Food & Agribusiness Research and Advisory (FAR) Group
North American Agribusiness Review

February 2016
# Report Summary

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Economy: Global Headwinds

U.S.
- The negative impact of the struggling global economy, low oil prices and the strong dollar on the U.S. economy have become evident in GDP growth slowing down to 0.7% (quarter-on-quarter, at an annualized rate) in Q4 and non-farm payroll growth easing to 151K in January. The impact on the manufacturing and mining sectors is visible in business investment, inventories and net trade. What’s more, the services sector—which should be less sensitive to the global economy—also appears to be losing momentum. Nevertheless, employment growth in that sector remains sufficient to further reduce the slack in the labor market, with unemployment falling to 4.9% in January. This should give the Fed the confidence that core inflation will be supported by wages going forward. However, the global headwinds are likely to delay the return of headline inflation to its 2% target. Therefore, we do not expect the Fed to deliver the four hikes that were implied by the December dot plot. In fact, it seems unlikely that that Fed will hike before June. We do not expect more than two hikes in 2016, with risks skewed to the downside.
- At the same time, the ECB is thinking about further monetary policy loosening. Based on this divergence of monetary policies, we expect EUR/USD to decline to 1.05 in the next 12 months.

Mexico
- In contrast, Banxico is likely to follow the Fed’s hiking cycle to defend MXN against outflows heading north of the border. What’s more, if price pressures in Mexico are going to increase we may see even more hikes. We still view Mexico as having a strong position relative to the rest of the region given the country’s close links to the US business cycle and relative insensitivity to the Chinese slowdown. It is true that oil is important for revenues, but oil production is already hedged for 2016 and growth is nowhere near as reliant on commodity prices as in other countries in the region. However, MXN is used as a proxy hedge for LatAm assets in general. On balance, we expect USD/MXN to fall to 18.50 in the next 12 months.

Canada
- Meanwhile, the Bank of Canada appears to remain on hold as the Canadian economy continues to absorb the negative shock from low oil prices. While the BoC may not be preparing to loosen policy again, the fact that the Fed has started tightening has caused interest rate differentials to weigh on the CAD versus the USD. Additionally, the continued weakness of commodity prices suggests that the CAD is set to remain on the back foot. That said, better economic data should lend some support to the CAD against the USD later in the year. On balance, we expect USD/CAD to rise to 1.40 in the next 12 months.
Consumer: Falling Gas Prices Raise Consumer Confidence

- Our measure of consumer confidence (the average of the two leading indicators of consumer sentiment from the University of Michigan and Conference Board), rose to 95.1 in January compared to 93.3 a year earlier. Over the past twelve months, consumer sentiment has bounced around reflecting the mixed messages over the state of the economy including the lackluster growth in GDP and median wages. But as unemployment continues to fall (now 4.9% in January 2016) and inflation remains very low at just 0.7%, the Misery Index (the aggregate of the two metrics) at 5.6% is back to pre-Great Recession levels.

- In 2015, the rate of inflation as measured by the Consumer Price Index (CPI) was just 0.7%. For the 44th straight month it has been below the Federal Reserve’s target of 2%. Inflation remains muted largely because of energy prices falling by 13% over the past twelve months. Over the same period, retail food prices (food at home) fell by 0.5% in contrast to restaurant (food away from home) prices up by 2.6%.

- In the US, about half of every dollar we spend on food is on food prepared away from home, mainly at restaurants and other food service establishments. In 2015, consumer expenditure on food away from home rose by 6%, suggesting a strong rebound in restaurant sales compared to flat retail sales.

### Food Sales

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<th>Food Sales ($bn)</th>
<th>Annual</th>
<th>YTD Cumulative</th>
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<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>
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<tr>
<td>Food away from Home</td>
<td>$590</td>
<td>$624</td>
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<tr>
<td>YOY Change</td>
<td>5.8%</td>
<td>5.8%</td>
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<tr>
<td>Total</td>
<td>$1,240</td>
<td>1,299</td>
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Source: USDA ERS, Rabobank, 2016

### Consumer Confidence Index

Source: Bloomberg, Rabobank 2016

### Food Price Inflation

Source: Bloomberg, Rabobank, 2016
Climate: Mild Winter with Stormy Events

- Frequent storms, in part fueled by a strong El Niño, dented the western drought and maintained generally adequate to locally excessive soil moisture across the central and eastern US.

- Despite the heavy snowstorm that hit the northeast in late January, temperatures for the month of January have been near to above normal for most of the country.

- Two regions received above average precipitation for the month: Florida—where heavy rains in the southern part of the state have caused local flooding as well as concerns for winter vegetables—and California, which experienced the wettest January since 2010. By the end of January, the average water content of the high elevation Sierra Nevada snowpack stood at 20 inches, about 115% of the average for the date.

- Elsewhere, January conditions were drier than normal, a welcome event after the excessive rainfall and flooding of the Oct-Dec 2015 period, particularly across the southern plains, the mid-south and parts of the south-east. More than two thirds of the wheat in the main productions states are rated in good to excellent conditions, although some downgrades came as a result of inadequate snow cover.

- As of early February, the U.S. drought coverage of 15.5% represented the smallest areal drought extent since October 2010.

- According to NOAA’s Climate Prediction Center, the ongoing El Niño phenomenon has likely peaked, with a transition toward a neutral period expected during the late spring or early summer 2016.
Beer & Barley: Craft Gains Offsetting Losses in Core Brands

- Beer depletions on the whole remained soft in 2015, declining 1.4% YOY, according to the Beer Institute. While the soft trends are a continuation of recent patterns, it is worth noting that trends in the second half of the year were generally better than in the first half.

- Mainstream domestic premium brands such as Budweiser and Miller, continue to lose share to smaller brands—particularly imports and craft. Even large brands that are considered ‘craft, such as Samuel Adams and Yuengling have come under pressure recently as consumers experiment with a wider range of lesser-known brands.

- Although AB InBev has seen ongoing softness in many of its core brands, the company’s recently acquired craft brands (Goose Island, Blue Point, 10 Barrel, etc.) are enjoying solid double digit growth in off-premise channels. We believe the success of these brands holds the potential to be transformational, not just for ABInBev, but for the U.S. beer industry as a whole. The company’s ability to brew these brands in large-scale, highly efficient breweries give it a considerable competitive cost and pricing advantage relative to smaller brewers.

- Rising demand for hops from craft brewers continues to drive an increase in hops production acreage, which rose nearly 15% in 2015, compared to the prior year, according to the USDA National Hop Report. Total production rose by a slightly lower amount (11%) as average yields saw a slight decline. Perhaps more importantly, the total value of hops production rose 32%, due to rising demand and a shift by producers to higher-value hops varieties.

- Maltsters went into the 2015 barley crop with very light inventories, but managed market scarcity exceptionally well. North Dakota saw a dramatic increase in acreage and production in 2015, which weighed on spot market pricing in that market, while other major growing regions saw firmer prices. However, with malting barley inventories back at healthier levels, pricing for 2016 contracts are below 2015 levels.
Fed cattle prices have started the year in a narrow trading range of 132 to 136 USD/CWT. While the narrow price range is still below breakeven for cattle feeders, the expectations of less volatility and the market trading in a defined seasonal price pattern are welcomed by the market.

Given the pattern of reduced placements during the second half of 2015, available fed cattle supplies are expected to remain tight for the first half of 2016. On top of tight available supplies, cattle feeders have been taking a more aggressive marketing position in order to get the remaining heavy cattle cleaned up and in many areas sell cattle in order to get out of deteriorating pen conditions.

The January Cattle Inventory report confirms herd expansion, All Cattle and Calves up 3%, Beef Cows up 4%, Beef Replacement Heifers up 3%, Heifers Expected to Calve up 6%, Steers 500 pounds and over up 4% and Calves under 500 pounds up 4%.

The combined effect of reduced placements during the second half of 2015 and the escalation in cattle inventory have increased supplies of cattle outside feed yards that is expected to lead to increased spring and early summer placements. Those expected placements are expected to increase fed cattle supplies during the second half of 2016.

Fed cattle prices are expected to drag short term as lingering winter weather and winter beef consumption weigh on the market. Tight available fed cattle supplies for the first half of 2016 still leave the opportunity of a spring high in the low to mid USD 140.00 price area. After a spring high, the combination of seasonal pressure and anticipation of increased fed cattle supplies is expected to take the summer market to the USD 120.00 price area.

Offerings of feeder cattle are expected to increase as winter grazing programs come to a close. Increased offerings of feeder cattle along with the expectations of increased numbers of summer yearlings are expected to impact feeder cattle prices.

While at a slower pace than the previous two years, cow herd expansion and heifer retention is expected to continue through the year.
While grain stock in all positions as of December 2015 were virtually identical YOY, there were 3.64 percent fewer stocks estimated on farm. The changes in on-farm storage tended to be regional, which is driving price divergence across the U.S.

Prices in the western corn belt and plains region are breaking lower than CBOT and other regions. While ease of access and lower transportation cost into cattle feeding areas are partial drivers, on-farm December stocks were 4.00 percent higher YOY in Iowa, Kansas and Nebraska combined. Consequently, local price rallies in the plains and western corn belt will be unlikely to be sustained over the next three months.

Exports are at a very slow pace as a result of slowing Asian economies and a strengthening U.S. dollar. Currently, corn exports are over 21 percent lower YOY and running at a pace that would drop total market year exports below 1.5 billion—which would be the lowest total over the past 30 years with the exception of the flood year of 1993 and drought year of 2012. We estimate that a decline below 1.5 billion bushels would take 15 cents or more off the price farmers receive per bushel of corn.

Opposite to the western corn belt region, the combined on-farm stocks for Indiana, Ohio and Michigan were estimated to be down by over 16 percent from the start of 2015. Total grain stocks were also down over 12 percent YOY. The resulting high basis in the south-east, eastern corn belt and great lakes region is likely to remain in place and potentially drive offshore imports to poultry and swine feeders in the eastern states.

As March approaches, all eyes will turn to the Northern hemisphere to assess planting intentions. The current new crop corn to soybeans ratio is just below 2.30 which slightly supports more corn acres. We maintain our outlook of just over 90 million acres (1.9 percent increase YOY) as U.S. balance sheet neutral.
• U.S. farmgate all-milk prices averaged USD 17/cwt through 2015, the lowest average price in 5 years. These low prices have been driven by an oversupplied U.S. market. Domestic milk supply growth (+1%), increased exports (+20%) and decreased exports (-11%) were the key triggers to the excess supply. As a result we have seen inventory build (+10%) throughout 2015 for core dairy commodities.

• Looking abroad, tectonic shifts in the market have made for even lower prices outside of the U.S. Whole milk powder and skim milk powder have been under pressure for nearly two years and remain near record lows.

• The removal of the EU milk quota has seen 9.5 million MT of additional milk produced in the EU over the last 24 months. The equivalent of this would be if the U.S. added two more Idaho's worth of milk production over the same period. Many European producers have managed to remain profitable due to a very low euro and subsidies from their processors.

• The increase in European milk supply couldn’t have come at a worse time for prices. The world’s two largest importing markets (China and Russia) have removed themselves from the import game for one reason or another. The alternative importers are made up in large part by oil dependent markets in the Middle East and north Africa.

• Prices for U.S. butter and cheese have remained at a premium to international markets, which has helped to keep farmgate milk prices above breakeven. The U.S. will continue to face pricing pressure as imports continue to flow in and exports remain suppressed—as the market arbitrages the premiums for butter and cheese in the U.S. It is highly likely this will result in some softening in prices for butter and cheese as we move through 2016. As these prices soften so will farmer’s appetite to continue to expand. We may see some very slight contractions in U.S. supply through the year.
DDGs

- U.S. DDG buyers are hoping that China will impose import penalties after March, and that this will soften prices thereafter. Meanwhile, nearby slots for DDGs for export are in short supply.

- DDG prices are currently also pressured by a decline in grind and tighter margins for ethanol. At present, the margin between the corn price and the value of ethanol and co-products fell in Iowa to below USD 1.

Hay

- Hay producers are struggling to sell their product since many dairies, especially those on the west coast, have pulled out of the market almost completely. As a result of low milk prices, most dairy producers have reduced rations, and some are relying on their stocks from previous years to maintain margins.

- Most California alfalfa ranges from 200-220 USD/MT for premium dairy hay, while the same grade Idaho hay is priced around 130 USD/MT. Washington and Oregon premium hay is priced between USD/MT 160-170. In the Central U.S.—North Texas, Kansas, Missouri, Nebraska and Colorado—prices for premium-quality alfalfa range between USD/MT 150 and USD/MT 180.

- In foreign news affecting the US hay market, the Saudi Arabian government is in the process of banning the use of water on crops, forcing dairies and other companies to purchase their feed from overseas. As a result, the Saudi dairy and food giant Almarai recently purchased a nearly 1,800 acre farm in Blythe, Ca for USD 32 million. This farm is in addition to a 10,000 acre farm in Vicksburg, Az. which had been purchased two years ago for USD 48 million.
Fruits: The Chill is On

- Inclement weather in the winter growing regions and continued strong demand continues to push strawberry prices higher. As production out of Mexico and Oxnard should hit peak during February, prices could soften. But for now, Florida and Oxnard berry growers are experiencing a much needed, more extended period of higher prices than they have in recent years.

- California citrus dodged any major issues from the hard freezes in December, as nighttime temperatures tended to stay at 28 degrees or better. Navel prices started the season strong, but are weakening as the season progresses.

- Washington apple prices continue their upward trend, averaging roughly USD 24 per 40-pound box across all varieties. The Washington apple crop is expected to be 17% smaller than last season's 141.8 million box record. The strength of the US dollar, coupled with the smaller crop, has exports down by 32%, but apple exports to China, which is now open to all U.S. apple varieties, had increased by 131% YOY, as of early January.

- Reported chill hours and chill portions in California's Central Valley this winter are exceeding those of recent years, which is giving fruit trees a needed rest. If the trend continues, it supports the potential for a strong fruit set in 2016.
Whereas U.S. hog prices were quite strong this past summer—helping producers to rebound from the unexpected pork glut to start the year, stemming from the strengthening dollar, lack of PEDv, and West Coast port slow down—hog prices experienced a sizable decline in Q4 to the tune of nearly 30%. As a result, hog producer losses averaged USD 12/head in Q4 on an unhedged basis, bringing the 2015 annual performance to just below breakeven at USD 1/head. This is quite a disappointment from many expectations entering 2015, where margins looked to be at least USD 10/head for the year.

The news wasn’t all bad towards the end year; the rebound in the hog herd in 2016 pushed U.S. packing capacity to the limit in Q4, driving packer margins to very favorable levels. Looking forward to 2016, it doesn’t look like hog supplies will decline at all in the coming year, which bodes well for another round of robust packer margins. One question we are asking is whether there will be adequate processing capacity next fall when hog supplies look to be even larger than in 2015. Beyond the next twelve months, the two new processing plants currently under construction will begin coming online in the latter half of 2017, providing some much needed shackle space in U.S. pork.

On the export front, volumes will end slightly up for 2015, despite the litany of challenges of the stronger dollar, devaluation of the Brazilian real, West Coast port slow down, and continued lack of access to Russia. Much of the strength this year is due to growth in shipments to Mexico and Korea, the U.S.’ first and forth largest export markets. Though the dollar continues to burden U.S. pork competitiveness, we see a few positives on the horizon for U.S. exports: the repeal of Country of Origin Labeling (mCOOL) prevents any retaliatory tariffs from Mexico or Canada who combined account for over 40% of U.S. pork exports, the relisting of a number of U.S. pork plants for access to China, and a futures curve with hog prices as low as during the recession.

With the futures curve for hogs and grain reflecting at or slightly below breakeven producer margins for 2016 and the most recent USDA hog report indicating only modest growth, we see pork production rising 2% in the coming year with any boost in hog prices and thus producer profitability stemming from stronger exports. This level of growth is mostly in line with domestic demand trends and a far cry from the 7%-8% growth in supply this past year.
Despite a sharp decline in U.S. chicken prices in the latter half of the year and some concern over the decline in breast meat values in Q4, 2015 will go down as one of the most profitable years for the U.S. poultry sector. Having managed through the challenging export market which stemmed from outbreak of HPAI and the litany poultry trade bans that followed coupled with the ever strengthening U.S. dollar, producers remained quite profitable with margins nearly matching the multi-year highs of 2014.

Driven by the spread of HPAI from the U.S. West Coast in late 2014 through the U.S. Northern Midwest in the first-half of 2015, dark meat values made a steady decline to USD 0.20-0.25 per pound from nearly double that value at the start of 2015. So far in 2016, there has been only a single incident of HPAI in the U.S.—in a turkey farm in Indiana which was of the H7N8 strain versus the H5N2 and H5N7 strains of 2014/2015. In our view, the biggest wild card for U.S. poultry in 2016 is the reemergence of HPAI and it is a good sign that the U.S. has had only a single case as of early February. Still, with our experience of HPAI last year—with incidences through mid-June—we think it is too early to call HPAI a non-issue for 2016. In addition, the trade bans continue to keep dark meat values depressed, which we expect to continue for months to come.

After U.S. chicken production increased 4% in 2015 and the challenging export market driving a near 7% increase in domestic consumption, per capita chicken consumption has risen to an all-time high. This has come at the cost of price with composite chicken prices declining 25% in the latter half of 2015 and bringing some producer’s margins into the red. The decline in price and profitability has been matched by a pullback in supply, helping prices to climb 15% during January. This rational producer behavior is a good sign that production growth will moderate in 2016 to 3% in our estimation and with our outlook of flat exports, the U.S. consumer will be asked to take on only half the increase in consumption versus 2015, supporting prices and profitability throughout the year.
The fortunes of the soybean crushing business changed dramatically in just the last three months. Calculated crush margins have moved below USD 1.50 per bushel, to their lowest values since April 2013. The continuing decline in soybean meal prices has been the main culprit for falling crush margins. As margins continue to contract, so will demand for soybeans and supplies of products. In the latest WASDE, USDA pegged 2015/16 crush at 1.880 billion bushels, down 10 billion from the previous estimate, nearer our thinking of 1.85 billion.

One of the big questions looming over the global soybean market is what the impact on the market is of economic reform in Argentina. The new government reduced the export tax on soybeans and products by 5% and eliminated export tax on all other commodities. In addition, the government devalued the currency by 30%, matching the blue rate, and eliminated export permits for grains and oilseeds. Argentina is holding record stocks of soybean and meal. The market is fearful the glut of Argentine soybeans and product will put further pressure on an already depressed market. However, since the reforms began in December 2010, only soybean meal futures have moved lower.

Soybean oil futures prices have been getting the most attention and therefore support. We have previously discussed the potential of a mid-year shortfall in palm oil production due to El Niño and the resulting positive impact on soybean oil demand and prices. Likewise, soybean oil’s share of crush has been increasing as both futures and cash have been increasing to help support crush margins.

Soybean and soybean meal exports are running behind last year’s pace at 12.6% and 14.8%, respectively. Adequate supplies versus previous years and a strong USD are contributing to a lagging pace. Soybean meal exports have been adjusted downward in the latest WASDE and USDA will need to do the same for soybeans in the near future, adding to the growing ending stocks. Soybean oil exports are the bright light in the complex, up 23.6% versus last year.

With large stocks, adequate supply and soft demand, prices in the complex are expected to remain under pressure with little upside or downside potential. Again the bright spot may be soybean oil prices, but they are linked to prospects for palm oil production.
Tree Nuts: Seeking a Rebound, be it Production or Price

- Buyer resistance and a surprising increase in last year’s California almond crop resulted in a sharp price reduction; as much as 25 percent on average. Some export deals fell apart while in transit. The lower price has brought back some buyer interest and will possibly increase shipments in the near term. Growers are hopeful for a bit of clear weather during the bloom, allowing bees to pollenate.

- Weather was a serious problem for U.S. and Mexican pecan growers last year in all areas, except New Mexico, Arizona and California. Production was down about 15 percent, wholesale prices are up about 20 percent and grower prices have increased about one third—nearly record levels.

- The sharply reduced pistachio crop in California has given growers reason to hope the prices paid to them by July will be as good as last year, though domestic sales and especially exports are down significantly. U.S. and Asian consumers are reacting to prices, some in Asia are buying from Iran. Better chill hours are encouraging growers to be hopeful for a larger 2016 crop.

- The prices paid for walnuts continues to fall; they are now nearly half of what they were at their recent record high. While sales are similar to recent years, they are not keeping pace with increased production. Some project the crop could be 700 thousand lbs in 2020, even after older and antiquated orchards are pulled.

- The hazelnut crop was smaller than expected, less than 31 thousand tons compared to USDA’s forecast of 39 thousand tons. Prices are down about one third because Turkey had a good harvest after their severe freezes in earlier years; yet this is still profitable for most growers. China has responded to the lower price, increasing export shipments.

Source: Administrative Commission for Pistachios, Almond Board, California Walnut Board, Hazelnut Marketing Board, USDA Census Bureau, 2016
Vegetables: What a Run

• In general, vegetable prices were exceptionally strong in November, December, and the first part of January. Warm fall weather created an earlier than anticipated wind-down on California’s Central Coast, followed by a cold-snap that slowed production out of the desert. Rains added to the challenge, by slowing harvest crews. The gap was made worse by the fact that warmer east coast weather kept demand high. Cold weather in Mexico also slowed broccoli imports to the U.S., which further contributed to the price rise in that crop. Moving into late January and early February, supplies were stabilizing at more normal levels, while heavy snows in the eastern U.S. and high prices had tempered consumer purchases. These forces have brought prices down steeply in recent weeks.

• While it is not uncommon to have seasonal spikes in price, especially during regional transition periods, this winter has seen prices sustained at higher levels during more weeks than is typical. As we move forward, the January rains in California during the spring vegetable planting season could have an impact on availability when deals transition back out of the desert.

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

Broccoli – U.S. Daily Shipping Point Price

Romaine Lettuce – U.S. Daily Shipping Point Price

Source: USDA/AMS, Rabobank, 2016
Wheat: Fierce Competition Abroad Dragging Down US Exports

• U.S. exports are dragging 22% behind last year’s pace and are set to be the lowest total marketing year exports since 1971/72. Ferocious competition abroad is dragging global wheat prices lower. Key exporting countries are still holding sizable exportable supplies. Both closer proximity to major importers and weaker currency has provided the Black Sea, EU, and Argentinian exporters with a tremendous competitive advantage over the U.S. on the global market.

• With supply still outpacing demand, Rabobank forecasts a Q1 average CBOT price of 4.80 USD/BU and then gradually sees an increase to 5.10 USD/BU on average during Q2 as global supplies are drawn down. We then expect prices to moderate and remain around the 5 USD/BU range during H2 of 2016.

• U.S. winter wheat acres are set to decrease 8% YOY to 36.6 million according to USDA estimates. The largest decrease was seen in hard red wheat acres where the projected 26.5 million acres constitutes a 9% decline YOY. The decline was felt most in Great Plains states, with Nebraska setting a record-low seeding, down 14% from last year at 1.28 million acres. Some decline was also seen in SRW plantings, down 5% in total, though the acres were mostly lost in south-eastern states. Some of the nearly 3 million acres not planted to wheat can potentially be planted with other grains, further burdening the 2015/16 U.S. grains balance sheet.

• With Argentina now lowering its wheat export tariff, U.S. supplies will lose some competitiveness throughout much of South America in the foreseeable future. In recent years, Brazilian wheat importers turned to U.S. HRW supplies after the Argentinian government began constricting exports.
The preliminary Crush Report suggests that California wine grape production in 2015 was 3.7 million tons, a 5% decline from 2014, though still a fairly large crop from a historical perspective. More importantly, there were considerable variations by region, with the production rising 5% in the San Joaquin Valley but declining 29% in the coastal areas.

The decline in the 2015 harvest has resulted in a marked decline in bulk wine available for sale, according to Turrentine Brokerage. As this decline was greater than most producers expected, there has been a sustained increase in bulk wine prices since September 2015, as seen in the data from Ciatti Co.

The value segment (<USD10 per bottle) remains the largest segment of the U.S. wine market by volume, but the segment has seen declining volumes in recent years, and the pace of decline appears to have seen some acceleration in 2015, down 6%.

The ongoing challenges in the value segment have led to an additional 20,000 acres to be removed from the San Joaquin Valley (SJV), according to Allied Grape Growers, in addition to the 20,000 acres removed last year.

In our recent note, Too much of a Good Thing” (July 2015) we noted that the Northern SJV (i.e. Lodi area) is well-positioned to be a fierce competitor in the fast-growing USD10-USD15 price segment. In the short term, however, the excess supply in the southern part of the SJV appears to be limiting pricing power for its northern neighbors.
Farm Inputs

Forestry

**Fertilizer**

- Prices have continued to steadily weaken throughout the past 12 month as evidenced by a -38% YOY decline in the Green Market Composite Index. Key drivers include: volatility in emerging market economies (China, Brazil), energy / agriculture commodities and currencies, and general concerns about a global economic slowdown.

- Fundamentally speaking, fertilizer markets remain oversupplied on a global basis and demand has been lackluster amid pressure on farmer margins. Taking a closer look at the three major nutrients:
  - Nitrogen (N) remains weak with Corn belt ammonia prices falling (as capacity additions loom large) and international urea prices are under pressure;
  - Phosphate (P) prices are falling at an accelerating rate prompted by supply surpluses; and
  - Potash (K) continues to trade lower ahead of new contract negotiations with China and India, as buyers / traders are posturing for lower prices in the coming year.

- While prices could strengthen as spring application season approaches, we believe fertilizer markets will remain soft for the foreseeable future.

**Green Market Fertilizer Price Index**

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<td>50</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Green Markets, Rabobank, 2016

- The uncertainties around global growth and the volatility in the financial markets at the end of 2015 have caused producers to fill orders on an as needed basis, rather than prematurely build up inventories for the typical spring/summer boom.

- Lumber shipment to China waned for both Canadian and U.S. producers—the strengthening of the dollar combined with their economic difficulty has caused the Chinese to look toward their European and Russian neighbors for lumber. The ruble weakened significantly last year, making Russian exports much more price competitive. Canadian and U.S. shipments respectively fell 15 percent and 20 percent, while European and Russian shipments respectively increased 15 percent and 17 percent.

- Winter started off unseasonably warm in much of the U.S., keeping softwood lumber flowing into job sites. Now that things have cooled down, closer to normal temperatures, consumption will likely slow for much of Q1.

- Housing starts for 2015 were 1.11 million units—lower than anticipated—though still 11% ahead of 2014. Anticipated employment gains in 2016 will likely fuel housing starts. This year’s housing starts are expected to maintain a similar growth trend and increase to 1.29 million housing starts.

**Industry Highlights**

<table>
<thead>
<tr>
<th>Industry Highlights</th>
<th>Jan/ 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>USD 338</td>
<td>USD 298</td>
<td>USD 411</td>
</tr>
<tr>
<td>Oriented Strand Board 15/32”Shipped to Los Angeles, Price per mbf</td>
<td>USD 284</td>
<td>USD 283</td>
<td>USD 252</td>
</tr>
<tr>
<td>Douglas Fir #2 Saw Log NW Oregon, price per mbf</td>
<td>USD 605</td>
<td>USD 599</td>
<td>USD 687</td>
</tr>
<tr>
<td>NBSK from North America to China, price per mt</td>
<td>USD 698</td>
<td>USD 710</td>
<td>USD 825</td>
</tr>
<tr>
<td>U.S. Housing Starts (thousands of units)</td>
<td>1,149</td>
<td>1,179</td>
<td>1,089</td>
</tr>
</tbody>
</table>

Source: Random Lengths, Forest2Market, RISI, 2016
Orange Juice

Florida Orange Juice expecting further contraction

- Since our last report in October, USDA has further reduced their forecasts for Florida’s 2015/16 crop to 69.0 million boxes this February, equal to another 13.75% decrease. The new release brought the total orange production to almost 2/3 of last season’s level. Production for non-Valencia oranges is projected to fall 9% to 36 million boxes while the Valencia varieties suffer a greater reduction, down 17.5% to 33 million boxes. If the forecast were to be realized, it would be the largest contraction since 1963’s freeze season. Below-average fruit sizes are a major contributor to this decline.

- Forecast for frozen concentrated orange juice yield has also been lowered from the previous forecast to 1.5 gallons per 42 brix box. However, this projection remains unchanged from last harvest’s level.

- On the bright side, FCOJ bounced back shortly to 156.25 USc per pound in mid-November followed by a mild decline. The futures were traded at USD 1.37/lb. by the end of January, an increase from an average price of 2015. As the US inventory level remains depressed, down by over 10%, we expect to see improvements in pricing leading to a sustainable inventory-price balance.

Sweeteners

- U.S. sugar markets have been quiet, with prices relatively stable. The majority of buyers have their Q1 and Q2 needs covered, but there are some end users with coverage into the second-half of 2016. Despite steady prices, the trade is reporting that the market has a firm tone.

- The Hershey Company’s announcement that they are switching to non-GMO sugar in their products this year is creating an interesting dynamic in the sugar market. For some time, sugar sellers have been seeing increased inquiries about and buying of non-GMO sugar. With beet sugar grown entirely with GMO seed and cane sugar not, the trade is expecting cane sugar’s premium over beet sugar to widen.

- The increasing demand for cane sugar comes at a time when supplies of cane refiners are snug and Mexican refined sugar supplies are also tight as the cane harvest got off to a slow start. End users are becoming concerned about cane sugar supplies.

- Concerns continued to be raised over potential losses in beet piles from the warmer than normal weather in October-December time period. Consequently, one processor has reportedly raised their price due to such losses. However, other beet processors report more than adequate supplies and have been more aggressive prices sellers.
Rice

- The 2015/2016 estimated farm price for long-grain rice is projected to be USD 11-12 per cwt and Jupiter is forecasted to be USD 11.50-12.50 per cwt. A surplus of medium grain in the south pushed prices even lower. Those growers without contracts or who have not yet sold, are seeing medium grain prices fall below long grain prices.

- The estimated farm price for Calrose is forecasted to be USD 20-21 per cwt for the 2015/16 season. The year has been wetter, providing necessary water for decomposition and refuge for waterfowl. The drought is far from over; however deliveries in the north part of the state will likely be normal, which will increase planted acres for the 2016/17 crop to a more normal level of 500+ thousand acres, depending how much water will be allocated or sold to the southern SJV.

- Exports continue to be an opportunity for U.S. growers; however, global competition is strengthening as the Trans Pacific Partnership has been agreed on for many Latin American countries. This poses as a challenge for U.S. growers as many Asian countries can mill and ship their rice cheaper than can be done in the U.S.

- U.S. and Chinese government officials have come to an agreement for phytosanitary protocol, which will permit the import of U.S. milled rice. If there are no interruptions, imports to China could start as early as this spring.

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

Source: USDA/NASS, 2016; Note: Average rough rice basis

Source: USDA/Rabobank, 2016
Input Costs

As of 2/11/2016

Corn Belt Input Prices

Source: Bloomberg, 2016; Note: Granular Potash

Diesel – Midwest

Source: EIA, 2016

Ocean Freight


Natural Gas Spot

Source: NYMEX, 2016

Agribusiness Review February 2016
Forward Price Curves

As of 2/11/2016

CBOT – Corn

CBOT – Soybeans

CBOT – Soymeal

CBOT – Soy Oil

Source: CBOT, Rabobank, 2016
Forward Price Curves

As of 2/11/2016

CBOT – Wheat

CBOT – Feeder Cattle

CBOT – Lean Hogs

CBOT – Live Cattle

Source: CBOT, Rabobank, 2016
Forward Price Curves

As of 2/11/2016

ICE – #2 Cotton

ICE – Cocoa

ICE – FCOJ

ICE – Sugar #11

Source: ICE, Rabobank, 2016
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