



RaboResearch Food & Agribusiness

North American Agribusiness Review

November 2018

Rabobank

Report Summary

Rabobank

Economy: Heading for Inversion

U.S.

- Although the U.S. economy continues to grow at a solid pace, we should keep in mind that GDP growth in 2018 is boosted by large tax cuts. Therefore, these effects are likely to fade in 2019 and beyond, unless we see further cuts. Meanwhile, the trade war with China will raise taxes on imports, increasing costs for importing U.S. firms and undermining consumer purchasing power. At the same time, retaliation by the Chinese government will make it more difficult for U.S. firms to export to this large market. Finally, emerging economies are feeling the pain of rising U.S. interest rates and the rise in protectionism. This will also undermine global growth – and indirectly, U.S. growth.
- Meanwhile, blinded by strong coincident and lagging indicators – such as strong GDP growth and low unemployment – the Fed is dismissing an important leading indicator in the form of the yield curve, which is heading for an inversion if the Fed keeps up the pace of rate hikes. Historically, a yield curve inversion is followed by a recession in about 12 to 18 months. So we are likely to see history repeating itself, with the Fed inverting the yield curve, stopping the hiking cycle too late – causing, or at least contributing to, a recession.

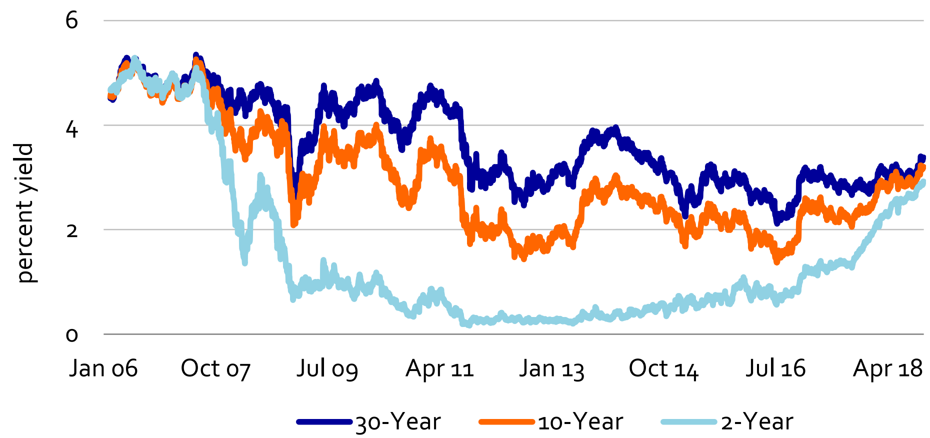
Mexico

- On 30 September, the U.S. and Canada reached an agreement to bring Canada into the U.S.-Mexico trade agreement, which was announced on August 27. It will now be called the USMCA (United States-Mexico-Canada Agreement). It is worth noting that the USMCA is set to be signed within 60 days from September 30, and we expect the new agreement to pass through Congress, regardless of the outcome of the U.S. midterm elections. We expect USD/MXN to fall to 19.0 in the next 12 months.

Canada

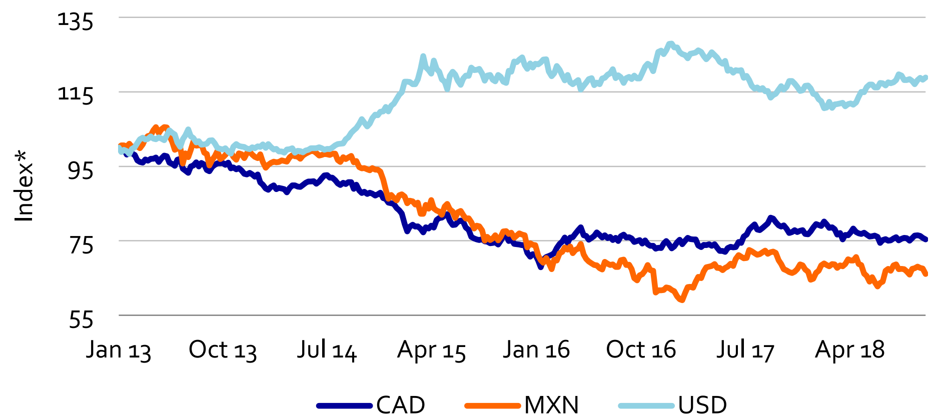
- We would argue that USMCA is hardly a game-changer – and instead, we are back to where we were before President Trump threatened breaking up NAFTA, albeit with a few tweaks and updates. But this announcement did, of course, remove the risk of the trilateral trade agreement falling apart. We expect USD/CAD to fall back to 1.30 in 12 months.

Interest Rates, 2006-2018



Source: Federal Reserve Bank of St. Louis, Rabobank 2018

Currencies, 2013-2018

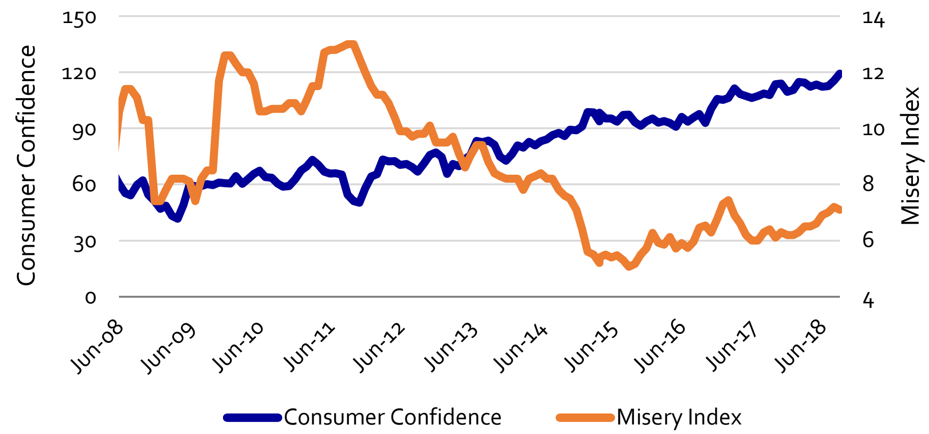


* Note: Rebased at 100 as of January 1, 2013
Source: Bloomberg, Rabobank 2018

Consumer: Record-Low Unemployment

- Our two measures of consumer confidence (the average of the two leading indicators of consumer sentiment from the University of Michigan and the Conference Board) increased in September, to 119.2, after a surge in August, remaining historically strong. Ongoing trade disputes did not put as much downward pressure on consumer confidence as anticipated.
- Over the last 12 months to September 2017, the Consumer Price Index (CPI) rose by 2.3%. Over the same period, food and restaurant prices increased by 1.4% . In September, unemployment dropped to 3.9 %, which is the first sub-4.0% rate since December 2000.
- 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 foodservice establishments. In the half of 2018, consumer expenditure on food away from home rose by 3.5%, while food at home expenditures rose by 4.1% over the last 12 months.

Consumer Confidence Index, 2008-2018



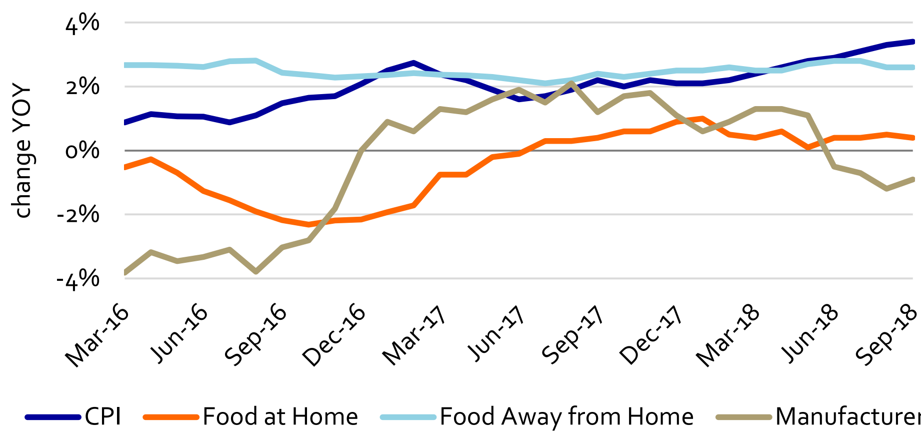
Source: U.S. Bureau of Labor Statistics, Rabobank 2018

Food Sales

Food Sales (USD billion)	Annual			YTD Cumulative		
	2015	2016	2017	18-May	18-Jun	18-Jul
Food at home	712.2	724.8	746.2	312.3	376.9	441.9
YOY change	0.80%	2.90%	2.87%	3.91%	4.03%	4.10%
Food away from home	693.1	732.3	754.1	319.7	388.5	457.5
YOY change	6.20%	8.10%	2.89%	2.85%	3.50%	4.00%
Total	**1,511**	**1,594**	**1,500**	**632**	**765.4**	**899.4**

Source: USDA ERS, Rabobank 2018

Food Price Inflation, 2016-2018

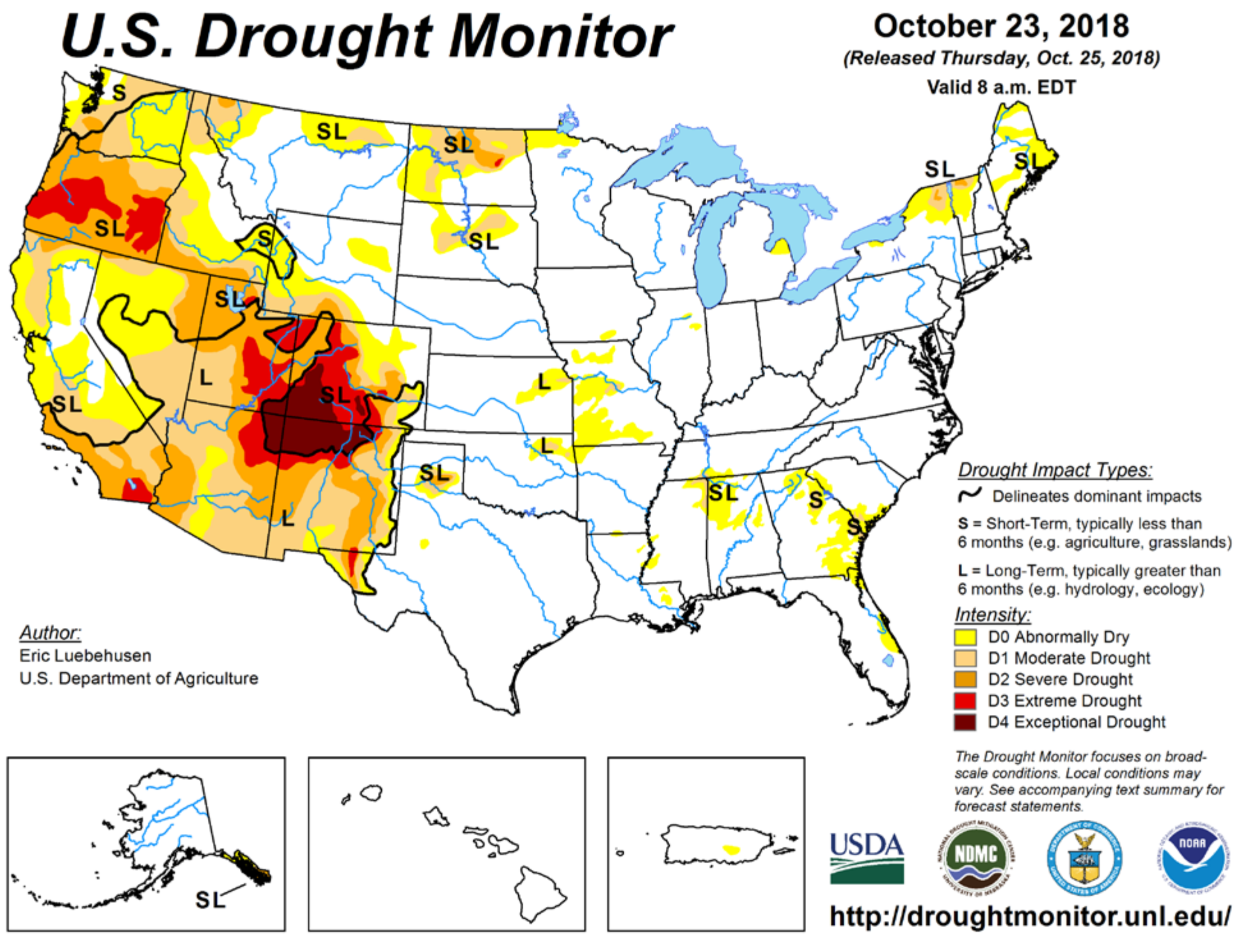


Source: U.S. Bureau of Labor Statistics, Rabobank 2018

Climate: Growing Great Plains Drought Concerns

- Hurricane seasons continued to moisturize most of the nation, although they also caused fatalities and catastrophic damages to agriculture in the meantime.
- In the West, abundant moisture led to notable reduction of drought intensity and coverage. Heavy rainfall, due to the arrival of Hurricane Sergio, moisturized southern California and Arizona, and brought extra precipitation to the southern Rockies, Montana, and northeastern Oregon.
- With much of the Midwest region already free of drought, well-placed rain and snow insured the region from south-central Missouri northward into eastern Iowa and Western Illinois was covered with abundant precipitation.
- Looking ahead, normal to above-normal precipitation is expected over most of the nation, except the Northeast and the Great Lakes, which will experience drier-than-normal weather. Warmer weather is expected in the eastern half of the nation.

U.S. Drought Monitor



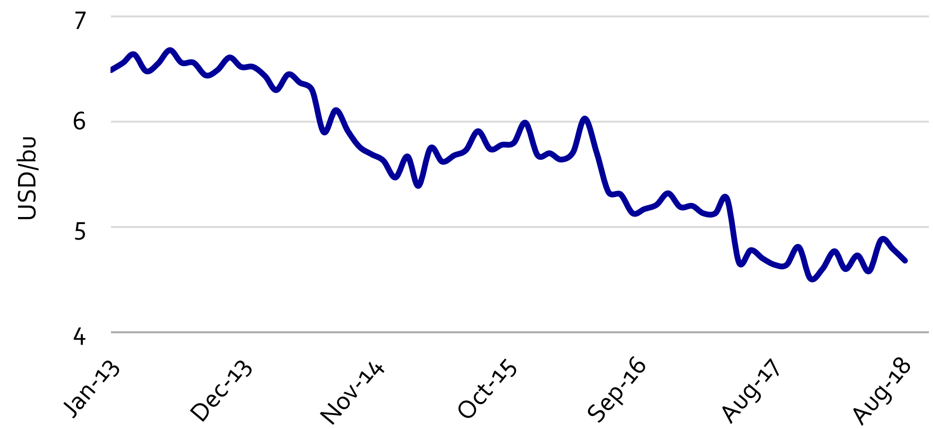
Source: National Weather Service, Climate Prediction Center, U.S. Drought Monitor, Rabobank 2018

Beer: Barley Tackles Trade and Climate Change

- According to the Beer Institute, domestic beer shipments are down by 2.0% YTD, compared to 2017. As we highlighted in August, tax-paid shipments were down in five of the first six months of year. A 6.1% jump in shipments for July suggests that some of those gloomy results were, at least partially, an artifact of timing. All beer, of course, is not created equal. Constellation Brands' beer portfolio, led by Corona and Modelo, grew by 11% in Q2 2018.
- Since our last Agribusiness Monthly, barley prices have not deviated significantly from their multi-year decline. While acreage did decline in 2018, according to the USDA, yields were up over the previous year. This – combined with significant carry-over stocks – is contributing to relatively low prices.
- A new study in the journal Nature Plants has gained a lot of media coverage in recent weeks. The study's authors, writing in the Washington Post, claim that due to climate change, "[Global] barley yields will at best – under the optimistic scenario – decrease by 3%. And in the worst-case scenario, yields will fall by 17%" by 2100. The study, however, did not take into account the impact of shifting geographies of barley production nor technological change. "It is possible that more drought- or heat-tolerant barley cultivars may be developed in future [...] But these and other technological developments [...] were beyond the scope of our study," the authors explained. While media organizations highlighted the risks of climate change, Bart Watson and Chris Swersey at the Brewers Association responded to the report with an article highlighting the innovative ways brewers, growers, and maltsters are addressing climate change. They trust that farmers will continue to innovate in their production practices and genetics to fight the effects of a changing climate. Initiatives like AB InBev's SmartBarley suggest brewers are also making adjustments. Watson and Swersey ultimately expressed optimism: "[...] Given the historical record, beer is as well-positioned as any industry to evolve and thrive, even as the climate changes."
- The U.S., Mexico, and Canada have reached a tentative agreement to replace NAFTA. The bluntly-named United States-Mexico-Canada Agreement (USMCA) does not represent a huge shift from previous policy. Details made available so far indicate that U.S. growers and maltsters will continue to have access to the growing Mexican market.

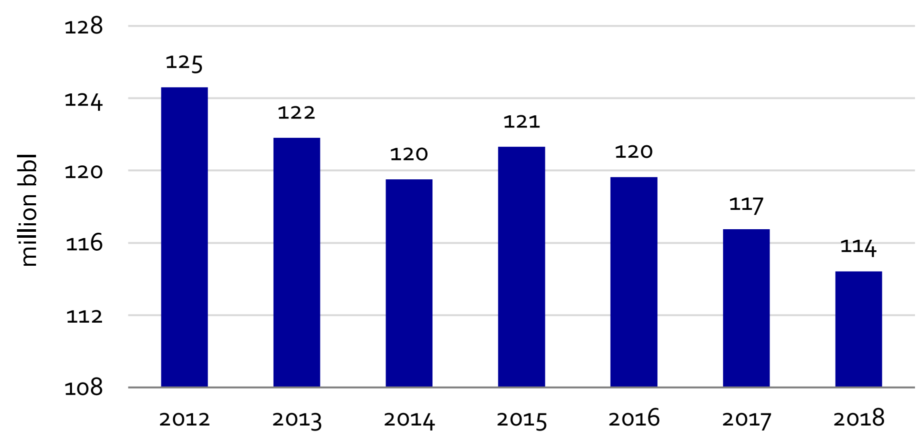
Source: Washington Post, Brewers Association, Agweek, Beer Institute, USDA, Reuters, Rabobank 2018

Historic U.S. Malting Barley Prices, 2013-2018



Source: USDA, Rabobank 2018

Total Tax-Paid Shipments for August YTD, 2012-2018

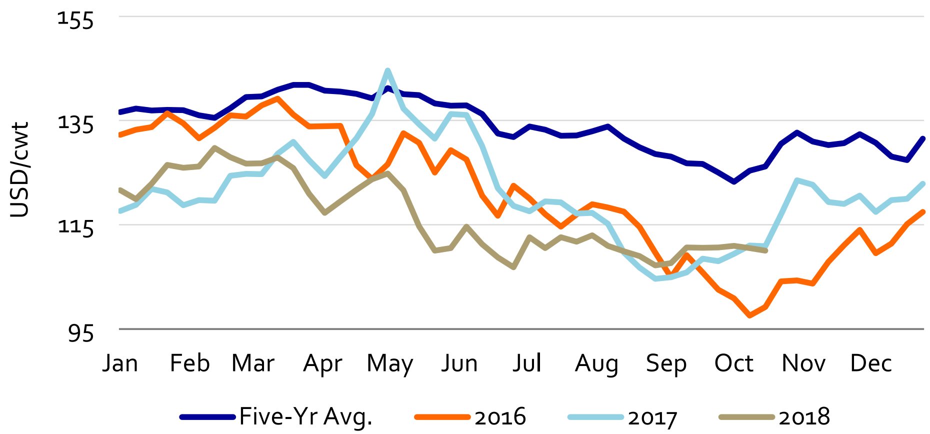


Source: Beer Institute, Rabobank 2018

Cattle: Market Volatility Is a Worry for 2019

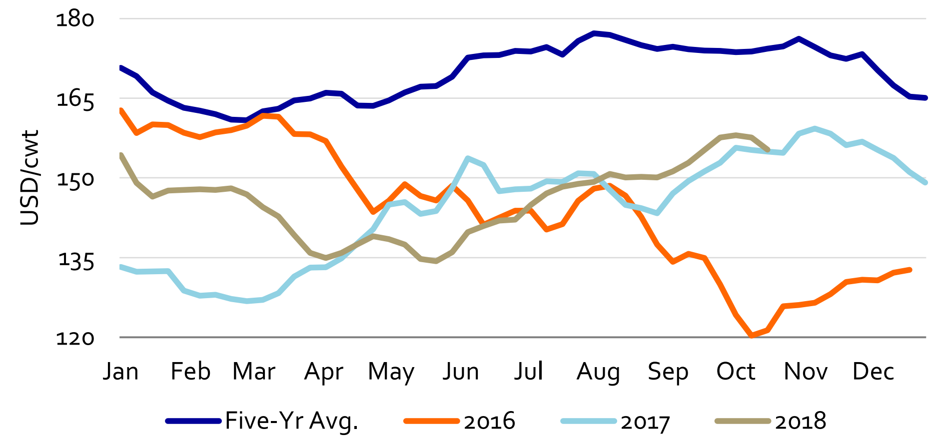
- For the past six weeks, fed cattle prices have been flat, at USD 111/cwt. Aside from the unusual aspect of fed cattle prices holding flat for that length of time, the concern is that the market has used up the time needed for seasonal price improvement. Last year, the market posted a sharp price advance in late October and early November. While seasonal price improvement is expected, a more subdued rally is expected this year. Early expectations were for the market to reach a fall high of USD 120/cwt to USD 122/cwt. The seasonal peak is now expected to be in a range of USD 116/cwt to USD 118/cwt. If correct, this could have serious price implications for 2019.
- Beef demand – both domestic and export – has been exceptional. The worry for the 2019 market is not only increased beef production levels, but increased levels of total protein that make sustaining prices more challenging.
- The 2019 market is going to be driven by increased production of all species driving the bearish view of the market, along with the risk of the spread of African swine fever in China and Europe driving the bullish view of the market. Because of the size of both issues, market volatility is expected to be severe and driven by the headline of the day.
- Feeder cattle prices have started to see modest price pressure from limited feed yard pen space and wet fall weather conditions that have not been conducive to cattle movement. In spite of huge premiums to the current spot fed cattle market, prices to the deferred live cattle futures are limiting what cattle feeders are willing to pay for replacement cattle. Availability of replacement cattle and concerns of winter feeding conditions are expected to limit feeder cattle prices for the remainder of the year.
- Improved rain over much of the cow/calf regions and forced regional liquidation of cows through the summer should limit cow offerings and cow slaughter through the remainder of the fall. Limited imports of manufacturing beef from Australia should provide lean trimmings and cow prices for the winter.

Fed Steer Prices (Five-Market Average), 2016-2018



Source: USDA, Rabobank 2018

CME Feeder Index, 2016-2018

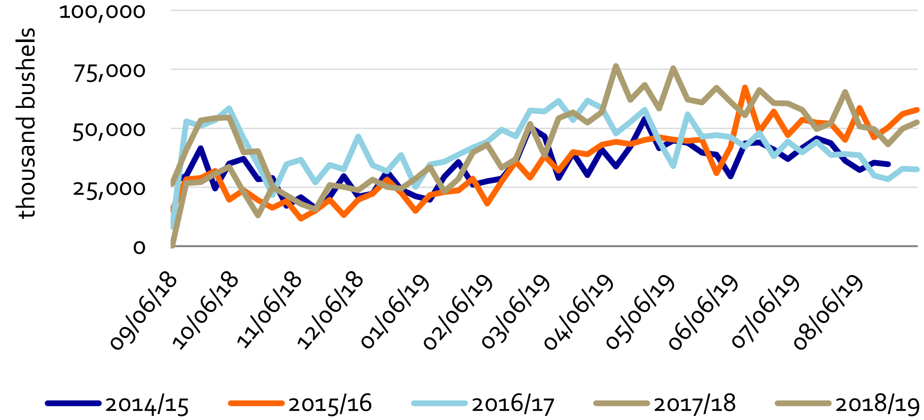


Source: CME Group, Rabobank 2018

Corn: Positive Has Not Lifted as Market Has Hoped

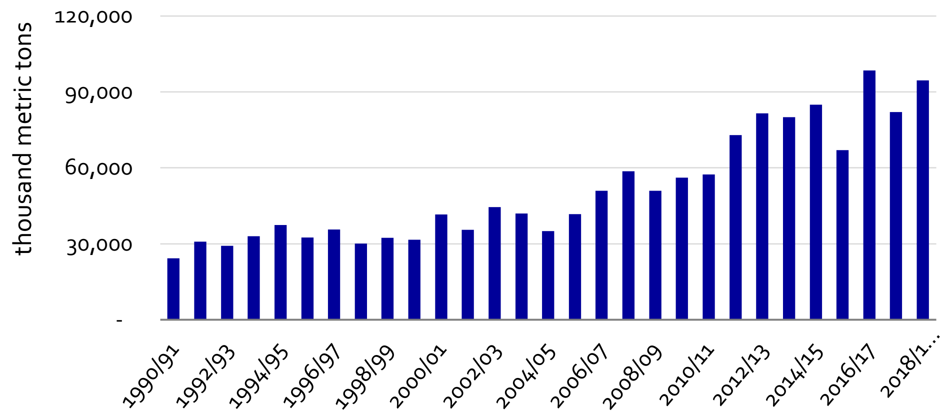
- While the October Crop Production report showed a smaller U.S. corn crop than September, the 2018/19 carryout when up. The decrease in the yield forecast was 0.6bpa, resulting in total production decrease of just 49m bushels. However, an increase in beginning stocks more than offset the loss in production. Within just a couple of days of seemingly friendly market news, December corn futures began their October slide when the market realized that ending stocks would not be contracting as much as originally forecast.
- The announcement by President Trump of year-round E15 was seemingly cheered by everybody but the corn market. This announcement was well-anticipated by the market. However, when a market does not react positively to positive news, it is a sign of a potentially very weak market.
- The extension of year-round use of E15 has several hurdles to clear before it becomes reality. The infrastructure is not in place for E15 unless you replace E10, which is currently the standard. The EPA needs to issue rules on both year-round usage of E15, along with new rules on the use of RINs and wait for public comment. Plus, the oil industry will continue to oppose and fight the adoption of the new E15 rules. E15 is far from being the standard ethanol blend.
- On a related note, increasing corn production and resulting low local prices in Mato Grosso (Brazil) are encouraging the development of more corn ethanol production there. Ethanol production is expected to grow, from 60m gallons to 2.0bn gallons in three to five years, following the rapidly growing corn production in the state. Brazil is the U.S.'s largest export customer for ethanol, therefore increasing Brazilian ethanol production may cut into future U.S. ethanol exports.
- The corn market received more good news with the completion of a renegotiated NAFTA, now called USMCA. The completion of these talks removed an uncertainty from the market. And once again, the corn market's reaction was somewhat ho-hum – another indication that the corn market may be sicker than we think.
- Looking ahead to next year, corn prices will be under continued downward pressure. More U.S. acres of corn are expected as margins for corn production are expected to be better than soybeans. Also, both Argentina and Brazil corn production is expected to rebound.—stay tuned.

U.S. Corn Exports Are a Bright Spot – Running 69% Ahead of Last Year



Source: USDA-AMS, Rabobank 2018

Increasing Brazil Corn Production Looking for Demand

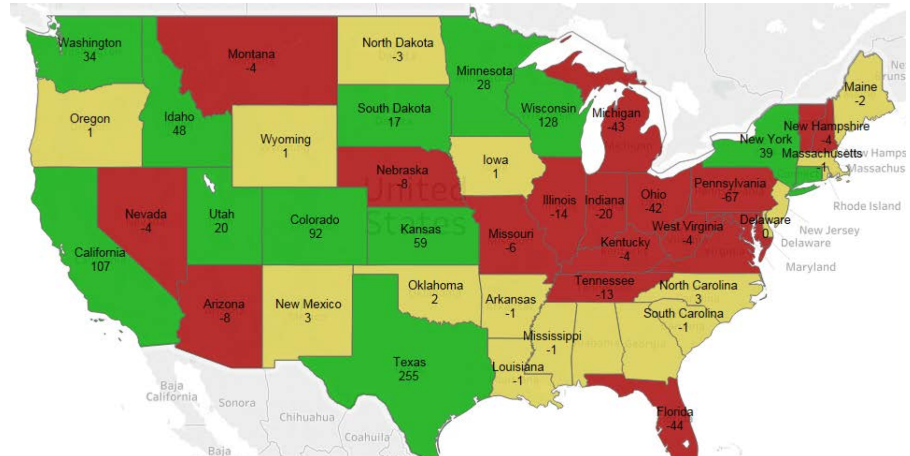


Source: USDA-FAS, Rabobank 2018

Dairy: More U.S. Milk Supply Growth Despite Fewer Cows

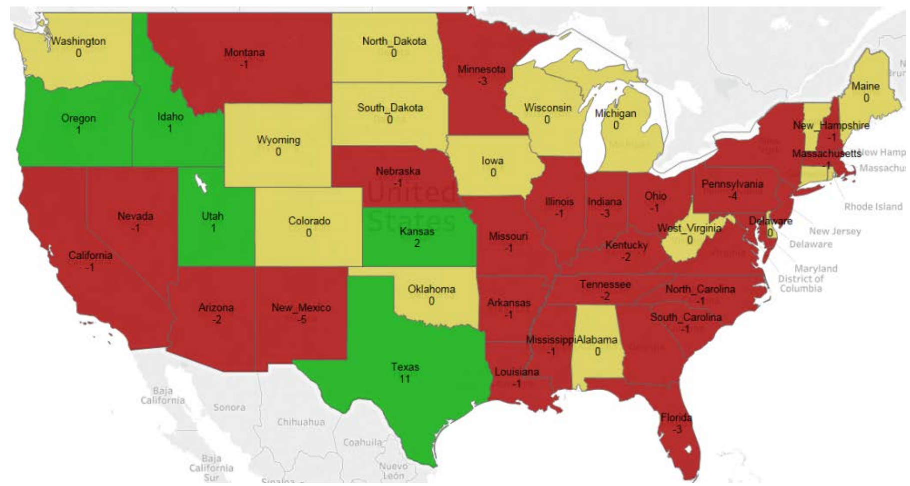
- U.S. milk production in September was up 1.3% YOY , according to USDA-NASS, slightly lower than trend at 1.5%, bringing the change in production for Q3 to 0.9%. Greater year-on-year output was driven by the 1.6% increase in milk per cow, as the dairy herd, at 9.367m head, was lower than both the previous month (-0.1%) and the previous year (-0.3%).
- U.S. dairy demand continued to grow through Q3 2018. Improved domestic consumption, as well as robust exports compared to the prior year, produced modest growth. The USDA reports that total commercial disappearance (domestic and exports) for August was up 4.7% YOY on a skim-solids basis and 2.6% on a milkfat basis. Total commercial disappearance of American cheese and butter grew by 3.9% and 3.4%, respectively, in August, compared to the same time last year, spurred largely by greater exports.
- U.S. dairy product prices and comparative exchange rates have supported strong exports, despite tariffs from China and Mexico which took effect in July. Meanwhile, August U.S. foodservice and retail expenditures increased by 6.6% vs. last year, according to the U.S. Bureau of Labor Statistics.
- The USDA reports that year-to-date U.S. export volumes (ending August) remained strong compared to last year, driven by NFDM (+26%) and whey products (+11%). The impact of retaliatory tariffs imposed on U.S. products by China and Mexico has impacted U.S. exporters. Cheese exports to Mexico in August were down 21% vs. the prior year, and U.S. whey exports to China were also down 28% YOY.
- Month-ending September cheese and butter stocks are ample and weighing on the markets. Natural cheese stocks typically decline in September, but this year, stocks grew by 1% and were 4% above September 2017 levels. Butter stocks posted a below-trend seasonal decline in September and exceeded the prior year by 11%. Manufacturers' month-ending August dry whey and NFDM stocks were lower than the prior month and previous year. Dry whey inventories retreated by 5.8% in August and were nearly 28% down on last year. August NFDM stocks fell by +13.3% from the prior month and were down 12% vs. the prior year's level, reflecting strong global demand for proteins.
- Farmgate milk prices improved from earlier this year, but remain below last year's level. The September Class III price, at USD 16.09/cwt., was USD 1.14/cwt higher than the prior month, but still USD 0.27/cwt lower than last year. As of mid-October, 1H 2019 Class III futures range from USD 15.41/cwt to USD 16.02/cwt. The latest WASDE report forecasts the 2018 all-milk price averaging between USD 16.35/cwt and USD 16.45/cwt. Prices are expected to improve in 2019, based on continued strong demand resulting in the all-milk price averaging between USD 16.85/cwt and USD 17.75/cwt.

U.S. Milk Production by State, Q3 2018 vs. Q3 2017



Source: USDA-NASS, Rabobank 2018

U.S. Cow Numbers by State, Sep 2018 vs. Jun 2018



Source: USDA-FAS, Rabobank 2018

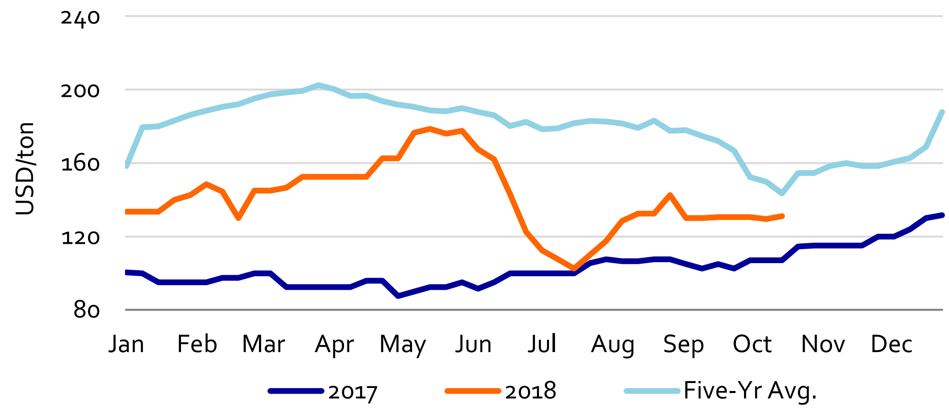
Feed: Alfalfa Hay Prices Still Strong

Rabobank

Hay

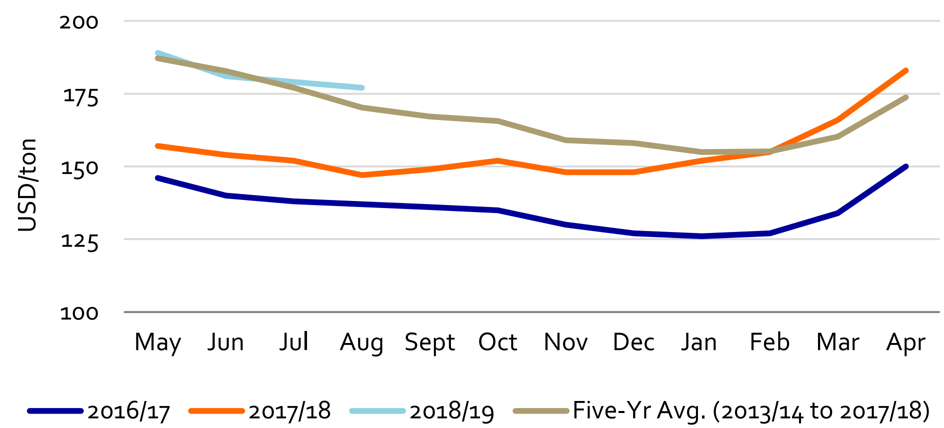
- Alfalfa hay prices were similar to their five-year average during May and June. In August, prices were up 20% YOY and up 4% with respect to the five-year average. Although showing some downward pressure, prices may remain higher than in previous seasons throughout the fall.
- The outlook for alfalfa hay production this year continues to improve. Based on October 1 conditions, U.S. production of alfalfa and alfalfa mixtures for hay is expected to grow 8% YOY in 2018, after top-producing states experienced drought-related supply disruptions last year. Area harvested is forecast up 5% YOY, and the national average yield will also be higher in 2018. Production of all other hay also improved over the last two months, but output is still expected to be down 2% YOY in 2018. Producers experiencing favorable conditions in Alabama, Georgia, Kentucky, and Oklahoma expect record-high yields.
- Total U.S. alfalfa and other hay exports through August are off about 9% and 13% YOY, respectively. Alfalfa hay exports to China were down 20%, while other hay exports to the country were off 24% YOY during the first eight months of 2018. Exports to the UAE also decreased considerably year-on-year in both categories. Alfalfa exports to Saudi Arabia, South Korea, and Japan were up 36%, 4%, and 2% YOY, respectively, through August 2018.
- Alfalfa hay prices are likely to continue be under downward pressure until the end of the fall. However, negative effects of the hurricanes in the Southeast and early snow storms in the Midwest on hay availability may support higher-than-average prices as the marketing year progresses.

Iowa DDG Price, 2017-2018*



** Note: 10% moisture, 28% to 30% protein*
Source: USDA-AMS, LMIC, Rabobank 2018

U.S. Alfalfa Hay Prices, 2016/17-2018/19

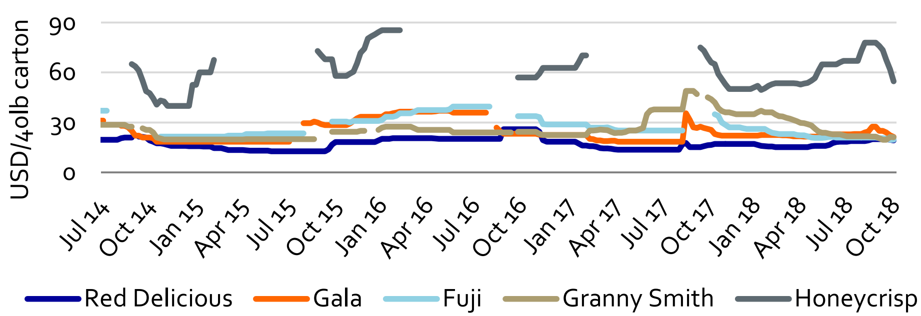


Source: USDA-NASS, Rabobank 2018

Fruits: Apple Availability Improving

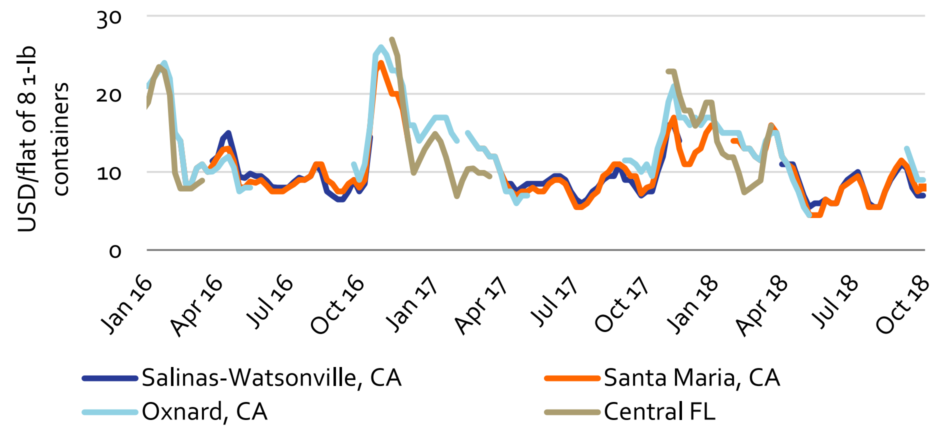
- Some rain in early October across California strawberry-producing regions had a mild negative impact on fruit quality and yields. While winding down, supplies continue to exceed projected output by this time of the season. By Mid-October, shipping point prices sit at around USD 8/flat, similar to those observed at this time the year before. Prices may experience some seasonal support during the next few weeks. Supplies from Mexico will slowly increase by early November.
- California Navel orange production for the 2018/19 season is forecast at 1.6om tons (40.om boxes), up 11% from last season. The objective measurement survey indicated that fruit set was above last year, although small-size fruit will be abundant. The harvest in California is starting in the second half of October.
- Lemon prices are down to almost their five-year average, after hitting multi-year highs during the summer. By mid-October, prices are up 24% YOY and still up 5% over the five-year average. Lemon supplies will improve as the 2018/19 harvest in Southern California and Arizona ramps up. The table grape harvest is in full swing in Central California, reporting excellent yields and quality. As stocks hit multi-year highs, prices will continue to be under pressure, especially for more traditional varieties.
- As the apple harvest continues, availability of good-quality fruit is improving. U.S. apple exports in August were down 4% in value YOY. Exports to Mexico increased 15% YOY, despite tariffs, accounting for 30% of U.S. exports in value. During the second week of October, prices for Red Delicious were are up 16% YOY. Gala, Honeycrisp, and Granny Smith prices are off 18%, 21%, and 42% YOY, respectively.

Washington Apple Shipping Point Prices – 88s – WA Extra Fancy, 2014-2018*



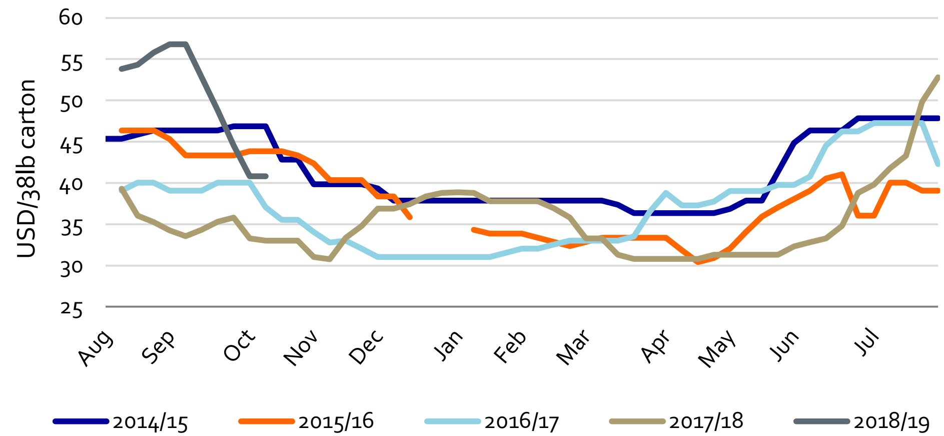
** Note: Composite of fine appearance and standard appearance prices*
Source: USDA-AMS, Rabobank 2018

Strawberry Shipping Point Prices – Primary U.S. Districts, 2016-2018



Source: USDA-AMS, Rabobank 2018

Lemon Shipping Point Prices – 140s – Shippers 1st Grade, 2014/15-2018/19



Source: USDA-AMS, Rabobank 2018

Pork: Record Supply and Trade Uncertainty Add Risk

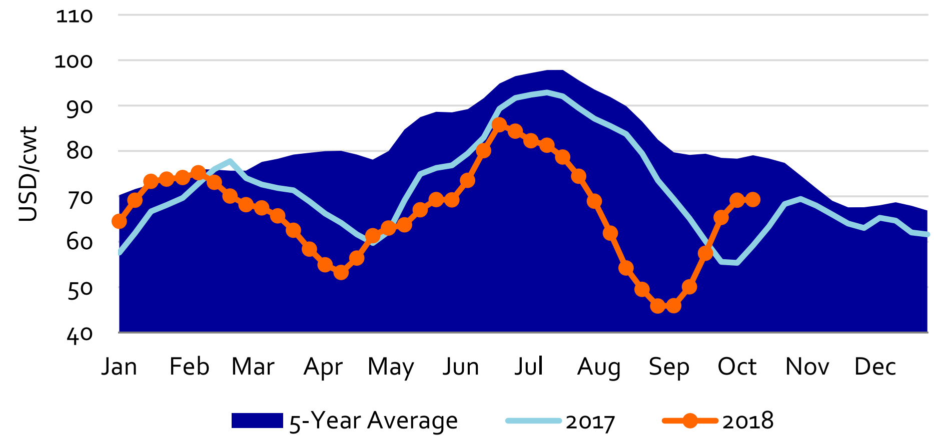
U.S.

- Record hog inventories of 75.5m head (+3.0% YOY) reflect ongoing industry expansion to meet the needs of recently added packing capacity and favorable costs of production. Hurricane-related disruptions had a modest impact on total production this fall, but they did affect the timing of slaughter in the East. Overall slaughter rates increased, and weights fell below expectations this fall (Aug-Sep) as stronger cash markets pulled hogs ahead. October reversed, and weights have rebounded in recent weeks. The addition of the second shift at an Iowa plant this month – to contribute to record slaughter in the Midwest this fall – along with the addition of another new plant in 2019 will push volumes even higher in coming months.
- Pork prices are likely to remain volatile, as large supplies of pork and competing proteins are likely to keep markets competitive. Pork continues to face stiff competition in both retail and foodservice. Bellies are trading higher, as demand remains strong and supplies limited, following the ban on Polish imports. We expect bellies to move sharply higher in the coming weeks. Ham values remain depressed (-20% YOY) as a direct reflection of the 20% tariff on exports of ham to Mexico. Loins are trading slightly ahead of year-ago levels (+4% YOY) and in line with historical averages. We expect trade to dictate the outlook for the cutout over the balance of the year and 2019.
- Pork exports for the year remain 1% ahead of year-ago levels, while values remain up 4%. Weaker shipments in August (-1% YOY) reflect ongoing trade disruption to China and Mexico. Shipments to China remain constrained (-44% YOY in August), as exports continue to face a restrictive 62% tariff. Exports to Mexico are down 4% in volume, as demand for U.S. product remains relatively strong. We see no immediate change in trade policy, despite the recently negotiated USMCA (previously NAFTA). We are expecting some benefit from the outbreak of African swine fever in China, although the magnitude and timing are difficult to estimate at present.

Mexico

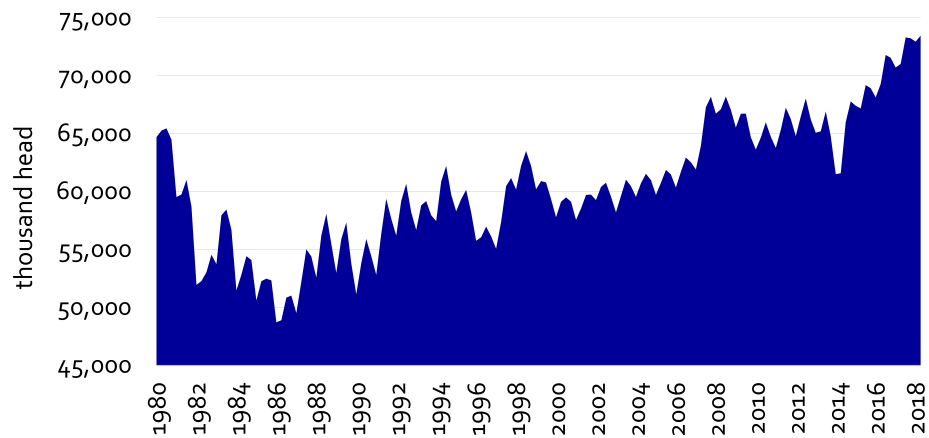
- National average hog prices are 2% higher compared to last year, as demand for hogs in Mexico increases, helping support hog domestic prices. However, pork carcass prices are 4% (Jan-Sep) higher than last year. Hog and pork prices in Mexico are expected to remain well-supported for the rest of 2018, as lower pork imports increase domestic demand.

U.S. Lean Hog Prices, 2017-2018



Source: USDA, Bloomberg, Rabobank 2018

Quarterly Hog Inventories, 2010-2018



Source: USDA, Rabobank 2018

Poultry: Growing Supplies Weigh on Price

Rabobank

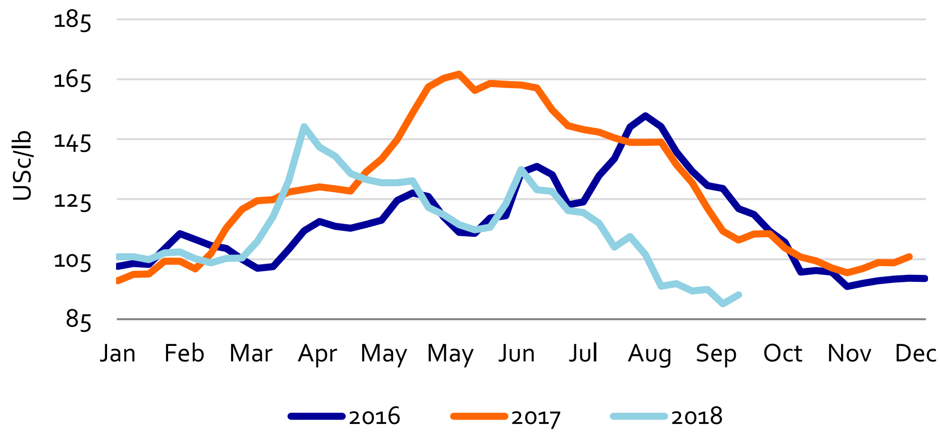
U.S.

- Chicken prices remain weak as record protein supplies weigh on the market. Breast meat and wing prices, specifically, are down 24% and 22% YOY, respectively. A plentiful protein supply has limited chicken's ability to secure features in the retail and foodservice channels – putting pressure on breast and wing prices in recent months. With no change in U.S. chicken production expected, along with a forecast for larger supplies of beef and pork in Q4 2018 and 2019, we expect chicken prices to remain depressed for the foreseeable future. We anticipate some improvement in feature activity in 2019, given our current price forecast, but any meaningful improvement in price will likely take several months.
- Growing inventories of chicken in cold storage (+17% YOY in Sep), along with modestly higher inventories of red meat (+1% YOY in Sep) could make it more challenging to balance supply and demand by year-end. Much of the increase was recorded in wings and legs/drums, which could be inventory-building in front of a large promotion (wings) or trade-related uncertainties/timing of shipments (leg quarters). We expect inventories of breast meat to build in the coming months, given recent market weakness, but do not view stocks as burdensome at present.
- U.S. chicken exports remain strong (+4.8% in value YTD, 2% in volume YTD) and have strengthened in recent months. Shipments to Mexico, the largest export market (20% of total), were up 28 % YOY in Sep, while China and Vietnam recorded an exceptional month – up 42% and 192% YOY, respectively. The big disappointments were Cuba (-42% YOY) and the Philippines (-19% YOY). Despite this strength, leg quarter values remain weak (down 22% YOY). Based on current trade disruption in pork and the growing African swine fever (ASF) crisis, we believe there will likely be strong demand for chicken into export markets in the coming months.

Mexico

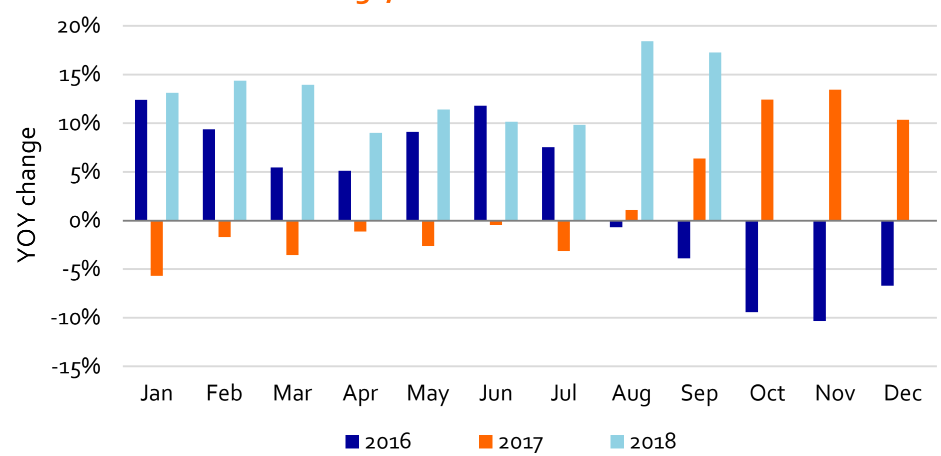
- Poultry imports in Mexico have seen a drastic increase over August, as U.S. prices drop below USc 100/lb. Year-to-date, broiler imports are roughly 7% higher than last year, but remain lower than 2016, by 3.5%. National whole chicken prices continue to be higher by 7%, compared to 2017 prices, going from MXN 34.6/kg to MXN 37/kg.

U.S. Boneless Breast Meat Prices, 2016-2018



Source: USDA, Rabobank 2018

Total Chicken in Cold Storage, 2016-2018

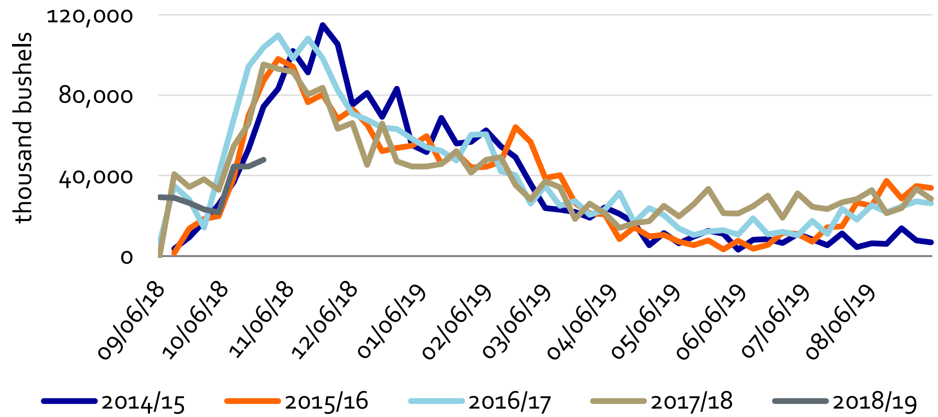


Source: USDA, Rabobank 2018

Soybeans: Bears Are in Firm Control

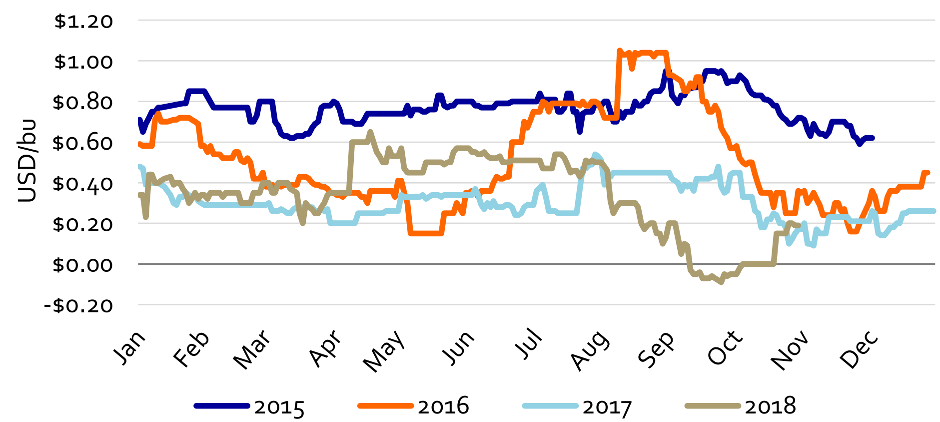
- The bear appears to be in firm control of the U.S. soybean market, amid record stocks and increasing trade tensions with China. At this juncture, it is hard to see a light at the end of the tunnel for soybean prices.
- U.S. soybean market fundamentals continue to deteriorate. As expected, in its October Crop Production report, the USDA confirmed the U.S. soybean crop is getting bigger, and November's report will show a further increase in yield. Also not unexpected, 2018/19 U.S. soybean exports are off to a slow start. For the week ending October 18, U.S. soybean export inspections year-to-date are down nearly 40% vs. last year. The bright spot is crush. Crush margins remain solid, so processors will keep crush high. Despite good crush numbers, 2018/19 ending stocks are approaching a record 900m bushels, which will keep prices depressed.
- There is no end in sight of the tariff war with China. While futures bore most of the early impact of the tariff war, basis values are not reflecting more of the impact. Nearby CIF gulf basis values for a time early this fall were negative when they would normally be USD 0.25/bu to USD 0.35/bu over the board. In addition,, PNW has not shown a basis bid since mid-summer. And weak deferred gulf basis bids are a strong indicator demand for U.S. soybeans will remain soft.
- There are other reasons to believe there is no end in sight for the tariff war. Reports out of China are that feed rations are being adjusted to remove as much soymeal from the ration as possible, in order to further reduce soybean demand. In addition, weekly export sales are dismal, and significantly lower outstanding sales show the lack of interest in U.S. soybeans by China.
- Exports to other destinations (e.g. the EU) are up this year vs. previous years, but are not enough to offset the loss of Chinese exports. U.S. soybean exports to all South American countries, except Brazil, are up vs. a year ago, when they were non-existent. However, once the South American soybean crop is harvested next year, those exports will be reduced significantly.
- Brazil is expected to plant a record 36.7m hectares of soybeans, compared to 35.1m last year. A trendline yield results in a record 118m-metric ton crop. The weak real and high Brazilian soybean prices are encouraging the expansion.

U.S. Soybean Exports Down Nearly 40% at the Height of the Export Season



Source: USDA, Rabobank 2018

Record-Wide CIF Gulf Soybean Basis Shows Weakest U.S. Soybean Exports to China



Source: Rabobank 2018

Tree Nuts: 'Tis the Season to Eat More Tree Nuts

Almonds: By the end of the 2017/18 marketing year, 86% of total U.S. supply was sold (vs. 81% and 84%, respectively, in the previous two seasons). A new record crop, up about 8% YOY, is underway for the 2018/19 marketing year. During August, the first month of the new season, total shipments were down 9% YOY, with domestic shipments unchanged and exports dropping 14% YOY. Exports to China actually increased year-on-year during August, as well as exports to Hong Kong, Vietnam, and South Korea. Exports to India, Spain, Canada, Germany, Japan, and the Netherlands were down year-on-year.

Hazelnuts: Through June 2018, about 85% of the crop was sold, finishing the 2017/18 marketing year with manageable inventories. According to industry sources, there was not enough shipment activity in July and August for a pooled data report. Supply is expected to continue growing. Initial prices this year are down year-on-year, due to lower total U.S. exports and increased international competition from the devalued currency in Turkey.

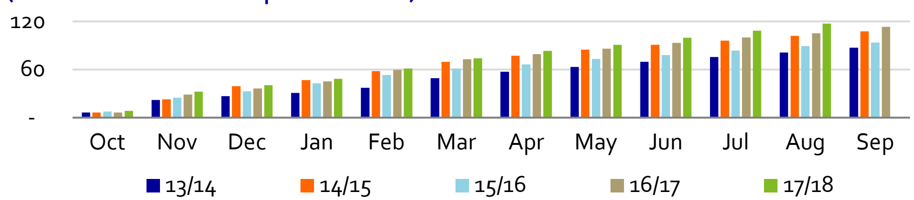
Walnuts: The 2017/18 marketing year ended with about 90% of the crop sold. Walnut shipments for the season, through August, were down 11% YOY. For the 2018/19 season, which started in September, California walnut production is forecast to reach a new record, up 10% YOY. As for exports, despite a marginal decrease in volume to China, total U.S. exports increased year-on-year during July and August. Export unit prices showed some strength.

Pistachios: Although 2017/18 pistachio shipments through August were down 2% YOY, 86% of estimated inventory at the closing of the marketing year was sold. During July and August, export volume was down year-on-year. In general, export unit prices showed some strength right before the start of an on-year harvest. Downward price pressure is a possibility. However, industry reports indicate that small-size and closed-shell pistachio proportion is higher than expected, which would support prices for good-quality product.

Pecans: U.S. exports continue with strong growth this season, up 11% YOY through August. Outlook for domestic availability and prices for the 2018/19 season is uncertain at this point, as effects from hurricanes in the Southeast are still being evaluated.

Cumulative Pecan Exports, 2013/14-2017/18

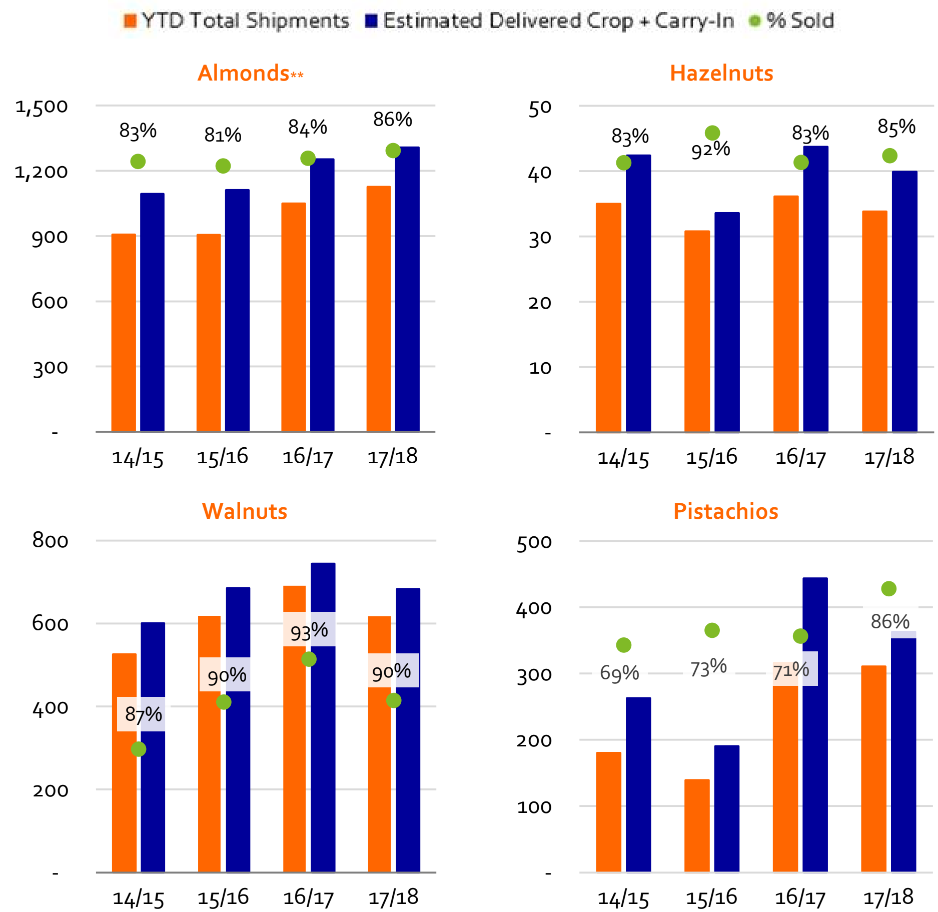
(Thousands of In-Shell Equivalent Tons)



Source: USDA-FAS, Rabobank 2018

Cumulative U.S. Tree Nut Shipments, 2014/15-2017/18*

(Thousands of In-Shell Equivalent Tons)



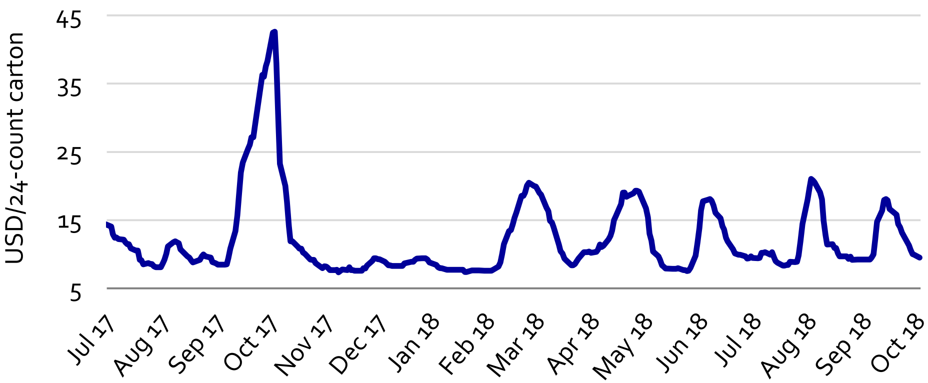
**Note: through August 2018 (June for hazelnuts). Meat pound equivalent. Pistachio supply is net of loss.*

Source: Administrative Commission for Pistachios, Almond Board of California, California Walnut Board, Hazelnut Marketing Board, INC, USDA-FAS, Rabobank 2018

Vegetables: Transition Time

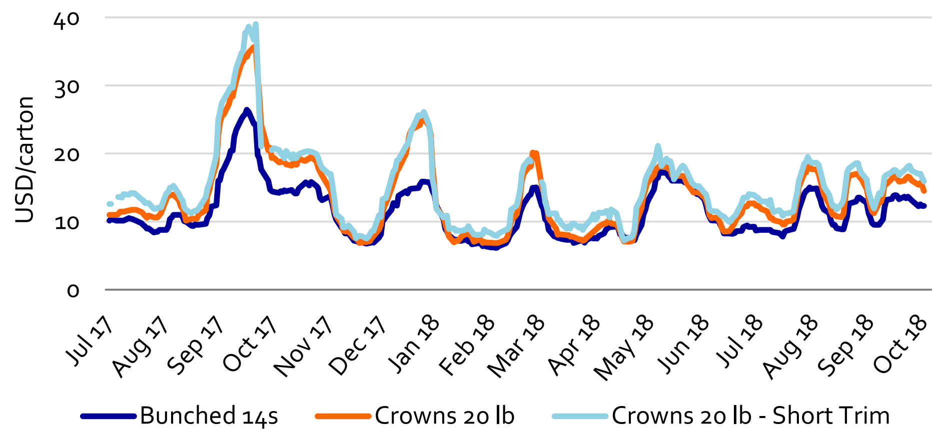
- Romaine prices strengthen, as light availability is not enough to meet current demand. Despite the recent surge during the second week of October, the price for romaine hearts (12x3) was off 23% YOY. Quality is fair as the coastal season ends.
- During the first half of October, broccoli prices were down about 20% YOY. Colder nights in Watsonville and Santa Maria have impacted quality of the product. Total supplies will continue to slowly decrease on the Coast as production transitions to the desert.
- Cauliflower supplies are gradually decreasing, and overall quality remains good. Prices during the second week of October were about USD 12.50/carton of wrapped 12s, unchanged year-on-year. Prices will see some support ahead.
- Iceberg lettuce prices are hitting the lower part of the rollercoaster in mid-October, as current supplies exceed declining demand. Prices – at around USD 10/carton for wrapped 24 – are down about 70%, compared to the unusual peak price registered last October. Production in Yuma may start in early November.
- Sweet potato prices are getting some support, as lower yields and hurricanes impact reduced availability. North Carolina U.S. #1 prices increased 13% during the first half of October and were up 5% YOY by mid-October. Peak demand during the holiday season, especially Thanksgiving, will continue supporting prices.

Wrapped Iceberg Lettuce – U.S. Daily Shipping Point Price, 2017-2018



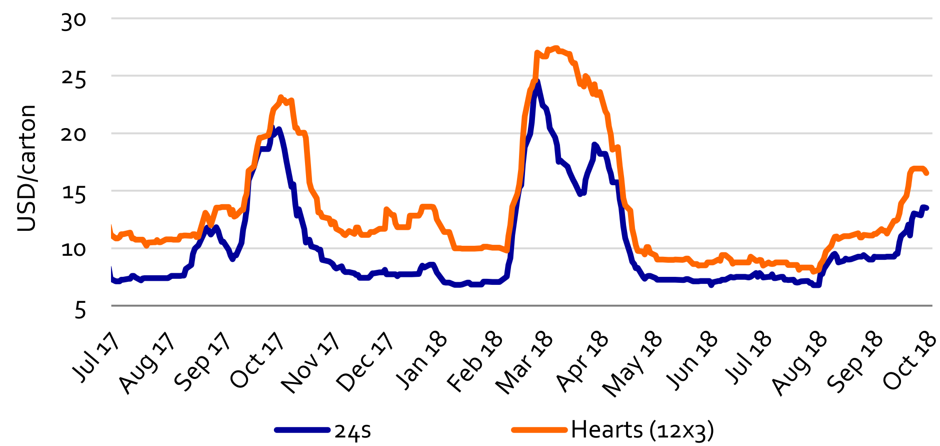
Source: USDA-AMS, Rabobank 2018

Broccoli – U.S. Daily Shipping Point Price, 2017-2018



Source: USDA-AMS, Rabobank 2018

Romaine Lettuce – U.S. Daily Shipping Point Price, 2017-2018

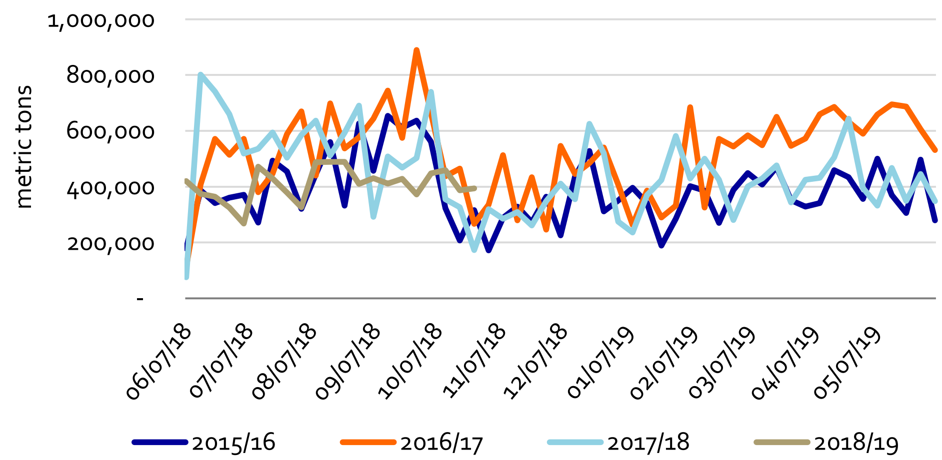


Source: USDA-AMS, Rabobank 2018

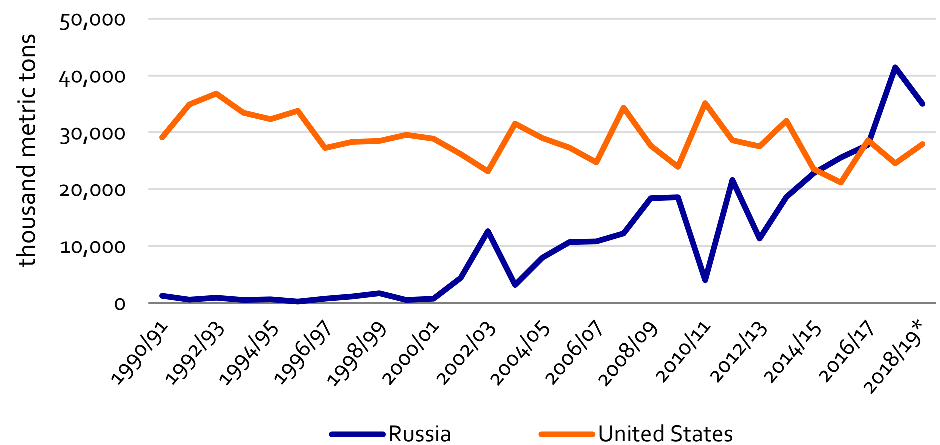
Wheat: U.S. Wheat Exports are Disappointing

- Despite drought conditions in the Great Plains and Southern Plains this past growing season, along with a reduced U.S. HRW crop, U.S. wheat supplies remain plentiful. While 2018/19 all-wheat ending stocks are down vs. 2017/18, 2018/19 ending stocks are approaching 1.0bn bushels and putting downward pressure on prices.
- Prices are slightly better than a year ago, and good moisture in the Southern Plains is encouraging HRW planting for the 2019/20 crop. According to our modeling, U.S. planted wheat acres will rebound to near 53m acres, replacing corn and soybean acres. This will result in additional downward pressure on future wheat prices.
- Year-to-date, U.S. wheat exports have been a disappointment, and according to weekly export inspections, U.S. wheat exports are running over 23% behind the 2017/18 pace. This is all happening with seemingly more export opportunities after short crops in Australia, Argentina (last year), and in the Black Sea region.
- The drought in eastern Australia has driven domestic prices higher and resulted in export-bound wheat from western Australia to be shipped to eastern Australia. As result, traditional Asian customers are seeking wheat from other exporters.
- Black Sea countries and Russia are filling the gaps by aggressively selling wheat. For the first three month of the 2018/19 crop year, Russian wheat exports are up 30% and forecast to reach 35.0m metric tons, the second-highest ever. Russia is exporting to Asia and Africa, traditionally markets for Australia and Europe, respectively. This is occurring despite lower production (still the third-largest on record), but sufficient carryover and competitive pricing are contributing to the strong export pace. In addition, Russia has renewed an export transportation subsidy, which is a signal it intends to continue to be an aggressive exporter. However, there is optimism that U.S., and to a lesser extent European, wheat exports will rebound. Russian exports will slow as winter sets in.
- Challenges remain for a rebound in U.S. wheat exports. The U.S. has lost market share in China, due to the 25% tariff, and in Mexico, due to increased competition from Canada and Russia. As U.S. wheat prices become more competitive, U.S. wheat exports to Mexico, Indonesia, and Iraq should rebound.

U.S. Wheat Exports Are off to a Slow Start – Can They Rebound?



Despite Dip, Russian Wheat Exports Dominate the World Market

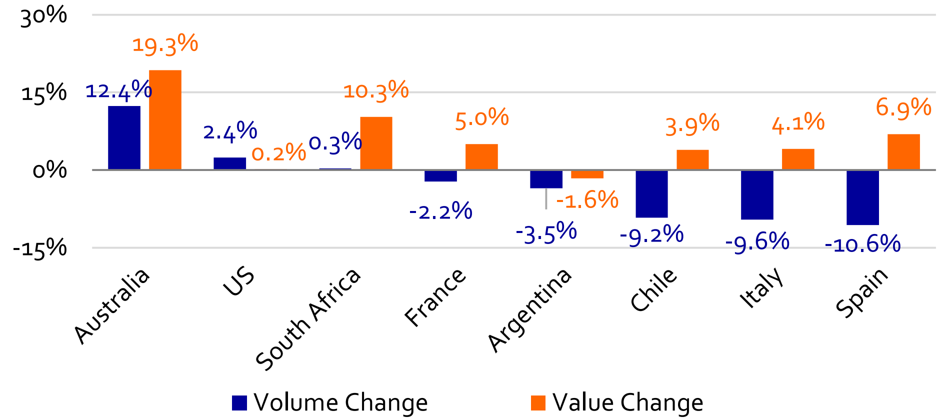


Source: USDA, Rabobank 2018

Wine: Highlights From Rabobank's Q4 Report

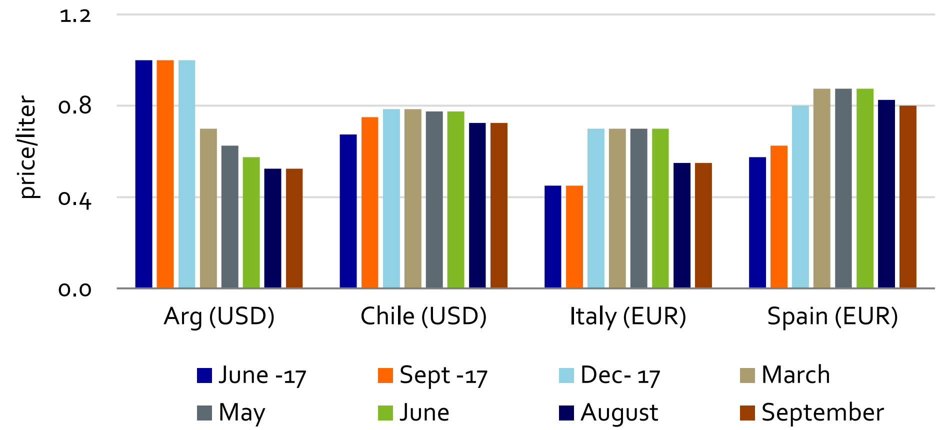
- In 1H 2018, U.S. exports rose 2.4% by volume and 0.2% by value. The decline in per-liter prices was a consequence of bottle export volumes declining by 11.5% and bulk exports increasing by 32.3%. Over the same period, U.S. imports rose by 9% in value, but saw import volumes decline by 4%. The volume decline was driven by a steep drop in bulk wine imports (-19% in volume). France and New Zealand saw the value of the wine sold into the U.S. grow at a particularly healthy pace, with increases of 18% and 13%, respectively.
- Light harvests in 2017 are negatively impacting export volumes for European producers in 2018, but the 2018 harvest looks set to return to more historic levels in France, Spain, and Italy.
  - **France:** Sparkling wine continues to drive French exports, growing by 3.5%, despite an overall 2.2% decline in French export volumes. With value rising by 7%, the U.S. continues to grow as the largest importer of French wine. On the other side of the world, French exports to China tumbled, both in volume (-28%) and value (-12%).
  - **Italy:** Italian wine exports declined by nearly 10% by volume in 1H 2018, but the country still saw a 4.1% rise in terms of value. This divergence was largely driven by increased average prices at the low end, with bulk prices jumping by 51%. Exports to the U.S. grew at 3.3% for both volume and value.
  - **Spain:** In a similar story to its neighbors. Spain's exports declined in volume (-10.6%) and rose in value (+6.9%). Again, bulk wine prices drove the increase in export value. Exports to the U.S. also declined in volume (-3%), but increased in value (6%) .
- With a tentative agreement on the revised NAFTA deal – the United States-Mexico-Canada Agreement – it appears that U.S. wine will have better access to supermarket wine sales in British Columbia. According to the Wine Institute, the changes represent "a real accomplishment."

YOY Change in Wine Export Volumes and Value , 1H 2018*



** Note: Value change in local currencies, except Argentina and Chile, which used US dollars.*
Source: Wine by Numbers, OIV, Rabobank 2018

Prices for Generic Red Bulk Wine by Country and Currency, June 2017-Sep 2018

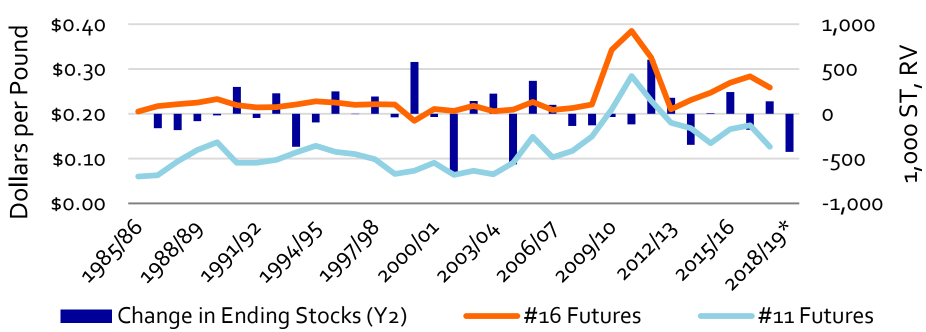


Source: Ciatti Company, Rabobank 2018

Sweeteners

- After the USDA's July high stocks-to-use ratio projection, they have come back to earth with a more realistic and tighter supply-and-demand picture. Current carryout projection would be the tightest since 2010/11, and the 12.7% stocks-to-use ratio estimate has not been that low since 2004/05. A tighter 2018/19 supply/demand picture is the result of flat production, significant decline in projected Mexican imports, and increased domestic use.
- Persistent and ample rainfall this fall has hurt sucrose content in the beet crop, resulting in lower production than previously forecast. Only the Idaho crop has escaped the bad weather. Beet prices have firmed on the development, plus beet prices will be well-supported as beet processors are reporting they have 80%+ sold of this year's production.
- A projected 1.2% increase in domestic food use is contributing to the tighter balance sheet, but the increase bears watching. In 2017/18, domestic food use was flat – and with consumers targeting reductions in sugar intake, there is potential for 2018/19 domestic use to look similar. If that is the case, the stocks-to-use ratio would be 14.4%, and stocks would be nearly 1.8m STRV. This is higher than current projections, but would be within the USDA's target range.
- Even if stocks increase from current projections, they are still likely to be below last-year levels. A decrease in stocks year-on-year portends a firming of prices from current levels.

A Year-over-Year Decrease in Stocks Points to Higher Prices



Source: USDA, Rabobank 2018

Orange Juice

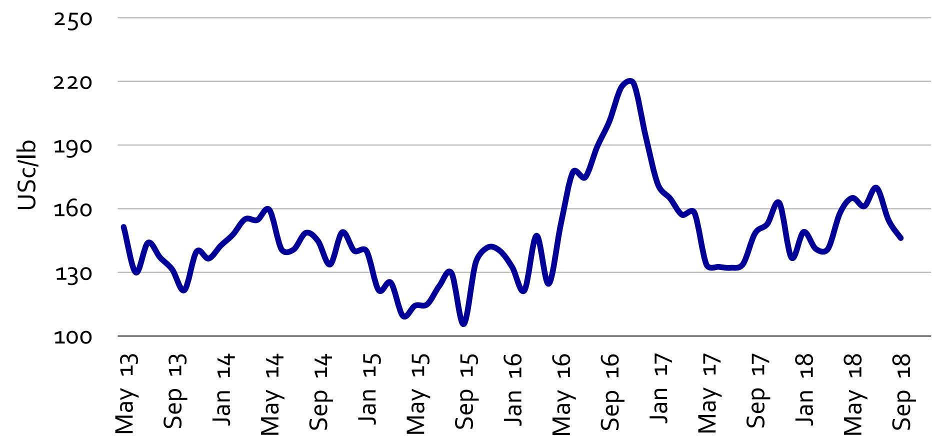
Florida Orange Juice

- The USDA now predicts Florida to produce 79m boxes of citrus in the 2018/19 season – a huge increase over the 45m boxes produced in 2017/18, when Hurricane Irma ravaged Florida's citrus groves. Rabobank's citrus specialist Andrés Padilla warns, however, that this figure might be revised downward as "droppage rates are set to remain high," and weather, eternally unpredictable, could still do unexpected damage. That being said, the weather in Florida has been good to date. We hope it continues through hurricane season.

Brazilian Orange Juice

- A dry period between June and August has negatively impacted the orange crop in São Paulo and Minas Gerais. A new report released by Fundecitrus on Setpember 10 adjusts the 2018/19 harvest down 5%, to 273m boxes. Smaller fruit, rising droppage rates, and levels of citrus greening, which will likely affect close to 20% of trees this season, are all contributing to the smaller yield. The smaller crop indicates that spot and contract prices will remain relatively high.

FCOJ Futures, 2013-2018

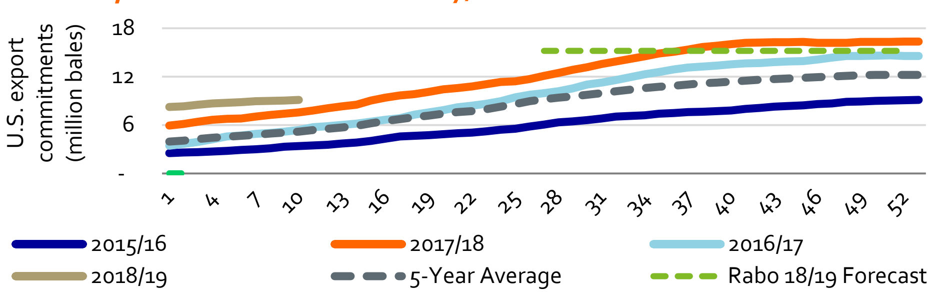


Source: Bloomberg-ICE, Rabobank 2018

Cotton

- December 2018 ICE #2 Cotton futures recover from seven-month price lows through October, as significant production risks emerge globally. Since August, two hurricanes have swept through harvest-ready crops in the Carolinas, Georgia, Alabama, and northern Florida – 88% of bolls were open as Hurricane Michael swept through Georgia, with just 12% picked. Fortunately, these events were not devastating, but bring an estimated 0.5m to 1m bales in crop losses – Rabobank forecasts US 2018/19 output at 19.3m bales. U.S. Quality will also be hit, both in the pathway of these hurricanes and in the Texas panhandle, where heavy rainfall now delays picking (El Niño?). Furthermore, freezing temperatures and snowfall threaten China's Xinjiang region during picking. Although somewhat belated, the ICE #2 has found support from these events – now just above Rabobank's USc 78/lb Q4 2018 forecast.
- 25% Chinese tariffs on U.S. imports are making their mark on 2018/19 cotton exports. Despite exceptional commitments of 8.2m bales to begin the 2018/19 season, the pace of U.S. exports has slowed considerably vs. previous years. Chinese cancellations have occurred in the past five consecutive weeks. With weaker cash prices, mill forward purchases are likely to take a backseat in the short term – ultimately returning as demand confidence is reinstated. Rabobank forecasts Southeast Asian demand to remain robust, but softer Chinese demand will keep export sales sluggish.
- Cotton longs look much less sexy through the eyes of speculators, as Non-Commercials cut their near-record net long position for the past 11 consecutive weeks – now 27,943 lots net long as of October 16, the lowest since August 2017. However, Rabobank anticipates 3% global demand growth through 2018/19 to take prices back into the low USc 80/lb level in mid-2019.

U.S. Exports Begin 2018/19 With a Staggering +8m Bales of Commitments; However, Pace Is Much Slower Vs. 2017/18 Amid US-China Trade Tariffs

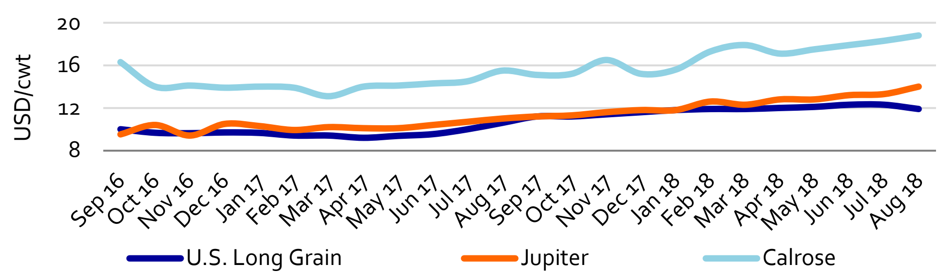


Source: USDA, Rabobank 2018

Rice

- The total 2018/19 U.S. rice crop should reach 218.8m cwt, up 23% YOY according to the October outlook report released by the USDA. Average national yield is forecast at 7,539lb/ac, a 32lb increase relative to the previous growing season. Yields are expected higher than the year before in California and Louisiana.
- Augmented production will be mainly driven from larger harvested acreage in all reported states, totaling 2.9m acres, up 22% YOY nationwide. Harvested acreage in Arkansas will grow considerably this season. Long-grain, which is grown mainly in the South, and combined medium- and short-grain production are expected to rise by 24% and 19%, respectively, over 2017/18.
- Despite some rain, harvest of Southern rice is reportedly making good progress and almost complete by mid-October, while the harvest in California is lagging behind the state's five-year average.
- Total U.S. rice supplies for 2018/19 are projected to be up 10% YOY, as the larger crop more than offsets the drop in carry-in, while imports will remain practically unchanged. U.S. exports are expected to increase by 22% YOY, despite a big drop in exports to Turkey. Total use of U.S. rice will be up 4% YOY, and ending stocks are estimated to be up 5% YOY.
- Rough rice prices are expected to be lower this marketing year. The projected season-average price for California medium- and short-grain is USD 15.80/cwt to USD 16.80/cwt. The 2018/19 long-grain season-average farm price (SAFP) is projected at USD 10.30/cwt to USD 11.30/cwt. The 2018/19 SAFP for southern medium- and short-grain is expected to be USD 10.60/cwt to USD 11.60/cwt.

24-Month U.S. Medium/Short and Long Grain Prices, Sep 2016-Aug 2018*

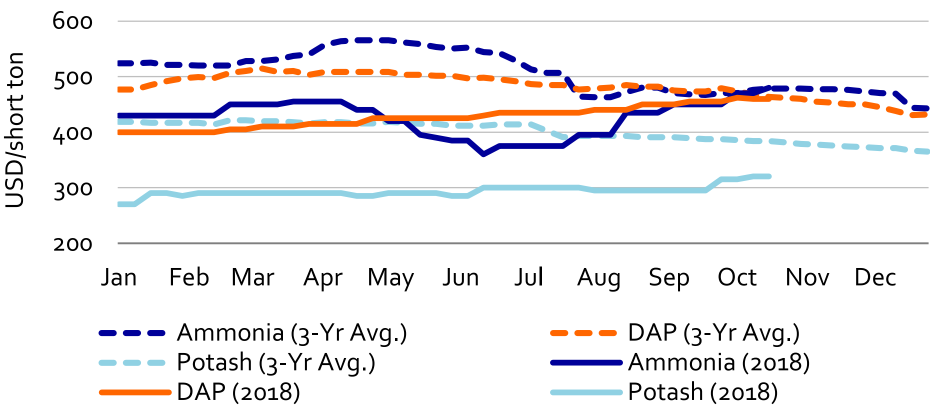


* Note: average rough rice basis
Source: USDA-NASS, USDA-ERS, Rabobank 2018

Input Costs

As of October 24, 2018

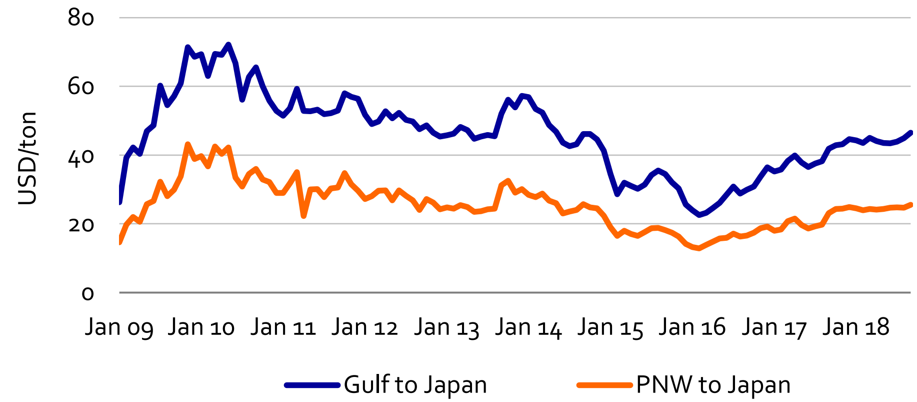
Corn Belt Input Prices*



* Note: granular potash

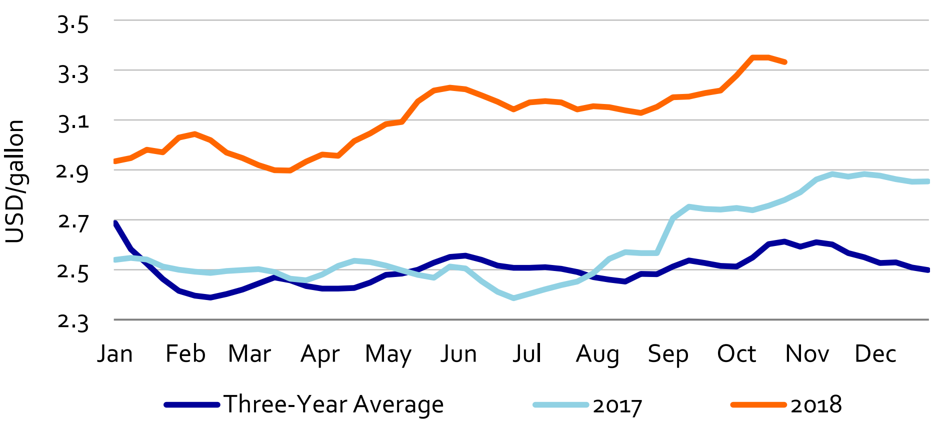
Source: Bloomberg, Rabobank 2018

Ocean Freight



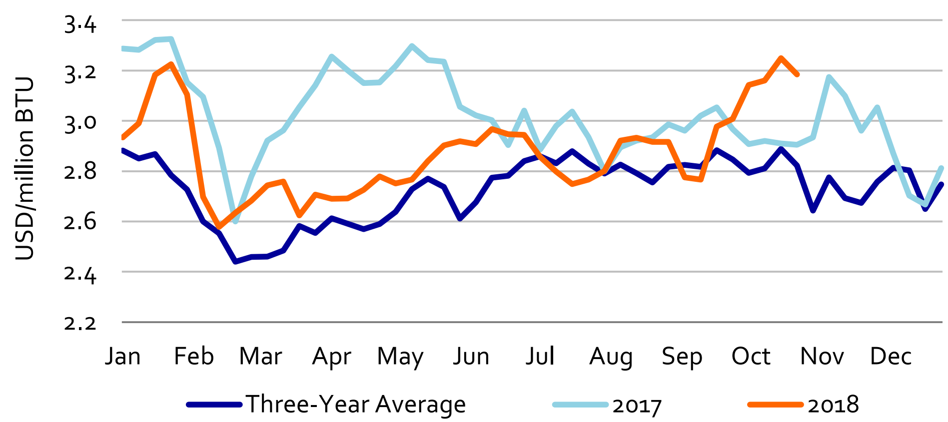
Source: O'Neil Commodity Consulting, USDA-AMS, Rabobank 2018

Diesel – Midwest



Source: EIA, Rabobank 2018

Natural Gas Spot

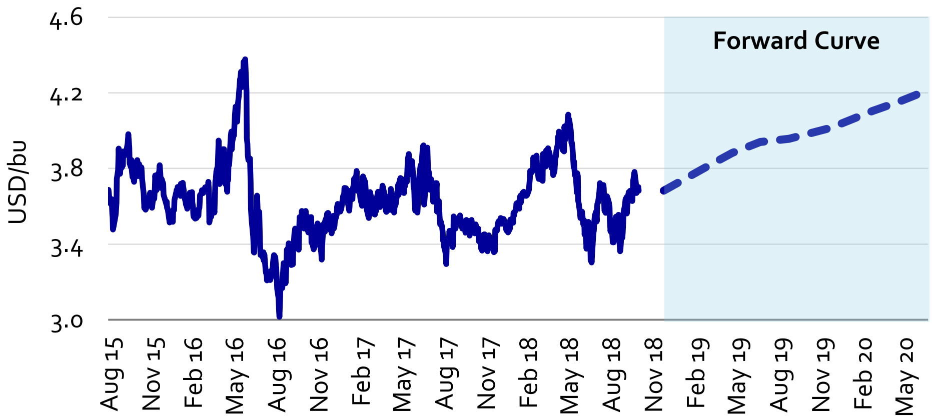


Source: NYMEX, Rabobank 2018

Forward Price Curves

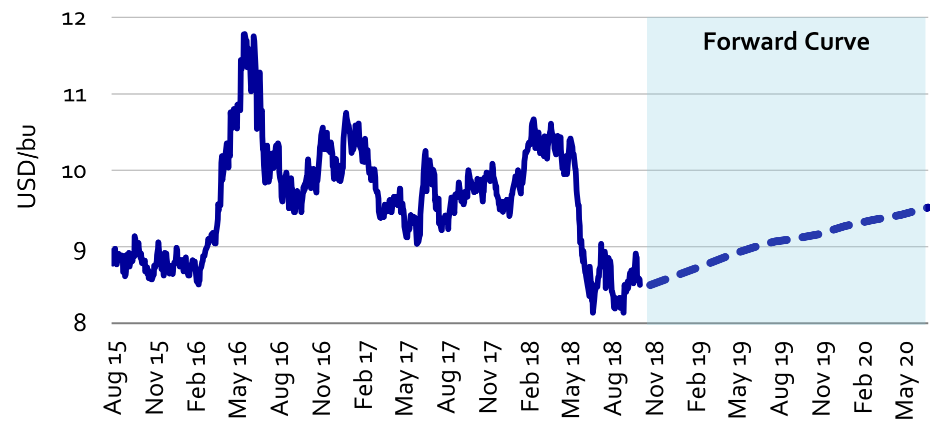
As of October 24, 2018

CBOT – Corn



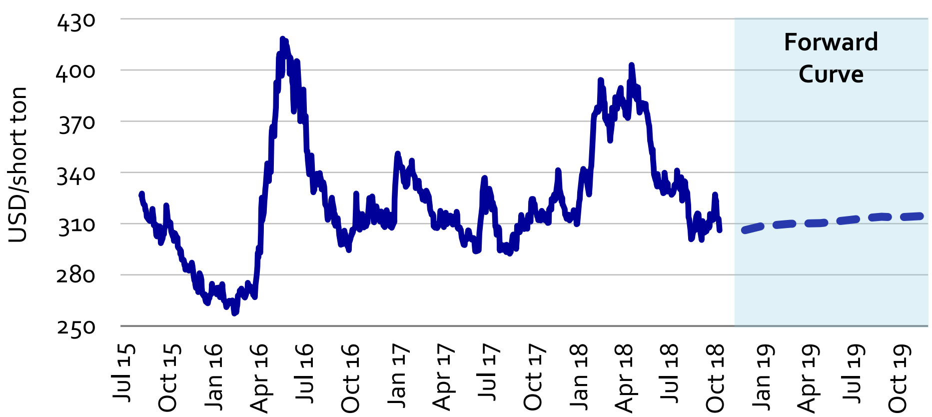
Source: CBOT, Rabobank 2018

CBOT – Soybeans



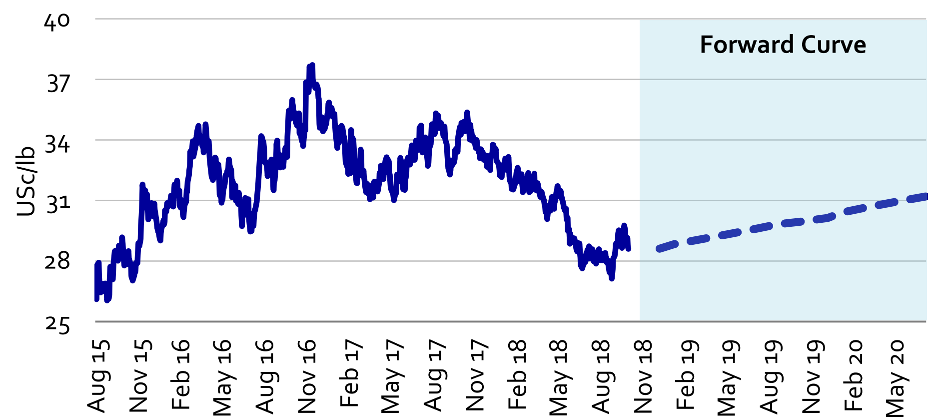
Source: CBOT, Rabobank 2018

CBOT – Soymeal



Source: CBOT, Rabobank 2018

CBOT – Soy Oil



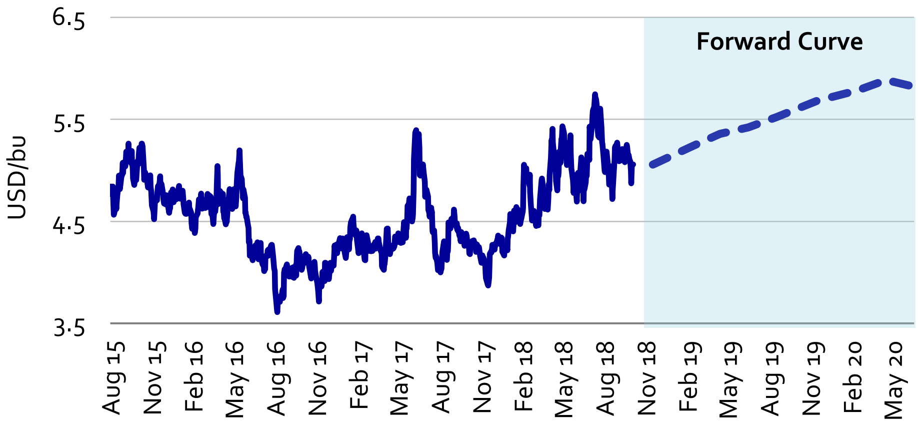
Source: CBOT, Rabobank 2018

Forward Price Curves

Rabobank

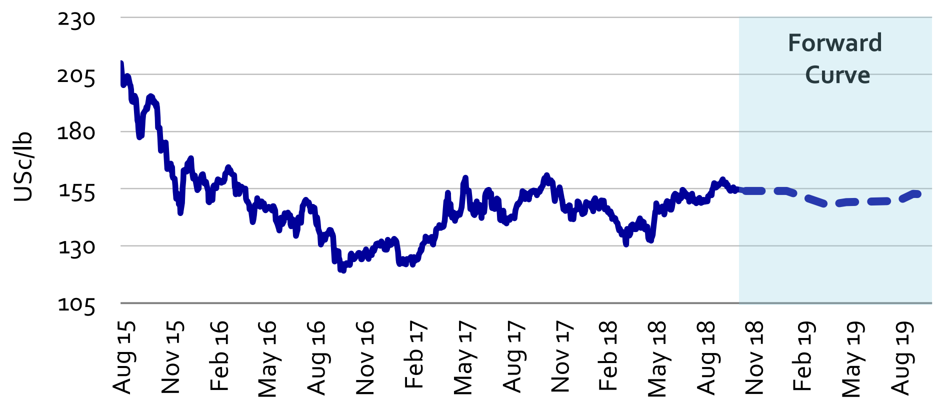
As of October 24, 2018

CBOT – Wheat



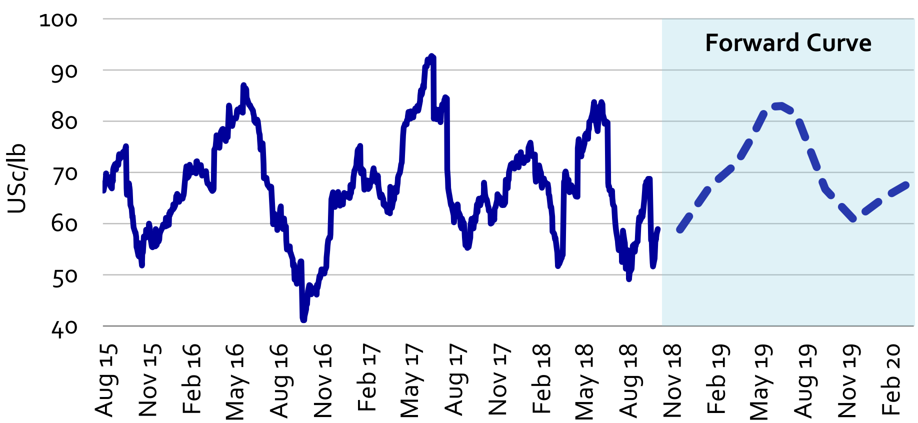
Source: CBOT, Rabobank 2018

CBOT – Feeder Cattle



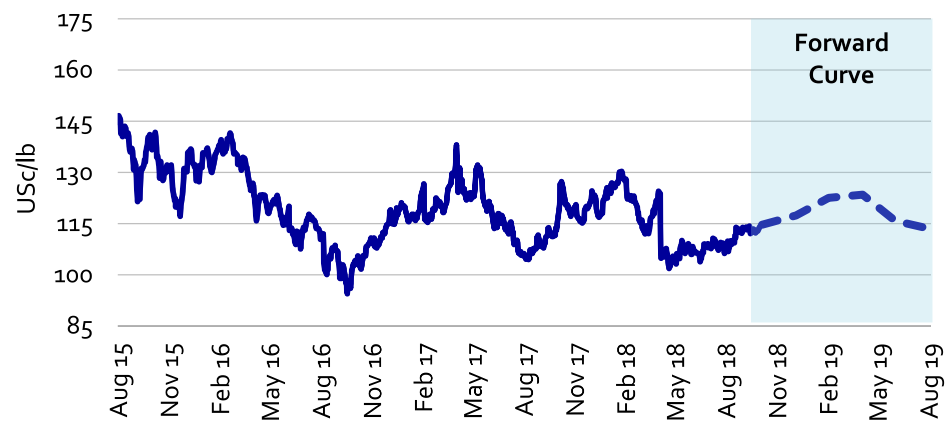
Source: CBOT, Rabobank 2018

CBOT – Lean Hogs



Source: CBOT, Rabobank 2018

CBOT – Live Cattle

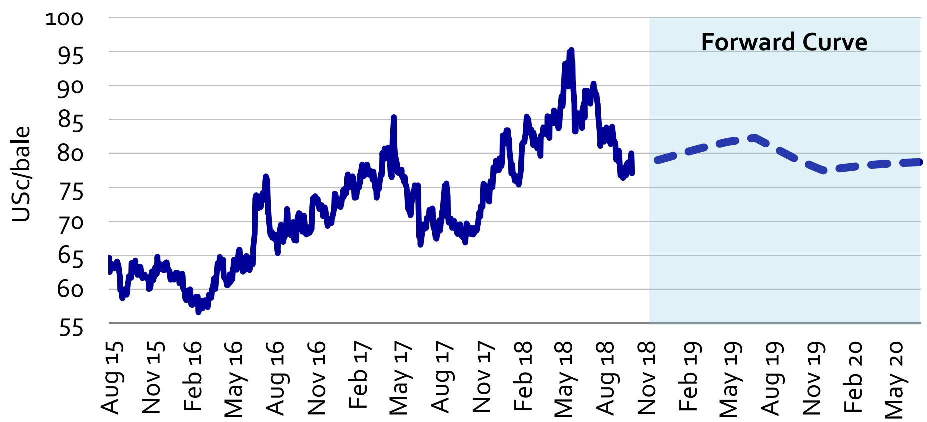


Source: CBOT, Rabobank 2018

Forward Price Curves

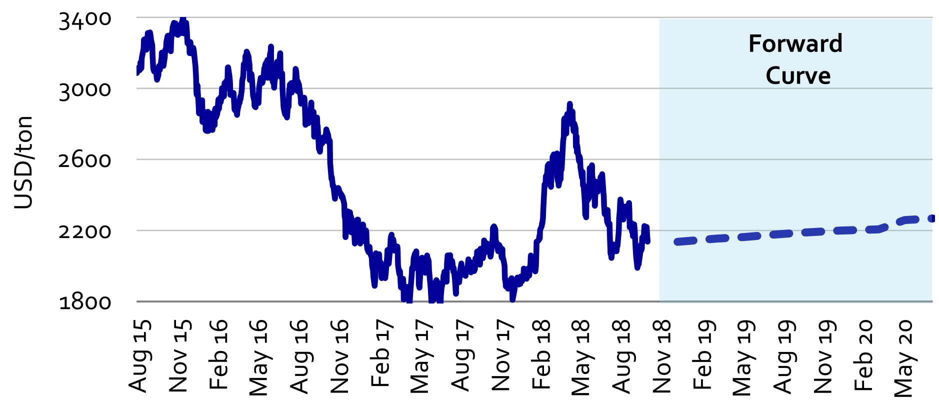
As of October 24, 2018

ICE – #2 Cotton



Source: ICE, Rabobank 2018

ICE – Cocoa

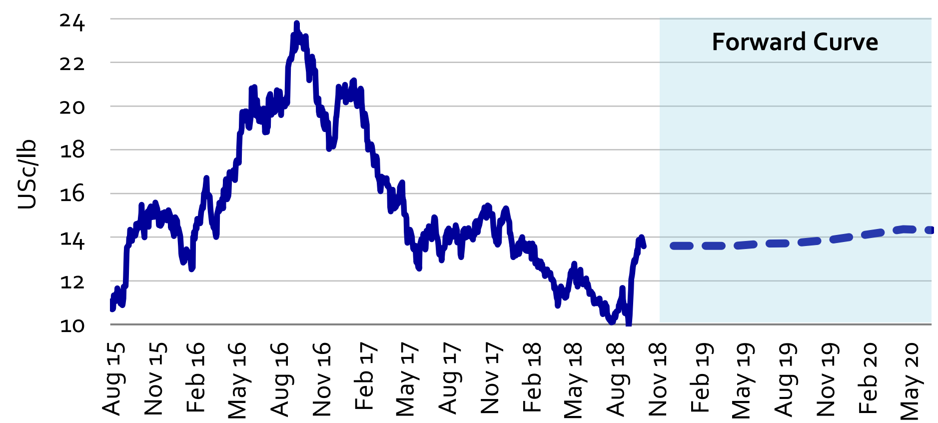


Source: ICE, Rabobank 2018

ICE – FCOJ

Source: ICE, Rabobank 2018

ICE – #11 Sugar



Source: ICE, Rabobank 2018

RaboResearch Food & Agribusiness

Pablo Sherwell
Head of RaboResearch Food & Agribusiness, North America
E-mail *Pablo.Sherwell@rabobank.com*

Don Close
Senior Analyst — Beef
E-mail *Don.Close@raboag.com*

Roland Fumasi
Senior Analyst — Fresh Fruits, Vegetables and Tree Nuts
E-mail *Roland.Fumasi@rabobank.com*

Al Griffin
Senior Data Analyst
Coordinator of the Agribusiness Review
E-mail *Al.Griffin@raboag.com*

Stephen Rannekleiv
Global Strategist – Beverages
E-mail *Stephen.Rannekleiv@rabobank.com*

Nick Fereday
Senior Analyst — Consumer Foods
E-mail *Nick.Fereday@rabobank.com*

Stefan Koopman
Market Economist— Financial Markets Research
E-mail *Stefan.Koopman@rabobank.com*

Charlie Clack
Commodities Analyst — ACMR
E-mail *Charles.Clack@rabobank.com*

David Magaña
Senior Analyst — Fresh Fruits, Vegetables and Tree Nuts
E-mail *David.Magana@rabobank.com*

Mary Ledman
Global Strategist— Dairy
E-mail *Mary.Ledman@rabobank.com*

Andrick Payen
Associate Analyst
E-mail *Andrick.Payen@rabobank.com*

Steve Nicholson
Senior Analyst — G&O
E-mail *Stephen.Nicholson@raboag.com*

Jim Watson
Senior Analyst — Beverages
E-mail *James.Watson@rabobank.com*

Tom Bailey
Senior Analyst - Dairy
E-mail *Tom.Bailey@rabobank.com*

Cici Dong
Intern
E-mail *Cici.Dong@raboag.com*

Bourcard Nesin
Analyst — Beverages
E-mail *Bourcard.Nesin@rabobank.com*

Christine McCracken
Senior Analyst — Animal Protein
E-mail *Christine.McCracken@rabobank.com*

Philip Marey
Senior Market Economist— Financial Markets Research
E-mail *Philip.Marey@rabobank.com*

Eamonn Austin
Intern
E-mail *Eamonn.Austin@rabobank.com*