



# *North American Agribusiness Review*



**Rabobank**



**RaboResearch  
Food & Agribusiness**



**October 2022**



# Report Summary

 <b>Economy</b>	<i>Double recession</i>	<u>4</u>
 <b>Logistics</b>	<i>Dry container demand slides faster than supply adjustment, reefer resilient</i>	<u>5</u>
 <b>Consumer</b>	<i>Consumers became careful about spending during summer</i>	<u>6</u>
 <b>Cattle</b>	<i>Feedstuffs remain scarce and expensive, and eventual supply declines should be more supportive to price</i>	<u>7</u>
 <b>Corn</b>	<i>A slow start of the marketing year on exports</i>	<u>8</u>
 <b>Dairy</b>	<i>High prices are testing demand</i>	<u>9</u>
 <b>Farm Inputs</b>	<i>Ebbs and flows of a fertilizer complex</i>	<u>10</u>
 <b>Feed</b>	<i>Feed substitutes running thin</i>	<u>11</u>
 <b>Fruits</b>	<i>Larger citrus harvest expected in California</i>	<u>12</u>
 <b>Pork</b>	<i>High costs slowing hog production growth</i>	<u>13</u>



# Report Summary

 <p><b>Poultry</b></p>	<i>Chicken prices fall sharply as higher production saturates near-term demand</i>	<u>14</u>
 <p><b>Soybeans</b></p>	<i>Logistical problems on the Mississippi challenge US exports. Is a record Brazilian crop on the horizon?</i>	<u>15</u>
 <p><b>Sweeteners</b></p>	<i>Well sold crop and ongoing supplies support prices</i>	<u>16</u>
 <p><b>Tree Nuts</b></p>	<i>Lower production and lower exports as drought and inflation linger</i>	<u>17</u>
 <p><b>Vegetables</b></p>	<i>Record-breaking shipping-point lettuce prices: On-time season transition meets ill-timed weather</i>	<u>18</u>
 <p><b>Wheat</b></p>	<i>Uncertainty drives the wheat market</i>	<u>19</u>
 <p><b>Cotton/Rice</b></p>		<u>20</u>
 <p><b>Input Costs</b></p>		<u>21</u>
 <p><b>Forward Price Curves</b></p>		<u>22</u>



### US

- As the end of the technical recession in the US may be in sight, with GDP growth probably back in positive territory in Q3, the inverted yield curve suggests that an NBER-approved recession is still in the cards for the second half of next year. Therefore, it looks like we are entering an episode between two related recessions, one technical and another official. They are related because ultimately the causes are the same. The exogenous negative supply shocks, the resulting high inflation, and the Fed's hiking cycle to get inflation back to 2% have all contributed to the technical recession and are likely to cause an official recession next year as well. Our view that the Fed will need to hike the economy into recession in order to squeeze inflation out of the economy underpins our forecast of an NBER-approved recession, i.e., a recession that includes a substantial rise in unemployment.

### Mexico

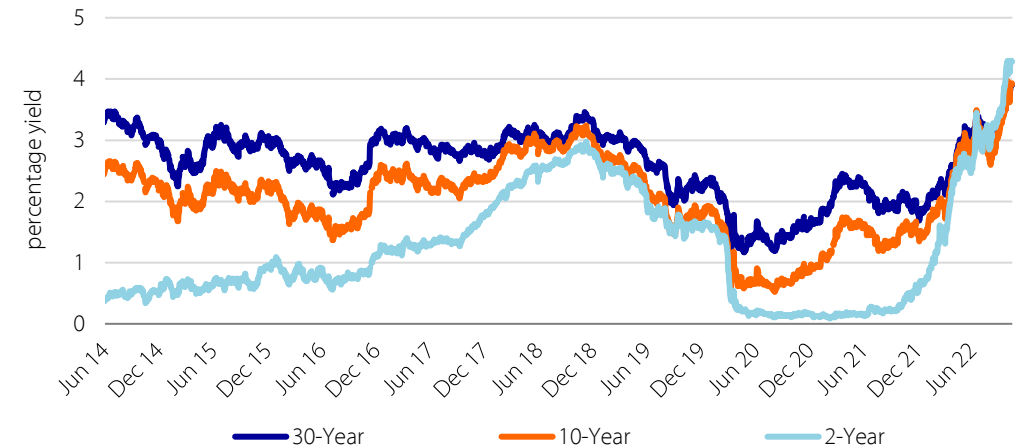
- Although many began to question how much damage the strong USD might wreak on the rest of the world, the MXN was the second-best performing major currency after the USD itself. This is not unusual. Because of its characteristics the MXN often finds itself at the whims of foreign flows, as it is very liquid and the only fully deliverable and convertible Latin American currency. Looking ahead, we favor MXN holding up well among other emerging market currencies, and USD/MXN is likely to stay relatively range-bound. With deep liquidity relative to other emerging markets, close ties to the US economy (which, despite staring down the barrel of a recession, still looks like a bastion of economic strength relative to many other major economies), and with high interest rates, MXN looks like a relative safe haven among emerging market currencies right now. We expect USD/MXN to rise to 21.00 at the 12 month horizon.

### Canada

- While market pricing implies around 25bp of rate cuts before the end of 2023, we expect Fed and BoC policy rates to stand at the terminal rate through mid-2024. In other words, we see room for the front end to reprice higher, but we expect rate differentials to remain constant. As such, policy rates will likely remain on the back foot as a driver for USD/CAD. We expect the primary factors dictating USD/CAD direction for the remainder of the year will be the impact of risk aversion on the USD leg and oil's role in driving the CAD leg, assuming our projections for short-end rates prove correct. We expect USD/CAD to fall to 1.35 at the 12 month horizon.

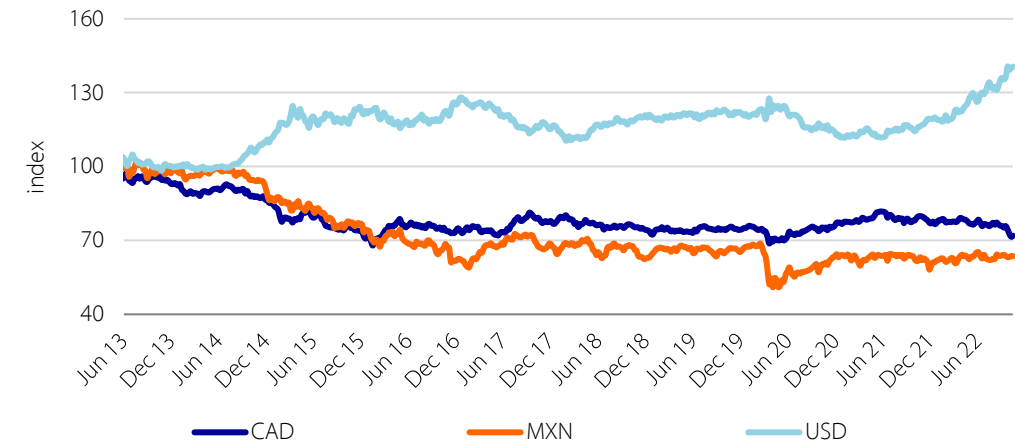
Source: USDA, Rabobank 2022

### Interest rates, 2014-2022



Source: Federal Reserve of St. Louis 2022

### Currency indices, 2013-2022



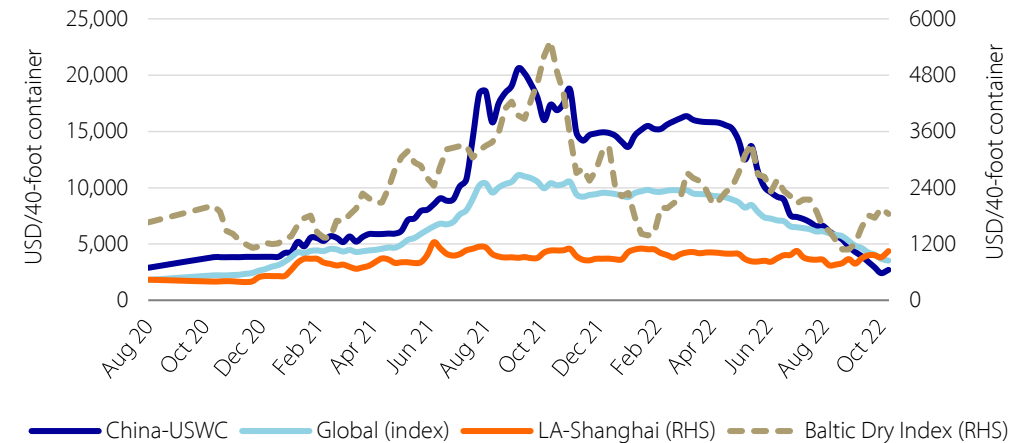
Source: Bloomberg 2022

Note: Rebased at 100 as of January 1, 2013



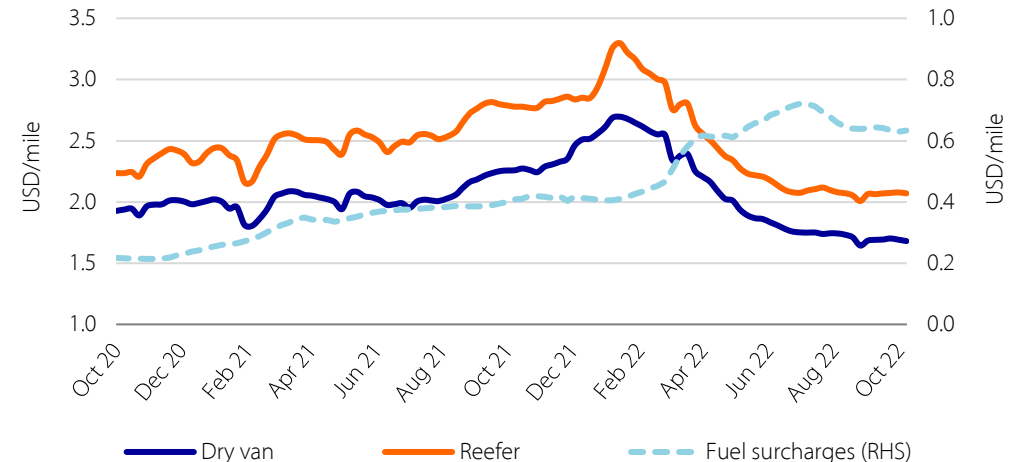
- Global container spot rates continue steep downward trends and carriers turned up their cancellation strategy.** While ship cancellations remained high, absolute capacity is on-par with 2021 levels as much more capacity was added during the past year. The Baltic Global Container Index continues to fall 44% MOM in October, transpacific and transatlantic routes all saw the decline slow down or reverse. Shippers, especially in Asia, have reached out to agents and freight forwarders to renegotiate contract rates, which are around twice the current spot rates. According to Xeneta (ocean freight and market analytics platform), nearly 50% of their customers have succeeded in negotiating lower contract rates. We expect the strong decline in spot rates will continue to create downward pressure on contract rates. However, with more capacity exiting the market due to little profit margin, rates may go up in Q1 2023 again.
- In contrast, we expect reefer container rates to decline significantly slower in 4Q 2022** because the freight demand for ocean reefer trade is expected to stay resilient through the economic recession and maritime network congestions still remain, particularly in Europe and the US. Imbalanced reefer equipment remains a major hurdle, but is expected to be no longer a problem in 2023. Reefer rates in general will remain above pre-pandemic levels.
- The Baltic Panamax Index (a proxy for grain bulk freight) bounced back in September, reversing the downward trend since May.** Strong volume from both coasts of South America supported the increase. The index, along with other Baltic Dry indexes, reached its highest in over two months.
- Trucking spot rates have stabilized, while contract rates have started mild descent.** The Producer Price Index for general freight trucking has declined 4% since the peak in May, but is still 17% above a year ago. Long-distance freight rates have declined more than those for local transportation due to weaker-than-expected imports and exports. Truck tonnage for hire also picked up in August and September, supported by recovering manufacturing output. As the macroeconomic expectation overshadows the logistics industry, we expect trucking rates to continue becoming depressed, but at above pre-pandemic levels.

Select ocean freight rates, Oct 2020-Oct 2022



Source: Freightos, Baltic Exchange, Bloomberg 2022

US dry van and reefer truckload prices, Oct 2020-Oct 2022



Source: Truckstop.com, Bloomberg 2022

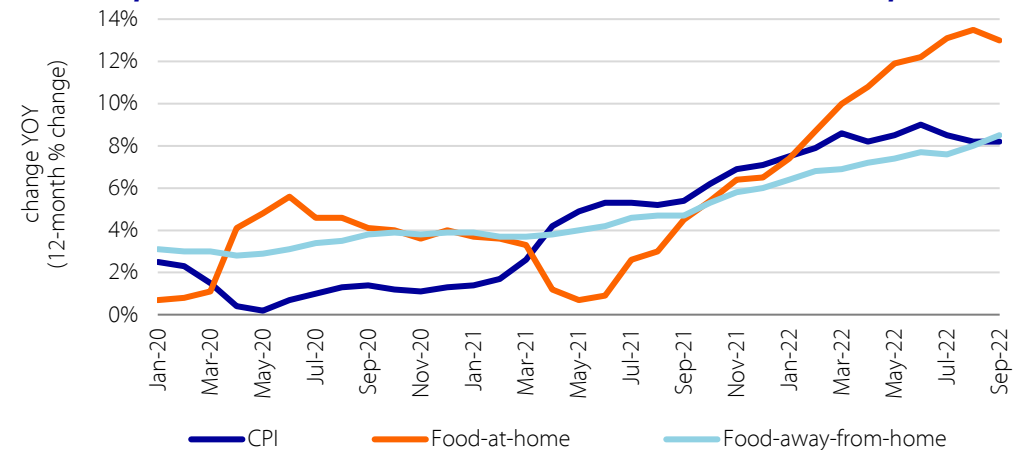
# Consumer Retail & Foodservice

## Consumers became careful about spending during summer



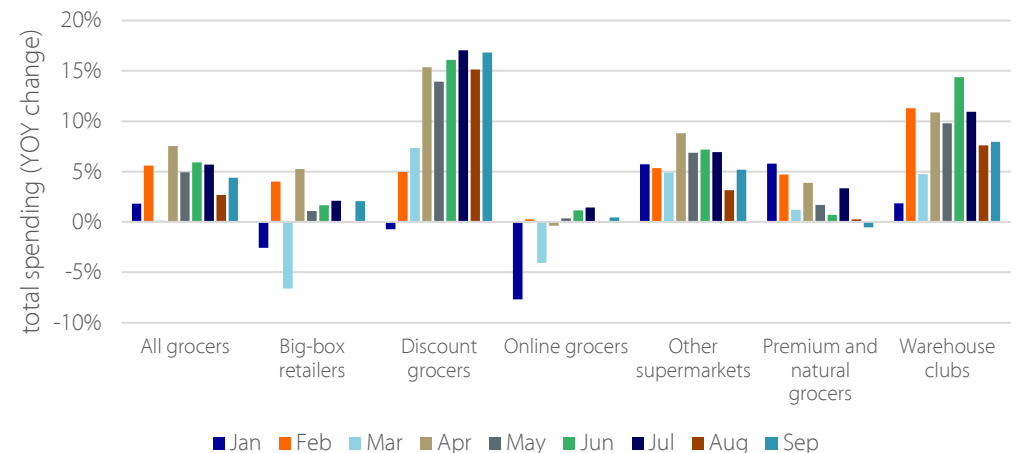
- Inflation from food-at-home reached 13.0% in September, well ahead of the general Consumer Price Index (8.2%) and food-away-from-home (8.5%).**  
 Increases in the shelter, food, and medical care categories were the main contributors to the Consumer Price Index (CPI) increase, partly offset by lower energy prices.
- A summer of restrictions:** Post-Covid 'freedoms' supported spending through the spring, but this was short-lived as consumers adjusted spending habits in the summer in response to inflationary pressures, which are proving to be long-lasting.
- Consumers continue to dine out less:** Restaurant transactions dropped 6% YOY in Q3 2022, but average spending per transaction was 7% higher YOY that month. In real terms (i.e., discounting the 8.5% inflation), it represents a drop in spending at restaurants. Headwinds remain for foodservice demand as inflationary pressure remains and falling disposable income results in consumers choosing to spend less at restaurants. This spending adjustment may come in the form of selecting lower-priced options, skipping drinks and courses (appetizers and desserts, for instance), and simply choosing to eat at home more often.
- Consumers have looked for value at grocery stores:** Average purchases by end-Q3 are lower than end-Q2 (at USD 63.00 in September versus USD 63.75 in June 2022), despite 13% inflation across the period (food at home). The search for value and bargains has increased traffic and elevated total spending at discount grocers and warehouse clubs. On the other extreme of the value-proposition range, premium and natural stores and online grocers were affected the most.
- Inflation looks to remain a problem into 2023:** We anticipate some improvements in producer prices (PPI) thanks to improving costs for freight, energy, and other auxiliary factors such as packaging. However, this will not translate to easing consumer prices (CPI), as manufacturers and retailers will seek to recover margin lost over the last 18 months by keeping prices elevated. Headlines will likely tout easing inflation as we lap high comparables in Q4, but the prices consumers see in grocery stores and restaurants will be burdensome for some time.

### Further uptick in food inflation: food-at-home reached 13% YOY in September



Source: US Bureau of Labor Statistics, Rabobank 2022

### Retailers that appeal to value have succeeded in the inflationary environment



Source: Earmest Research, Rabobank 2022



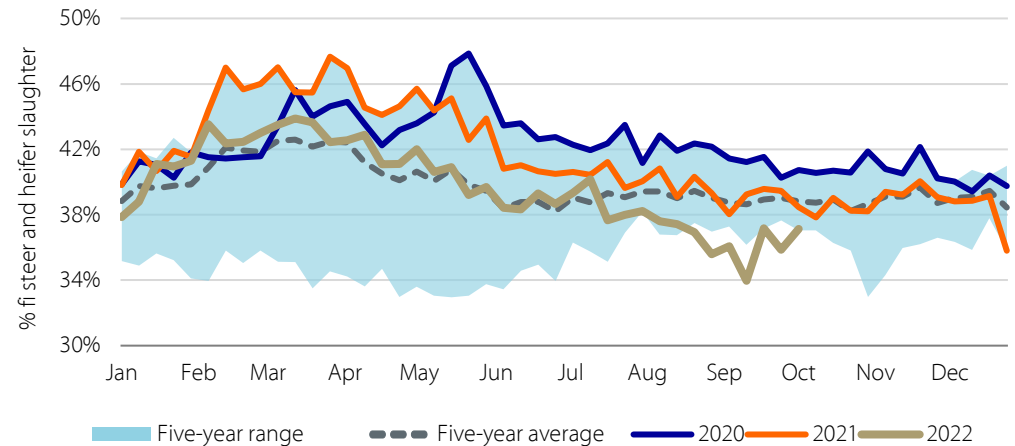
# Cattle

Feedstuffs remain scarce and expensive, and eventual supply declines should be more supportive to price



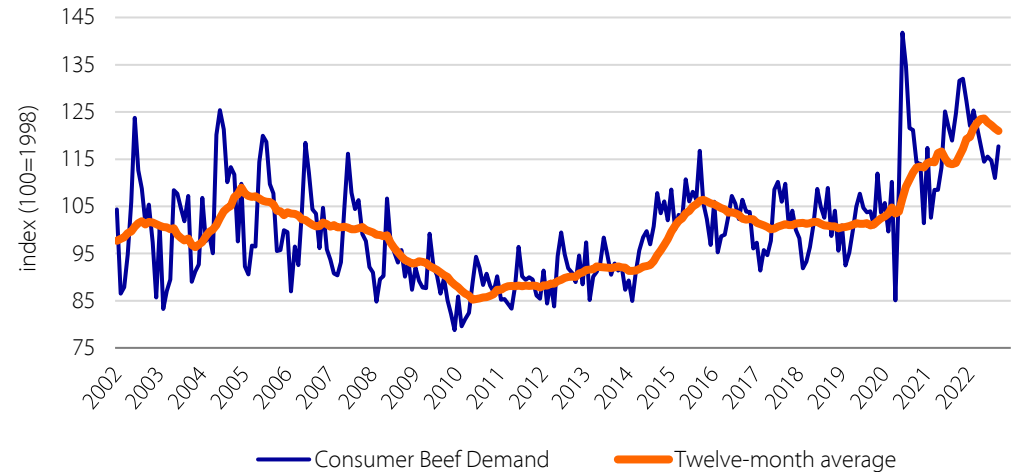
- Drier weather conditions continue to challenge major US cattle producing regions.** After seeing some improvement in August, the percentage of the US beef cowherd battling with drought has increased nearly 20 points since the week ending September 10. Last week, 62% of the US beef cowherd is battling with moderate or worse drought conditions. It is the highest October value since 2012. Beef cowherd remains on pace to see a record-high annual culling rate near 13.5%.
- Cattle producer optimism is being stifled by higher feed costs.** USDA reported August corn prices were USD 7.25/bu., alfalfa hay prices were USD 275/metric ton and all other hay was priced at USD 134/metric ton. Late summer hay prices are at all-time highs, while corn prices are practically in the same category. Feedyards in Texas, Oklahoma and Kansas are often paying USD 2/bu. over the December corn futures price to secure fall-delivered product. Those feed costs are pushing fed cattle breakeven sales prices for this winter into the USD 160s. That is USD 5 to USD 10/cwt. higher than winter live cattle futures values.
- Higher quality cattle are in shorter supply.** Orders for USDA Prime and upper 2/3rds Choice beef remain adequate, but fed cattle with carcasses of that quality are harder to find. Steer and heifer slaughter is up 16,250 carcasses per week during the last eight weeks, but the grading percentage for those premium categories is two points lower than last year at 79% in that period. That has produced nearly 10,000 fewer carcasses per week within those quality grades. As a result, packers continue bidding aggressively for cattle that are more likely to fill higher quality needs.
- Retail beef margins remain historically strong.** The wholesale beef market is 15% below year-ago levels at USD 246/cwt., while USDA-reported retail beef prices are roughly 3% lower at USD 7.32/lb. Retailers remain cautious with meat case price declines – knowing supply declines are likely after four years of cowherd liquidation. Retail demand remains historically strong. YTD levels are the highest in 20 years, but it is trending lower. Even with modest demand declines, extra retail margin should find its way back to cattle producers as beef supplies shrink in 2023.
- US beef export volumes have remained strong throughout the summer.** Over the last three months, export volumes are up 6% compared to last year, with the increase almost entirely due to strengthening sales to China, Japan, South Korea, and the Philippines. YTD exports remain 6% higher than last year and should end the year 3% to 5% higher. Imports continue to fall after an exceptionally strong first quarter. The last three months are down 15% compared to last year, and import demand should remain lackluster through the fall with adequate cow slaughter.
- Cattle prices across North America remain stronger.** Canada feeder cattle and calf prices are more than 20% higher than year-ago levels over the last eight weeks. Mexico values are around 10% higher for the same class of cattle, while US prices are somewhere in between – averaging 14% higher. Slaughter cattle prices in North America show a more mixed picture. US and Canada fed steers are averaging 15% higher over the last eight weeks, while Mexico slaughter cattle are 1% softer. The difference in prices is based on available inventories. US and Canadian cattle supplies are in decline, while Mexican beef cattle inventories are at roughly 15-year highs.

**Weekly USDA Prime and upper 2/3rds Choice percentage is lowest since fall 2017**



Source: USDA, Rabobank 2022

**Monthly consumer beef demand is historically high but trending lower**



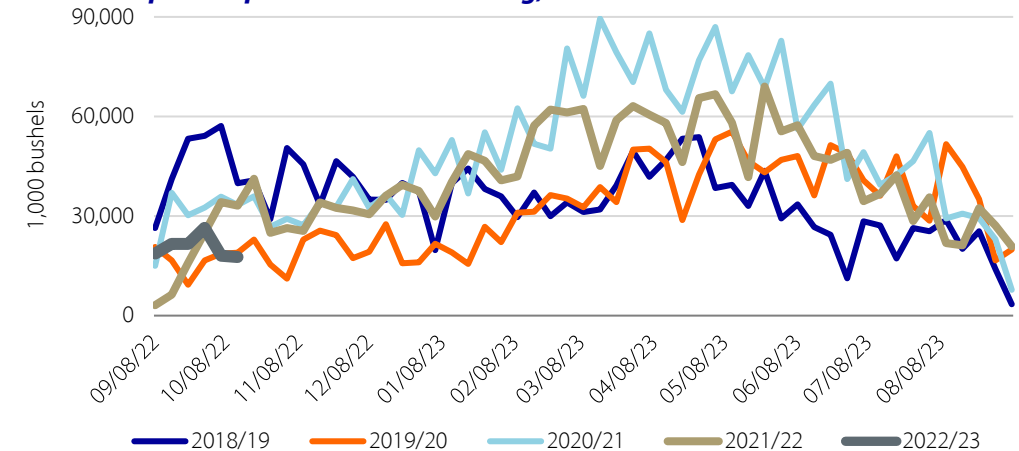
Source: USDA, BLS, Kansas State University, Rabobank 2022

# Corn

## A slow start of the marketing year on exports

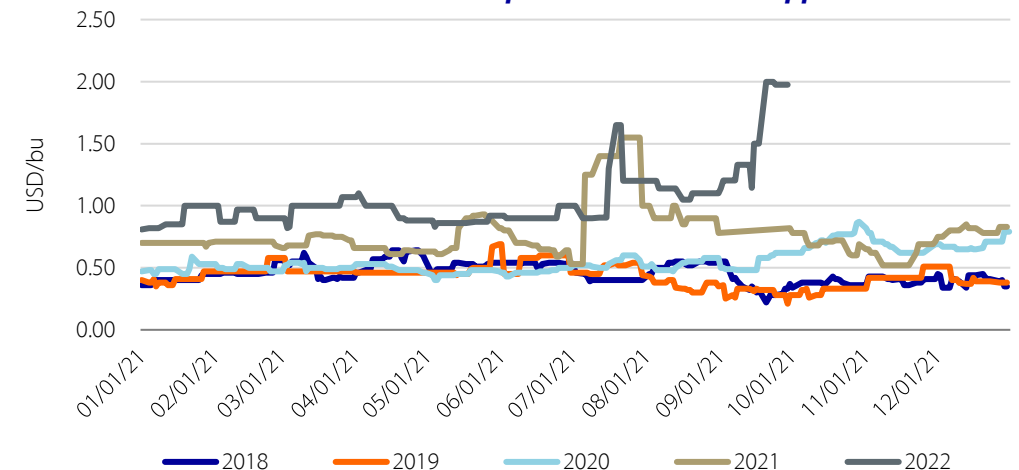
- USDA lowered corn yields one more time in its latest report bringing yields down - 0.6 bushels per acre on a MOM basis and ~3% from the estimate in June.** While we do not anticipate another big change on yields, it is worth mentioning that given weather challenges we could potentially see a slight decline from the 170 bushels per acre in the January report.
- A slow start of the season on corn exports.** As we look at what is happening on the export side, a few things begin to show concern on the export outlook. Outstanding sales are 53% lower this marketing year compared to last season, while corn inspections are higher this marketing year compared to last by 5%, but have remained flat since the beginning of October. For the marketing year 2022/23, exports have been revised downward due to a sluggish start, adjusting exports from 2.2bn to 2.1bn bushels.
- Low Mississippi river levels are slowing exports in an already slow market.** Drought conditions have impacted water levels in the Mississippi river, limiting the volume of grain in barges to ship down to the Gulf. This paints a difficult outlook for the export market due to a slow start of the year, at a time that harvest is at full speed. The impact is already being felt at the Gulf with basis levels increasing above USD 1.50/bu. In the meantime, if conditions persist this will continue to weaken the internal basis.
- Ending stocks continue to get lower, pushing the stock-to-use ratio to the lowest level since 2012/13.** As harvest is underway, thinking about next marketing year, stock-to-use ratio for 2022/23 is already starting to look challenging, concerns moving into the next marketing year with tight supplies and below average soil moisture could potentially signal another year of challenges. In the October WASDE report ending stocks fell by 47m bushels to a total of 1,172m bushels on a MOM basis, however, on a YOY basis, stocks are projected to be 15% lower than last marketing year.
- Price pressure continues to build, but the upside might be capped by lower exports.** A set of factors will continue to add to volatility on the corn price. Lower planted area, yields and ending stocks continue to support corn prices, however, a lower-than-expected export market in addition to lower movement in the Mississippi river will likely tame the demand outlook. Gulf basis remains strong and with a strong dollar this could potentially shift demand for more Brazilian corn.

### US corn export inspections started strong, but have slowed down since October



Source: USDA AMS Rabobank 2022

### Gulf basis at record levels as corn transport down the Mississippi is limited



Source: AMS-USDA, Rabobank 2022



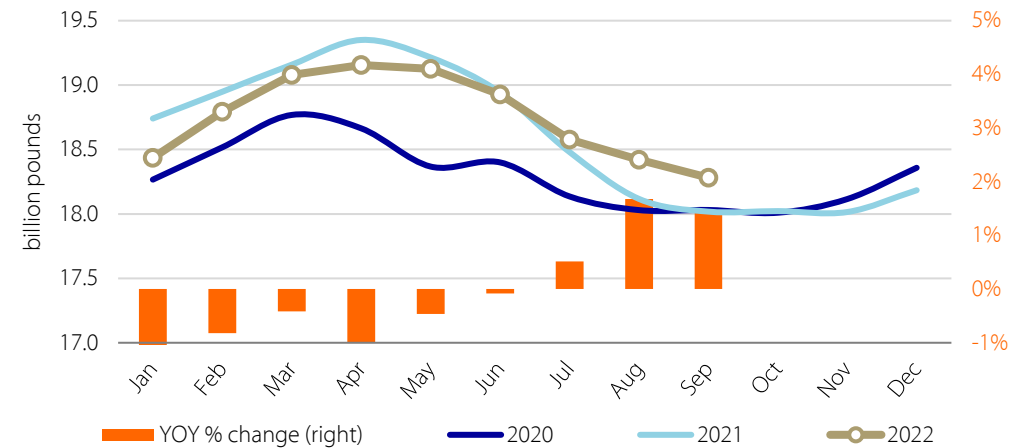
# Dairy

High prices are testing demand



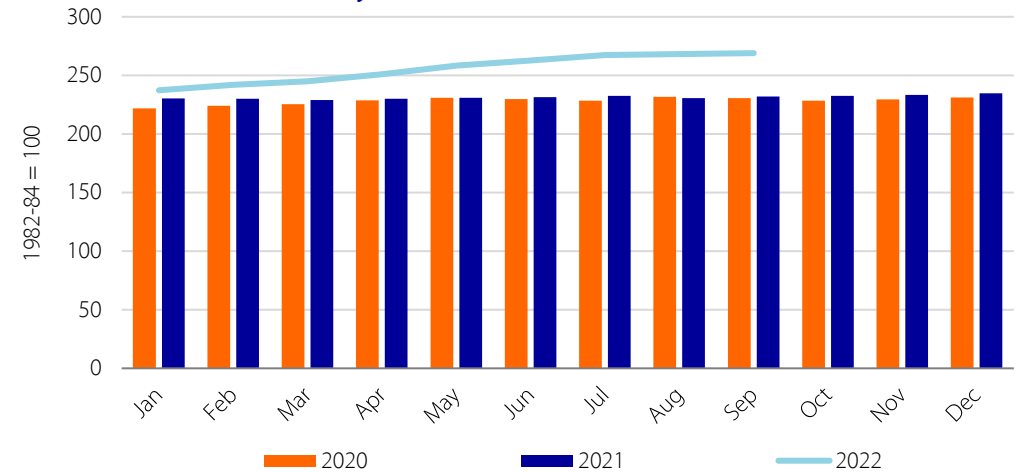
- Q3 milk production posted a 1.2% YOY increase, driven by a 1.6% gain in milk per cow, as the US herd was shy 29,000 head versus Q3 2021.** The US dairy herd grew steadily, adding 52,000 head from January through May to 9.419m head. However, USDA recently revised its monthly herd tally, reflecting modest monthly declines. In September, the herd totaled 9.411m head, down 8,000 head from the peak and 2,000 head less than in August. Still, September marks the first month with more cows versus the prior year (+6,000 head), as the herd declined rapidly in Q4 2021. US milk production is expected to increase by 1.4% YOY in Q4 and 1.3% YOY in 2023 against weak comparables.
- Exceptional milk and dairy product prices during the first half of 2022 continue to be passed through to consumers, albeit at a slower pace.** The September CPI for dairy products was 15.9% higher than last year, but just 0.3% more than the prior month, which is weighing on demand. Domestic commercial disappearance of total milk solids is flat versus last year. Fortunately, US exports on a total milk solids basis through August are up 3.1% YOY, pushing YTD total disappearance into positive territory at +0.3%.
- US dairy exports continue to impress.** August dairy exports topped 539.6m pounds, 5.4% higher than last year. August cheese and whey exports set a new high for the month, offsetting lower YOY milk powder exports. Nonfat dry milk (NDM) exports, at 142.7m pounds, were 18% lower than last year's August record level. On a positive note, August NDM shipments to Mexico reached 70.6m pounds, the highest tally this year and nearly on par with August 2021. Robust exports keep US dairy product stocks from becoming too burdensome and buoying spot dairy product prices.
- The butter market remains the tightest within the US dairy product complex.** The CME spot and USDA's weekly NDPSR butter prices topped USD 3.20/lb in mid-October. US butter production trails the prior year by 2.2% through August or 31.1m pounds. Month-ending August butter stocks were 22% lower than last year, pushing the CME spot butter price above USD 3/lb – where it is likely to remain until seasonal demand subsides.
- US milk prices peaked in Q2 2022 and are forecast lower through the rest of the year and into 2023.** The weakness in the dry whey price, from 79-cents in March to 49-cents in August, accounts for USD 1.80/cwt decrease in the Class III price. RaboResearch forecasts Q4 2022 average Class III and Class IV prices of USD 20.90/cwt and USD 23.00/cwt, respectively.

## US milk production (30-day months)



Source: USDA NASS, Rabobank 2022

## Consumer Price Index: Dairy and Related Products 2020 - current



Source: Bureau of Labor Statistics



# Farm Inputs

## Ebbs and flows of a fertilizer complex

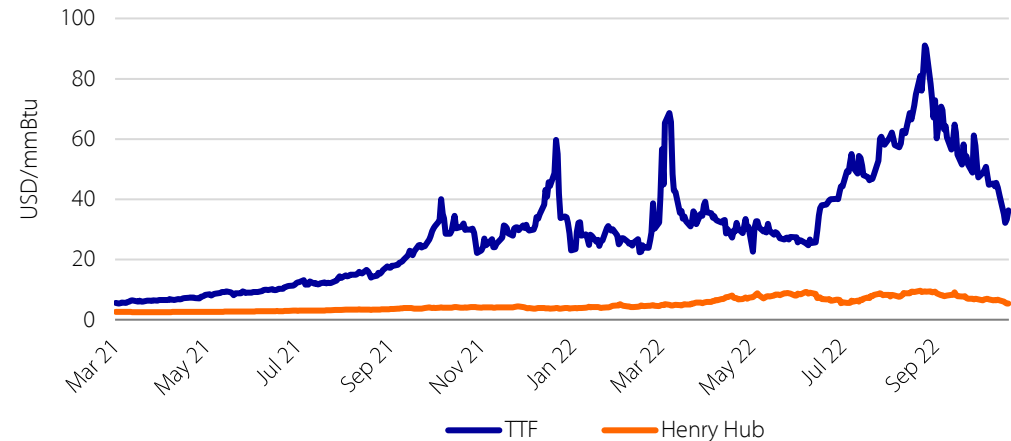


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### Ever shifting fertilizer landscape

- Low water levels of the Mississippi River can be qualified as yet another exogenous factor adding to the unpredictability of the fertilizer complex, heading into fall. With the acceleration of harvest ushering the prospect of a decent window for fall application, the low water level of the Mississippi could hamper some supply of fertilizers.
- More likely, it will act as a support for prices of key macronutrients, such as potash, as current supplies face less pressure from river imports. Just in the last week, this has seen prices in the Midwest at the wholesale level 'bumped' by ~USD 15/short ton. River barge rates have also played into this, with most pricings up to near time highs.
- Midwest phosphate prices have drifted lower (as predicted in our previous ABR), primarily as a function of sufficient supply and carryover from spring. However, more recently, prices have slowed their decline as we head into fall. River constraints and increased seasonal demand could tamp the general deflationary movement of DAP/MAP in the Midwest, particularly if fall field work proves to be strong this year.
- Ammonia prices have moved directionally higher since our last publication. Ammonia prices are now up ~15% YOY, however, as we head into the coming weeks and months we could see them begin to trade at a discount to last year as we lap the horrendous comps of last year.
- This does not represent a 'volte face' to previous forecasts of further price risk to the upside between now and the end of the year, but we have seen some key fundamentals prevent higher prices in the meantime. Weak industrial demand for nitrogen (as a result of the slowing global economy) and easing of the European natural gas prices, causing some curtailed nitrogen capacity to come back online, have loosened the global balance sheet for nitrogen.
- Our base case view is for the broader global fertilizer index (refer to graph on the right) to trade down over the coming six months, as demand destruction and a slowing economy ease supply concerns. But underlying risks around natural gas and logistics leave the pricings susceptible to volatility, not least in the Midwest.
- Presciently, we could be mindful of yet another tumultuous year in 2023. Particularly in the nitrogen complex. We could be forgiven for wishing the worst of disruptions were behind us, but long-term structural concerns of gas supply in Europe could offer further concerns ahead into 2023.

### European and New Orleans gas prices; TTF price inching down on supply



### Global fertilizer index history and forecast



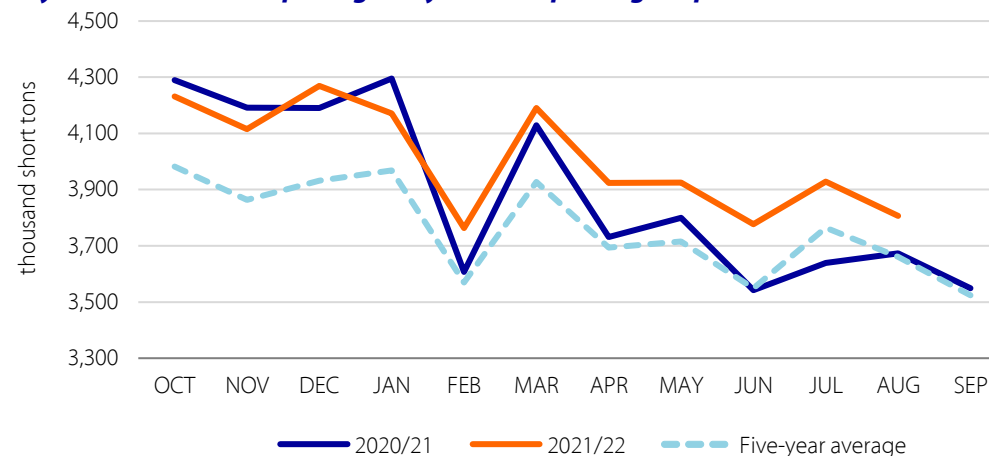


# Feed

## Feed substitutes running thin

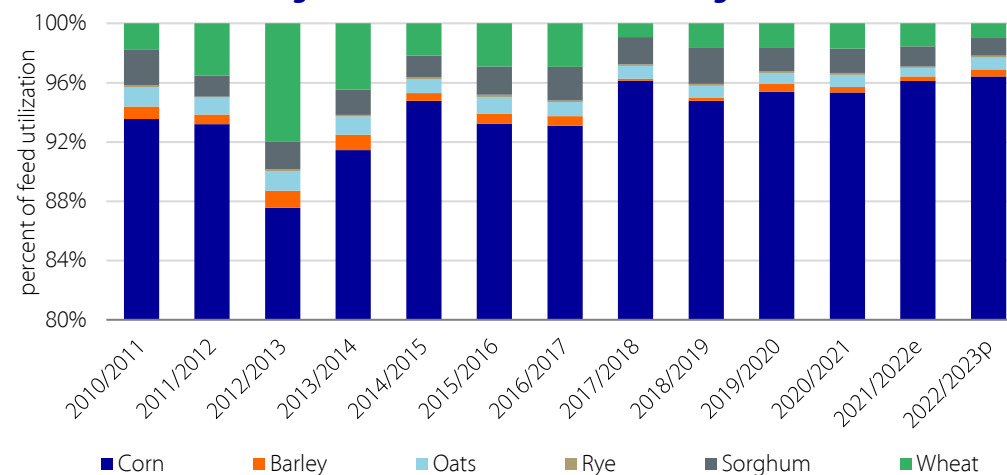
- Soy meal demand remains robust despite high prices.** As the industry continues to anticipate the decline in soy meal prices, mainly driven by new crush capacity coming online, the expected decline in price has not materialized due to low availability or high prices of other substitutes. This has pushed animal feed mills to continue buying soy meal despite higher prices. Fundamentally, demand continues to be higher despite a slowdown on production since last June. Demand from animal feed is 2.4% higher YTD compared to the same period last year, but seasonal decline is setting in and MOM demand for meal has declined 3%.
- DDG prices continue to trend higher, making it less attractive for feed inclusion.** DDG prices have increased since the beginning of Covid-19 due to lower availability compared to previous years, and while production increased by 6% YOY, it remains 10% below the peak in 2017/18. By the same token, feed and residual disappearance grew 3% on a year-over-year basis, but its 15% below the peak in 2017/18. More importantly, the price difference on a crude protein basis between DDGS and soy meal continues to narrow making DDG a more expensive ingredient from a crude protein level.
- Feed grain substitutes running thin and showing a challenging year ahead.** During the 2012/13 drought, corn yields were severely impacted by dry weather, low availability and high prices, forcing nutritionist to modify rations and include more wheat into the mix as well as sorghum. This year, despite high corn prices, every other feed grain is exhibiting challenges, especially wheat and sorghum, which have been under a lot of drought stress. Corn is projected to account for 96% of the feed utilization for 2022/23, compared to ~86% in 2012/13. Other feed grains are struggling as well, which means that the potential to offset the cost of corn in feed rations is very low.

### Soy meal demand outpacing last year's despite higher prices



Source: USDA NASS, Rabobank 2022

### Corn will remain in high demand for feed as other feed grains are scarce



Source: USDA ERS, Rabobank 2022

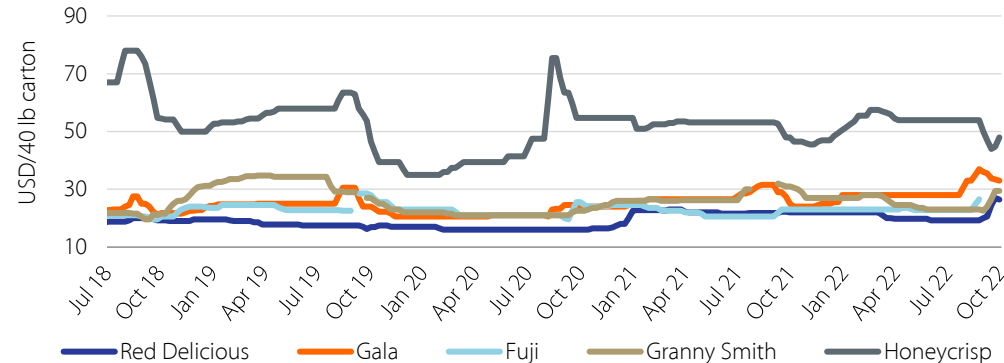


# Fruits

## Larger citrus harvest expected in California

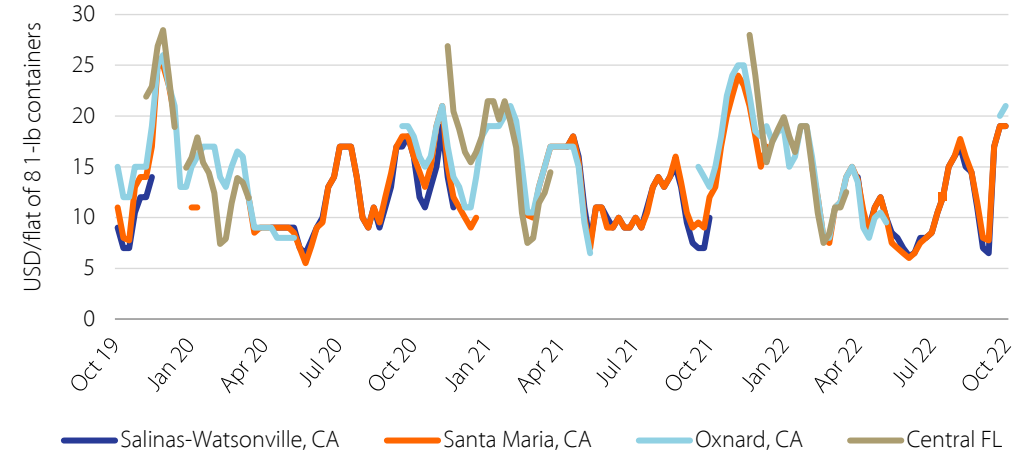
- **Strawberry** prices reached USD 19 per flat for non-organic product by mid-October, up 70% YOY, for fruit from Salinas-Watsonville and Santa Maria. Availability will continue to improve after the impacts from the September heat wave. The Oxnard season is starting at USD 20 per flat, up from USD 13 a year before. Net hurricane impacts on winter production in Florida remain to be seen.
- **Valencia orange** prices were at multi-year highs in 2022, reaching USD 33 per carton for 88s, up 56% YOY, as the overall US orange production was down in 2021/22. For 2022/23, production is expected to rebound in a significant way in California, with **Navel** production estimated to increase 19% YOY, while **easy-peel citrus** production will go up 15% YOY. On the other hand, citrus production in Florida is estimated to be down 40%, 25%, and 7% YOY for non-Valencia oranges, Valencia oranges, and easy peelers, respectively.
- **Table grape** shipments from Central California through mid-October are down 5% YOY, per USDA figures. The most significant gap in shipments occurred in September amid a heat wave. Average blended price is up 10% YOY. Increasing arrivals from Peru at the front-end of their season will create a larger overlap with the back-end of the California season during late November and December, when prices tend to show a seasonal uptick.
- **Avocado** prices have come down from elevated levels early in the summer to around USD 30 per carton, down 25% YOY for mid-sized Mexican avocados. In the next few months, the US market will rely almost exclusively on supplies from Mexico, which are expected to remain plentiful.
- Lower availability of certain varieties, due to a shorter crop in WA, has been reflected in higher prices. By mid-October, prices of non-organic Gala and Red Delicious **apples** were up 32% and 20%, respectively, while Granny Smith prices were at a similar level as a year ago. Shipping-point prices for Honeycrisp were down 5% YOY.

### Washington apple shipping point prices, 88s – WA Extra Fancy, 2018-22



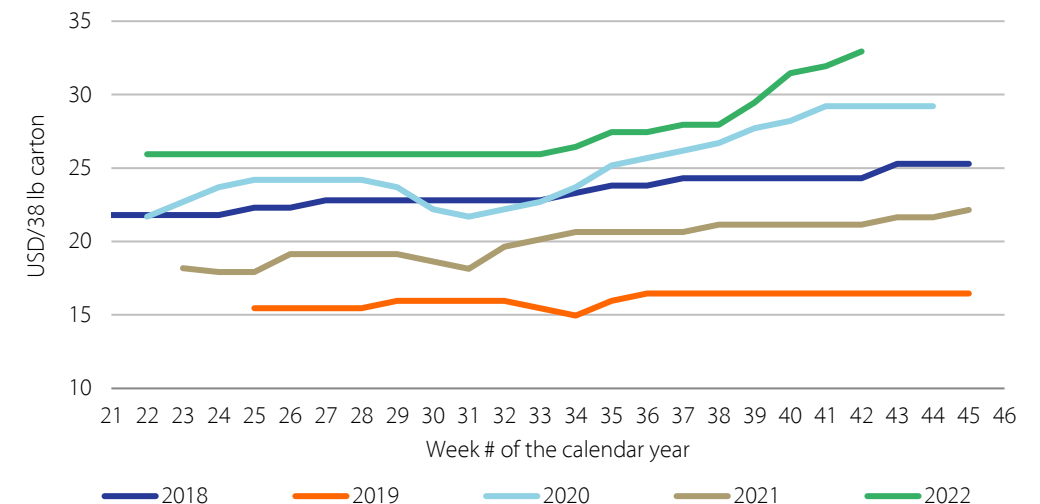
Composite of fine appearance and standard appearance prices  
Source: USDA AMS, Rabobank 2022

### Strawberry shipping point prices – primary US districts, 2019-2022



Source: USDA AMS, Rabobank 2022

### Valencia oranges shipping point prices, 88s - shippers first grade, 2018-2022



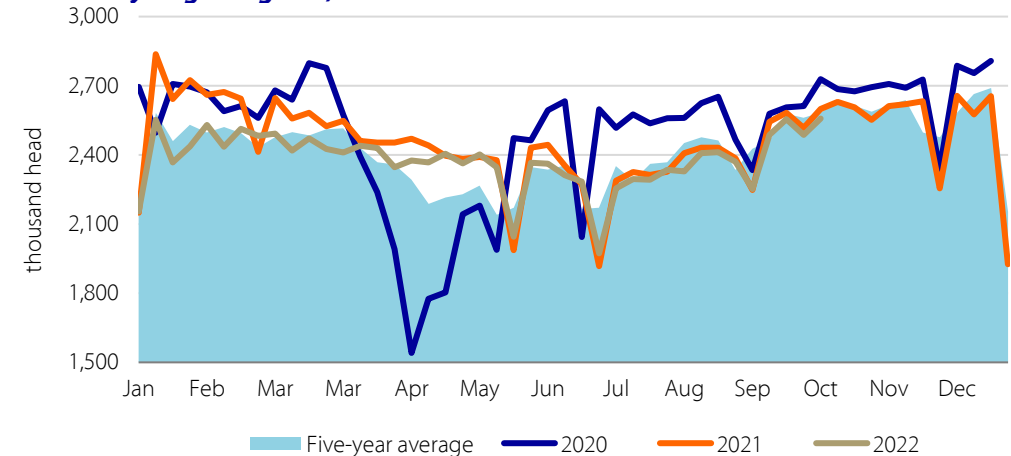
Source: USDA AMS, Rabobank 2022

# Pork

## High costs slowing hog production growth

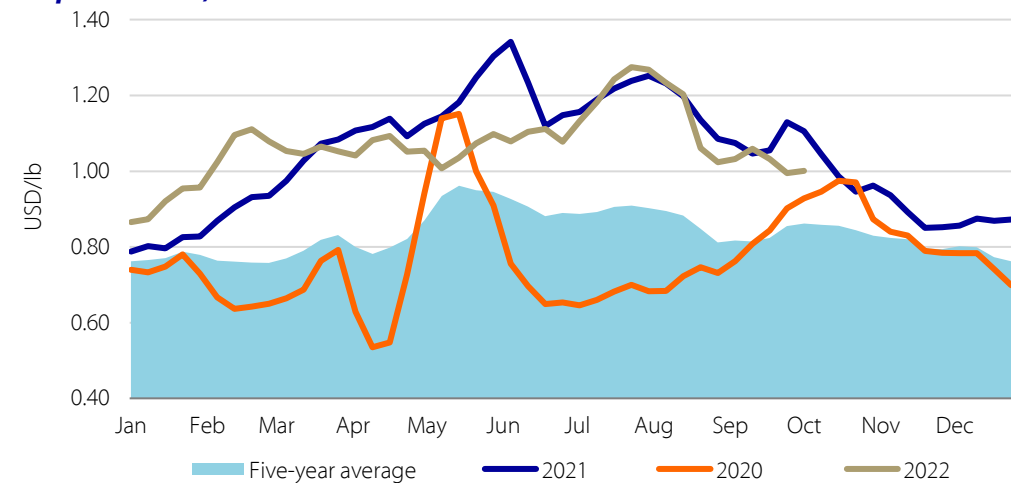
- Hog prices are lower seasonally, but remain above year-ago levels as hog supplies remain below packers' needs.** Hog slaughter is currently averaging 1.6% below year-ago as market inventories are below earlier expectations and as packers are likely slowing the harvest to maintain margins. Heavier dressed weights are helping to offset the drop in slaughter, as the average has moved up 1.3% YOY on smaller harvest numbers and seasonal factors (cooler weather, new crop corn). We do not expect a material increase in slaughter levels through 1H 2023, as the latest Hogs and Pigs report shows lower current market inventories (-1.5% YOY) and lower farrowing intentions in coming months. Limited herd growth continues to reflect higher feed and fuel costs, and ongoing regulatory uncertainty. Pork production was nearly flat in Q3 2022 and is expected to be down 1.5% YOY in Q4 2022.
- Packer returns have weakened as pork cutout values have failed to keep pace with hog market gains.** Pork cutout values are 9.4% below year-ago levels on a lower contribution from bellies (-37% YOY) and weaker loins (-11.6% YOY), despite ongoing strength in ham values (+26% YOY). While the cutout is lower versus the year-ago period, prices remain 16% ahead of the five-year average. Pork prices are expected to remain strong in Q4 and early 2023 on limited growth in hog supplies and steady export demand. There is some risk that weaker domestic demand and plentiful chicken supplies could weigh on retail demand, although current demand remains flat with year-ago levels.
- August pork export volumes fell 3.4% YOY to 211,000 metric tons, and export values were down 2.4% YOY.** Higher exports to China/Hong Kong (+7.1% YOY) helped offset weaker sales to Japan (-19% YOY) and Canada (-7% YOY). Sales were also stable (+2.2% YOY at 70.4m metric tons) as demand for US ham imports holds steady. We remain optimistic on Q4 2022 export demand given tight global pork supplies and rising Chinese hog prices, and expect US exports to remain competitive in 2023 given expected declines in global hog production.
- Mexican hog prices remain 26% ahead of year-ago levels and well above historical averages on tight domestic availability.** Hog production is higher in some regions, although productivity remains a challenge for some. Pork prices are also up sharply (+22% YOY) at record highs, helped by steady demand and lower imports of US turkey following HPAI trade restrictions. We expect some moderation in prices inflationary pressures on consumers increase and lower cost imports help offset commodity cost pressures.

**US weekly hog slaughter, 2020-2022**



Source: USDA 2022

**US pork cutout, 2019-2022**



Source: USDA, Rabobank 2022

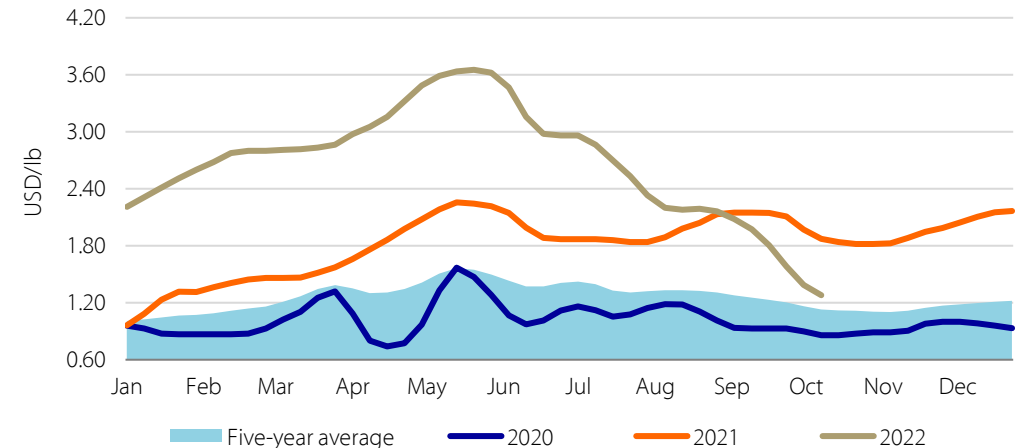


# Poultry

Chicken prices fall sharply as higher production saturates near-term demand

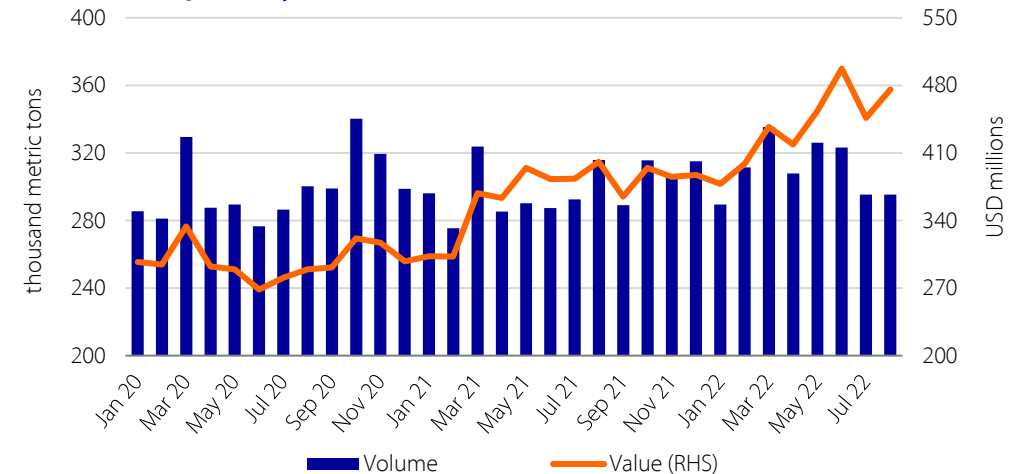
- Boneless breast meat prices are -65% from summer highs and are 27% lower than year-ago levels as rising chicken availability is saturating the market.** An increase in Ready-to-cook (RTC) production is ahead of near-term demand, adding to relatively high frozen inventories (+16.2% YOY). Demand has failed to keep pace with the increased supply as retail has been slow to pass through declines in commodity costs. Foodservice support for breast meat has also been mixed, with QSR demand relatively steady and weaker demand over the balance of the industry. Until volumes stabilize, prices are expected to move lower. Wing prices are -55% YOY and at four-year lows on a slow recovery of foodservice demand. At current levels, we expect improved menu promotions, although progress will likely be slow. Leg quarter prices also moved sharply lower on increased production and soft export demand.
- RTC chicken production surged in late September, +6.1% YOY to 872m pounds, the tenth week of higher average production.** The increase reflects both higher slaughter levels (+3% YOY) and a notable gain in weights (+3% YOY). The rise in slaughter not only reflects earlier growth in the breeder flock, but also a gradual improvement in hatchability. Weights moved higher on cooler temperatures (birds grow faster) and also reflect a move toward larger bird weights at some facilities. Rabobank anticipates RTC production to remain above year-ago levels in Q4 2022 (+2.3% YOY), which may continue to weigh on prices. We expect raising our full-year estimate of RTC production to 2.0% YOY.
- August chicken exports of 315,000 metric tons were down slightly in volume (-1.3% YOY), but up 18.6% YOY in value.** Exports of paws to China remain strong, fueling continued growth in export volumes (+6.7% YOY) and value (+21% YOY). Shipments to the Philippines and Vietnam were also materially higher, +92% YOY and 22% YOY, respectively. Sales to Mexico remain depressed, -8.1% YOY, as local supplies remain ample and as Brazilian imports gain share. Exports should remain stable through Q4, although ongoing HPAI outbreaks (most recently in Arkansas) could jeopardize trade with some trade partners.
- Mexican chicken markets remain relatively soft. After very strong prices in 1H 2022 due to HPAI bird losses, Mexican markets are down sharply (-36% since early June) as supply has stabilized. Prices are now 4% below year-ago levels.** Consumer demand appears weaker tied to higher overall inflation and higher food costs. Retail and foodservice sales slowed in late summer, and there has been a shift toward more whole (commodity) chicken consumption. Higher raising costs (primarily feed) continue to pressure producer margins and are likely to limit industry production in 2H 2022. Weaker industry returns are likely to limit near-term expansion and could depress 2H 2022 import demand.

## Boneless skinless breast meat prices, 2020-2022



Source: USDA, Rabobank 2022

## US chicken exports, by volume and value, 2020-2022



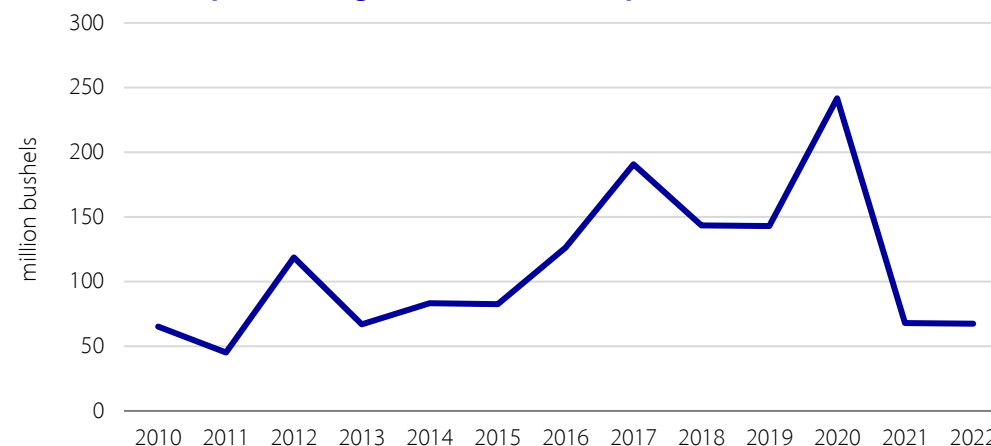
Source: USDA 2022

# Soybeans

Logistical problems on the Mississippi challenge US exports. Is a record Brazilian crop on the horizon?

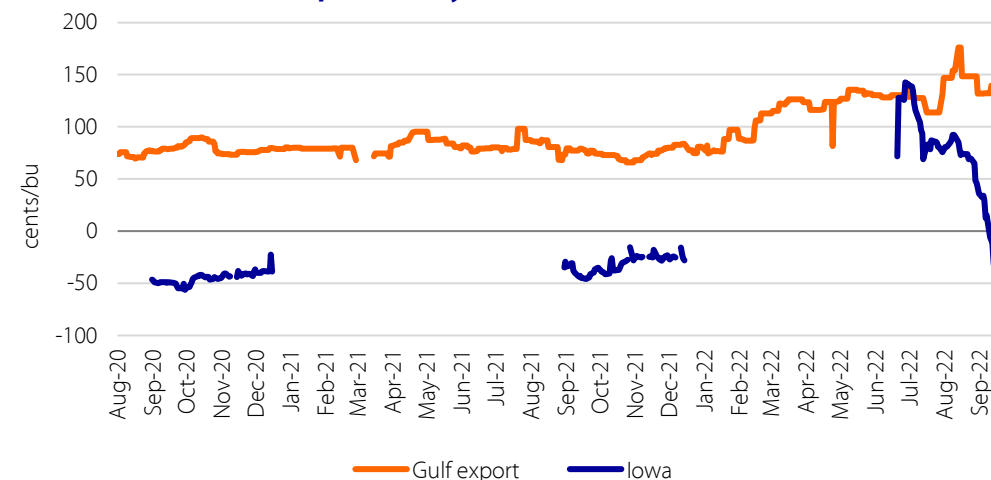
- With pricing volatility typical of the summer months behind us, the market is now looking at harvest data from the US, the pace of exports to the world market, and planting progress in South America.** After being hammered by macroeconomic headwinds in late summer, strong fundamentals have resurfaced as a backstop to the US soybean market. Since the USDA's first estimates for 2022/23 were released in May, the US soy balance sheet has shed over 260m bushels of production, with most of that decline being pencilled in during September, leaving the US with the prospect of the second-tightest ending stock-to-use ratio on record.
- Progressing through harvest, it is now clear that the drought that blanketed 40% of US soybean acreage has pushed yields below trend.** Now the greater unknown for the soybean market is how South American soybean production will emerge from 1) a pivot away from cereal crops in response to higher fertilizer prices and 2) what is anticipated to be a third consecutive La Niña. Historically, La Niñas serve up the driest conditions for Argentina, but 2021/22 bucked that trend, with Brazil's southern states bearing the worst of drought conditions. If 2022/23 does indeed have another La Niña in store, early indications are that it will look more typical. Ample rainfall in Brazil, where record production is anticipated, has that country's growers planting full tilt, with the pace of seeding through early October double that of the recent five-year average. Argentina, meanwhile – where corn planting is underway and soy planting is set to begin in November – is experiencing its worst drought in 30 years, a factor that may ultimately shift even more acreage to soybeans and sunflower over the next month.
- Low water levels on the Mississippi have aggravated already tenuous agricultural export channels, spiking basis levels at the Gulf.** The same drought that has put a dent in yields across the Midwest has also depleted the Mississippi River to historically low water levels. As of October 11, river stage averaged just 3.5 feet at Vicksburg, the second lowest October reading in at least 30 years with the lowest coinciding with the catastrophic drought of 2012.
- The bottlenecks along the Mississippi have been particularly detrimental to soybeans, which is the most export-oriented broad acre crop and reliant on barge transport. The crop has been leaving the country at its slowest pace since 2013.** This backlog, coupled with the arrival of harvest and stubbornly high rail rates have weighed heavily on basis levels in the Midwest. The spread between Iowa and the Gulf has been widening to two dollars in recent weeks. With the secondary rail market at its highest levels since 2012, this spread looks set to widen. And, if we learned anything from 2013, it's that transportation disruptions weigh more heavily on whole beans than on meal or oil, which could trigger a repeat of high surface crush margins in the Midwest.

**Accumulated exports through week 40 (end of September)**



Source: USDA, Rabobank 2022

**Iowa and US Gulf Basis Spread – Soybean Basis**



Source: USDA, Rabobank 2022



# Sweeteners

Well sold crop and ongoing supplies support prices



**Despite higher US sugar production, increased ending stocks and increased imports, prices remain well supported.** The main factor holding up prices is that nearby supplies are tight.

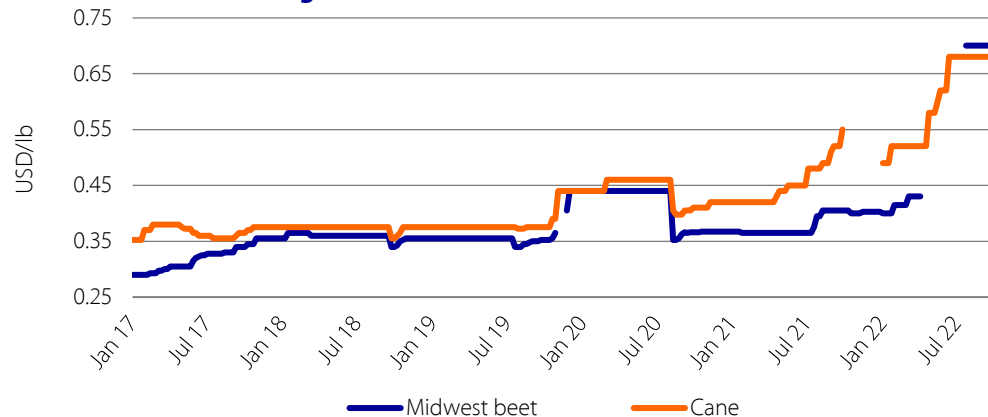
**Tight nearby supplies is a hangover from the small crop in 2019/20, from which the market has had a hard time recovering.** Both beet and cane processors are well-sold for the 2022/23 crop year, as evidenced by the fact that beet processors' price offerings are lacking and that prices are nominal at best. In addition, there are several major end users who are not fully covered for 2023 who still have to come to market. There appears to be little price relief for the new crop year.

**The stout prices come in the face of increasing sugar production, rising stocks, increasing imports and an increasing stock-to-use ratio.** Both beet and cane prices are reaching levels not seen since the low stock period in the late 2000s.

**Even USDA's increase in the tariff-rate quota (TRQ) has not eased the strength in prices.** In September, USDA increased the TRQ for specialty sugars, which raised the supply for the 2022/23 crop year. However, this increase does little to increase the supply of imported raw sugar, which processors depend upon. To add to the raw supply issues, the Philippines announced that it would not be filling its TRQ allocation to the US due to the need to allocate all production to domestic consumption. This action further tightens the supply of raws to US refiners.

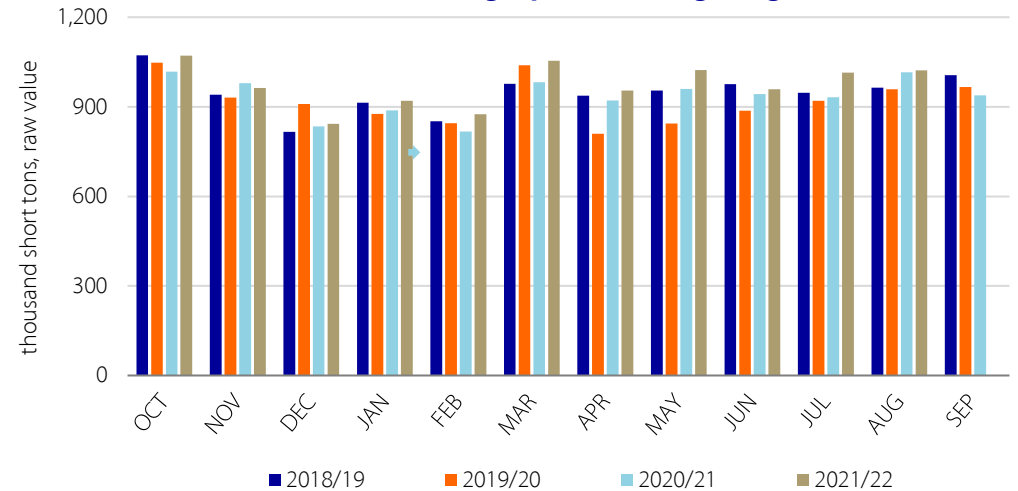
**Annual corn sweetener negotiation is just getting underway.** Early flat price offers to existing customers are showing hefty increases of 15% to 20% when compared to last year's published prices. High corn prices, rising energy costs and high freight rates are all being cited as reasons for the large increase.

## Domestic Wholesale Sugar Prices



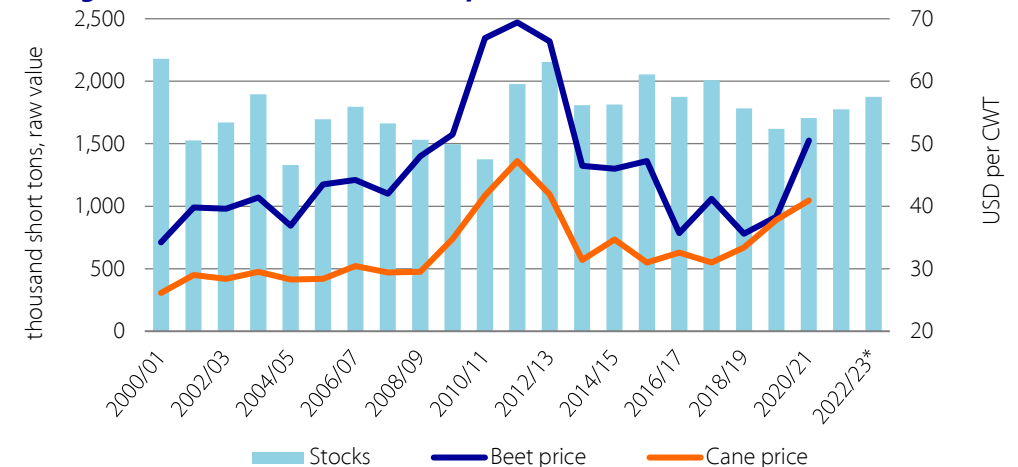
Source: Milling & Baking News, Food Business News, Rabobank 2021

## Beet and Cane Deliveries are Strong, up 4.0% through August



Source: USDA FSA, Rabobank 2022

## Sugar Prices Continue to Rise Despite Increased Stocks



Source: USDA-ERS, Rabobank 2022

# Tree Nuts

Lower production and lower exports as drought and inflation linger



**Almonds:** Carry-in into the 2022/23 season was 836m pounds, up 38% YOY, while estimated crop size is 2.6bn pounds, down 11% YOY, as yields were impacted by a freeze and the drought. Adding these two components, total supplies are down 3% YOY. Shipments in the 2022/23 marketing year, which started in August, are down 4% YOY through September, with domestic shipments down 10% from the previous season and exports down 2% YOY. In 2022, September exports were at the lowest level since 2018. A strong US dollar, persisting inflation, and economic woes are likely to slow demand in key markets.

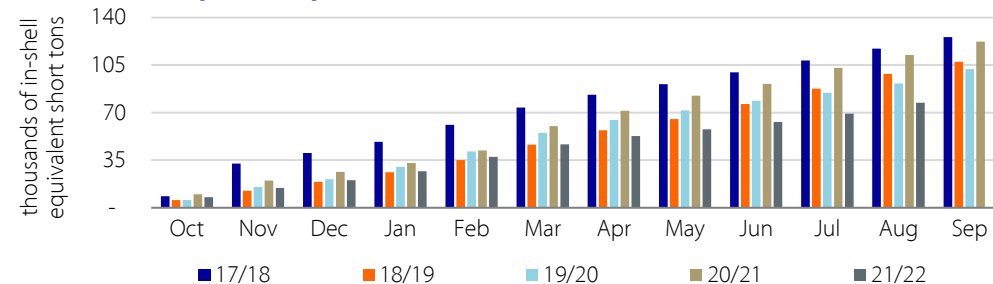
**Hazelnuts:** Shipments at the end of the 2021/22 marketing year (June) were up about 5% YOY, with kernel exports declining 6% YOY. Industry sources report that after a record crop in 2021/22, yields in the Pacific Northwest are expected to be lower in 2022/23. As production of specific varieties increases, US growers will be able to meet quality requirements in specific markets, helping the industry ahead. Global availability of hazelnuts is reported as high, as other grower regions have large crops.

**Walnuts:** Total US shipments were up 7% YOY, with exports declining 1% YOY, and domestic shipments increasing 12% YOY in September, the first month of the 2022/23 marketing year. Although industry players were expecting a bumper crop this season, USDA's objective estimate came at 720,000 in-shell equivalent tons, down 1% YOY. Crop quality in California has been mixed, with some damage from the heat wave. Increased international competition in export markets pressures prices downward.

**Pistachios:** Carry-in was 354m pounds, up 25% YOY at the beginning of the 2022/23 season, while some expect the crop to be around 850m pounds, down about 27% YOY. With this, marketable supplies for 2022/23 are set to be down about 16% YOY. Shipments in September were down 17% YOY, with in-shell domestic shipments up 16% YOY, and in-shell exports down about 32% YOY. Large sizes are reported to be in short supply. Industry sources indicate that overall, prices are holding up.

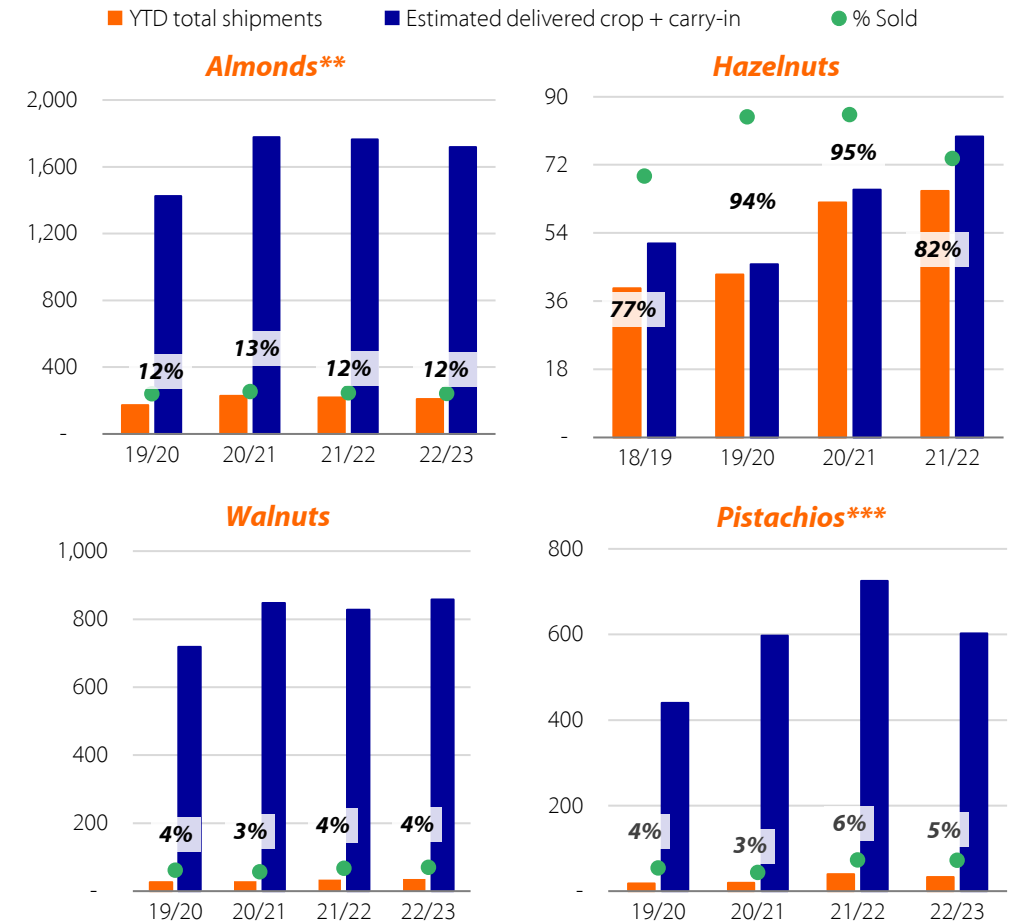
**Pecans:** US pecan export volumes in the 2021/22 marketing season through August were down 31% YOY as in-shell exports have declined sharply, according to USDA figures. As harvest is underway, growers in the Southeast report good quality, while some growers in Texas report poor quality due to lack of water, according to industry sources. Prices have remained steady as the crop in the US was short the past season and the crop in Mexico is expected to be shorter this season.

## Cumulative US pecan exports



Source: USDA FAS, Rabobank 2022

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



Source: Almond Board of California, Oregon Hazelnut Industry, California Walnut Board, Administrative Committee for Pistachios, Rabobank 2022.\* Through September 2022, 2022/23 marketing season for almonds walnuts, and pistachios; June 2022, 2021/22 marketing year for hazelnuts; \*\*Meat pound equivalent. \*\*\*Not considering inventory adjustment/loss.

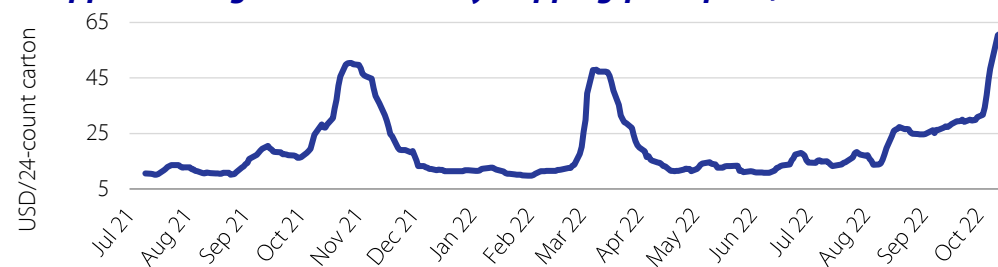


# Vegetables

## Record-breaking shipping-point lettuce prices: On-time season transition meets ill-timed weather

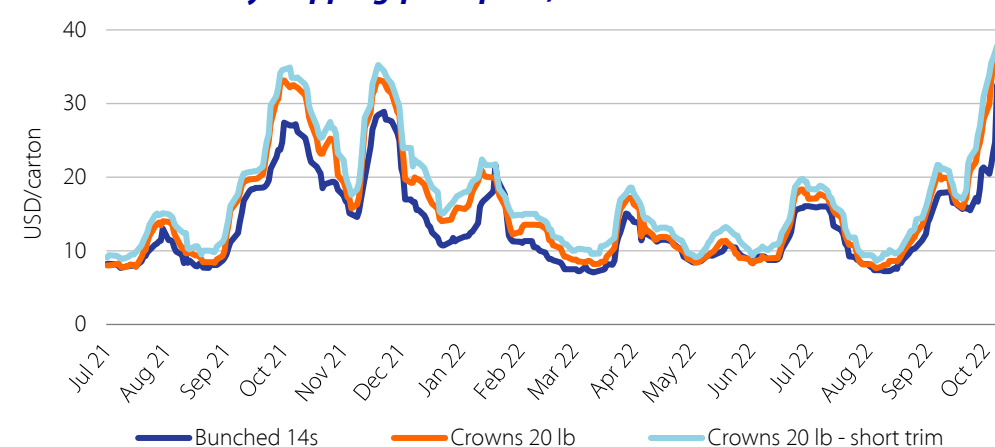
- Extreme heat followed by untimely rain in the period from late August through the first week of September in the Salinas Valley and California Central Coast caused significant damage to many romaine, iceberg and greenleaf lettuce fields and increased disease incidents.** Not only were yields negatively impacted, but also the quality of product worsened. Occurring during the tail end of the season, when shipping-point prices usually spike, pushed these prices further upward, reaching historic high levels. By early October, romaine and iceberg lettuce shipping-point prices broke USD 50 and USD 60 thresholds for the first time. Currently, these prices were 130%, 101%, and 104% higher YOY for romaine's 24s and hearts (12x3) and wrapped Iceberg, respectively. Until the desert's production is in full swing by mid November, these prices are expected to continue climbing. Assuming average weather, shipping-point prices will probably fall steeply by the end of the year and early January following their seasonal pattern.
- Broccoli's yields and quality were impacted in some areas by bad weather and the spread of pin rot. Price surged as a result, but modestly.** By early October, shipping-point prices of bunched 14s and 20-pound carton broccoli crowns were up 25% and 23% YOY, at around USD 26 and USD 34, respectively.
- The harvest of new potato crop is wrapping up in all regions, bringing some relief to markets.** Production is estimated to be lower YOY. Early estimates predict about 2% to 3% YOY reduction. The 2022/23 season is going to be another year of tight supply and high prices. Although prices are expected to soften from their current highs (shipping-point prices as of October are roughly 33% higher YOY), they are going to remain elevated.
- The average retail price of fresh vegetables was 10.4% higher YOY at the end of August 2022, whereas retail volume was down 5.2% YOY.** Retail price inflation and volume pullback continued for another month, with no sign of abating. The recently released CPI of fresh produce also showed a continuation of the price trend into September at a fast MOM rate. Upstream forces as mentioned above explain some of this trend. Potatoes, onions, and lettuce are leading August's inflation with prices up 26.4%, 26.2% and 11.4% YOY, respectively. August is the first month in which potatoes and onions dropped in retail volume YOY – by about 5% and 4%, respectively. As the new crops enter the market, their retail prices will likely soften. Nevertheless, it is quite possible to continue experiencing a double-digit YOY inflation in the total fresh vegetable category for the months of October and November given the current supply dynamics upstream.

### Wrapped iceberg lettuce – US daily shipping-point price, 2021-2022



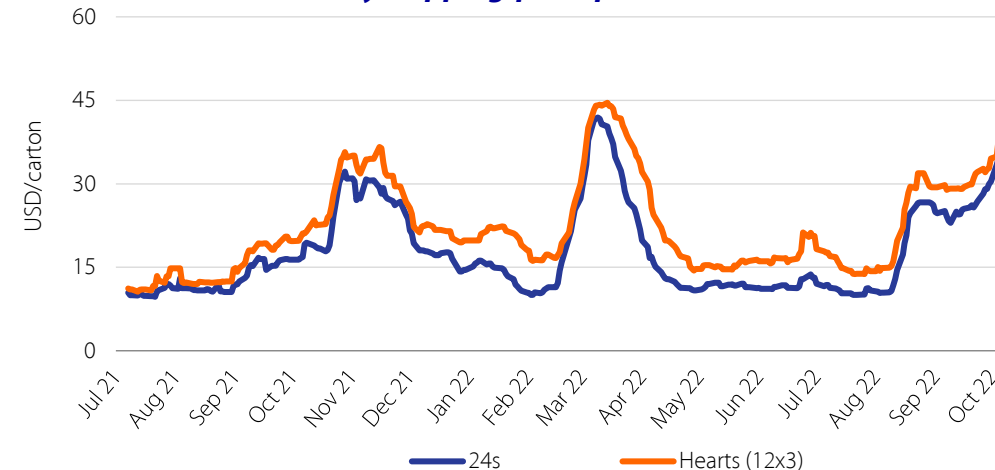
Source: USDA AMS, Rabobank 2022

### Broccoli – US daily shipping-point price, 2021-2022



Source: USDA AMS, Rabobank 2022

### Romaine lettuce – US daily shipping-point price, 2021-2022



Source: USDA AMS, Rabobank 2022

# Wheat

## Uncertainty drives the wheat market

**The wheat market is all about uncertainty.** Many of the drivers the market has been dealing with all year are still in place and are now being magnified (i.e., the Russian invasion of Ukraine and weather in all geographies). The supply side of the balance sheet is coming into focus and looks positive, but the world is still struggling to build stocks, particularly among the world's exporters. This uncertainty will continue and will be supportive to prices in 2023.

**Ukraine and Russia continue to dominate the wheat market, but for different reasons.** In Ukraine, it is all about plantings and shipments. Until October 10 only 1.6m hectares of wheat were planted, about 30% of the harvested area, and the optimal planting window has already closed. Ukrainian wheat and corn exports have been improving, but the future of the 'grain corridor' is questionable. Both Putin and the Russian foreign ministry have criticized the agreement. The trade sector is skeptical about the extension of the agreement mid-November. If the agreement is not extended, we expect a bullish market reaction, but it will not be as dramatic as last February/March. The trade sector is anticipating the agreement to expire and trade flows have adapted to the reality of the conflict in the meantime, which will dampen the upside potential.

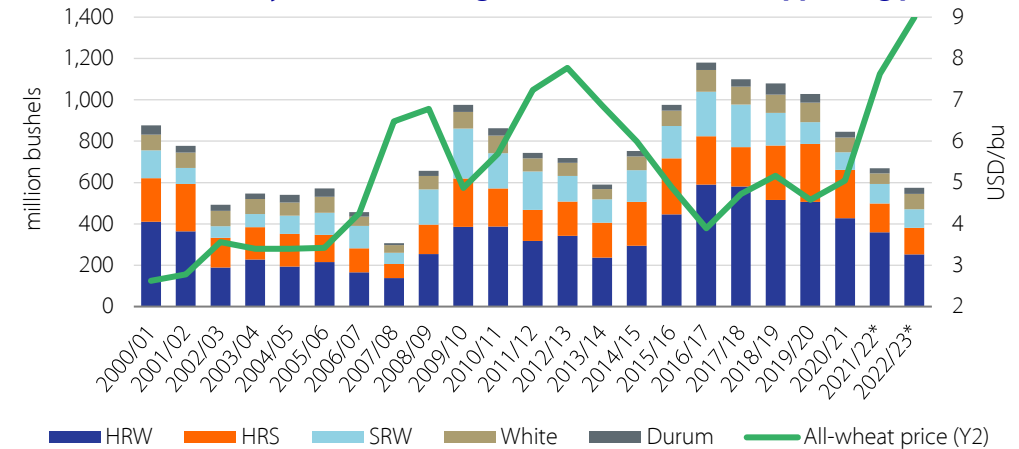
**Globally wheat stocks are declining for the third consecutive year, but the situation is more dire among major wheat exporters.** The decline in export stocks is concerning, since this is about the amount of wheat available worldwide. Only Canada and Russia will see an increase in stocks due to increases in production, but the focus is on Russia. Russia's initial export pace has been weak due to export restrictions (i.e., export taxes, export quotas, high freight costs and due to some traders shunning Russian wheat). However, Russia has a large carryover and a record crop to export, so we expect Russian wheat to keep a lid on wheat export prices.

**Ongoing drought, smaller than expected hard red winter crop (HRW) and continued contraction of US wheat stocks will keep US wheat prices supported at least until next summer.** Wheat and HRW stocks are the lowest since 2007/08 and 2013/14, respectively. US wheat stocks are projected to decline for the sixth consecutive year. It is difficult to see this trend turning around anytime soon without any cooperation from Mother Nature.

**Currently, US wheat producers are 'dusting in' the HRW wheat in the very dry southern Plains.** As of mid-October, 69% of the winter wheat crop is planted, which is on par with last year and the five-year average. While planting is on schedule, winter emergence is delayed. As of mid-October only 33% has emerged in Kansas, the largest wheat state, versus 45% in 2021 and a five-year average of 44% despite on-par planting progress with past years. The dry conditions and delayed emergence are not a strong start for the crop and do not bode well for the 2023 crop – stay tuned.

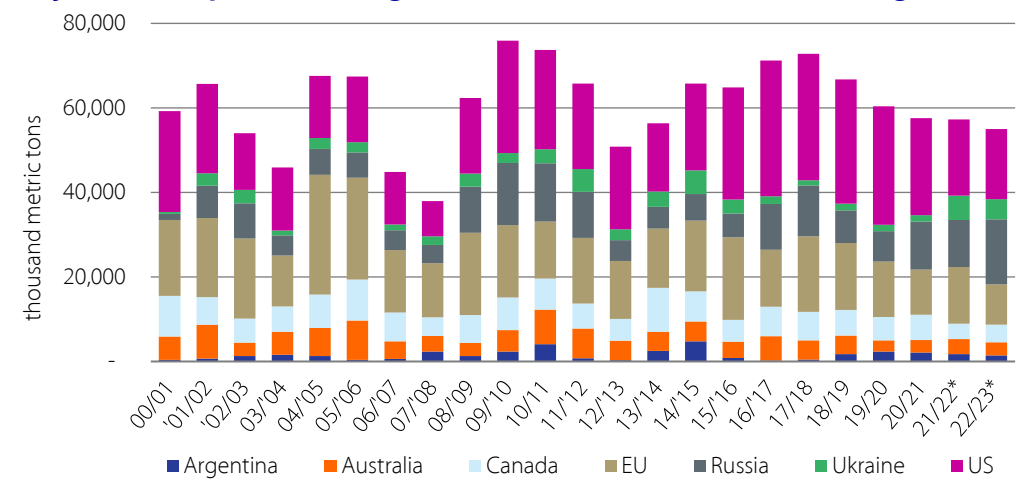
**Current US wheat futures and cash prices are trading at prices based on the fundamentals.** In other words, prices are reasonable and similar to the prices seen back in 2010-2013 time period. Without a change in weather, prices are expected to remain at these high levels. In addition, there is more upside than downside price risk for at least the next six months.

### Sixth consecutive of years of declining US wheat stocks are supporting prices



Source: USDA ERS, Rabobank 2022

### Major wheat exporters holding 20% of world stocks versus 20-Year Avg. of 30%



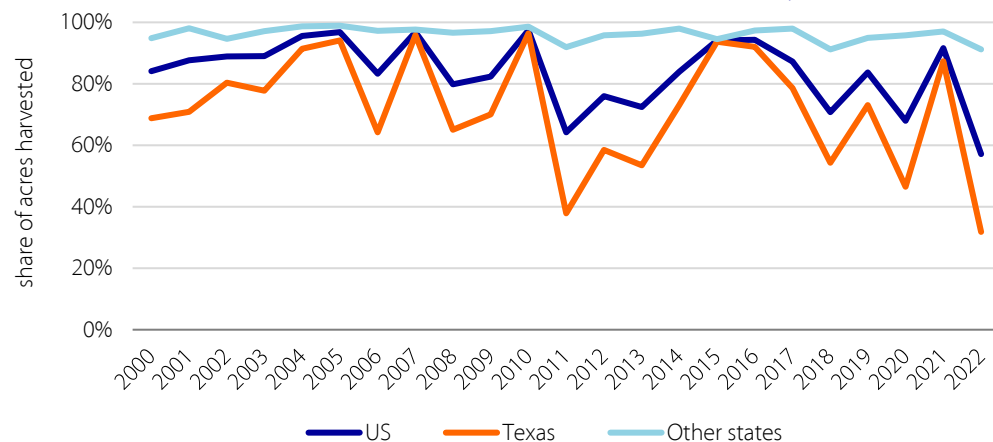
Source: USDA FAS GATS, Rabobank, 2022



# Cotton

- Record unharvested acres in the US.** Accounting for over half of the country's acreage, Texas plays a critically important role in US cotton production. And although roughly a third of acreage in the state is irrigated, the state's hot and dry climate means that production there can be highly variable. Since 2000, on average, only 75% of Texas' cotton acreage is ultimately harvested. For 2022, however, severe drought throughout the growing season, but particularly dry conditions at planting, led to the highest levels of crop abandonment (70%) in recent memory. Given the variability of the weather and some of the underlying goals of federal crop insurance, Texas cotton has historically been one of the most heavily indemnified crops in the country. Through early October Texas cotton farmers had received USD 1.6bn in indemnities – a figure that will surely grow given the Risk Management Agency's total liabilities in Texas cotton approach USD 4.2bn.
- Cotton as the canary in the economic coalmine.** Despite the rapidly deteriorating production outlook, cotton prices have experienced the largest decline in price – 40% – amongst the major commodities since the early June peak. While all commodities have battled the same macroeconomic headwinds, cotton found itself uniquely exposed to the threats of a looming recession and its impact on clothing demand. This is reflected in US export sales, which ten weeks into the 2022/23 marketing year amounted to just 800,000 running bales, just a quarter of the levels observed this time last year.

**Highest levels of US cotton crop abandonment in recent history**



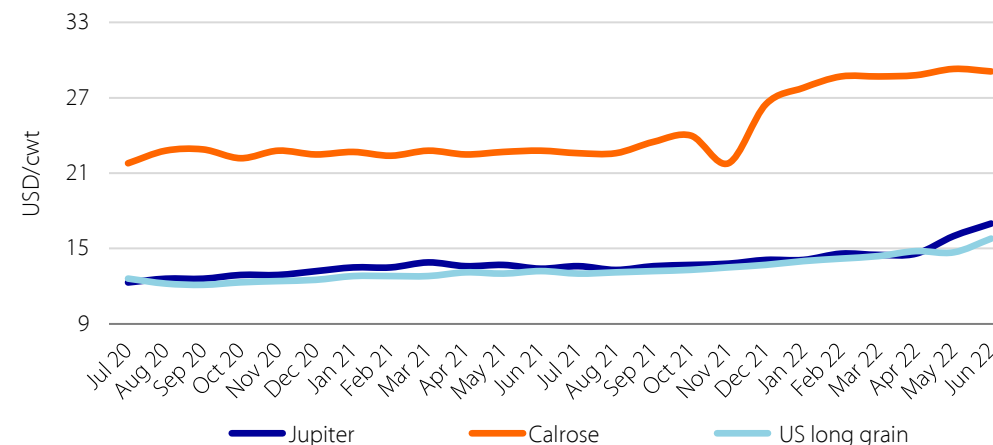
Source: USDA, Rabobank 2022

# Rice



- Rice imports continue to grow due to low supplies.** Despite a better-than-anticipated yield in California and Mississippi, production this year is nearly 14% below last year. Estimated imports are expected to reach record levels due to low production and a 17% lower beginning stock in this marketing year. Imports are estimated at a record level of 44m cwt or 16% above last year. On the long grain front, Thailand, India and Pakistan are expected to be the main suppliers of Asian aromatics, while South America is likely to push for more exports of regular milled rice as prices remain well below US prices. Medium and short-grain imports are expected to increase by 41% compared to last year as California struggled with the drought this year. Thailand, India and China are expected to increase exports, but Australia could become an important source of medium and short-grain rice.
- World trade prices have increased in some regions.** Especially Thailand and Vietnam are struggling with factors such as lower global production and lower world exports, which limit world supplies. And on top of that the announcement from India that it would potentially limit exports, depending on the grade and type of rice, as India tries to curve domestic inflation.
- Season average farm prices in the US have not seen a change from last month's outlook, but low production and stocks keep prices at all time highs.** Long-grain rice remains at a record USD 16.50/cwt and 20% above last year. Meanwhile, medium and short grain in the US stands at USD 27.90/cwt or 27% above last year.

**24-month US rice prices, Sep 2020-Aug 2022**

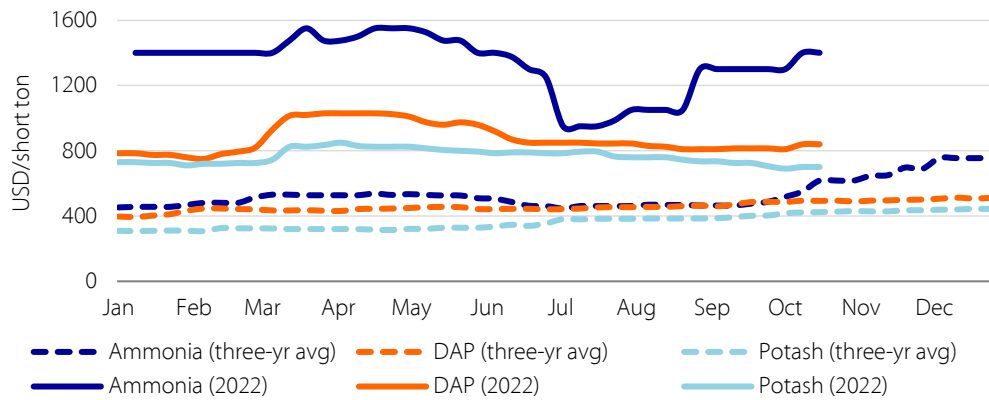


Source: USDA NASS, USDA ERS, Rabobank 2022  
Note: Average rough rice basis

# Input Costs

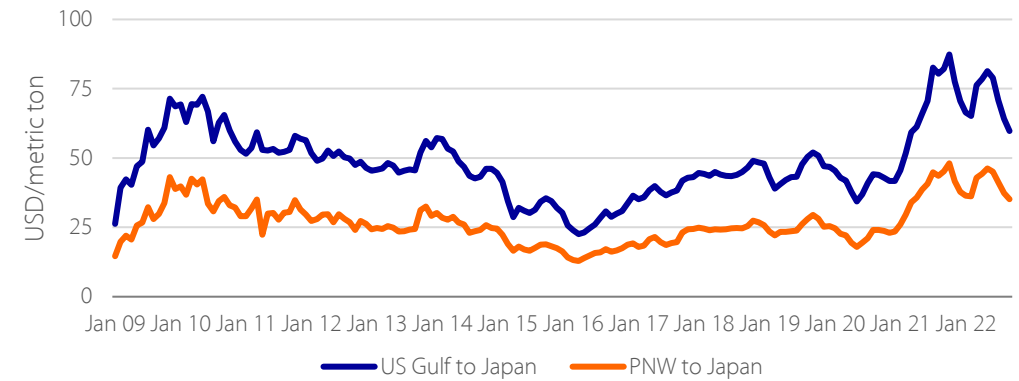
As of October 20, 2022

## Corn Belt input prices\*



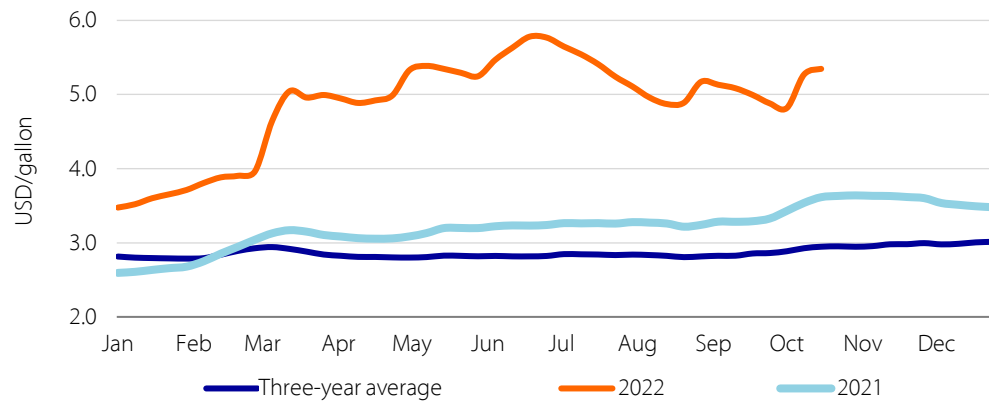
\* Note: granular potash  
Source: Bloomberg, Rabobank 2022

## Ocean freight



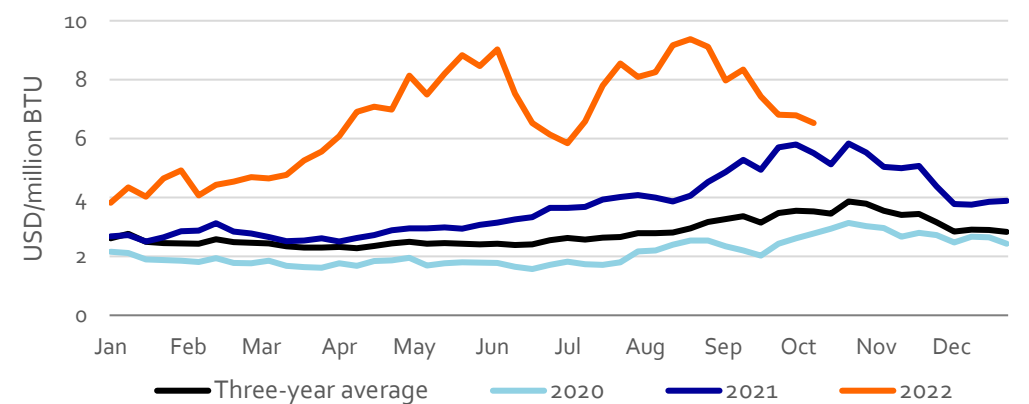
Source: O'Neil Commodity Consulting, USDA AMS, Rabobank 2022

## Diesel - Midwest



Source: EIA, Rabobank 2022

## Natural gas spot



Source: NYMEX, Rabobank 2022



# Forward Price Curves

As of October 20, 2022

## CBOT – Corn



Source: CBOT, Rabobank 2022

## CBOT – Soybeans



Source: CBOT, Rabobank 2022

## CBOT – Soymeal



Source: CBOT, Rabobank 2022

## CBOT – Soy oil



Source: CBOT, Rabobank 2022

# Forward Price Curves

As of October 20, 2022

## CBOT – Wheat



Source: CBOT, Rabobank 2022

## CBOT – Feeder cattle



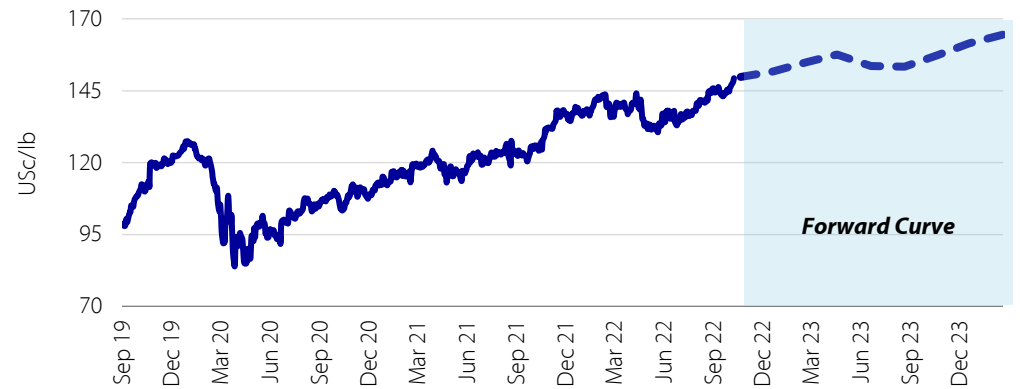
Source: CBOT, Rabobank 2022

## CBOT – Lean hogs



Source: CBOT, Rabobank 2022

## CBOT – Live cattle



Source: CBOT, Rabobank 2022



# Forward Price Curves



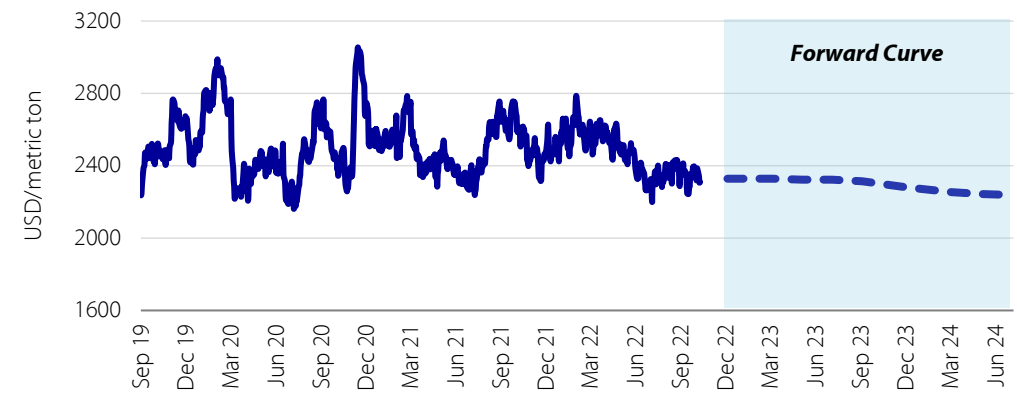
As of October 20, 2022

## ICE - #2 Cotton



Source: ICE, Rabobank 2022

## ICE - Cocoa



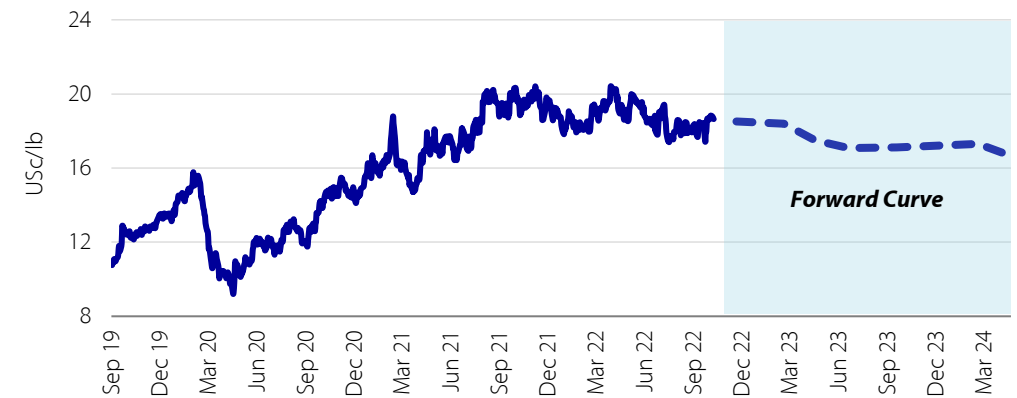
Source: ICE, Rabobank 2022

## ICE - FCOJ



Source: ICE, Rabobank 2022

## ICE - #11 Sugar



Source: ICE, Rabobank 2022

# RaboResearch Food & Agribusiness





  
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