

# RaboResearch Food & Agribusiness

## *North American Agribusiness Review*

*Covid-19 Is a MOABS – Mother of All Black Swans*

April 2020



**Rabobank**

# Report Summary



Introduction	Covid-19 is a MOABS – Mother of All Black Swans	3
Economy	Scrambling for Liquidity	5
Climate	Favorable Conditions as Planting Begins	6
Food Retail / Foodservice	Consumers Look for Comfort in Food & Hard-Hitting Moment for Foodservice and Its Suppliers	7
Cattle	Supply Chain Disruption and Demand Shifts	9
Corn	Demand Woes	10
Dairy	Prices Collapse as Demand Falls Sharply	11
Farm Inputs	Chinese Exports and Production Limited by Covid-19	12
Feed	Covid-19 Wreaking Some Havoc	13
Fruits	Spring Demand Pull, Where Art Thou?	14
Pork	Packing Plant Closures Create Near-Term Imbalance, Pork Values Near Historic Lows	15
Poultry	Prices Stabilize After Historic Drop, Plants Struggle With Labor Availability	16
Soybeans	Can Higher Demand Offset Increased Acres?	17
Sweeteners	Many Uncertainties Point to Firm Prices	18
Tree Nuts	Shipments Mostly Keeping Good Pace	19
Vegetables	Transition Season Under Covid-19	20
Wheat	Opportunities Around the Corner	21
Cotton/Rice	Cotton Demand Feels Crushing Impact of Covid-19 / US Long Grain Rice Production Up	22
Beer/Wine	Craft Brewers Fight For Their Life / E-Commerce Supports Direct Sales, For Now	23
Input Costs	Fertilizer Inputs / Shipping Cost / Fuel Prices	24
Forward Price Curves	Corn / Soybeans / Soymeal / Soybean Oil	25
Forward Price Curves	SRW Wheat / Feeder Cattle / Live Cattle / Lean Hogs	26

# Introduction: Covid-19 Is a MOABS – Mother of All Black Swans



In April 2020, we find ourselves in a scenario straight from an economics classroom: with the Covid-19 pandemic shuttering the bulk of global economic activity, what is the impact? Economists call this incident a Black Swan Event, a rare anomaly. The course of this particular event is extra challenging to predict, considering we have no modern comparison. Covid-19 is the rare event that has produced shocks to both supply and demand across the entire economy, not just agriculture.

Given what we know today, our short-term outlook is bearish; for calendar year 2020, Rabobank expects US GDP to fall by 6%. However, uncertainty over the length and severity of Covid-19 will continue to drive market volatility until a therapeutic treatment and/or vaccine is developed, which will ease consumers' fears. This could be up to eighteen months away. Events are driving unprecedented intervention from federal governments and central banks to stabilize businesses and consumers plus keep the financial system liquid and functioning.

## Whiplash to the Supply Chain

All sectors of the North American economy are feeling the impact of shuttering all but essential economic activity. Likewise, agriculture is suffering from severe interruptions to traditional consumption patterns, which has resulted in dislocation within and along the food supply chain. Supply chains have operated on a just-in-time model, and even minor disruptions can have significant consequences. For example, empty grocery store shelves are not an issue of supply but demand. In other words, there is no lack of food in the supply chain, but demand has shifted to retail, causing widespread disruptions in the food and agriculture supply chain. With food-away-from-home options restricted to delivery and takeout for over 90% of the US population, restaurants sales dropped 65% during the second half of March. The sudden curtailment of the hotel, restaurant, and institutional sectors is proving the main source of misery for

the animal protein and dairy sectors. Higher grocery and retail purchases are not enough to offset lower overall demand from closed businesses and schools. The abrupt shift in demand from foodservice to retail adversely impacts prices in most sectors; for example, dairy and meat prices have dropped abruptly due to the rapid decline in foodservice sales.

Availability of labor for agriculture was an issue before the onset of Covid-19, and the pandemic has magnified the issue. Several meat processing plants have already closed or are working well below capacity due to rising absenteeism resulting from both illness and the fear of contracting the illness. New procedures enhancing employee sanitation and health protocols, physical distancing of workers, and more downtime for cleaning are all contributing to bottlenecks in the meat supply chain. The slowdown or closure of meat processing plants ultimately falls back on the producer, who loses a market for their livestock, and creates a backlog in market-ready animals, raising costs at a time of depressed prices.

# Introduction: Covid-19 Is a MOABS – Mother of All Black Swans



## Margins Along the Food Chain Remain Challenging

The whiplash being felt throughout food distribution channels is having the predictable consequence of hurting margins for foodservice, which directly impacts the animal protein and dairy sectors. While the grain & oilseed sector is not consumer facing and has been less directly affected, there is one exception – the corn market. Crumbling motor gasoline demand and an oversupplied global oil market are challenging the continued economic viability of the US ethanol industry, which has significant implications for corn profitability. In the past few weeks, northwest Iowa corn basis values have retreated about USD 0.40/bu, or approximately 14%. With crop production at best a break-even proposition these days, a USD 0.40/bu drop in corn prices results in negative returns on corn production.

## Even With Massive Government Stimulus, Stability and Recovery Are Elusive

The passage of the CARES Act is a down payment on trying to restore a portion of lost farm income. Congress provided the USDA a multi-billion dollar package to support the entire food and agriculture supply chain. On Friday April 17, the USDA announced USD 19bn in aid to agriculture from both existing CCC funds and USD 9.5bn from the CARES Act. According to the US Senate Committee on Appropriations, aid will be received by beef, dairy, pork, row crop, specialty crops, and "other crops". It is expected additional CCC funding requests will be made to Congress. For many sectors, government support will be the difference between being in business next year and not. There are still positive stories to tell. US meat exports are strong. Grocery stores are scoring upwards of USD 100bn of food sales shifted from foodservice to retail. Trucking rates are and will continue normalizing as

shipping adjusts. Demand for tree nuts are steady, and cheap gasoline lowers operating costs for all.

The entire food and agriculture supply chain has been impacted both positively and negatively. Consumer-facing commodities, such as animal protein, cotton, and dairy, have been impacted hard and quickly. While other agricultural commodities, such as grains and oilseeds, have been affected indirectly, but very likely will be impacted over a longer period of time (e.g. feed demand, energy consumption). Covid-19 is like the Great Depression in that it will affect an entire generation's behavior, government policy priorities, foreign relations, and trade. Food and agriculture are essential. Food security and food safety will increase in importance. Understanding your business's place in the food chain is more important than ever, and being adaptive to the new environment will mean the difference between profit and loss.

# Economy: Scrambling for Liquidity

## US

- The outbreak of the coronavirus in the US, and the subsequent social distancing measures pushed the economy into recession in March. We expect GDP to contract by 5% in Q1 and 31% in Q2. Unemployment is likely to peak between 20% and 30%. While lifting measures should lead to a rebound in the economy (14% GDP growth in Q3), the damage to the demand side is likely to remain a drag on the economy. Therefore, we expect the economy to fall back again in Q4 (-1% GDP growth). For 2020 as a whole, we expect GDP to fall by 6%.
- The extreme drop in cashflow has led to businesses scrambling for liquidity. At the same time, the usual buyers of commercial paper, the money market mutual funds, are also looking for liquidity as they anticipate withdrawals by investors. Consequently, the commercial paper market froze up in March and the Fed had to launch a range of special lending facilities to provide USD liquidity, both at home and abroad. While these actions have stabilized the money markets, several spreads remain elevated. As long as cashflows of businesses remain depressed, USD liquidity is likely to remain problematic.

## Mexico

- Mexico was already four quarters into a recession as this year begun, but in light of the Covid-19 impact globally, in the US and domestically, estimates for GDP growth in 2020 are painting a very gloomy picture. Indeed, we expect the economy to shrink 7% in 2020. We still expect further cuts from Banxico and maintain our call for an end-of-year policy rate of 5.00%, but the sharp sell-off in the currency has of course already provided a significant easing impact. We expect USD/MXN to rise to 24.50 at the three-month horizon.

## Canada

- We also expect a sharp downturn in the Canadian economy, with GDP falling by 4% in 2020. The Bank of Canada has cut its main policy rate to 0.25%, and is reluctant to go negative. Instead, the Bank is increasing its asset purchases. In terms of USD/CAD, the pair is currently trading around the 1.40 handle. We see the path of least resistance as higher and expect the pair to retest 1.44 before the end of Q2.

## Interest rates, 2013-2020



Source: Federal Reserve of St. Louis 2020

## Currencies, 2013-2019



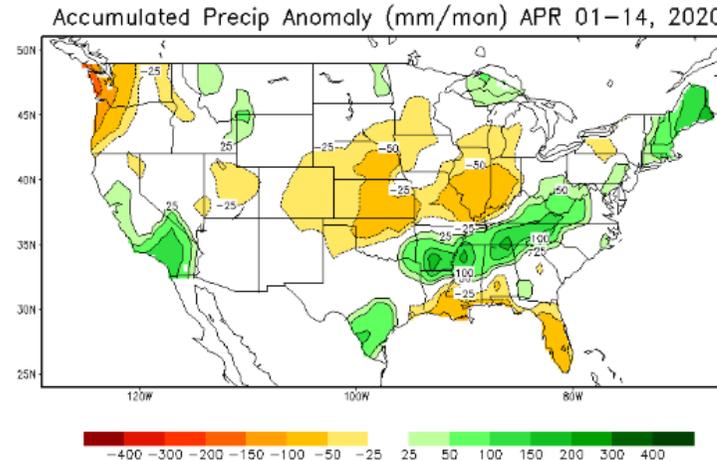
Source: Bloomberg, 2020

Note: Rebased at 100 as of January 1, 2013

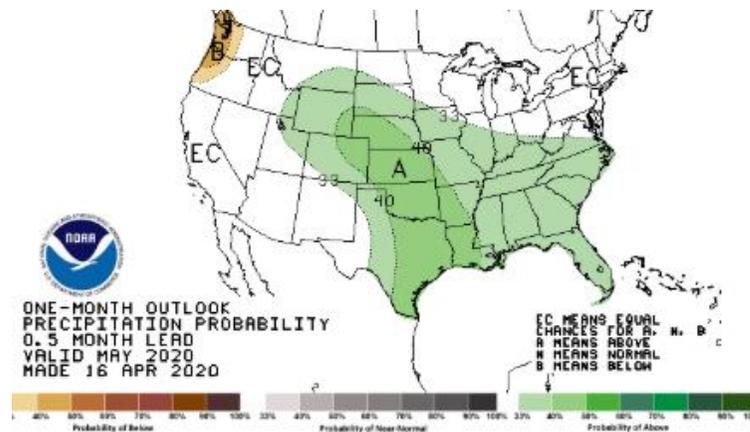
# Climate: Favorable Conditions as Planting Begins

- The warmer winter weather pattern has extended, for the most part, into early spring. Average temperatures are forecast for next month across the Corn Belt. This should enable timely spring plantings as some areas of the Central and Southern Corn Belt have seen soil temperatures approaching the desired 50 degree mark.
- The biggest weather risk going forward remains the forecast for higher than normal precipitation as seen in NOAA's one-month outlook. Although some areas have seen relief in recent weeks, there is still a high level of soil moisture across most of the US row crop regions.
- The Northern Plains continue to face challenges. This area has recently experienced a colder than normal weather pattern. Farmers here are also still struggling to complete last year's harvest. There is still roughly 10% of the 19/20 corn crop in North Dakota in the fields. This additional fieldwork will create challenges along with the colder and wetter than normal weather they are experiencing.
- Planting is well under way in Southern states where some wetness has created delays. For instance, corn and soybean plantings lag year ago levels in Alabama, Arkansas and Mississippi. This region saw particularly heavy precipitation during the beginning of April. With a wetter than normal pattern expected to continue, there is an increased risk that farmers in this region do not get the crops they intended to plant into the ground. There could be acreage shifting into other crops or acres claimed as Prevent Plant again this year.

Lower than normal precipitation during the first half of April was welcomed across the Corn Belt. However, heavy rains in the south have delayed early fieldwork



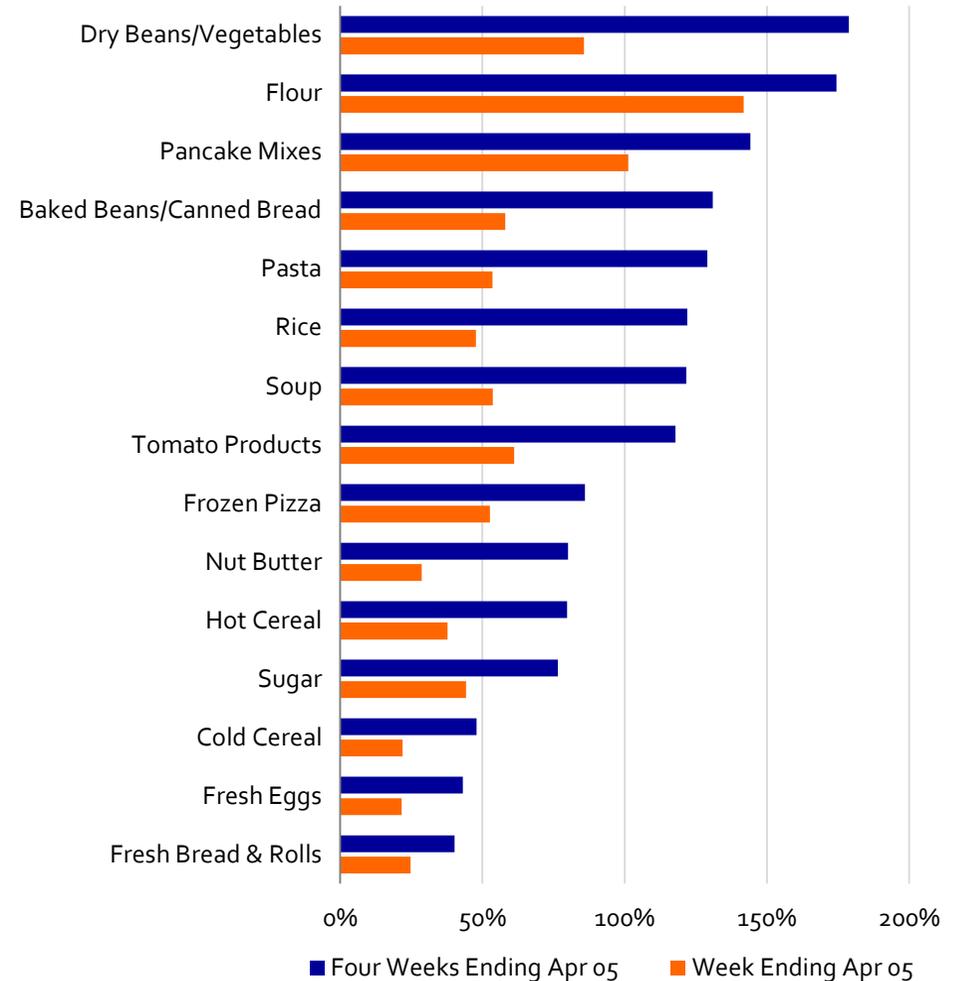
The forecast of above average precipitation during the next month could delay plantings



# Food Retailers/Manufacturers: Consumers Look for Comfort in Food

- Stay-at-home directives have lifted sales for most packaged food manufacturers, with the magnitude of lift dependent on their relative category mix. Groceries sales trends over the past several week clearly show a strong consumer emphasis on 'everyday staples' and 'comfort', manifesting in strong triple-digit sales growth in categories such as dry bean, flour, pancake mixes, baked beans, pasta, rice, soups, well-above low/mid single-digit growth over the past twelve months.
- Specifically, the home baking ingredients segment has benefitted from being a pastime for people staying at home and a way to get access to fresh products without leaving home. The ongoing sales lift in the baking segment, even if likely temporary, is a welcome relief for a category suffering from increasing consumer aversion to gluten and carbs.
- Though the surge in packaged food sales will crest after consumers stop their pantry-loading, we believe that it may lead to a residual, albeit likely modest, positive impact on packaged food sales as more people are expected to avoid travel and eating away-from home. Furthermore, it may lead to lasting changes in consumers' shopping behaviour with respect to frequency and size of shopping trips, as well as places and channels to shop. Recent shopping data clearly shows a strong consumer shift from convenience stores to supermarkets/groceries, particularly for snacks/candy – both salty and sweet. We also believe that it will lead to a faster shift to the online/ecommerce channels for groceries – one of the least developed consumer segments – as it's leading to a much broader/faster consumer 'test', as well as incentivizing food manufacturers and retailers to invest faster in their online capabilities.
- While providing a short-term sales boost, the current pandemic environment has also added operating costs to packaged food manufacturers and retailers in the form of higher logistics costs, production/manufacturing realignments, paid sick leaves, and risk premium paid to personnel.

## Growth in sales, % YOY

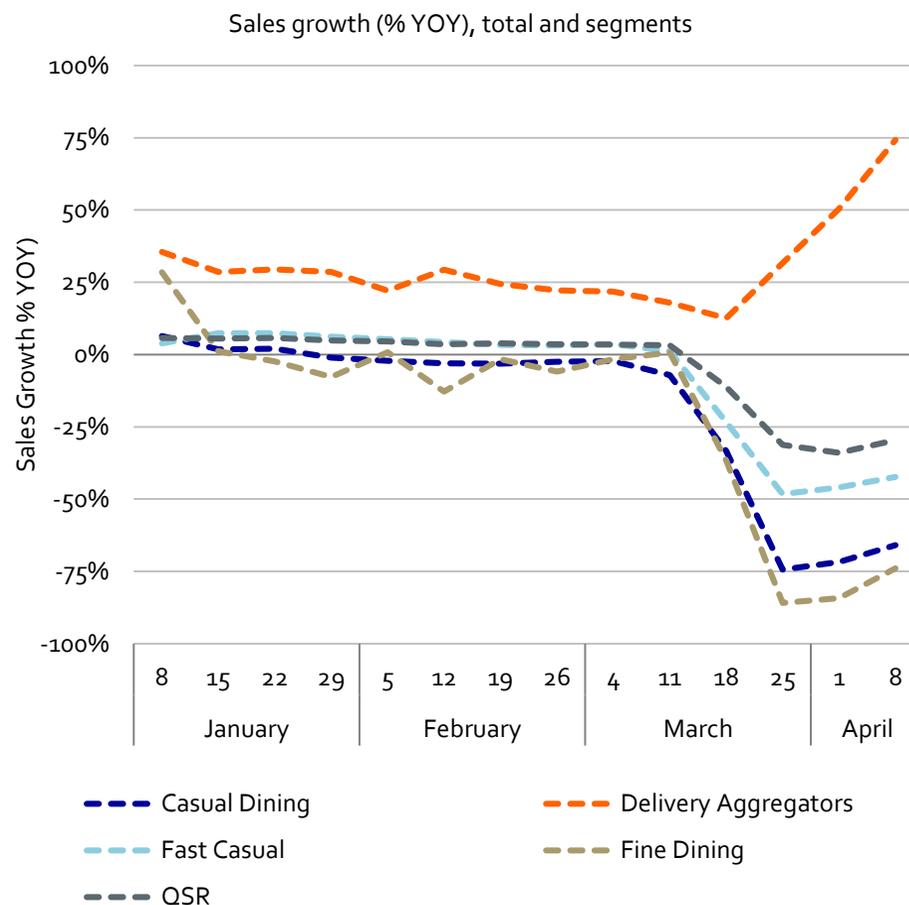


Source: IRI, Rabobank 2020

# Foodservice: Hard-Hitting Moment for Foodservice & Its Suppliers

- US foodservice operators continue to be one of the biggest casualties of the ongoing Covid-19-driven disruptions. Transactions for six million US credit/debit cards compiled by Earnest Research show a stark contrast from solid sales performance by US foodservice in January and February, with deepest declines in full-service restaurants (fine and casual dining, -74% and -66%), followed by fast casual (-42%). Quick service was least affected (-30%) mainly due to drive-thru business – a good fit in a world of social distancing.
- On the other hand, with restaurant services largely restricted to delivery and takeout for over 90% of US population since mid-March, sales through third-party delivery services continue to explode, with sales growth accelerating from 20%-40% in January/February to +74% during the week ending April 8. The pizza sub-segment is favourably positioned in this environment given its greater exposure to delivery. Specifically, Domino's reported a +1% same-store sales growth in March, better than February; and Papa John's a +3.6% in the same metric.
- Although Rabobank expects foodservice declines to moderate as restaurants begin to reopen with the lifting of the lockdown restrictions by late May, the operating environment for foodservice operators/suppliers will continue to very challenging given lower foot traffic from exposure risk, higher unemployment, and likely restricted capacity to allow for adequate distancing in dine-in rooms. In fact, the National Restaurant Association estimates that 15% of restaurant may close permanently by the end of April.
- That said, we believe that the recently passed CARES Act should provide substantial and immediate help to the foodservice segment, particularly to small independent and/or franchisee operators. The two most relevant funding mechanisms of the CARES act are 1) Paycheck Protection Program from the Small Business Association for forgivable loans of USD 10m or 2.5x monthly gross payroll; and 2) Economic Disaster Loans of up to USD 2m with favourable terms and greater flexibility for usage towards not just payroll but also operating expenses or working capital.

## Restaurant sales to recover as businesses adapt to delivery and take out, and consumers join delivery platforms



Source: Earnest Research 2020

# Cattle: Supply Chain Disruption and Demand Shifts

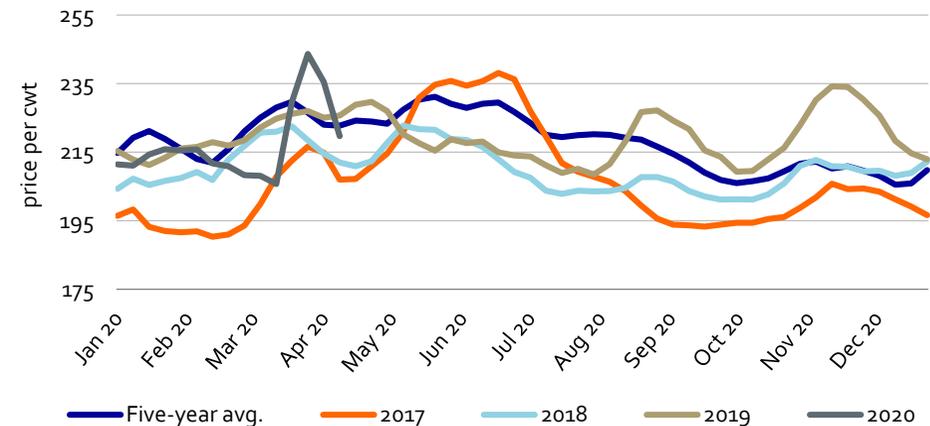
- Coronavirus impacts, in combination with YOY increases in all animal protein production through March, have put live cattle prices in near free fall. While cutout initially paralleled the downward trend, the surge in meat stockpiling coupled with shifting product from HRI (formerly 59% of beef consumption) to retail triggered a rapid spike in cutout prices.
- Labor force concerns related to the coronavirus spread have shuttered multiple packing plants for the next couple weeks and triggered reduced processing capacity at nearly all. Aggressive slaughter rates in March (+7% YOY weekly average) incentivized by record strong basis and the looming threat of plant disruptions bought the industry a small cushion to avoid a backlog of cattle. That cushion is evaporating quickly. For the week ending April 11, federally-inspected slaughter was 19% below the average March rate and 16% below the same week in 2019. Expect continued processing disruptions in the weeks ahead.
- The fed cattle supply increase relative to operational processing capacity will put continued negative pressure on live cattle prices. Simultaneously, the processing disruption will cause a reduction in wholesale beef supply relative to consumer demand, thus supporting cutout prices. Expect the spread between cutout (near USD 230/cwt and higher) and cash live cattle prices (near USD 100/cwt and below) to widen over the next couple of weeks.
- Acute supply chain disruptions should be solved in weeks rather than months, pulling cutout and live cattle back together. Prices will then hinge on consumers' economic health. While grilling season will provide some seasonal support, the economic recession and continued social-distancing will weigh heavily on prices. With favourable trade deals in place, beef export volume has been exceptionally strong YTD (+28% through April two-weekly data), however, the global recession and a strong USD suggest diminished export demand ahead.
- Feeder cattle prices will track deferred live cattle futures with slow fed cattle marketings and financial damage to cattle feeders, curtailing demand in the short-term. Stocker/backgrounders will also be reluctant to sell feeders until substantial recovery from the current sub-USD 120 level. For the weeks ending March 20-April 10, national feeder cattle receipts are down 57% YOY.

Fed steer prices (five-market average), 2017-2020



Source: USDA, Rabobank 2020

Comprehensive cutout, 2017-2020

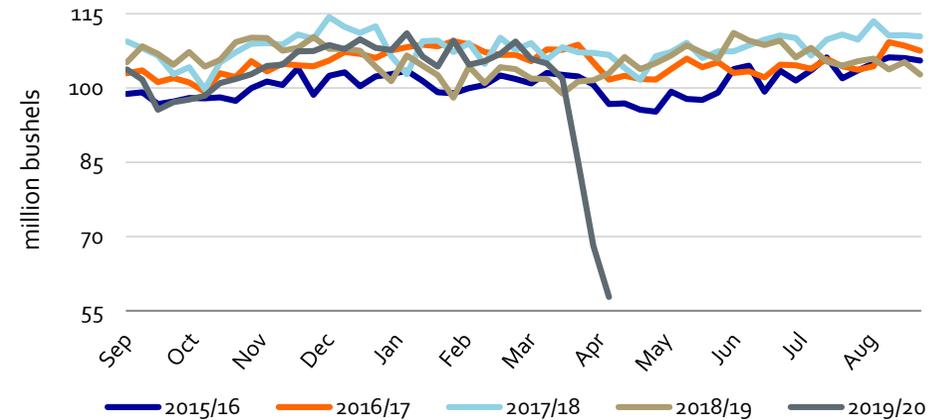


Source: USDA, Rabobank 2020

# Corn: Demand Woes

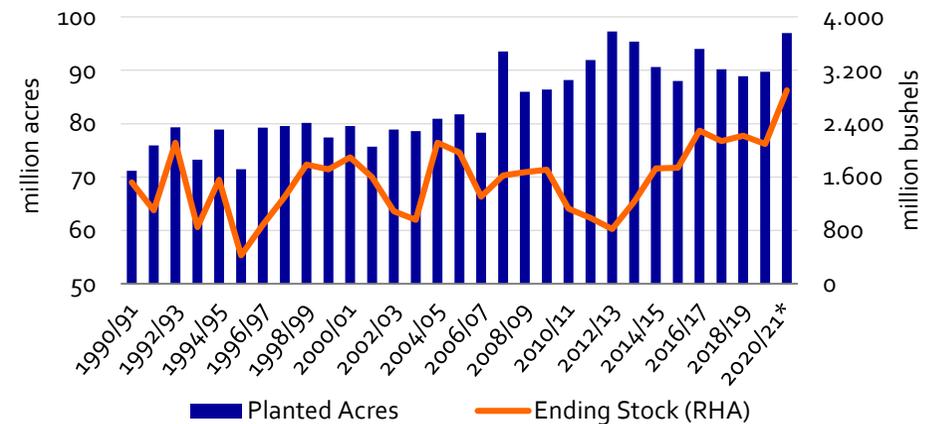
- Corn and Covid-19 has been all about ethanol or the lack of it, declining gasoline supplied to the market (-47.6% in past four weeks) and the corresponding decline in ethanol demand. Through March 20, average weekly corn grind for ethanol production was 104.7m bushels per week. For the past three weeks, the average weekly grind was 70.6m bushels. If you extrapolate that average three-week grind through the end of the crop year, total corn demand for ethanol would be approximately 4.6bn bushels. This compares to 5.378bn bushels used in 2018/19 and projected current usage of 5.05bn this year, which is slightly below what is needed to meet the RFS. Barring a quick and significant economic recovery, loss of corn demand is going to add stocks to the balance sheet. Resulting in 2019/20 ending stocks being closer to 2.5bn bushels, and putting more downward pressure on already depressed prices.
- The USDA's projected 2020 corn plantings, of 97.0m acres, was above all trade expectations and has added to the bearish tone of the corn market. The 97.0m acres is likely the high-water mark for the season, as new corn futures have declined further since the report and soybean futures have held steady.
- Plugging 97.0m acres into a 2020/21 balance sheet, using a conservative trend yield of 175 bushels per acre and USDA's optimistic (February) demand projections, 2020/21 ending stocks increases to 2.9bn bushels, and the stocks-to-use ratio reaches nearly 20%. Using the relationship between STU ratio and December futures in Q4, December corn futures are projected to trade in the USD 3.25-USD 3.35 per bushel range. Currently, December futures are trading at the bottom end of that range. The additional concern is that stocks could easily top 3.0bn bushels as the USDA's 5.8bn bushel feed/residual projection appears optimistic in light of turmoil in the livestock sector.
- Where are the marketing opportunities? First, opportunities arise during the spring as producers go to the field and are not thinking about selling. Second, a basis opportunity is likely to arise this summer as ECB supplies dwindle. The southeastern poultry market will need to reach farther west to procure corn and soybeans. Thirdly, the market carry will provide better marketing opportunities into 2021 and 2022 – think about selling the crop before you plant it.

## At current pace, US corn use of ethanol could be 4.6bn bu



Source: USDA-AMS, Rabobank 2020

## Fundamentals and economics don't support 97mln planted acres

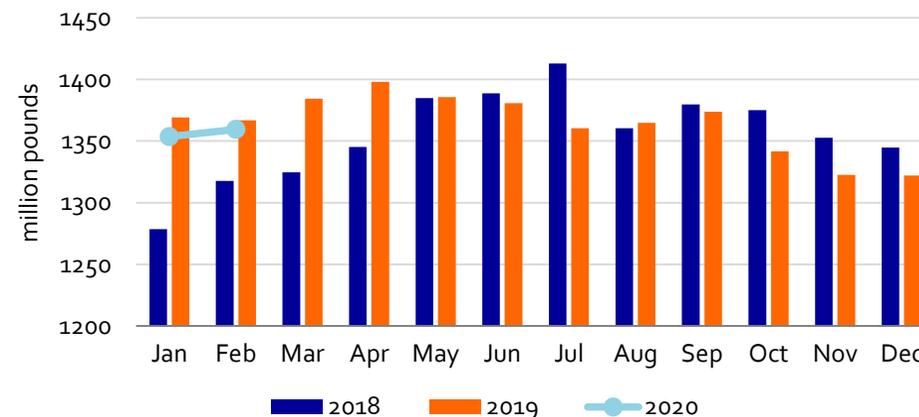


Source: USDA-NASS, Rabobank 2020

# Dairy: Prices Collapse as Demand Falls Sharply

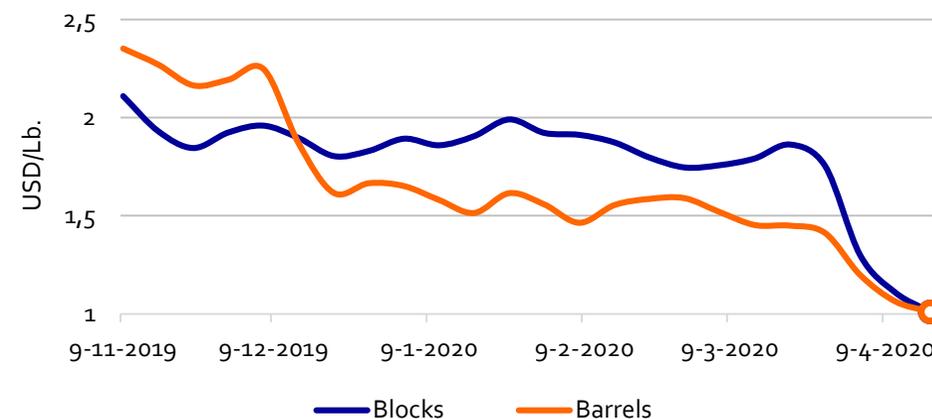
- Milk prices have collapsed suddenly and severely due to lost foodservice sales and an expected slowdown in exports, which translates into a milk market that is about 10% to 15% oversupplied.
- As this extra milk struggles to find a home, product inventories are building rapidly toward maximum historical levels. Nonfat Dry Milk stocks are at 99% of their maximum historical level of 320.7m pounds. Cheese inventories are only 53m pounds away from their maximum historical levels as of the end of February.
- Cheese inventories will quickly become burdensome as the lost foodservice sales will add at least 110m pounds to inventory each month until demand returns or an alternative outlet is found. Given the lack of cold storage space, milk is being dumped rather than converted into cheese without a market.
- Exports will not provide much relief as import demand will be reduced in much of the world. Earlier in the year, when China was dealing with their initial slowdown in demand for fresh dairy products due to Covid-19, much of their excess domestic milk production was converted into whole milk powder, which will limit their need to seek powder on the world market.
- Risk management decisions made last year into the beginning of this year will help soften the blow of the sudden price collapse for some, but will not completely offset the pain of such dramatically lower prices. In most cases, there is no protection against lower pool values of dumped milk or deductions from milk buyers for marketing costs.
- Commodity prices have collapsed across the board. Block cheddar cheese spot prices at the CME are USD 1.00 / lb., a level not seen since 2003, and a 50% decline from the USD 2/lb prices reached in January. Butter and nonfat dry milk have buckled similarly to USD 1.14/lb and USD 0.85/lb, respectively. Milk checks have not yet fully seen the impact of these lower commodity prices but will reflect these lower prices in the coming weeks. Prices will be depressed for the remainder of 2020, and the trajectory from here is dependent on the magnitude of government intervention and the speed at which the economy can improve in the wake of the Covid-19 epidemic.

Total natural cheese stocks



Source: USDA, Rabobank 2020

CME weekly spot cheese prices



Source: CME, Rabobank 2020

# Farm Inputs: Chinese Exports and Production Limited by Covid-19



## Spring fertilizers; need for nitrogen

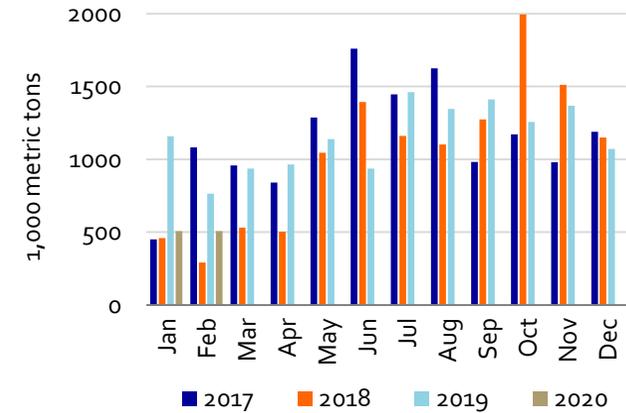
- As we complete the spring ammonia application window, attention is likely to shift towards urea and UAN. Given the expectation of a rebound in total acreage this planting season, and a potential increase of 4m-6m acres of corn, we would expect a stronger demand for later season N on a YOY basis. It is this relative 'shortage', and anticipation of strong spring demand, that has seen urea rally ~20% since the start of February. With US imports of urea lagging ~38% behind year ago levels through the first two months of the year we could yet see a further leg-up in pricing, particularly if USDA prospective planting acres for corn come to fruition.
- A countervailing argument to this is the FX movements that we have seen as a result of Covid-19, with the USD strengthening against world currencies. This has the potential to encourage imports into the North American market. However, imports are likely to face logistical and timing constraints to meet corn belt demand. In our last ABR review in February, we highlighted the potential for urea prices to move up. In expectation of a return to normal planting patterns we would expect a marked uptick in demand for the main macro nutrients this planting season. Given the steps taken by the industry to curtail K output and the impact that Covid-19 has had on P production (and could have again in the future), the potential remains for fall fertilizer pricing to be higher YOY. It may be time already for farmers to form a view on fall costs.

## Corn Belt fertilizer benchmark price index shown a little life by urea



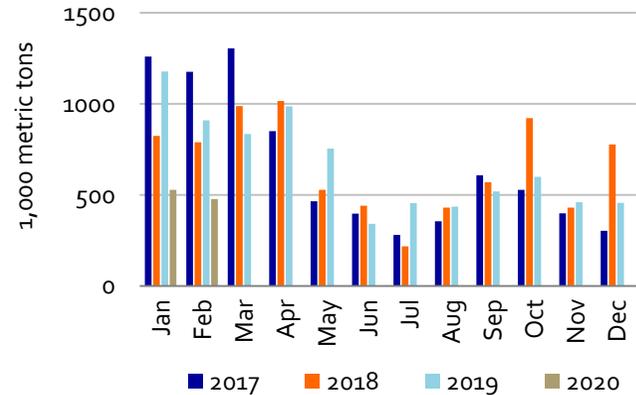
Source: Bloomberg, CRU, Rabobank 2020

## Combined Chinese urea and MAP/DAP exports



Source: Bloomberg, CRU, Rabobank 2020

## Combined US urea and MAP/DAP imports



Source: Bloomberg, CRU, Rabobank 2020

# Feed: Covid-19 Wreaking Some Havoc

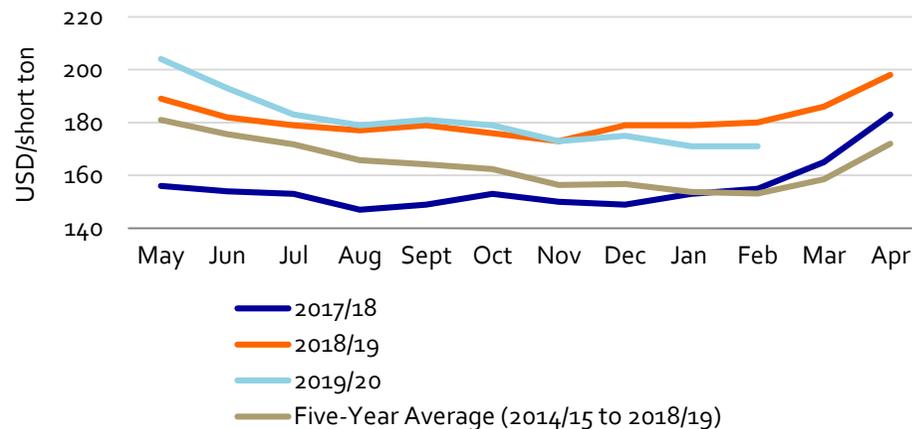
## Hay

- US alfalfa hay prices edged slightly lower in January/February to USD 171/metric ton. This price is 5% lower than February 2019, but still 12% higher than the previous five-year February average.
- US Alfalfa exports were up 5.6% for the first two months of 2020, versus the same period last year. A 74% increase in alfalfa exports to China – despite Covid-19 – more than offset declines to other major markets. February alfalfa exports totaled almost 211,000 metric tons, which was 17% higher than the previous five-year average for that month. Other hay exports were down 3.7% YOY during January and February, versus the first two months of 2019, with exports to South Korea registering the steepest decline.
- Days of heavy rainfall in March and early April did disrupt the start of the hay harvesting season, but cutting is now back on track. Given the extended, global Covid-19 outbreak that has occurred since early March, and the resulting volatility in livestock, dairy and other feed markets, hay buyers are currently assessing the rapidly changing situation, which has limited trading.

## Feed Ingredient Demand

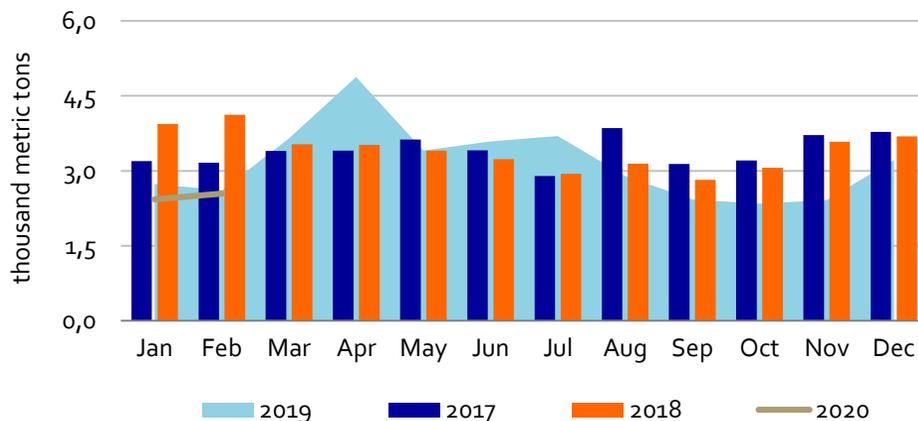
- Over the last two months, the feed ingredient markets have seen prices move from lows to highs and back to lows. Driven by external factors like Covid-19 and the oil price war between Saudi Arabia and Russia. We anticipate lower demand for animal feed in the second or third quarter, as processing plants shut down and feeding operations slow weight gains in animals or move further to liquidations..
- Ethanol output has declined and DDGS prices have increased due to limited output. Prices have increased this year from January to February by 6% on a national average compared to 2019. DDGS are not feasible in some regions as feed ingredient and formula are likely to move to corn and soymeal.
- Vitamin imports have seen a decline due to a backlog on containers coming from China at different US ports. In addition, imports in 2019 vs 2018 declined by 8%. So far in the first two months of 2020, imports of all vitamins from China are 7% lower compared to same period last year.

US alfalfa hay prices, 2017/18-February 2020



Source: USDA NASS, Rabobank 2020

US vitamin imports from China, 2017-February 2020

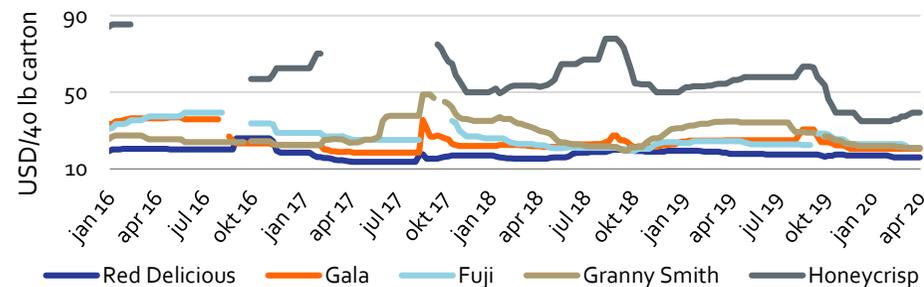


Source: US Census, Rabobank 2020

# Fruits: Spring Demand Pull, *Where Art Thou?*

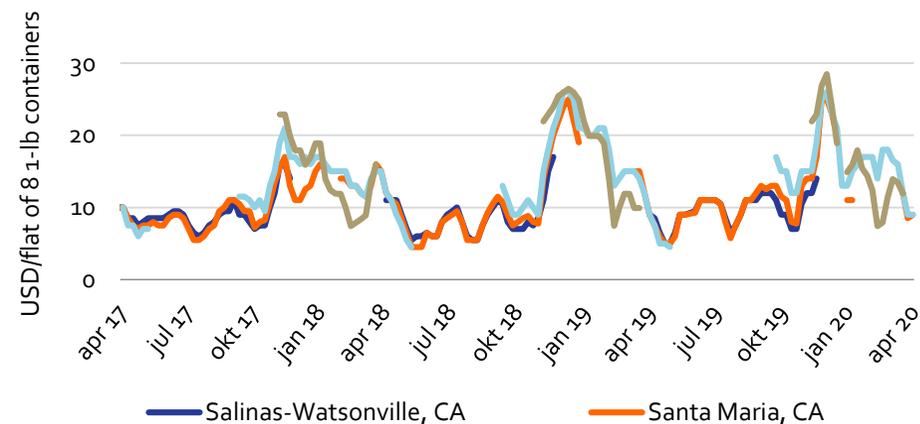
- After a price increase during March's retail sale spike, strawberry prices have declined to about USD 9/flat in early April. Supplies are set to be plentiful this summer, as planted acreage in California increased about 4% YOY. Supply-side risks, such as a potential decline in labor availability due to Covid-19, and likely irregular demand, may disrupt the favorable outlook for this highly perishable fruit.
- Blueberry prices dropped more than 50% after a strong start in March, slower movement is reported. Table grape production out of Mexico is expected to ramp up early in May. The new crop, 20% smaller YOY, should find a mostly clean US market.
- California avocado prices are down 18% YOY, to about USD 47/carton for Hass 48s. CA avocado production is expected to go up 70% YOY. During most of Q1 2020, the market was strong, with demand pulling prices up YOY. Larger supplies, combined with a decline in foodservice demand, due to shelter-in-place guidelines, may impact prices during the next several weeks. Prices during summer will also be down YOY.
- It has been a mixed bag for citrus. Lemon prices continue at multi-year lows. At the beginning of April, prices of 140s were down 13% YOY to about USD 25/carton. Prices for mid-sized Navel oranges found some much-needed boost amid Covid-19, with 88s priced at USD 15/box, up about 27% from multi-year lows in April 2019.
- Despite a surge in domestic demand at retail in March, apple prices for most of the main cultivars were flat to declining during the last four months. During Mid-April, prices of Granny Smith, Gala, Fuji, and Red Delicious were down 40%, 18%, 14%, and 10% YOY, respectively. Honeycrisp prices recovered some ground during March, but were still down 29% YOY. A larger YOY WA apple harvest, along with some trade bottlenecks, and a very strong dollar will continue pressing prices down this season.

## Washington apple shipping point prices – 88s – WA Extra Fancy, 2016-20



Composite of fine appearance and standard appearance prices  
Source: USDA AMS, Rabobank 2020

## Strawberry shipping point prices – primary US districts, 2017-2020



Source: USDA AMS, Rabobank 2020

## California Hass avocado shipping point prices –48s – 2016-2020

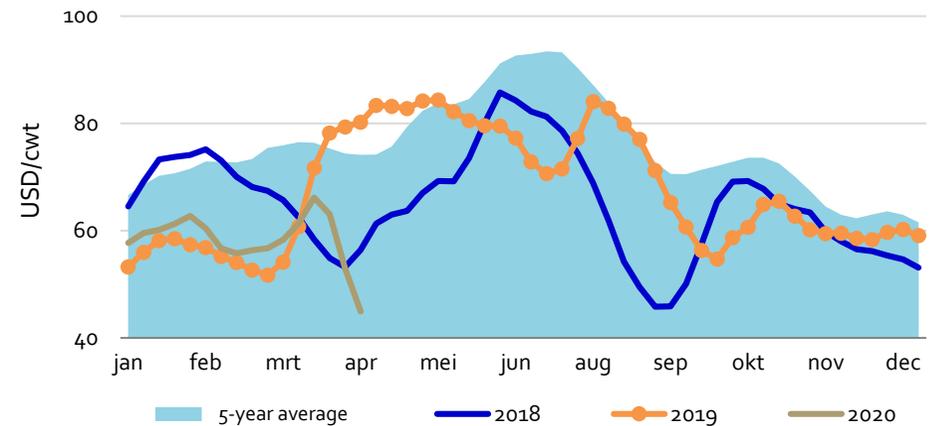


Source: USDA AMS, Rabobank 2020

# Pork: Packing Plant Closures Create Near-Term Imbalance, Pork Values Near Historic Lows

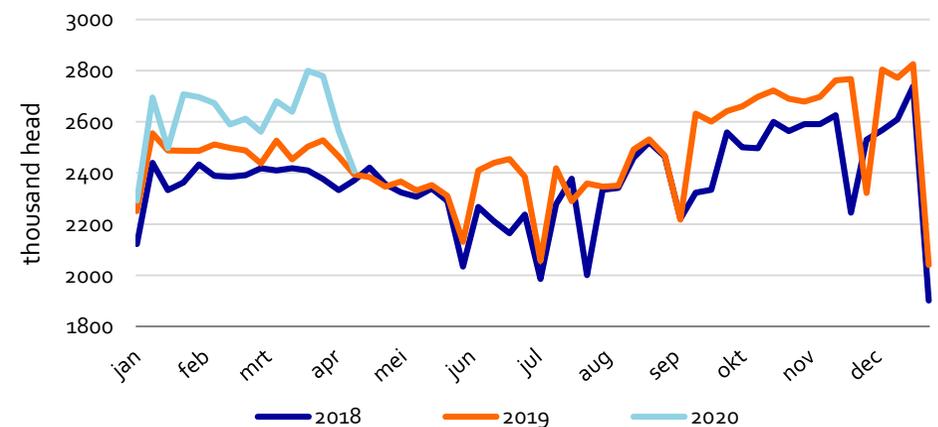
- US lean hog and pork markets dropped sharply in recent weeks following the closure of two Midwestern pork plants and the continued deterioration in pork demand. Pork prices fell 44% since the beginning of the year, to nearly 20-year lows. Bellies were particularly weak, down 54% in March, as the slowdown in the foodservice sector (60% of sales) decimated demand. Other foodservice items like butts and ribs also fell sharply in recent weeks, down 40% and 34%, respectively. Hams also hit new lows in March (down 34% in the month), reflecting disappointing retail demand as well as the impact of a weaker Mexican peso (down 25% YTD) on export demand. Loin was the lone pocket of strength, up 25% in March, as retail demand remained relatively robust.
- US hog slaughter was up 6% YOY in Q1 and well ahead of expectations. Larger available hog supplies and a focused effort by packers to pull hogs ahead before labor shortages due to Covid-19 became an issue, drove the gain. Plant closures have reduced available slaughter an estimated 6%, while many other plants are running well behind our forecast. Industry kills are expected to stabilize at ~2.4m head in coming weeks, but could move lower on virus-related closures. It remains unclear how quickly plants will be allowed to reopen and what percentage of the workforce will return. We expect disappointing slaughter schedules throughout the spring, which creates a probable overhang on supply in the fall.
- The only bright spot has been exports, which continue to meet our expectations for growth (up 42% YOY) despite a stronger dollar, weaker economic growth prospects in many key markets and low-cost competing meat supplies. Shipments to China were up 631% YTD, driving nearly all of the growth in US exports. Sales to Mexico, Canada, and Japan were also higher through February, but could slow to our North American partners given the strength in the dollar.
- Mexican pork production rose 4% YTD, well behind year-ago levels and our expectations. Higher cost corn (due to the weaker peso) and weaker pork demand may slow production growth over the balance of the year, although export demand remains robust. Mexico was slow to implement quarantine measures and it is unclear what impact Covid-19 will have on the industry. Economic growth is expected to drop, due to the loss of oil and tourist revenues, which is expected to limit pork demand.

US lean hog prices, 2018-2020



Source: USDA, Bloomberg 2020

Weekly hog slaughter, 2018-2020

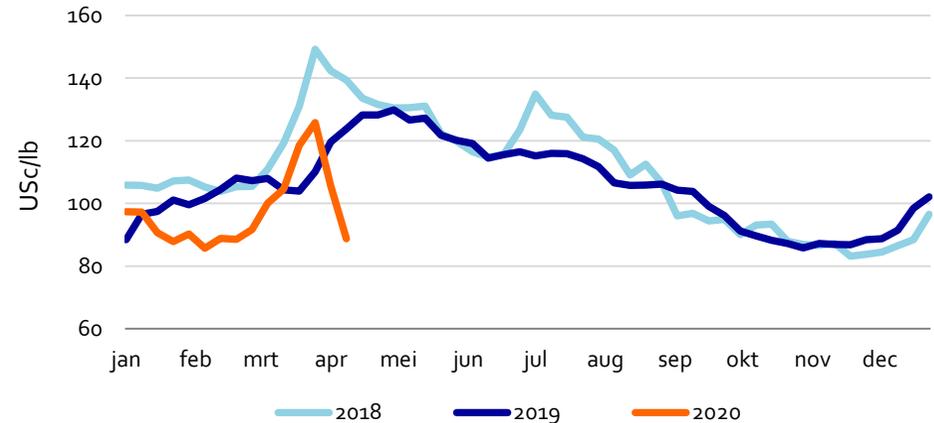


Source: USDA 2020

# Poultry: Prices Stabilize After Historic Drop, Plants Struggle With Labor Availability

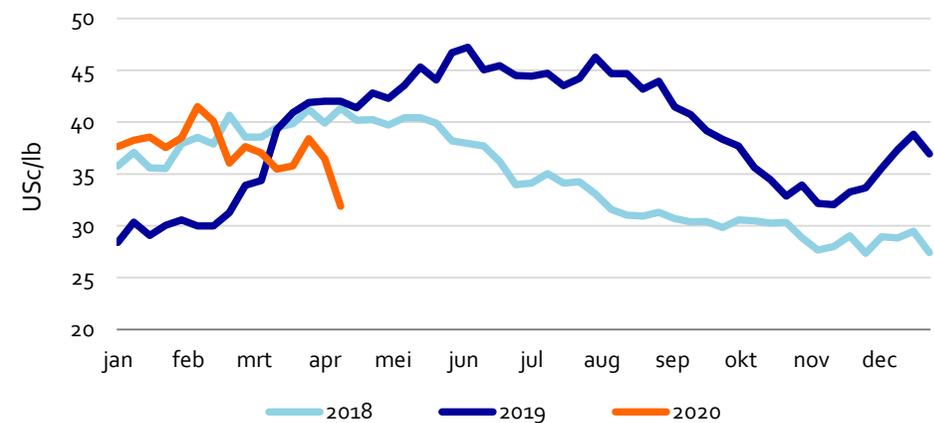
- Chicken was initially a beneficiary of consumer pantry loading, with breast meat surging, before falling more than 30% in only a few weeks. The sharp slowdown in foodservice began to weigh not only on jumbo boneless, but also on the value of tenders (down 12%) and wings (down 43% YTD). Reports of boneless selling for as little as USc 30 per pound were not uncommon in recent weeks, as burdensome inventories and limited retail options dampened sales. Composite values were nearly cut in half, now averaging only USc 50/lb. Chicken production continues to run well-ahead of year-ago levels, averaging up 7.4% YOY to 4.2m pounds in January. The industry posted a 5% gain in head slaughtered and a 2.4% YOY gain in weights to end the month, aided by new capacity, good weather and favorable year-ago comparisons. Current industry losses will force sharply lower production, with the industry forced to break eggs and cull birds.
- Slaughter in the latest week is nearly flat versus year-ago levels, after being up 5% in Q1 2020. This is a drop of nearly 5m head a week, reflecting the sharp decline in profitability and lack of labor. The industry curbed weights (flat vs. up 2% in Q1), as demand for jumbo meat has waned with the loss of foodservice.
- Labor constraints (due to Covid-19) have compounded an already challenging profit outlook. Several plants were forced to temporarily close to sanitize facilities upon discovery of positive cases, which further limited throughput. Tight labor supplies have raised costs and limited deboning and additional processing. We anticipate conditions to remain challenging through Q2 2020.
- Exports were strong through February, up 6% YOY. Big gains in sales to Mexico (up 21% YOY), and several ASF-affected nations like Vietnam (up 46%), China, and the Philippines (up 133%), drove improved Q1 dark meat and paw values.
- Mexican chicken prices moved sharply higher in March, up 46% in March YOY, as ongoing Avian Influenza issues and challenging weather conditions curbed production by an estimated 30%. Imports rose sharply to fill the supply gap. Government measures to control Covid-19 took effect late in the quarter, but are expected to have a material impact on Q2. Sales are down sharply on reduced mobility and foodservice closures. An unfavorable move in the peso will increase feed costs in 2020, but should make chicken imports less competitive.

US boneless breast meat prices, 2018-2020



Source: USDA, Rabobank 2020

US leg quarter prices, 2018-2020



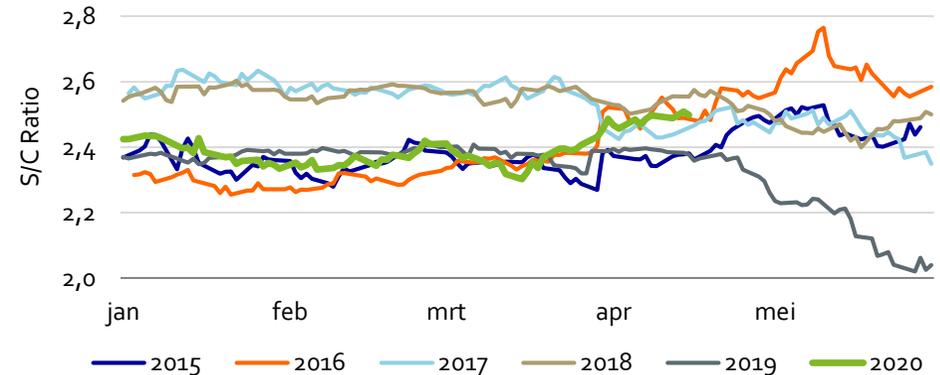
Source: USDA, Rabobank 2020

# Soybeans: Can Higher Demand Offset Increased Acres?

- The US soybean complex is balancing higher demand with the potential for more acres. Higher use this season will be driven by bigger exports to China and strong crush demand for domestic meal consumption. Whether or not this is able to push soybean prices higher will be determined by how big the US crop is.
- November CBOT soybean prices have declined only 5% since the beginning of March compared to December CBOT corn's 10% drop. This has pushed the new crop soy-to-corn price ratio from 2.36 during the first two weeks of March to 2.50. This is important to note because the first two weeks of March is when farmers were surveyed for the USDA's March Prospective Plantings report which showed 83.5m acres of soybeans. Since then, soybean prices have become more attractive relative to corn and will likely result in farmers planting more acres to soy. The last time the ratio made this type of move early in the season was in 2016. In that year, soybean acres went from 82.2m in the March Prospective Plantings report to 83.7m acres in the June Acreage report. A similar type of acreage shift is likely to occur this season. Not only will farmers likely prefer soybeans to corn, due to the profitability move, but also because soybeans are less cash intensive per acre.
- China's soybean demand is expected to recover as the country begins to emerge from the Covid-19 lockdown and their hog herd recovers from ASF. China's soybean imports in March dropped 13% YOY to only 4.28m mt. Low soymeal supplies and crush constraints have caused crush margins to expand to four-year highs in China. This will drive China's future import needs higher. The USDA recently raised their forecast for China's 19/20 soybean imports to 89m mt, which would be a nearly 7m mt YOY increase.
- South American soybeans remain more competitively priced than the US soybeans, which will continue to hamper short-term US soybean exports. However, dryness in Argentina and Brazil have lowered crop production forecasts there and will create a smaller export tail during the US harvest window. This, along with the recently signed phase-one trade deal, should allow US soybean exports to rebound in the second half of 2020.
- US domestic soybean demand remains strong, driven by high meal consumption. Ethanol production in the US is running at a 40% YOY decline due to lower demand as a result of Covid-19. This has caused the animal feed industry to seek out alternative products and increased demand for soymeal. March NOPA soybean crush was reported at a record-high 181m bu, which was above even the highest trade estimate.

## Soybean prices have gained on corn which will buy acres

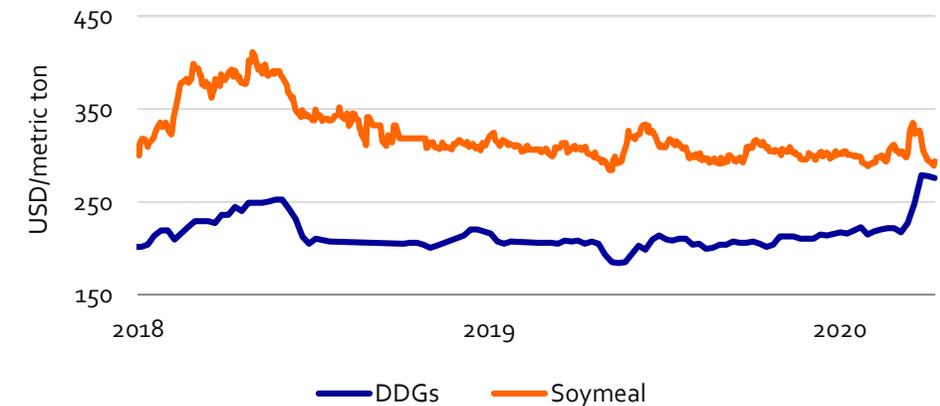
### New crop CBOT soy-to-corn price ratio



Source: Bloomberg, Rabobank 2020

## A significant drop in DDGs production pushed prices of soymeal higher

### Illinois DDGs and Soymeal Prices

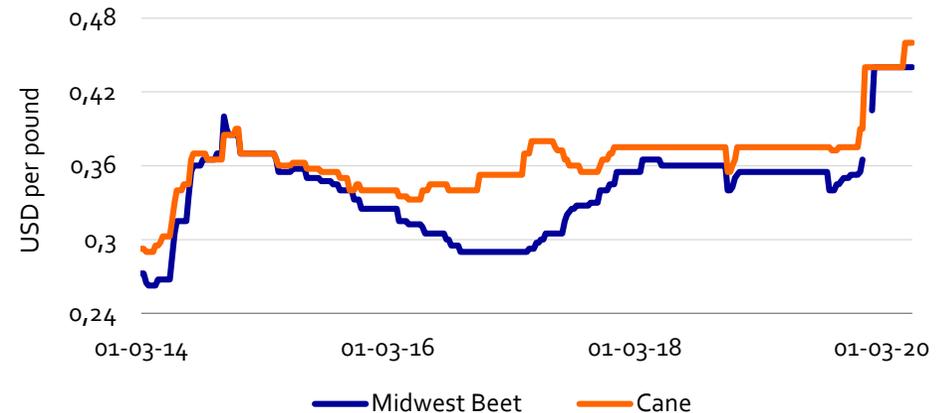


Source: US Grains Council, USDA, Bloomberg, Rabobank 2020

# Sweeteners: Many Uncertainties Point to Firm Prices

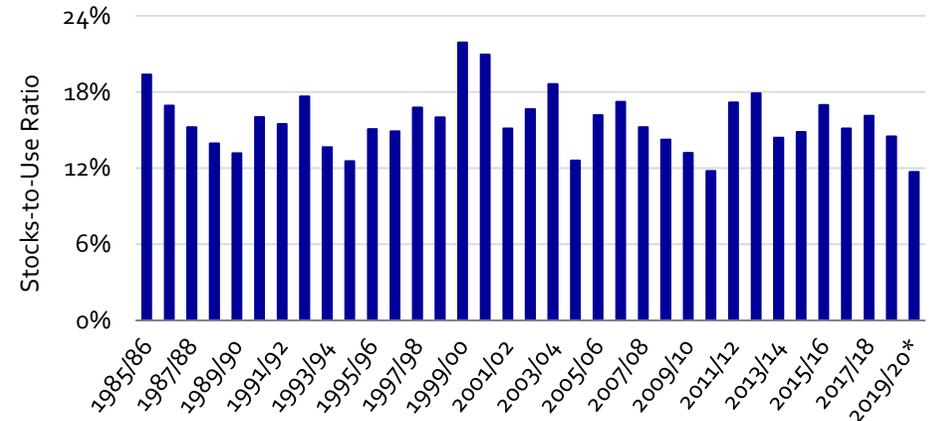
- Like all commodities, the coronavirus has impacted the sugar sector – showing a surge in retail sales at the expense of food service. The weeks of March 15 and March 22 saw a surge of sugar sales over last year, of 98% and 129%, respectively. Retail sales have eased for the week of March 29 and April 5, but are still up 43% and 44% respectively versus year-ago sales. Sugar sellers have estimated that sugar shipments are down 25% to food service and food manufacturers who supply the food service sector.
- While this temporary surge in retail demand is occurring, the US sugar sector is working to address the supply side of the balance sheet. On April 1, the USDA announced a number of steps to ease the tight 2019/20 supply situation. First, the USDA transferred allocations from domestic sugar beet processors with surplus allocation to those with deficit allocations. Allocations were lowered for five beet processors, resulting in a net decline of 750,000 metric tons, reassigned to raw sugar imports. Second, the USDA reassigned 550,000 metric tons of cane sugar marketing allocations to the raw sugar import quota. Even with these actions, the USDA projected stocks-to-use ratio at 11.7% is far below 13.5% minimum prescribed in the sugar trade suspension agreement – look for the USDA to raise import quota again.
- Adding to the uncertainty is what Mexico will be able to export to the US. The Mexican crop is estimated at just 5.235m metric tons, far below last year's 6.426m mt crop. Mexico did increase their exports to the US to 1.199 short tons, raw value (STRV) up slightly from last month's projection of 1.165 STRV.
- Only Michigan has sugarbeets planted, 12% complete for the week ending April 12. There has been no planting in the Red River Valley or Idaho. In Idaho it remains cold and some fields still covered in snow. While in North Dakota and Minnesota it remains cold and wet. Soil moisture levels in these two states remain above 80% of normal. Louisiana sugarcane crop condition ratings show the crop 63% good or excellent compared to last year's 36% at the comparable time.
- Uncertainty abounds in the US sugar market – Covid-19 demand impacts, tight US sugar supplies, spring planting questions in the Red River Valley. These all point to prices remaining firm through the 2019/20 crop year and only minimal new crop price declines.

## US sugar prices well-supported through 2019/20 crop year



Source: Sosland Publishing – Milling&Baking News and Food Business News, Rabobank 2020

## Lowest stocks-to-use ratio since 2010/11 crop year



Source: USDA-NASS, Rabobank 2020

# Tree Nuts: Shipments Mostly Keeping Good Pace

**Almonds:** The 2019/20 crop ended up larger than everyone was expecting surpassing 2.53b pounds, up about 12% YOY. Through March 2020, shipments were up about 6% YOY, and 60% of the total marketable supplies were sold. Exports, accounting for 70% of US shipments, were up 6% YOY, while domestic shipments were up 5% YOY through March. Prices weakened early in 2020 due to the large crop in 2019/20 and a likely bumper crop in 2020/21, however, favorable demand may start supporting prices again.

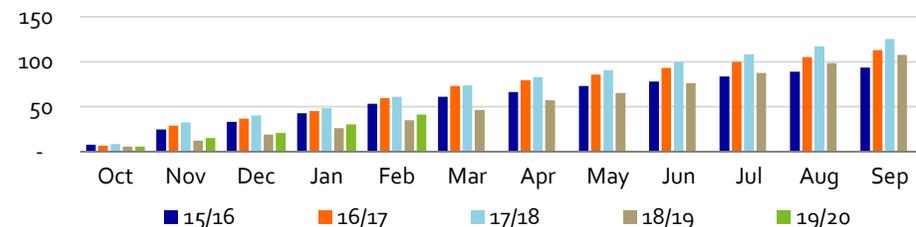
**Hazelnuts:** Shipments through January 2020 for the 2019/20 marketing season were up 3% YOY, with total in-shell exports increasing 19% YOY. About 68% of the crop was already sold, compared to 57% the previous season on a record-setting crop.

**Walnuts:** Total shipments during the 2019/20 season through March were down about 7% YOY, with 64% of 2019/20 supplies sold, lagging behind last year's pace. Exports declined by 11% YOY, and domestic shipments were up 2% YOY. Exports accounted for 67% of US shipments. Current Covid-19 pandemic, tariffs going into China, along with increased competition from China and Chile in international markets continue to represent a hurdle for US walnut exports.

**Pistachios:** Despite trade disruptions amid the Covid-19 situation, US pistachio shipments in the 2019/20 marketing year are tracking well, with 41% of the supplies sold through February, compared to 39% the previous season on a larger crop. Prices are reported to be steady and inventories should end the marketing year at manageable levels. The 2020/21 crop is expected to surpass 1b pounds, setting a new record.

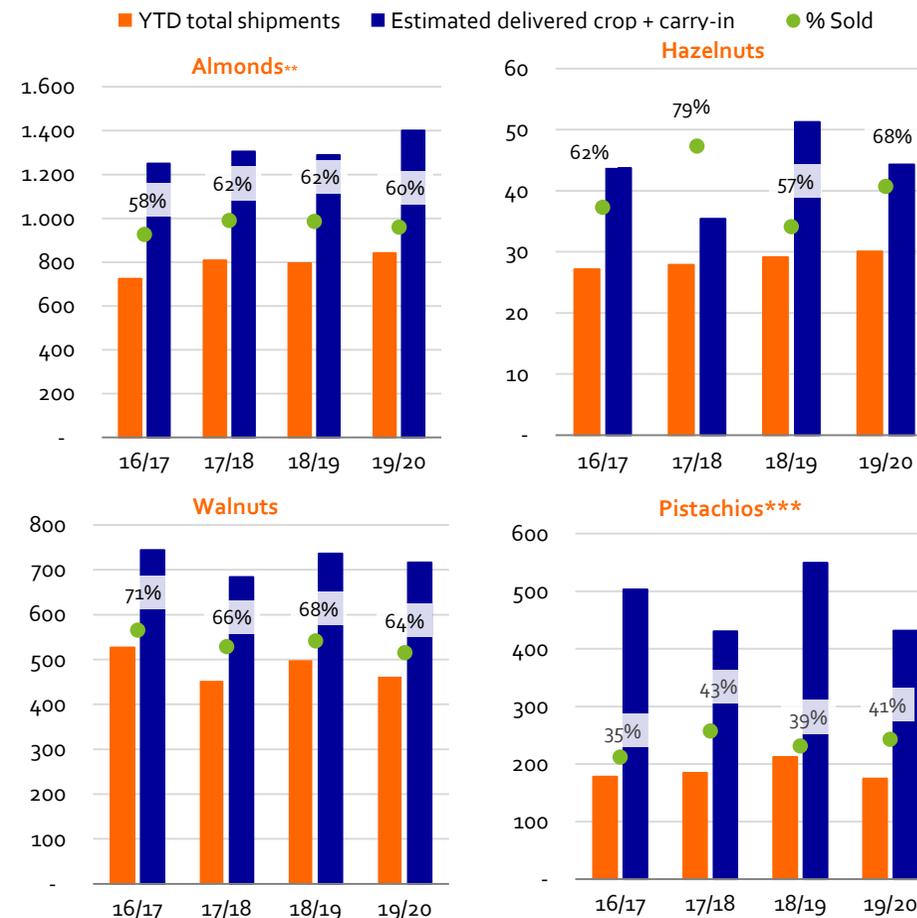
**Pecans:** US pecan export volume in the 2019/20 marketing season through February improved its pace and it is up 18% YOY, but continues to be low compared to historical average, impacted by the trade war with China and logistic bottlenecks. Industry sources report a strong demand for pecans in the domestic market. The pecan handler inventory is down 25% YOY. Industry players have mixed opinions regarding the potential impacts from Covid-19, some expect demand to slow down, while others do not believe demand will slow much.

## Cumulative US pecan exports (thousands of in-shell equivalent) tons



Source: USDA FAS, Rabobank 2020

## Cumulative US tree nut shipments\* (thousands of in-shell equivalent tons)



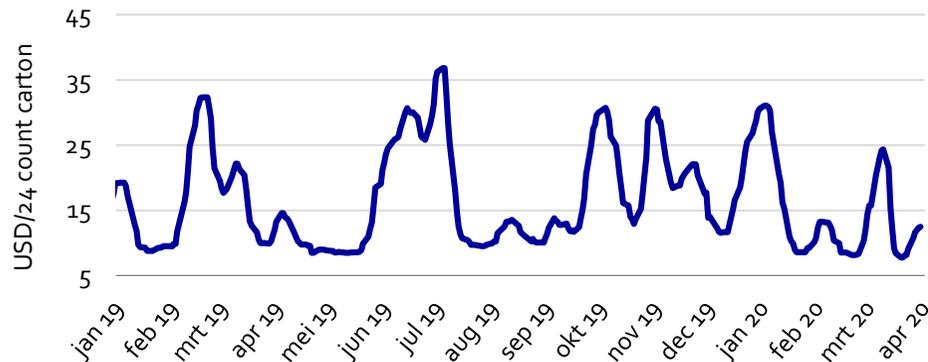
Source: Administrative Committee for Pistachios, Almond Board of California, California Walnut Board, Oregon Hazelnut Industry, Rabobank 2020

\*Marketing year through March 2020 for almonds and walnuts; February 2020 for pistachios; January 2020 for hazelnuts \*\*Meat pound equivalent. \*\*\*Not considering inventory adjustment/loss

# Vegetables: Transition Season Under Covid-19

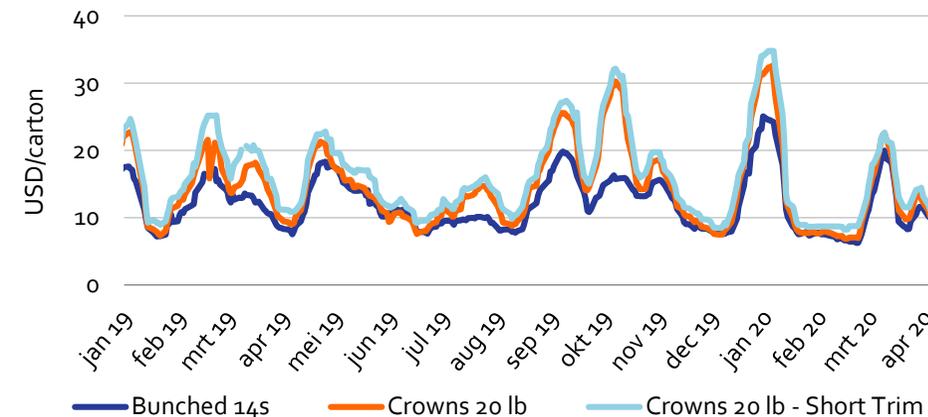
- After the second week of April, romaine lettuce prices are at similar levels as they were 52 weeks before. Prices for 24s averaged USD 10/carton, while romaine hearts (12x3) prices sat a little over USD 12/carton. A sharp price increase occurred by Mid-March, as a consequence of the retail run after the shelter-in-place orders were given. Prices will remain volatile, as increased supplies face uncertain demand.
- Iceberg lettuce prices were up about 12% YOY during by Mid-April, to above USD 12/carton for conventionally-grown, wrapped 24s, the highest price since late March 2020. During Mid-March, prices surged amid a retail sales peak and transition season. Foodservice demand remains under stress as the peak California crop ramps up.
- By Mid-April, broccoli prices were up about 20% YOY, with bunched 14s around USD 10/carton, and prices for crowns up 8% YOY. Recent rains and cold weather impacted quality. Prices will continue to adjust, as supplies out of the California coast improve, helped by favorable weather ahead.
- Cauliflower prices were strong by Mid-April, up about 48% YOY, to roughly USD 18/carton for white 12s. Prices got some support from reduced shipments out of Salinas Valley due to rain and muddy fields. Supplies should improve in the coming weeks, putting some downward pressure on prices, according to industry sources.
- Sweet potato prices in North Carolina sat at USD 16.25/carton during the second week in April 2020, down 4% YOY and close to the five-year average price. Prices increased slightly over the last month, and may be flat through the summer.

## Wrapped iceberg lettuce – US daily shipping point price, 2019-2020



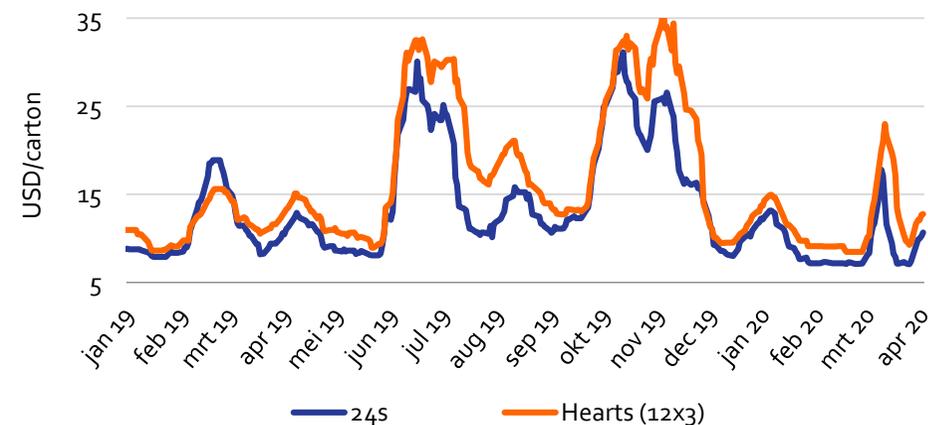
Source: USDA AMS, Rabobank 2020

## Broccoli – US daily shipping point price, 2018-2020



Source: USDA AMS, Rabobank 2020

## Romaine lettuce – US daily shipping point price, 2018-2020

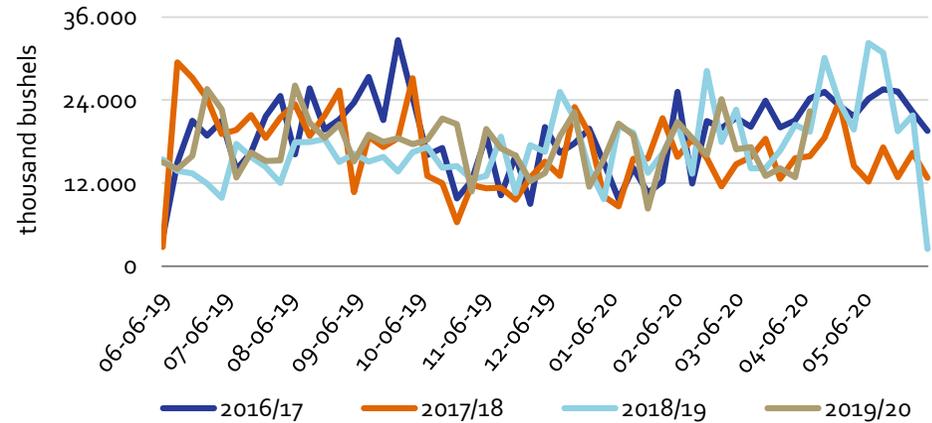


Source: USDA AMS, Rabobank 2020

# Wheat: Opportunities Around the Corner

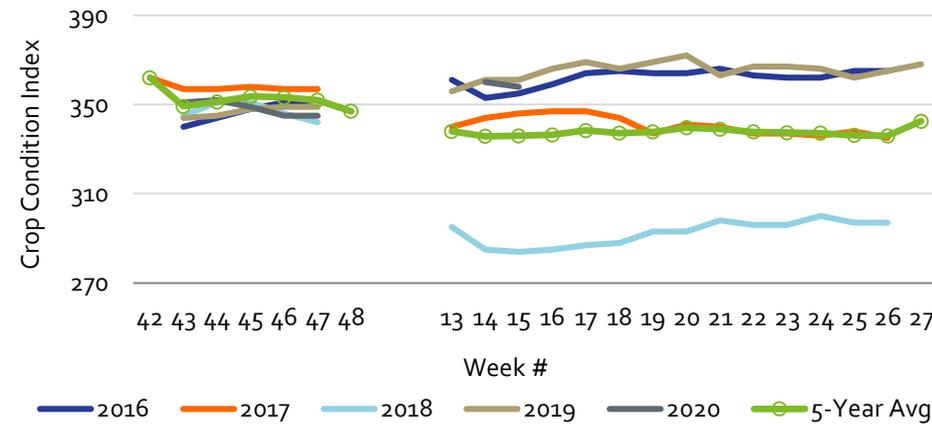
- The rally in wheat futures since the lows in mid-March has been a bright spot among the grains and oilseed sector. As a food grain and a consumer-facing product, retail flour demand has been much like during the holiday baking season, just more so. Flour millers have been running hard to fulfill retail demand and at the same time seeing their food service business decline. Flour millers have been trying to adapt food service lines to pack for retail. However, as of late, retail orders have been more variable from week to week. IRI data is showing a slowdown in sales, but still running ahead of last year's pace. For the week ending March 15, flour sales were up 186% versus a year ago. While the most recent data for the week ending April 5, shows sales up 142%, time will tell whether more home baking is a lasting trend or not. It seems that Covid-19 has changed our everyday lives, and home flour demand for baking may be one of the pleasant outcomes of this event.
- Export quotas have been put in place by Kazakhstan, Ukraine and Russia, with Romania now installing an outright export ban. Kansas City wheat prices, since the mid-March lows, have rallied over USD 0.50 per bushel on these actions. These quotas have been put in place due to rising domestic food prices and a recognition of the spread of Covid-19. Countries are beginning to recognize food security as a major issue in this new world. These actions are likely to disrupt global commodity trade. For the most part, the US is self-sufficient in food. Export quotas, bans and embargoes open up opportunities for US wheat exports – stay tuned.
- Futures have rallied on strong flour demand and export disruptions from major Black Sea wheat exporters. However, rallies to the USD 5.00 area, basis Kansas City, appear to run into selling at that level. Consequently, this would be a target area for selling. At the same time, basis values have remained relatively stable through all of this. An indicator that supply and demand are in relative balance, which portends that there will be little upside basis opportunities to sell into.
- The one caveat is US planted wheat –acres are the lowest level since records began in 1919. While early winter conditions look as good as 2019, there is no cushion for any production issues this year. Both futures and basis would rally immediately if a production issue should arise.

## US wheat export inspections, ahead of last year at 7.6%



Source: USDA-AMS, Rabobank 2020

## Current winter wheat crop conditions portend no issues

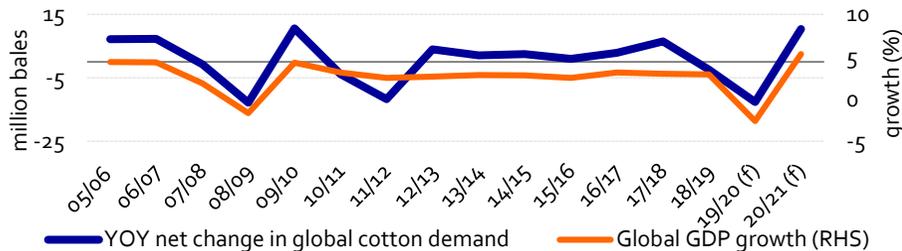


Source: USDA-NASS, Rabobank 2020

# Cotton

- The Covid-19 pandemic is set to disrupt global cotton markets substantially. This has already been felt in prices, with the ICE #2 December 2020 contract falling 21% YTD to USc 55/lb – Rabobank forecasts prices to remain below USc 60/lb through 2020. Global consumption is the key concern, and will be cut sharply through three separate channels: 1) national lockdowns of 'non-essential' retail which prevents consumers buying textiles, 2) the closing or slowing of factory and mill operations across Asia, and 3) a forecast 2020 global recession which cuts household incomes and, in turn, textile purchases. This ugly outlook was reflected in the USDA's recent cut in global consumption for 2019/20, set to fall 8% YOY. Rabobank forecasts a deeper 11% consumption cut – similar to that seen during the global financial crisis – with a deeper cut possible if lockdowns remain in place globally.
- Cotton plantings kicked off in April across Texas, Arizona, California and, to a lower extent, in the Delta. At 11% planted as of 19 April, early progress is just ahead of average amid good conditions. The key question remains how much will be planted? The USDA's latest 13.7m acres – down just 1% YOY – appears optimistically high, especially as current ICE #2 December prices sit below cost-of-production for many. If realised, this second consecutive 20m bale crop could pressure prices below USc 50/lb. Rabobank expects 2020 US final area closer to 12m acres – a four-year low. Elsewhere, plantings in India and Pakistan are making slow progress amid Covid-19.
- Export sales, reported on April 9, showed net old crop cancellations totalling 184,000 bales – the most since 2012. This reflects a grim situation for Asian mills and factories where clothing retailers have been pulling out of contracts – Bangladesh's BGMEA reports 3.17 bn USD worth of cancelled or suspended textile orders (980m pieces).

## Global cotton demand to fall 11% YOY in 2019/20, amid national lockdowns and a global recession, before recovering again in 2020/21



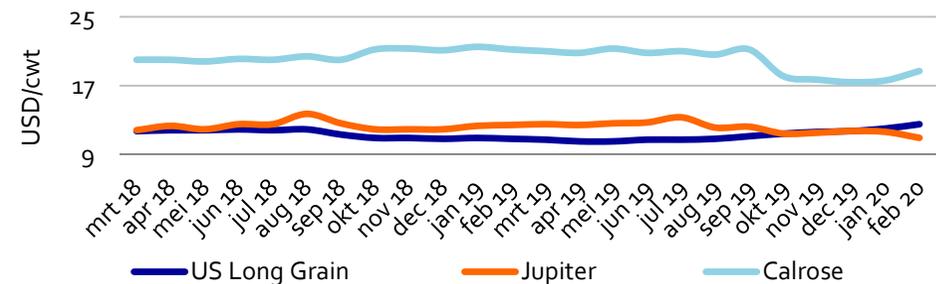
Source: USDA, IMF, Rabobank 2020

# Rice



- US long-grain planting intentions for the 2020/21 season stood at 2.1m acres, up 18% YOY in March. The increase in plantings is driven by rising US and global rice prices, and the expectation of tight US ending stocks this season. Southern medium- and short-grain plantings are expected to be down 6% at 257,000 acres, on relatively weak global demand for those varieties. California rice acreage is expected to be nearly unchanged, up less than 1%, with short-grain acreage up slightly, medium-grain acreage down slightly, and long-grain acreage unchanged.
- US rice import estimates for this season have been revised downward, but are still at record levels. The recent, monthly decline in imports is due to lower foodservice demand for Asian varieties of jasmine and basmati, amid the Covid-19 lockdowns.
- US all-rice exports in 2019/20 are estimated to be 99m cwt (rough basis), up about 6% YOY. Total domestic and residual use of rice in the US during 2019/20 is expected to be down 7.5% at 133m cwt, with the majority of the decline being in long-grain. The reduction in use is being driven primarily by the much smaller crop.
- US long-grain ending stocks in 2019/20 are forecast to be the lowest since 2003/04 at 13.7m cwt, and 58% lower YOY. US ending stocks for medium- and short-grain rice are expected to be 13.7m cwt in 2019/20, up 35% YOY.
- The US long-grain season-average farm price (SAFP) estimate for 2019/20 has been raised 20 cents to USD 12.20/cwt, which is USD 1.40 higher than the 2018/19 season. The higher long-grain price is due to tighter US supplies and recent increases in global trading prices. The 2019/20 California medium- and short-grain SAFP estimate was also raised 20 cents to USD 18.20/cwt, still USD 2.90 lower YOY.

## 24-month US medium-, short- and long-grain rice prices, Mar 2018-Feb



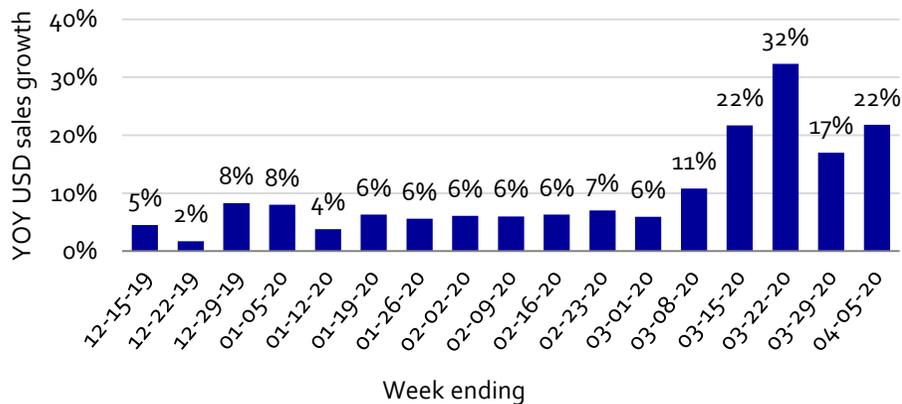
Source: USDA NASS, USDA ERS, Rabobank 2020

Note: Average rough rice basis

# Beer

- Social distancing guidelines have forced bars and breweries to shut their doors. According to interviews with wholesalers across the country, on-premise alcohol sales have dropped by more than 90%. While on-premise consumption is responsible for around 50% of alcohol industry dollar sales, it only represents about 20%-25% of beer volume, according to BW166. Interestingly, during the past four weeks (ending April 5) off-premise beer dollar sales have seen an increase of 20%-25% YOY, according to IRI. This increase replaces the lost volumes from the on-premise on an almost one-for-one basis. It is not clear if these elevated levels of off-premise purchasing are a consequence of the stock-up boom or if consumers are moving their on-premise consumption to the off-premise. As grocery shopping trends normalize, the next few weeks should help us understand the sustainability of this new purchasing behavior.
- According to a recent survey by the [Brewers Association](#), many craft brewers will not reopen after this crisis. Around 40% of craft beer volumes are sold through bars, restaurants and taprooms. The survey found that 60% of craft brewers could permanently close if social distancing measures remain in place until the summer.
- Be sure to check out our podcast, [Liquid Assets](#), to keep up to date with our beverage research!

## US off-premise beer sales, December 2019-April 2020



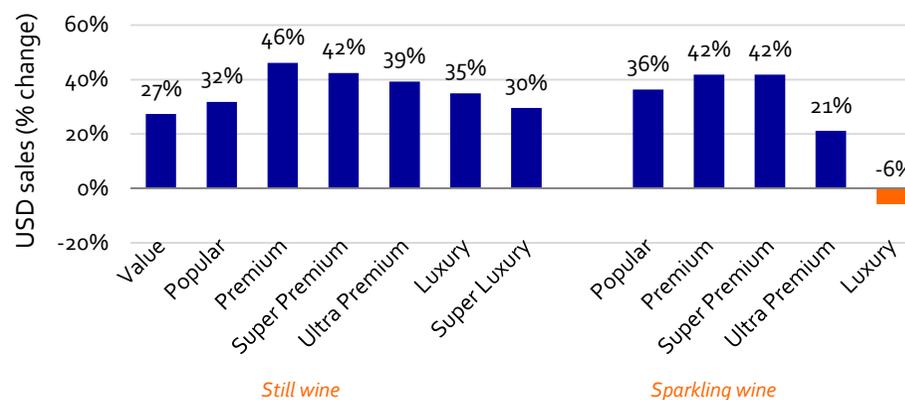
Source: IRI, Rabobank 2020

# Wine



- The wine industry has also been acutely affected by the corona virus pandemic. Around 19% of wine volumes are sold through restaurants, according to BW166. These sales have virtually disappeared, which disproportionately affects higher-priced brands and boutique wineries that lean heavily on fine dining. The spike in off-premise wine purchasing, however, is much more pronounced than the spike for beer. According to IRI, wine sales grew by around 35% YOY in the four weeks ending April 5. Virtually all wine and all price points are seeing an increase in sales – with the exception of luxury sparkling. We will have to wait a few more weeks, however, to understand if these elevated levels of purchasing are sustainable.
- Tasting rooms are closed across the country and, as we explained in our December report, [“The 2020 Alcohol E-commerce Playbook,”](#) tasting rooms and events tied to the winery are responsible for 2.3bn to 3.0bn in annual direct-to-consumer sales. Thus far, wineries are successfully using e-commerce to replace much of that lost revenue. According to Wine-Direct, increased e-commerce sales made up for 70% of would-be-lost tasting room volumes.
- Be sure to check out our podcast, [Liquid Assets](#), to keep up to date with our beverage research!

## Change in US wine sales, Feb 23-Mar 8 v. Mar 9-Mar 22

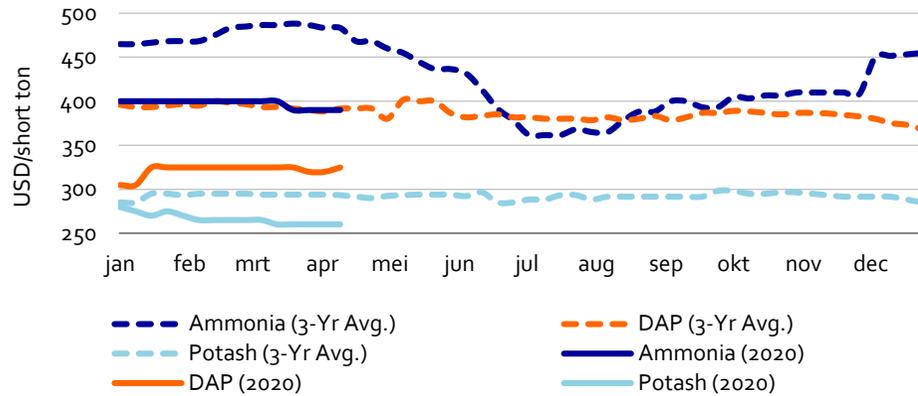


Source: IRI, Rabobank 2020

# Input Costs

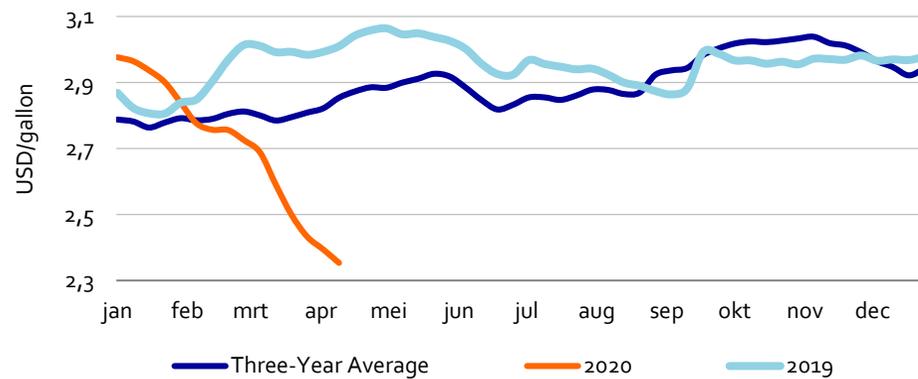
As of April 20, 2020

## Corn Belt input prices\*



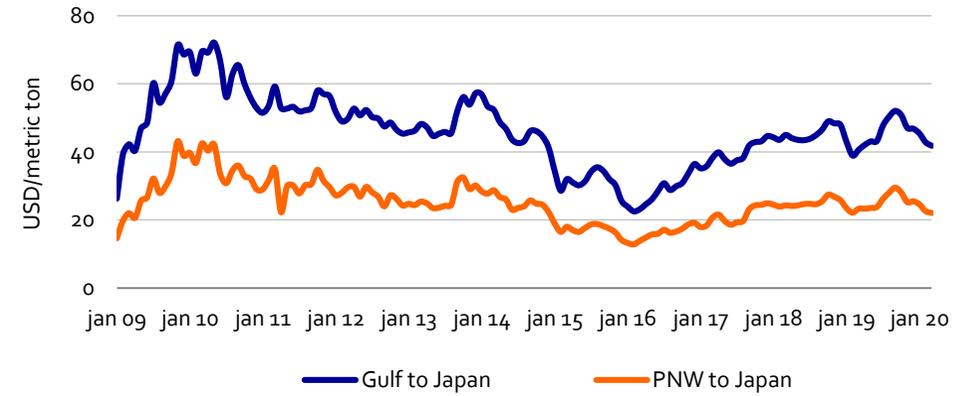
\* Note: granular potash  
Source: Bloomberg, Rabobank 2020

## Diesel – Midwest



Source: EIA, Rabobank 2020

## Ocean freight



Source: O'Neil Commodity Consulting, USDA AMS, Rabobank 2020

## Natural gas spot

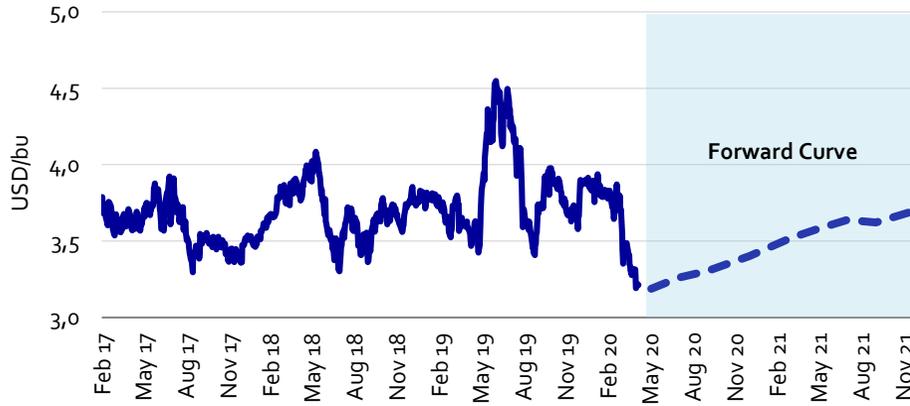


Source: NYMEX, Rabobank 2020

# Forward Price Curves

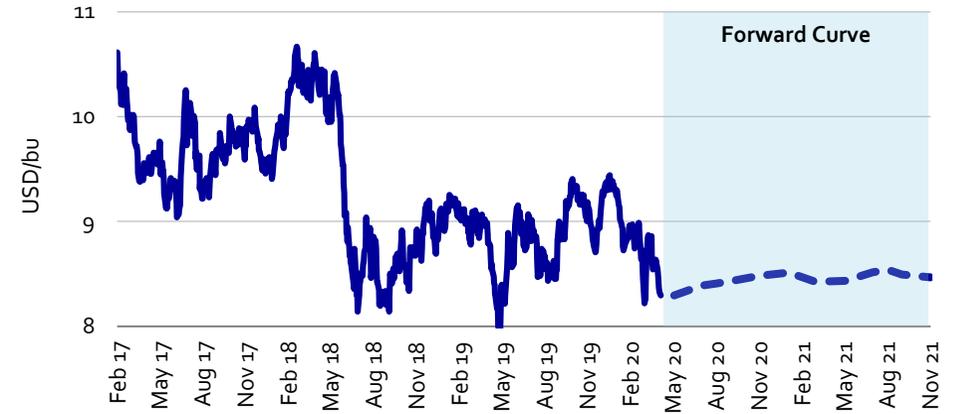
As of April 20, 2020

## CBOT – Corn



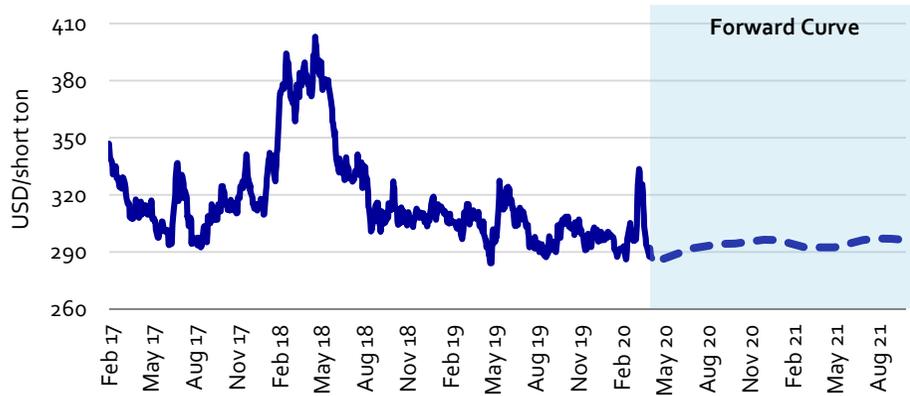
Source: CBOT, Rabobank 2020

## CBOT – Soybeans



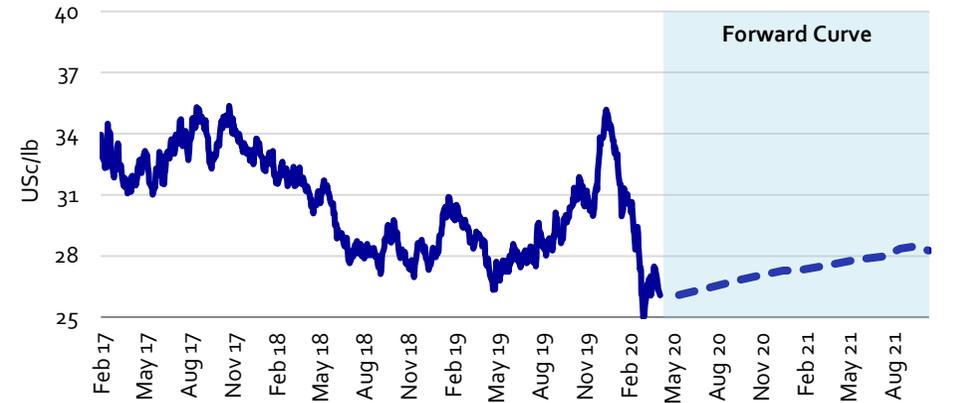
Source: CBOT, Rabobank 2020

## CBOT – Soymeal



Source: CBOT, Rabobank 2020

## CBOT – Soy oil

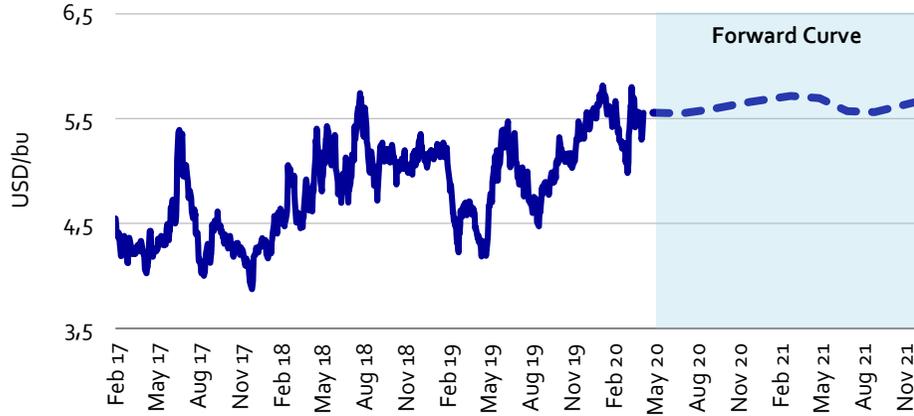


Source: CBOT, Rabobank 2020

# Forward Price Curves

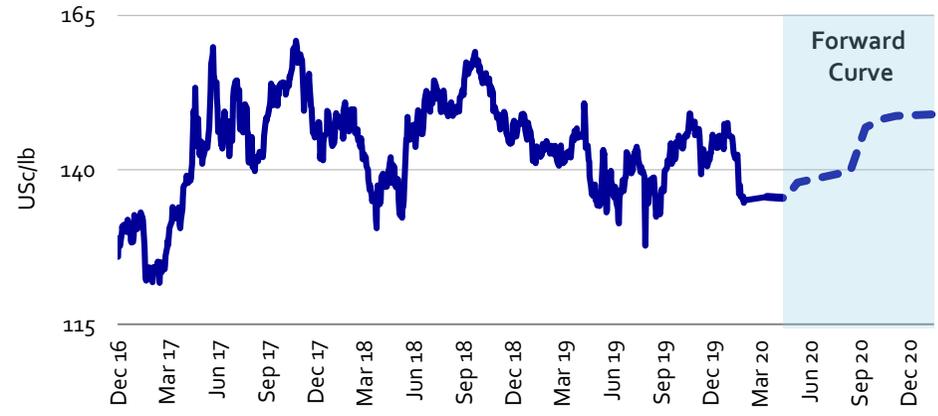
As of April 20, 2020

## CBOT – Wheat



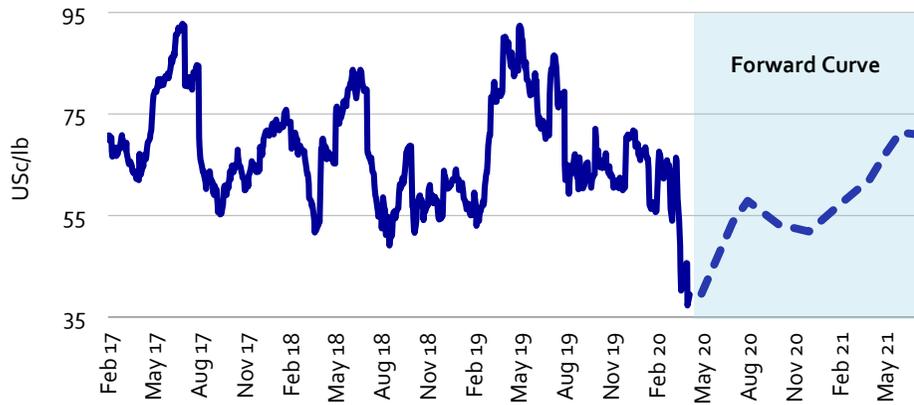
Source: CBOT, Rabobank 2020

## CBOT – Feeder cattle



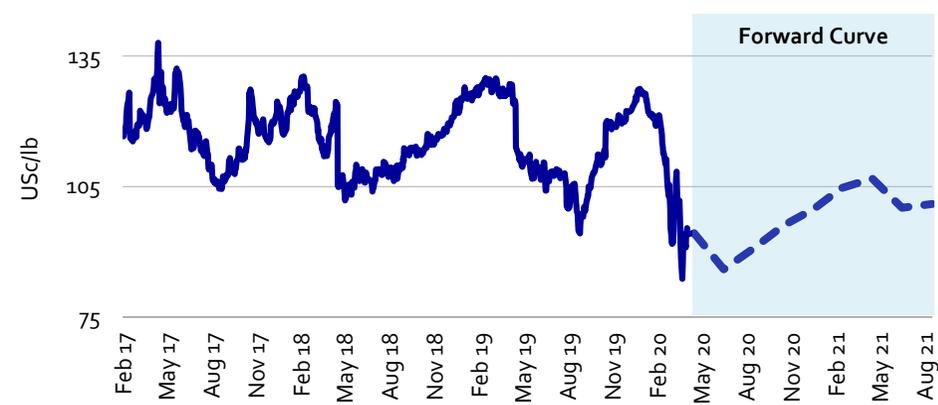
Source: CBOT, Rabobank 2020

## CBOT – Lean hogs



Source: CBOT, Rabobank 2020

## CBOT – Live cattle

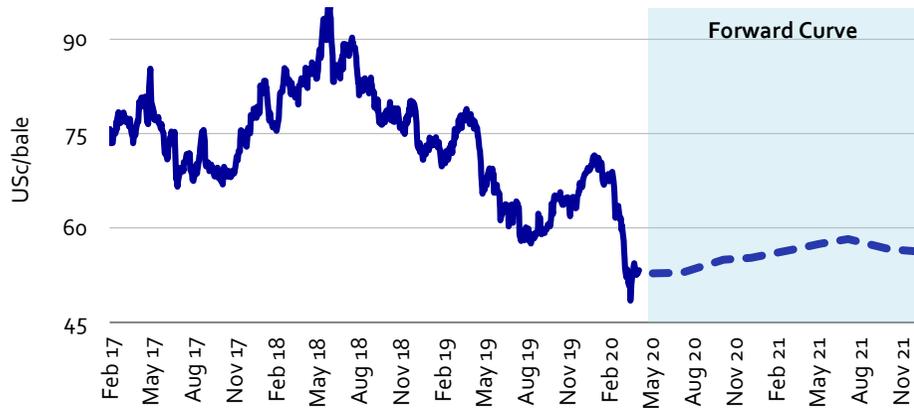


Source: CBOT, Rabobank 2020

# Forward Price Curves

As of April 20, 2020

## ICE – #2 Cotton



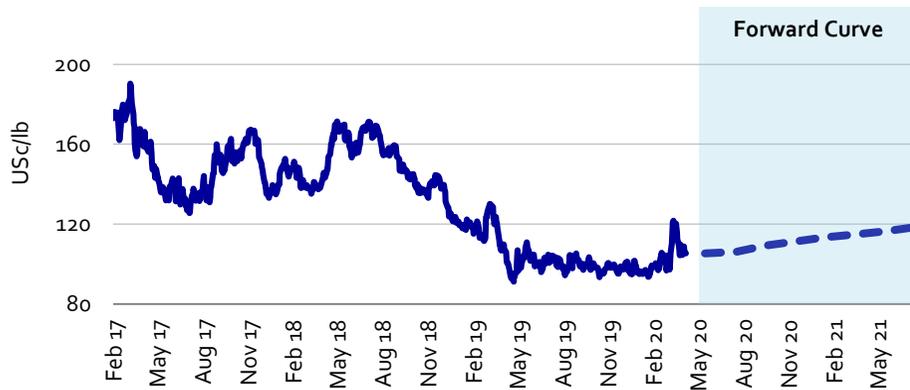
Source: ICE, Rabobank 2020

## ICE – Cocoa



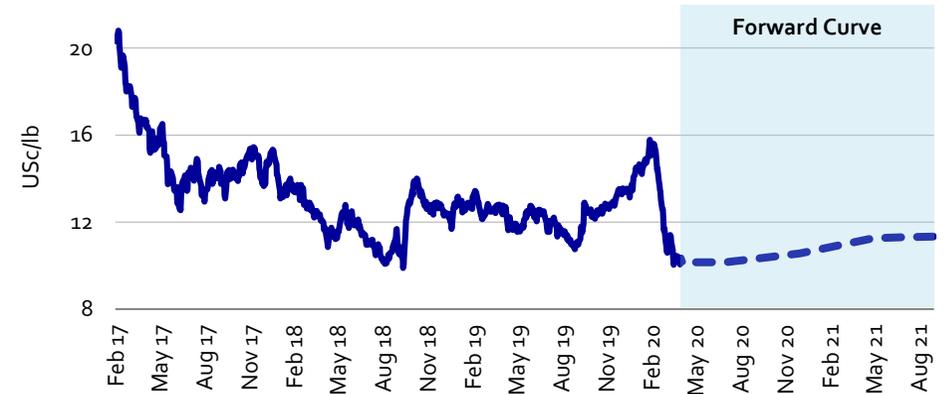
Source: ICE, Rabobank 2020

## ICE – FCOJ



Source: ICE, Rabobank 2020

## ICE – #11 Sugar



Source: ICE, Rabobank 2020

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