.

The Mexican anti-dumping suit is pretty well wrapped up other than dotting the “i” and crossing the “t”, but the recent Trans-Pacific Partnership (TPP) agreement has implications for sugar. The agreement establishes a new and higher TRQ for sugar and sugar-containing products from TPP countries. Australia is the largest beneficiary. In years when the Secretary determines a need for more imported sugar, Australia’s and Canada’s TPP TRQ will be increased. The new TRQ was short of the Australian’s expectations for more unfettered access to the U.S. market. However the TPP has had little, if any, impact on sugar prices.

While liquid corn sweetener negotiations are pretty well wrapped up, negotiations over dry products (e.g. dextrose) are ongoing. Buyers have balked at the large proposed price increase. Dextrose has been tight for the last several years and is expected to remain so.

Sugar prices are expected to remain soft. The record large beet crop and reports that beet processors still have sugar to sell for 2016 all contribute to price not having much upside potential.

Florida Orange Juice

USDA has released forecasts for Florida’s 2015/16 crop in early September and the forecast indicates a significant decline in orange productions across different varieties. Total orange production is projected to decline 17% from the last harvest to 80 million boxes. Production for non-Valencia oranges is projected to fall 16% to 40 million boxes while the Valencia varieties is expected to decline 19% to 40 million boxes as well. The decline can be attributed to a combination of lower number of fruits per tree and below-average fruit sizes, and the decline can be most observed in the Southern area.

On a positive note, forecast for FCOJ yield bounced back by 11%, reaching 1.61 gallons (at 42.0° brix) per 90-pound box for all oranges compared to 1.50 gallons from the last harvest. However, as the orange production for this crop is on track for a small harvest, FCOJ yield is far from the record high of 1.67 gallons per box in 2007/08. Forecast for detailed data by types of oranges will be published early in 2016.

FCOJ futures are trading at USD 1.05 per pound as of September 30, falling 14.6% from the rebound in August. The price has dropped to the lowest in the recent 6 years since the recovery from the 2007 recession.

Sugar prices are expected to remain soft. The record large beet crop and reports that beet processors still have sugar to sell for 2016 all contribute to price not having much upside potential.

**U.S. Cash Cane & Beet Sugar Prices**

Source: Milling and Baking News, 2015

Source: Bloomberg – ICE, 2015

**FCOJ Futures**

Source: Bloomberg – ICE, 2015
California growers who secured water and planted their fields are seeing a heavy crop. Total production is anticipated to be 34 million cwt, less than 10% off last year. Prices have been consistently high this year hovering between USD 20 and 21 per cwt. A large 2014/15 carry over could put downward pressure on prices.

At the tail end of the season, growers are concerned about water for decomposition. In a typical year growers receive enough water to flood 300,000 acres, this year there may only be enough to flood 50,000 acres. This will have some environmental impacts as the region’s winter wet lands are a safe haven for migratory water fowl.

Southern Growers saw a 15% decline in price this year for both Medium/Short and Long Grain rice. The strength of the USD and the global surplus has put downward pressure on price. Reports are that the 2015/16 crop may have quality issues as the summer months were hotter than normal and temperatures fluctuated quite a bit.

The USDA forecasts 2015/16 Long Grain prices to be between USD 12.80 to 13.80 per cwt—up from the average of USD 11.90 seen most recently. Average Medium/Short Grain prices should be relatively unchanged from the year previous.

The size of the U.S. crop remains in question, and a wet finish forecast for the harvest in Texas is driving quality concerns, as El Niño bears on the cotton market. NOAA has forecast above-average rain across the southern U.S. states over the next month, and heavy showers are expected later this week. This is a critical time for the crop, particularly in Texas, with harvest progress at around 30% complete and nearly all of the bolls open and exposed to the elements.

We maintain our U.S. production forecast at 14 million bales, and at this stage believe that the weather poses more of a quality concern than significant volume risk. The USDA’s 2015/16 domestic production forecast of 13.3 million bales and ending stocks of 3.1 million bales is still largely disregarded by the market. However, if these estimates materialise, upward pressure on futures is to be expected, to above USc 70/lb.

Cotton futures remain undervalued and susceptible to production shocks at current price levels in our view. We continue to see upside for prices particularly through 2016 as world cotton plantings are expected to contract for a second year. We maintain our price forecasts at USc 65/lb through Q4 2015, edging higher towards 70 USc/lb through 1H 2016.

Demand remains a key concern for the market, although is tracking in line with expectations of 2% to 4% YOY.

The size of the U.S. crop remain in question, we maintain an estimate of 14 million bales

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

Source: USDA, Rabobank, 2015

Source: USDA/NASS, 2015; Note: Average rough rice basis
Input Costs

As of 10/23/2015

Corn Belt Input Prices

Diesel – Midwest

Ocean Freight

Natural Gas Spot

Source: Bloomberg, 2015; Note: Granular Potash

Source: EIA, 2015


Source: NYMEX, 2015
Forward Price Curves

As of 10/23/2015

CBOT – Corn

CBOT – Soybeans

CBOT – Soymeal

CBOT – Soy Oil

Source: CBOT, Rabobank, 2015
Forward Price Curves

As of 10/23/2015

CBOT – Wheat

Source: CBOT, Rabobank, 2015

CBOT – Feeder Cattle

Source: CBOT, Rabobank, 2015

CBOT – Lean Hogs

Source: CBOT, Rabobank, 2015

CBOT – Live Cattle

Source: CBOT, Rabobank, 2015
Forward Price Curves

As of 10/23/2015

**ICE – #2 Cotton**

Source: ICE, Rabobank, 2015

**ICE – Cocoa**

Source: ICE, Rabobank, 2015

**ICE – FCOJ**

Source: ICE, Rabobank, 2015

**ICE – Sugar #11**

Source: ICE, Rabobank, 2015