



North American Agribusiness Review



Rabobank



**RaboResearch
Food & Agribusiness**












February 2023

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Economy

Disinflation has started

US

- According to Fed Chairman Powell the disinflationary process has started. Goods inflation has come down and disinflation (a slowing of the pace of price inflation) is in the pipeline for housing. However, the inflation caused by core services ex-housing (the wage-sensitive category of consumer prices) remains a concern. Since this part of inflation seems closely related to wage growth, the strength of the labor market is likely to push the FOMC further than anticipated in their December projections. The disinflationary process is going to take a significant amount of time. Therefore, we do not expect the Fed to cut rates in 2023, despite our forecast of a recession in the second half of the year. The Fed will have to keep rates high to squeeze inflation out of the economy.

Mexico

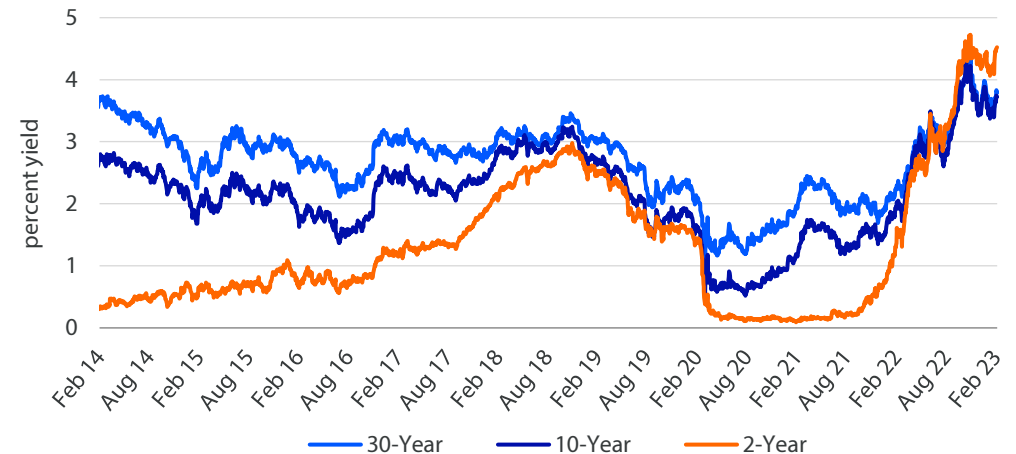
- MXN was one of the best-performing currencies in 2022, despite it being a poor year for many risky assets. In 2022, the Banxico policy rate doubled from 5.25% to 10.50% after the hiking cycle began in August 2021 at 4.00%. Banxico was not the most aggressive Latin American central bank and Mexican rates were not the highest in the region, but the whole region performed well from a currency perspective. In terms of the outlook for the Mexican economy, we see the country narrowly avoiding a technical recession with net exports providing significant support. However, consumption is likely to see a modest contraction, which should help inflation ease despite core consumption remaining sticky. That said, a return to target is unlikely this year. As we look to the year ahead, we expect MXN to become the best-performing EM currency, taking the top spot away from BRL. We expect USD/MXN to rise to 20.20 at the 12-month horizon.

Canada

- Unsurprisingly, the Bank of Canada's Business Outlook Survey (BOS) and the Canadian Survey of Consumer Expectations (CSCE) reveal a downbeat outlook for the economy. Business confidence fell to its lowest level in two years with most firms expecting a recession this year, albeit 90% of those expect it to be 'mild'. Our current forecast shows the economy narrowly avoiding a technical recession, but slowing to a near halt, and the risk is firmly skewed to seeing outright quarterly contractions in the second half of the year. Inflation expectations remain elevated, with the survey implying CPI inflation at around 4.5% this year, slowing to 2% in two years' time. We are broadly in line with this projection and think it means the Bank of Canada will keep interest rates on hold until the middle of 2024 in a similar fashion to the Fed. We expect USD/CAD to rise to 1.37 at the 12-month horizon.

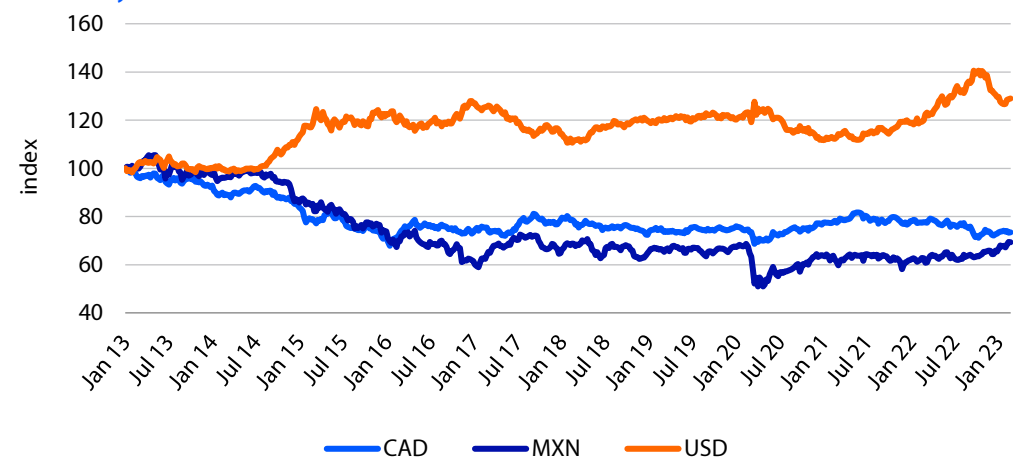
Source: USDA, Rabobank 2023

Interest rates, 2014-2023



Source: Federal Reserve of St. Louis 2023

Currency indices, 2013-2022



Source: Bloomberg 2023

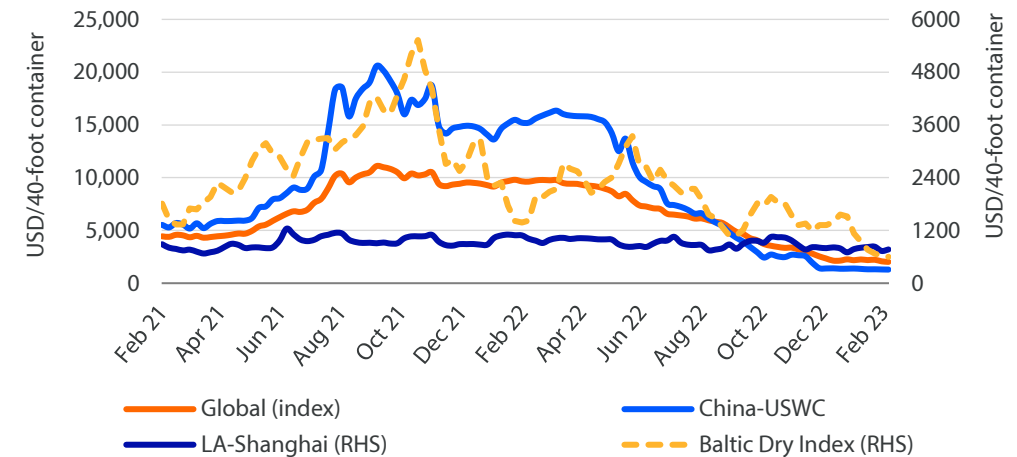
Note: Rebased at 100 as of January 1, 2013

Logistics

New capacity to flood the market amid weakening demand. Energy and labor costs will remain a challenge

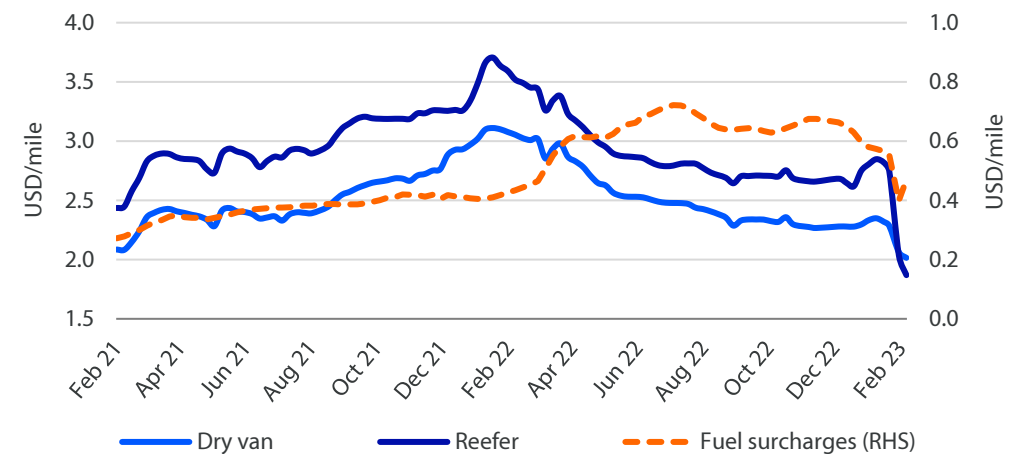
- In 2023 we should see a downcycle in the cyclical container shipping market.** The downcycle started in Q2 2022 with steep falling demand (mainly for dry container shipping due to inventory corrections by US and European shippers) and increasing carrier capacity as vessels become available from easing congestion. Whereas demand rebound in Q2-Q3 2023 will likely not be as strong as that in 2021, capacity continues to improve with an influx of new vessels scheduled to be delivered this year. However, we expect to be near the bottom of the downturn. Ocean carriers that effectively operate in their shipping alliances (although there are challenges), are in strong positions working toward a new equilibrium where shipping rates would be higher than pre-pandemic levels as operating and energy costs remain high. Carriers are delaying contract negotiations to avoid the current dip, looking for stronger 2H demand, which may not be there. We expect contract rates to be much lower than the previous years, but still above the current spot rates.
- Shippers relying on refrigerated containers will still see high costs, but availability should improve.** Even though reefer container rates have started to decline, we expect the pace to be much slower throughout 2023 due to stable demand for global food trade and reefer container imbalances in agri-exporting regions.
- The Baltic Panamax Index (a proxy for grain bulk freight) continued to decline throughout the holiday season and into 2023.** At its lowest point in 2.5 years, the index is negatively impacted as the overall Baltic bulk index slipped on soft Chinese demand and Brazil rainfall. Non-ag commodities were the main driver, however. We expect a soft rebound into Q2 as temporary challenges resolve in a recessive economic backdrop globally.
- Trucking contract rates continue to normalize as small freight operators exit the market.** As spot rates decline and operating costs remain high due to the labor and energy components, high-cost operators, many of which are small and started operating in the last two years, will continue to exit the now oversupplied market. The January Producer Price Index for General Freight Trucking has declined 6.4% since the peak in May, but is still 36% above pre-pandemic times. As the macroeconomic expectation overshadows the logistics industry, we expect trucking rates to continue to be favorable toward shippers.

Select ocean freight rates, Feb 2021-Feb 2023



Source: Freightos, Baltic Exchange, Bloomberg 2023

US dry van and reefer truckload prices, Feb 2021-Feb 2023



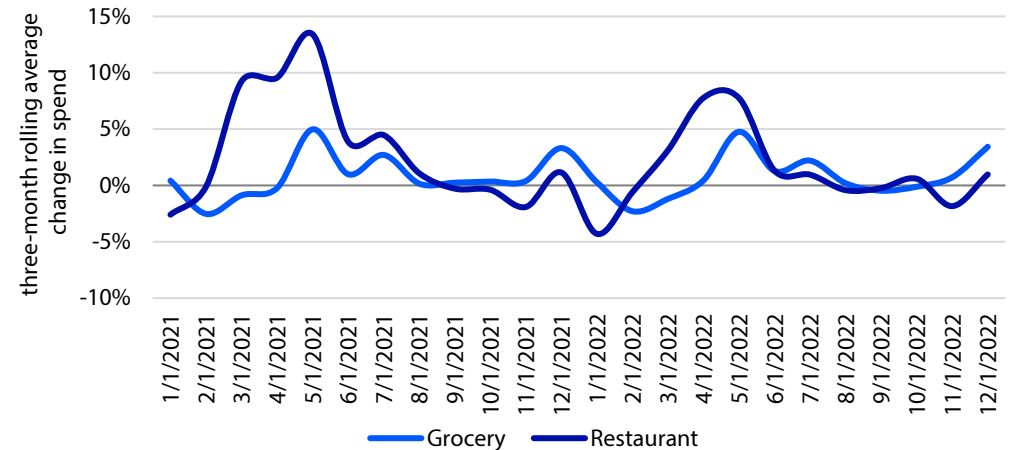
Source: Truckstop.com, Bloomberg 2023

Consumer Retail & Foodservice

Penny-pinching as we enter 2023

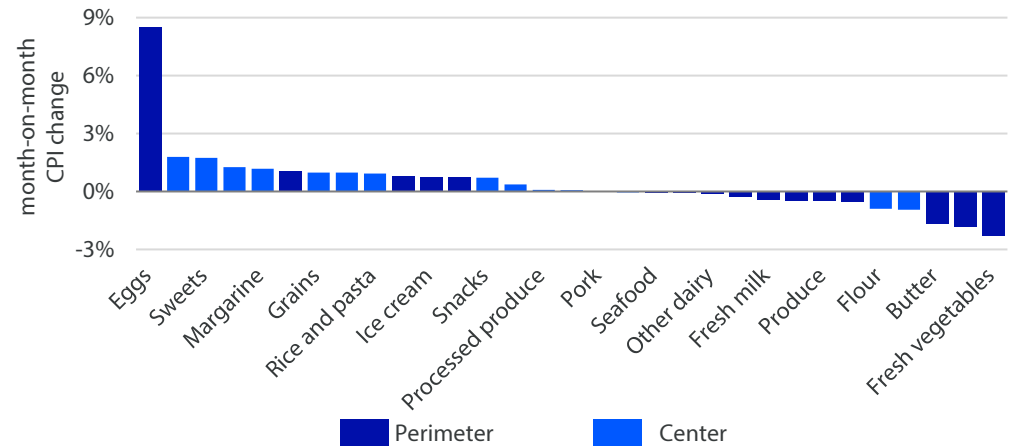
- In 2023, consumer behavior is likely to be influenced by prices** more than any other trend. After experiencing nine months of double-digit food inflation, consumers are feeling the pinch and adjusting their spending habits accordingly. This has led to a decrease in demand for foodservice, with three-month average restaurant sales up 1% versus grocery store sales 3%, as consumers shift back to relatively more affordable home-cooked meals.
- Grocery store sales are benefiting from the cost-conscious consumer** (particularly discounters). Private label brands have seen strong growth in sales, with Kroger reporting a 10.4% increase in their store brand sales in Q3 earnings (released in December). Similarly, TreeHouse Foods' most recent earnings show a strong trade-down toward private label products and a positive outlook for unit growth in 2023 compared to competitors.
- A more cost-conscious consumer may not bode well for premium segments**, of either grocery or restaurants. We anticipate white tablecloth sales to suffer as consumers trade down to more affordable out-of-home dining experiences, particularly QSRs (apparently McDonald's agrees, as they are planning to add 400 new units in the US in 2023, 1,900 globally!). Meanwhile, premium grocery product categories such as organic, free-range, and all-natural products, may see a more cost-conscious consumer temporarily unwilling to pay up for such premium attributes.
- The rate of inflation is easing** (also known as disinflation), although it may take some time for consumers to notice, particularly for center-aisle products like bakery, sweets, and cereals, which have continued to increase in price, albeit marginally. This can be attributed to more complex ingredient lists, longer supply chains, and contract tenures. In contrast, prices for perimeter items such as poultry, seafood, fresh vegetables, fresh milk, and butter fell month-on-month in January due to easing prices at the commodity level and more discretionary demand.
- In 2023 consumers should see some much-needed food pricing relief for consumers**, grocery prices month-on-month are expected to move into negative territory by mid-year, led by the perimeter. Until then, consumers will be prioritizing value over values and will go deal hunting instead of splurging.

Consumer spending growth on grocery started to outpace foodservice



Source: US Census Bureau, Rabobank 2023

Perimeter generally leads the way lower for inflation



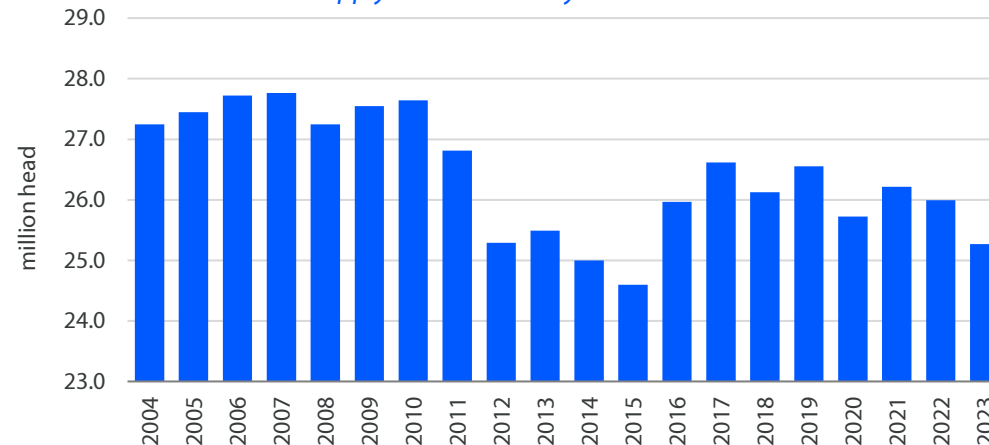
Source: US Bureau of Labor Statistics (BLS), Rabobank 2023

Cattle

Production is adjusting lower in the US and Canada, while Mexico struggles with extra supplies

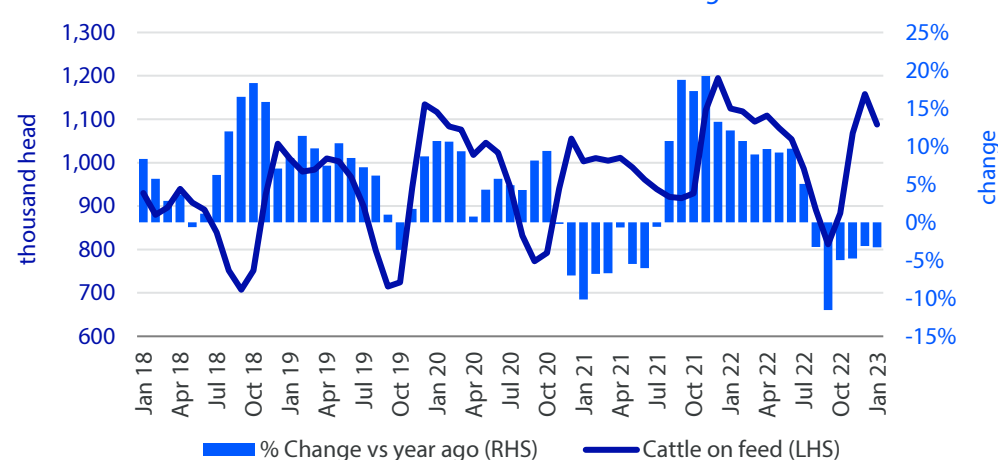
- Winter weather creates disruptions but offers precipitation in some areas.** Processing plants across the central US were slowed by colder-than-normal temperatures to end 2022. December and January also brought heavy snowfall to northern US cattle feeding regions, reducing cattle performance and weights there. The short-term result was fewer cattle slaughtered than expected in December and more in January to cover the shortfall. Expect a seasonally smaller cattle slaughter from February to April with cooler and wetter northern weather reducing US carcass weights trends. First quarter beef production is expected to be down 2% to 3%.
- Tighter cattle numbers will be a regular occurrence throughout 2023 and beyond.** The USDA confirmed that drought and four years of herd liquidation have taken a toll on US cattle supplies. The January 1 beef cow inventory is at its lowest levels since 1962 at 28.9m head. Furthermore, feedyard supplies are down 537,000 head (3.7%) compared to last year, and feeder cattle and calf supplies outside of feedyards are down 724,000 head (2.8%). Expect these declines to reduce US beef production throughout 2023, while a 5.8% YOY decline in beef replacement heifer numbers will limit the ability to offset liquidation throughout this year and next.
- Retail beef prices begin to reflect a softer wholesale market.** The USDA reported that the all-fresh beef retail price declined sharply to end 2022 – averaging USD 7.19/lb in the fourth quarter. That was down 4% compared to last year and signaled an increased willingness from retailers to pass discounts onto consumers. The wholesale beef market had been consistently weaker than year-ago levels since April 1, 2022, with boxed beef cutout values averaging 12% lower than the previous year. Weaker real consumer incomes and ample US animal protein supplies are also motivating factors. Expect first quarter US retail beef prices to be 1% to 2% softer than prior year.
- Front-end supplies remain burdensome in Canada.** Throughout 2H 2022, Canadian cattle on feed inventories declined an average of 5% compared to the previous year. However, the January 1 supply remained near 1.1m head. That was only 37,100 head below last year and remains the third-largest inventory to start the year. Elevated on-feed supplies have led to a relatively disappointing fed cattle cash market compared to the Chicago Mercantile Exchange live cattle futures market. Cash market prices have been 12 percent below the Chicago Mercantile Exchange spot live cattle futures contract price over the last eight weeks. Expect the cash market to strengthen relative to futures both seasonally and longer term as cattle supplies tighten throughout 2023.
- Mexican market struggles with ample production.** The Mexican beef cow herd has increased 50,000 head compared to last year – reaching 8.05m head in 2023 and supporting a 2% increase in 2023 beef production to nearly 2.2m metric tons. Since June 2022, export volumes are down 5m metric tons (3%) compared to last year, which has kept more production on the domestic market. Ample cattle supplies and softer export demand have reduced early 2023 beef prices 8% compared to last year, and cattle prices are also coming under pressure. Expect Q1 2023 prices to remain under pressure if domestic consumers remain burdened with the additional supplies.

The feeder cattle and calf supply outside of feedyards is the smallest since 2015



Source: USDA, Rabobank 2023

Canada on-feed inventories remain elevated but are trending lower



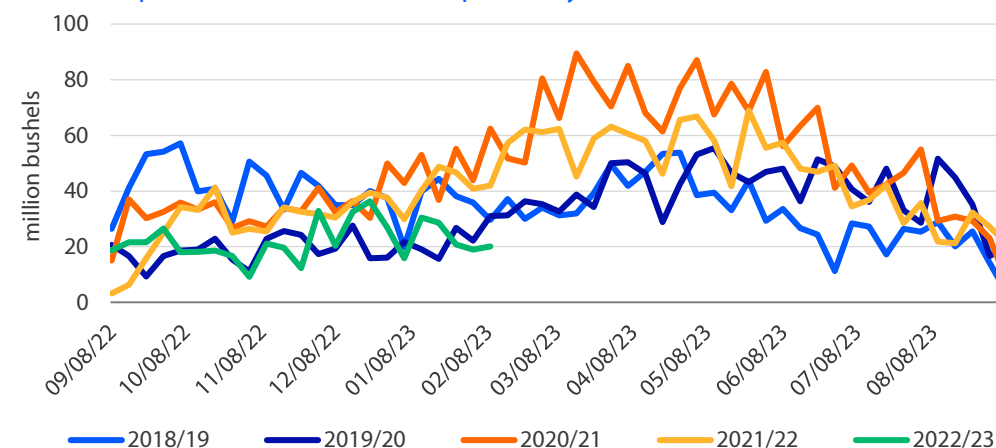
Source: CanFax, Rabobank 2023

Corn

Gulf basis levels came down from last year's peak, but exports remain low

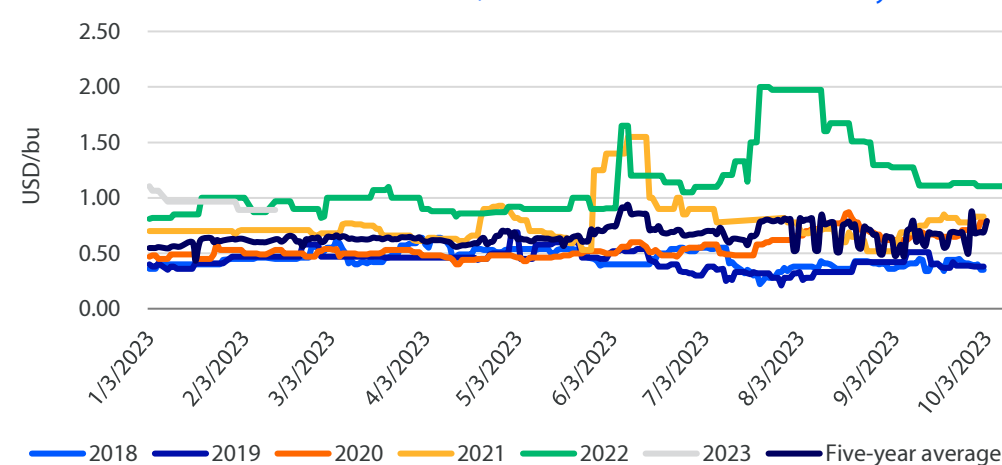
- Ending stocks:** The December 1 report on grain stocks showed 10.8bn bushels of corn in all operations. Stock levels for the first quarter of the marketing year are the lowest since 2013. This has kept markets under pressure as low supplies in drought-affected areas have shown to be below those of last year.
- Exports:** The level of exports continues to be a concern as export demand remains low. Outstanding sales continue to worry with YTD down ~54% compared to same period last year. Gulf basis levels have come down from their highs in the fall to settle below the 1 USD/bu. Historically, however, basis levels at the Gulf have remained elevated compared to the five-year average. A continuation of a relative strong dollar and strong basis for exports continues to make the US less competitive.
- Eyes on Brazil:** The big question remains how Brazilian corn production will fare as well as the planting delays caused by the late harvest of soybeans. As of the end of the week of February 6, 25% of Brazil's safrinha corn had been planted, versus 42% last year. The slow progress could affect yields if planting is not materialized soon, and strong domestic demand, despite expected strong production, could limit expected exports. The potential to see a quick upsurge of corn exports could happen during the spring.
- What to expect for 2023/24:** As spring planting is quickly approaching, the battle for acres continues to be a hot topic. Yet, higher winter wheat planting was a surprise, limiting possibilities for an increase in soy and corn acreage. On top of higher winter wheat acreage, input prices remain high and are likely to impact producer margins, limiting the number of acres to be planted in the spring. Given the current environment, corn and soybean acres are likely to increase marginally.
- Average farm prices:** The USDA continues to set the average farm price at 6.70 USD/bu, however, the expectation is that supply and demand continue to balance. Exports continue to be a wild card in the US, but domestic consumption stays strong. The question remains whether ending stocks will continue at the current estimated levels or are likely to go lower, ultimately looking for higher/lower prices.

US corn inspections remain well below previous years



Source: USDA AMS Rabobank 2023

Gulf basis come down from record levels, but remain elevated versus history



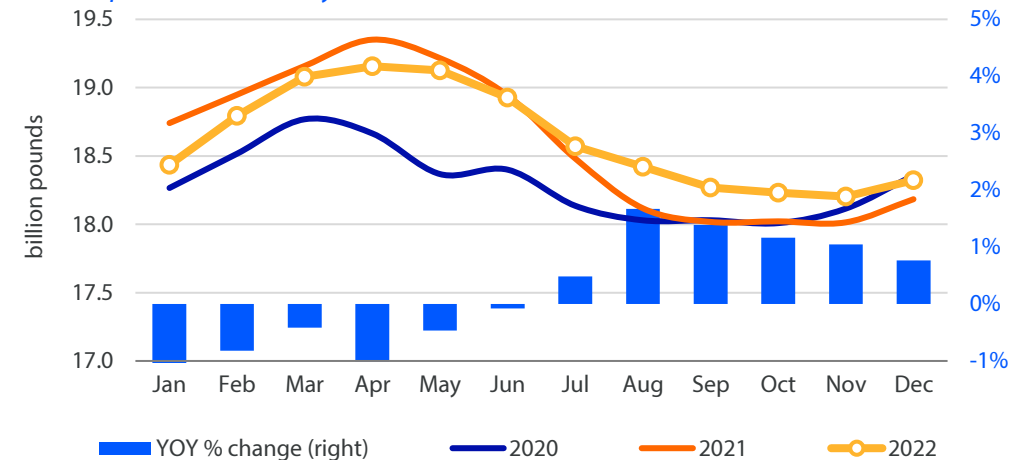
Source: AMS-USDA, Rabobank 2023

Dairy

Lower prices prevail in Q1, but further weakness is not expected

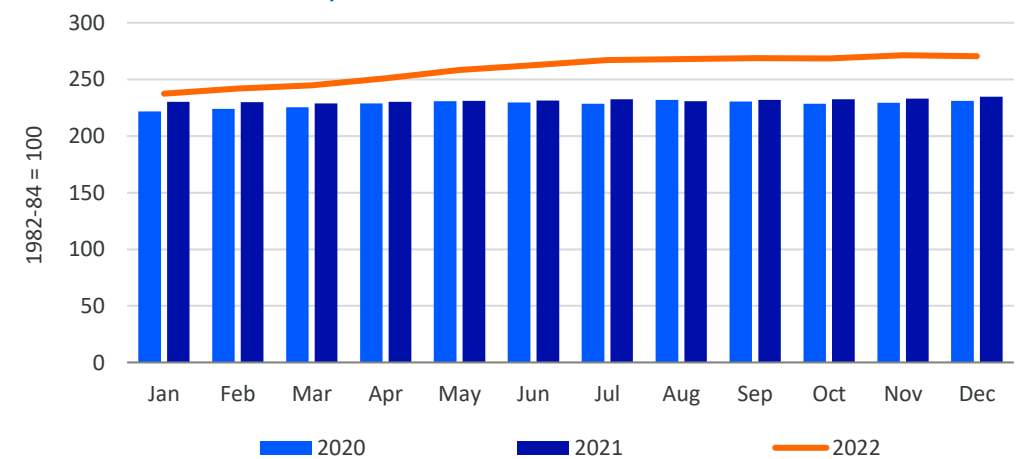
- Q4 milk production climbed 1.0% versus the prior year**, a recovery versus the declines in the first half of 2022, but lower than the 1.2% increase in Q3. The volume growth was supported by a larger herd, up 27,000 head YOY in December even as milk per cow was weaker than in Q3. While Q4 cow numbers are still higher compared to 2021, the USDA reports that the herd contracted by 15,000 head during the quarter. It is possible that declining milk prices have begun to encourage increased culling, measured on a monthly basis. Rabobank still expects milk production gains throughout 2023 of slightly higher than 1%.
- Consumers continue to face significantly higher dairy product prices versus the prior year**, with the December dairy products CPI up 15.3%. However, the value dropped 0.3% versus November, aligned with milk price declines in recent months, preventing additional CPI growth after the steep increases noted over the past two years. In 2022, domestic commercial disappearance of skim solids was down 0.6%, while disappearance of milk fat was down 1%.
- US dairy exports had yet another impressive year**, climbing to an all-time high on both a value and volume basis. Total dairy products exported increased 5.6% versus the prior year, with cheese, whey, and lactose all seeing record volumes shipped in 2022. While nonfat dry milk exports declined slightly versus the previous year, it still marked the second highest yearly volume on record. Impressive exports persevered despite shipping and logistical challenges that plagued the industry throughout the first half of the year. Rabobank expects that US export volume in 2023 will continue to be supported, especially given lower product availability from key competing export regions.
- CME spot market declines have translated into NDPSR declines across all products into mid-February.** The nonfat dry milk NDPSR price dropped nearly 12-cents in a single week in late January to USD 1.2781 per pound, the lowest price since September 2021. Dry whey declined to the lowest level since November 2020. After setting a new record high in Q4 2022, butter dropped to a more than one-year low by early February. However, while the block/barrel spread remains wider than average, the block Cheddar NDPSR price has managed to stay above USD 2.00 per pound so far this year, a slightly supportive sign for Class III values amid bearish tones in other dairy products. Looking ahead, significant further declines are not likely, with current values aligned with Q1 Rabobank forecasts. Recent dairy product prices are lower than Rabobank's estimated 2023 average values.

US milk production (30-day months)



Source: USDA NASS, Rabobank 2023

Consumer Price Index: Dairy and Related Products 2020 - current



Source: Bureau of Labor Statistics 2023

Farm Inputs

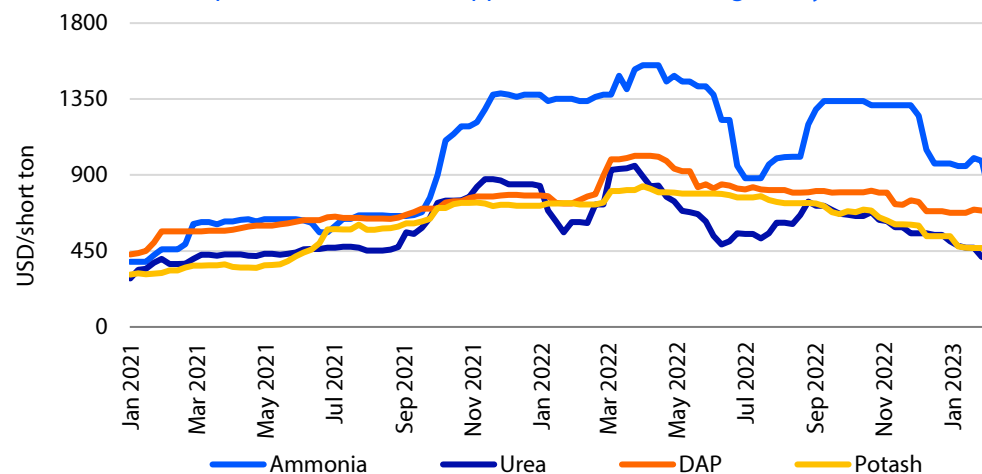
Global fertilizer markets awaiting signs of demand

Will imminent demand slow the fertilizer price decline?

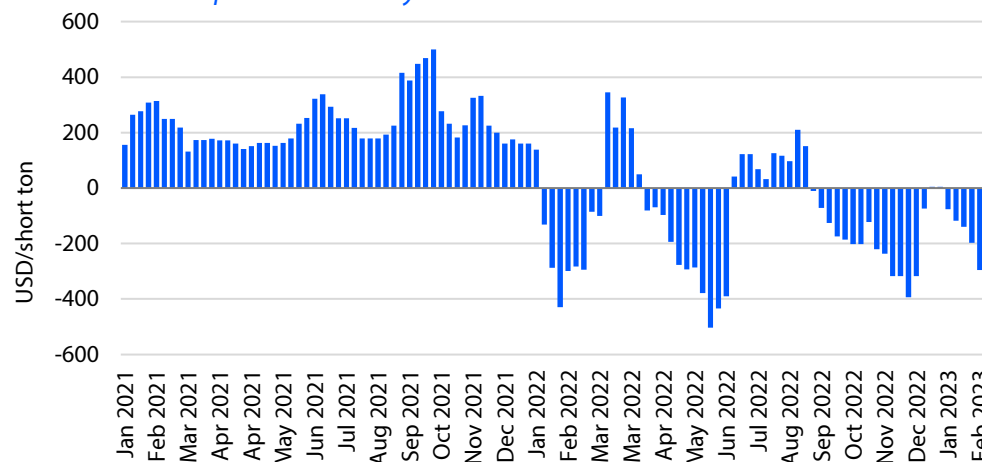
- The global fertilizer markets have drifted lower through the last few weeks and months as seasonality, a falling cost structure, and pensive buyers deflate an exuberant fertilizer market.
- In our November Semi-Annual Fertilizer Outlook, we assessed the probability of a double-digit decline in the Midwest phosphate and potash market. While these declines are largely in line with expectations – a ~15% DAP price depreciation and a ~30% potash price fall – it is really the nitrogen complex that has altered the fertilizer complex and expectations the most.
- Since the start of November, Midwest ammonia and urea prices have fallen ~40% and ~35% at the wholesale level, respectively. The main catalyst to this collapse is the changing cost structure, globally.
- We currently see European natural gas prices at their lowest level in more than 18 months, as a mild winter tamped fears of a worst-case scenario for European gas prices and inventory. This shifting cost structure for European ammonia producers has also seen their domestic industry curtailments shift from as high as 65% in the summer months to a level believed to be below 15% curtailment today.
- We are still awaiting demand indications from key global markets, as well. Anticipations of an imminent urea tender from India persist – and could manifest by time of publication. However, the length of anticipation, along with expected Brazilian interest, give the impression of weaker potential demand.
- Where the rubber hits the road for North American growers is when this demand emerges. The question is whether this will then signal a bottom in the markets for nitrogen and where the inventory will then be held within the supply chain.
- Senses remain that much inventory remains at the product producer level, as retailers and distributors stay reluctant to jump in a falling market.

Source: CRU, Bloomberg, Rabobank 2023

Corn belt fertilizer prices drift lower as suppliers await demand globally



Urea's traditional premium to anhydrous still awaits



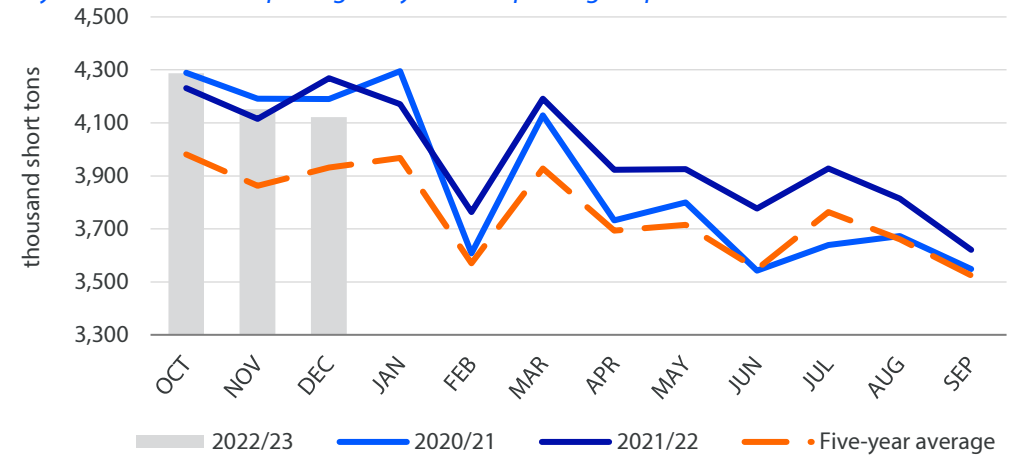
Feed

Feed rations continue to be under pressure



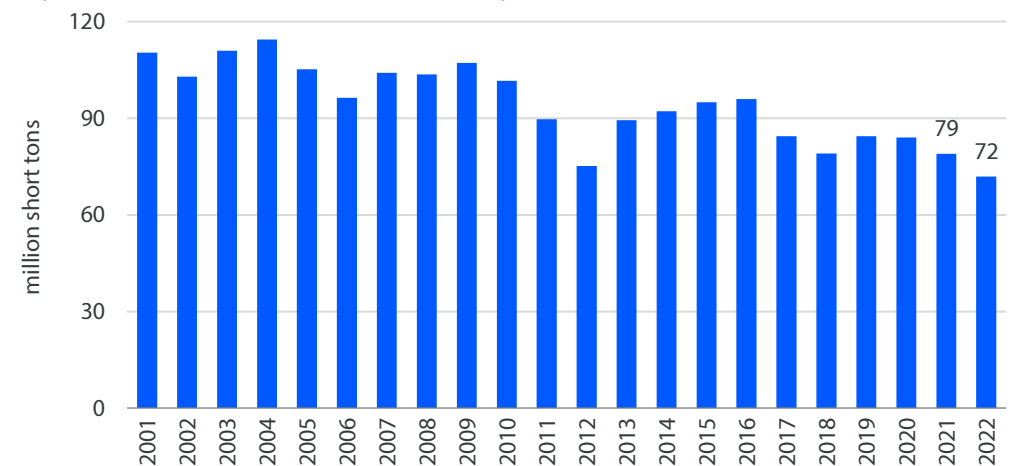
- Low hay supplies:** December 1 stocks on hay showed a dreary reality and a reminder of how drought and yields have impacted hay production in the US. While it was expected to see a decline in hay stocks, the amount of the decline was eye-opening. Hay level stocks declined on December 1 by 9% YOY to one of the lowest stocks in history since 1954. While overall stocks have declined, it is important to point out that regionally, some states that were hit by drought in previous years are rebuilding their stocks.
- Hay prices have come down from their peaks,** but regionally prices have moved according to local supply. In drought-affected regions that have been able to recover, alfalfa hay and other hay prices have shown to be more moderate reflecting better conditions, however, dry hay in Texas and drought impacted states in 2022 have shown price increases.
- Soymeal remains strong:** Soymeal prices have seen nothing but increase, adding pressure to feed rations in animal protein. From a fundamental perspective, production is ~1% lower this marketing year compared to the same period last year. Animal feed production is relatively the same this marketing year compared to the same period last year, while ending stocks are expected to be ~13% higher compared to last year. Eventually, the crush between soy oil and soymeal should begin to pressure to return to a healthier level.

Soy meal demand outpacing last year's despite higher prices



Source: USDA NASS, Rabobank 2023

Hay December 1 stocks down 9% Year-on-year



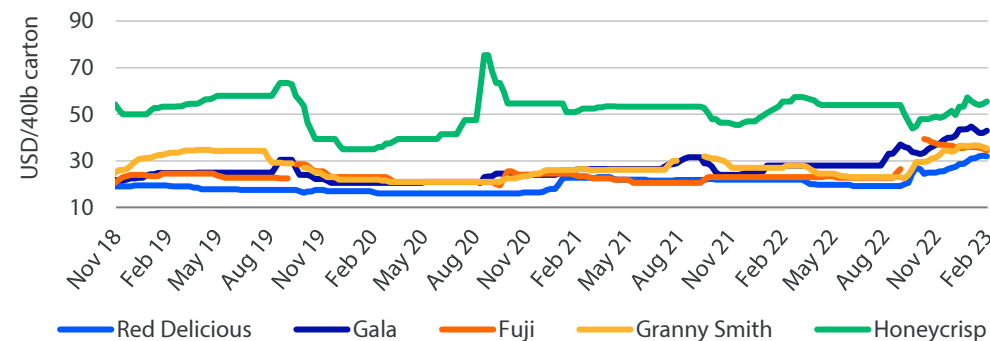
Source: USDA, Rabobank 2023

Fruits

It is a mixed basket, with affordable avocados and increasingly expensive apples

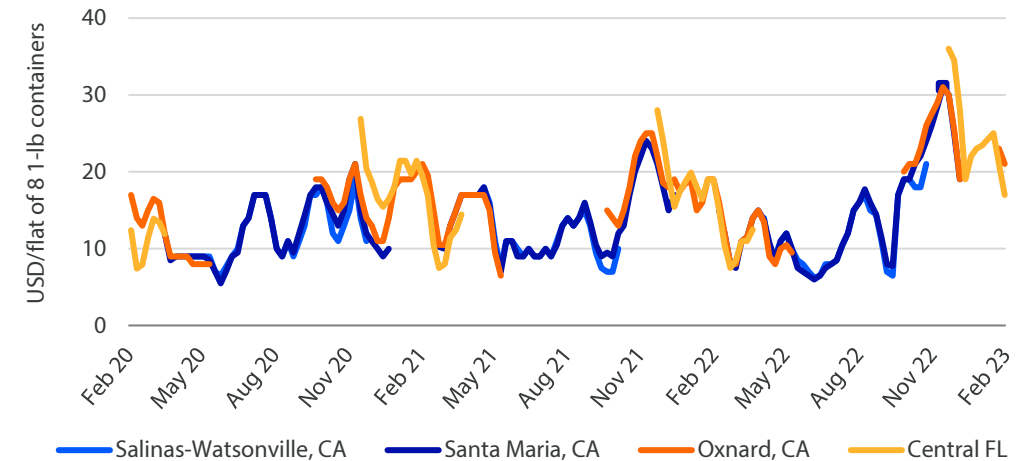
- **Strawberry** prices reached USD 21 per flat for non-organic product by mid-February, up 11% YOY, for fruit from Oxnard. Shipping-point prices in Florida were at high levels at the beginning of the season as availability was light. Strawberry availability will soon improve. Planted acreage for 2023 in California is reported at a record high as the industry adapts to meet increased demand.
- **Navel orange** prices were around USD 21 per carton for 88s by mid-February, down 5% from multi-year highs for this time of the season last year. Navel production in California is projected to end the 2022/23 season with a 19% YOY increase.
- Shipping-point prices for mid-sized **lemons** were around USD 26, down 7% YOY. US lemon production is expected to be 19% down YOY to 23.5m boxes. The 2022/23 *easy-peel citrus* production in California will go up 24% YOY to about 22m boxes but will remain 24% short of the bumper crop in 2020/21.
- **Avocado** shipping-point prices have remained below USD 30 since September 2022. By mid-February prices were around USD 25 per carton for non-organic mid-sized Mexican avocados, down about 50% YOY, amid ample shipments from Mexico. Barring any supply disruptions, prices are expected to remain under pressure for the next few months as a potentially record-setting crop in Mexico continues, while California production is expected to be slightly lower than last year's.
- Lower availability of certain varieties, due to a shorter crop in WA, has been reflected in higher prices. By mid-February, prices of non-organic Gala, Fuji, Red Delicious, and Granny Smith *apples* were up 53%, 50%, 45%, and 31%, respectively, while Honeycrisp shipping-point prices were at a similar level as a year ago. Per industry report, US fresh apple holdings as of February totalled 71.9m bushels, down 7% YOY and down roughly 13% compared to the February five-year average.

Washington apple shipping-point prices, 88s – WA Extra Fancy, 2018-23



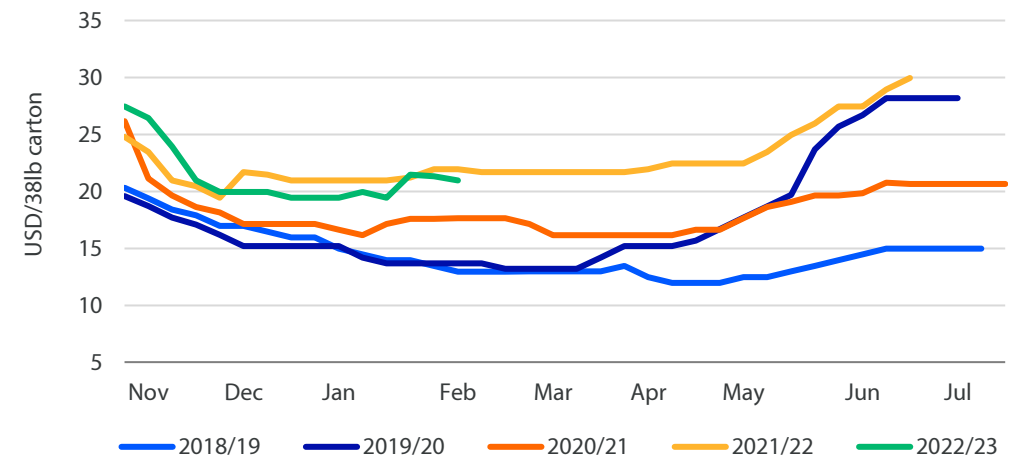
Composite of fine appearance and standard appearance prices
Source: USDA AMS, Rabobank 2023

Strawberry shipping-point prices – primary US districts, 2020-2023



Source: USDA AMS, Rabobank 2023

Navel oranges shipping-point prices, 88s - shippers first grade, 2018/19-2022/23



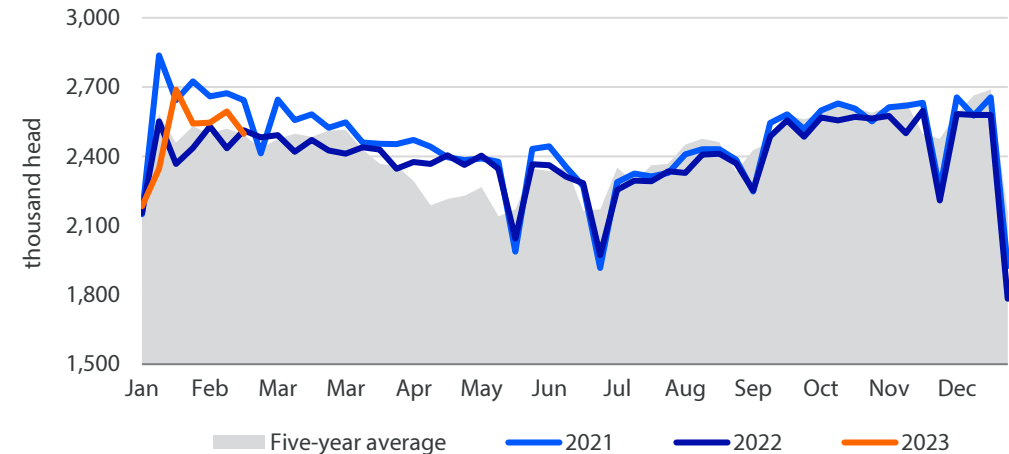
Source: USDA AMS, Rabobank 2023

Pork

Weak start to the year on larger hog supplies

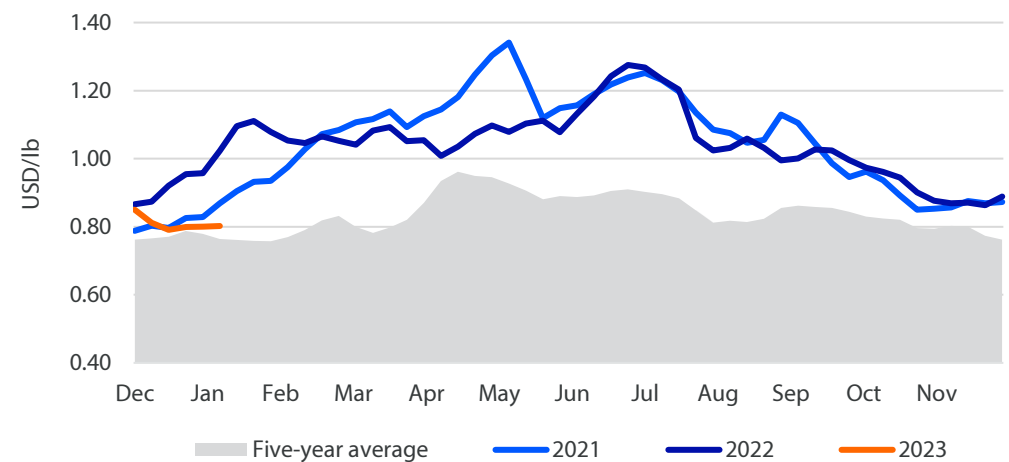
- **Hog prices remain under pressure as YTD slaughter has run ahead of expectations based on USDA inventories.** Average weekly slaughter of 2.5m through mid-Feb reflects a catch-up following lower Q4 2022 slaughter and packers killing ahead. Prices remain below expectations given larger slaughter levels, (~3% more hogs than expected), resulting in losses topping USD 10/head for producers. Prices appear to have bottomed in February as recent slaughter levels have normalized and are expected to move lower. Harvest weights have also dropped, further supporting our view that producers are current on marketings and supplies are likely to move lower in coming weeks. We expect prices to improve seasonally, yet with break-even costs still topping USD 87/cwt, margins will remain under pressure through spring. Recent production losses are expected to drive more limited herd expansion over the balance of 2023.
- **Pork prices are weak on larger-than-expected slaughter levels and large supplies of competing meat.** YTD pork cutout has averaged -11% versus year-ago levels as sharply lower belly prices (-38% YOY) weighed on the market. Weaker loins (-9% YOY) and ribs (-23% YOY) failed to offer support and more than offset a +20% YOY increase in ham values. Sizable increases in poultry supplies and heavy cold storage inventories (+15.6% YOY) are expected to limit upside in pork prices through spring, although current indications of improved retail support for pork should help the industry gradually eliminate the surplus.
- **December pork export volumes were up 5.5% YOY to 190,600 metric tons, and export values were +9.9% YOY.** Higher exports to China/Hong Kong (+53% YOY) and Mexico (+9.7% YOY) helped offset weaker sales to Japan (-24% YOY). The value of pork sold to Mexico in December was +42% YOY, driven by continued strong ham sales. The 2022 pork export volumes of 2.1m metric tons were -10.8% YOY, while the value was down 6.8%. We remain optimistic on 2023 export demand given tight global pork supplies, a weaker USD and lower US pork values.
- **Mexican hog prices have dropped in line with US markets yet remain 14% ahead of year-ago.** While production is slowly rebounding and is set to expand in 2023, prices are expected to remain above historic levels given high costs of production and tight supplies of competing proteins. Lower chicken and egg availability to start the year remain supportive to domestic hog prices and is also attracting stronger protein imports. The recent decision to reopen the market to pork imports from Brazil is not expected to have a significant impact on prices near term but could create added pressure on the market over time.

US weekly hog slaughter, 2021-2023



Source: USDA 2023

US pork cutout, 2021-2023



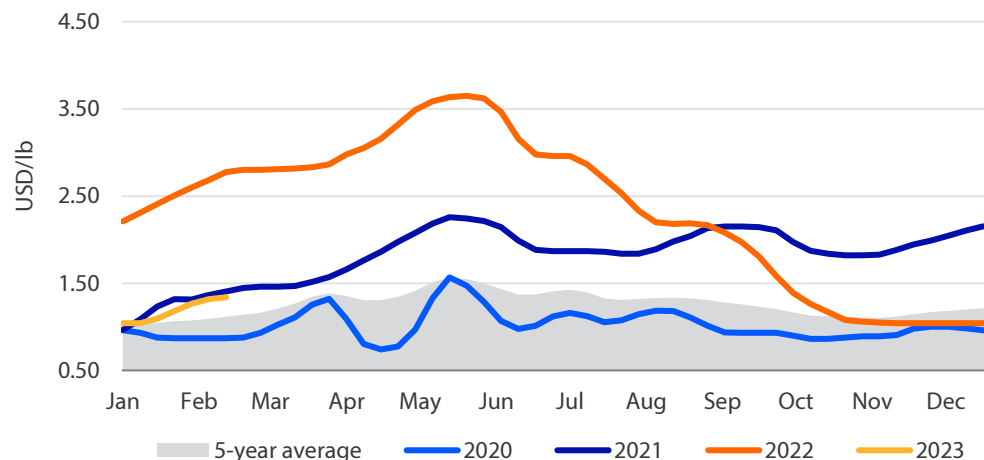
Source: USDA, Rabobank 2023

Poultry

Chicken prices rebound as markets rebalance

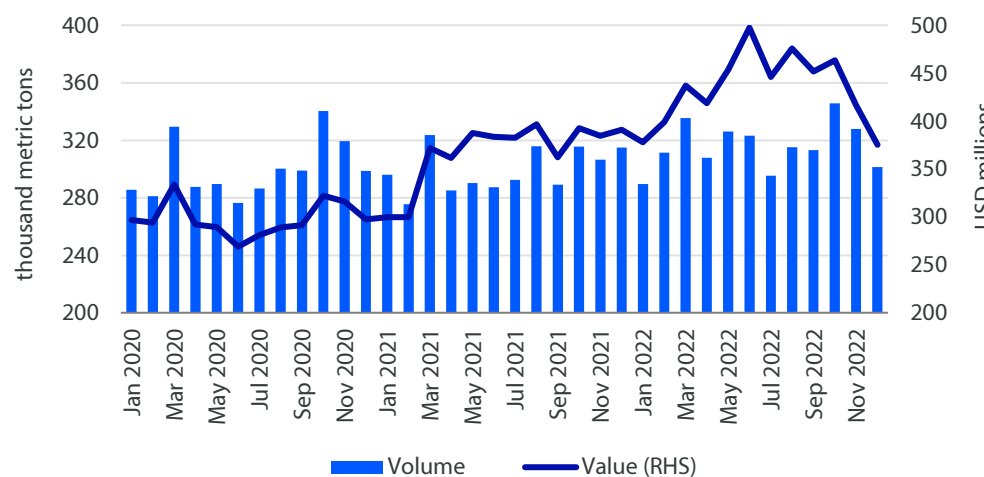
- Boneless breast meat prices stabilized at year-end and are moving higher seasonally.** Prices are -52% from inflated levels in the year-ago period but remain 20% above the five-year average. Leg prices have stabilized, yet remain 6% below year-ago levels, while wing prices remain depressed (-59% YOY) but trending higher. Composite chicken values strengthened but remain under pressure as inventories remain elevated (+9.7% YOY) versus historically low levels in the year-ago period. Elevated retail prices through December (+12% YOY) also weighed on consumer interest, as has low feature activity. Foodservice support for breast meat and tenders has stabilized, which should lend some support to the market in coming months. We expect improved retail and foodservice support at current depressed prices, with stronger planned promotion in 2H 2023. Leg quarter values are likely to remain steady, with a weaker USD and steady exports to Mexico expected to remain supportive.
- RTC chicken production has averaged +2.2% ahead of year-ago levels, driven by gains in both slaughter levels and weights. Chicken placements are averaging slightly ahead of year-ago levels (+0.6% YOY),** while a shift toward heavier bird weights at some integrators will place more pounds on the market near term. Rabobank anticipates RTC production to remain above year-ago levels in 2023 (+1.8% YOY).
- December chicken exports of 301,499 metric tons were down in both volume (-4.3% YOY), and value 4% YOY.** Exports to Mexico rebounded (+9% YOY) as lower US chicken prices attracted stronger buyer interest, while exports to China fell 15.9% YOY as HPAI-related trade disruption impacted shipments. In 2022, exports were record large in volume (+4.6% YOY) and value (+17% YOY). While exports to Mexico were down 7.3% for the year, it remained the largest export market by volume (17% of total). The 2022 chicken exports to China of USD 1.1bn were the largest by value (21% of total) and increased 26% YOY. We expect ongoing volatility in exports in 2023, with Mexican exports expected to remain strong, but trade with China to remain under pressure.
- Mexican chicken markets have strengthened in February, as supply growth slowed through year-end and demand remains steady.** Live prices are currently in line with record prices in the year-ago period and have increased 34% since early January. Despite the price recovery, producers continue to face high feed costs and production growth is likely to slow in coming months to maintain profitability. Wholesale prices remain elevated, with breast meat prices +22% YOY and thigh meat +30% versus year-ago levels. Only whole birds are stable, as production has likely shifted toward lower cost products to maintain margins. In 2022, chicken imports were down 2.8% YOY in volume, despite an 8.4% YOY increase in imports from Chile and a 23% YOY increase from Brazil.

Boneless skinless breast meat prices, 2020-2023



Source: USDA, Rabobank 2023

US chicken exports, by volume and value, 2020-2023



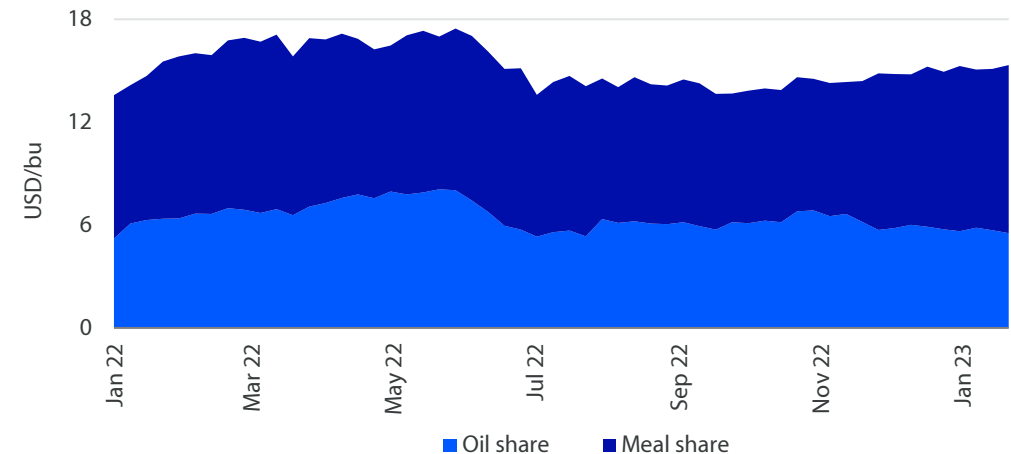
Source: USDA 2023

Soybeans

Meal makes up for declining oil prices. Brazilian crop exceeds country's ability to store it

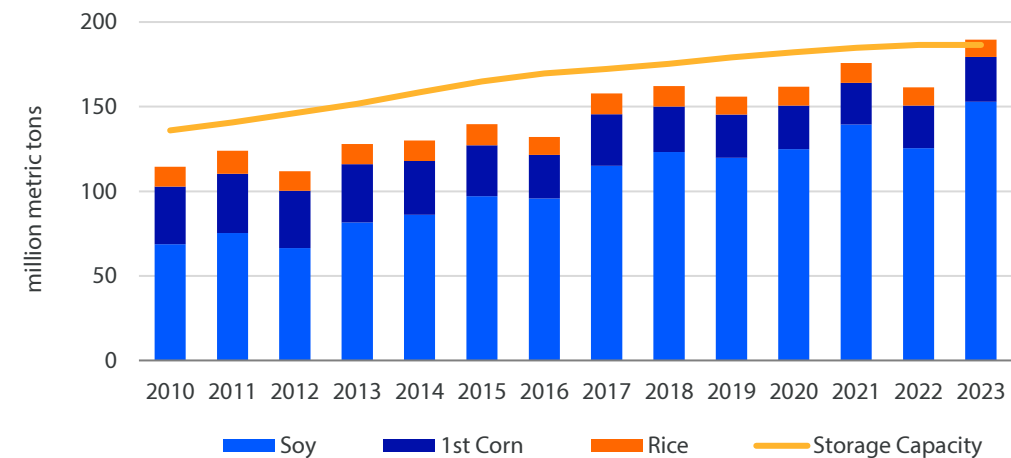
- Since being knocked off its perch in June by rising interest rates and flashing signs of a recession, soybeans have spent the last eight months mostly trading sideways.** However, steady bean prices bely diverging trends within the soy complex that have emerged along the way, namely rising prices for meal, and oil prices that have been on the decline. Since early June, meal prices have moved from USD 430 to USD 500 per metric ton, an increase of 15%. Oil, meanwhile, has shed 25% of its value during that same period. **The divergence in meal and oil prices in soy is noteworthy because it nicely encapsulates the obstinacy of the opposing forces pulling on commodity markets and reflects the challenges facing stakeholders in today's market.**
- For its part, a declining soy oil price supports the rationale of the bears who argue that agricultural commodities are not immune to impending economic headwinds and retrenchment from high prices and a strong dollar.** After an initial decline in June, the second most recent fall of soy oil prices began early November, coinciding neatly with a 13% drop in petroleum markets that month and further exacerbated by a disappointingly low Renewable Fuel Standard proposal released by the EPA later that month. Meal, meanwhile, supports the bullish case that global inventories remain historically low, that restocking the Chinese hog herd will require both calories and vegetal protein, and that Argentina, the world's third leading producer, is poorly positioned to help in this effort because of La Niña.
- The question now becomes whether Brazil's record soybean crop will break the impasse.** For 2023, dry weather has had only a marginal impact in the south, which was more than compensated for by record yields in the center-west. The size of the 2023 Brazilian crop is not only important from a global S&D standpoint, it also holds additional significance because it is **the first time Brazil's grain production will exceed the country's ability to store it.** Lack of storage in Brazil has encouraged aggressive pricing and has pushed basis at Brazilian ports into negative territory for the first time since June 2021. Although the latest WASDE projects a 15% increase in Brazil's exports to absorb some of the large crop, the current pace of export commitments has been tepid, down 25% from the same time last year.
- While the world is now largely focused on Brazil for its soybean purchases.** *US soybean sales for the new (2023/24) marketing year have been ongoing since mid-November.* At this early point in the year, the picture emerging is not especially strong. **As of early February, just 900,000 metric tons of 2023/24 US soybeans have been sold, compared to 2m metric tons last year, 4m metric tons the year prior.** This has been the slowest pace of new year soybean sales seen in the last ten years, outside of 2019 and 2020 at the height of the trade war.

2022 Composition of US soybean value



Source: USDA, Rabobank 2023

Brazilian grain production and storage capacity



Source: CONAB, Rabobank 2023

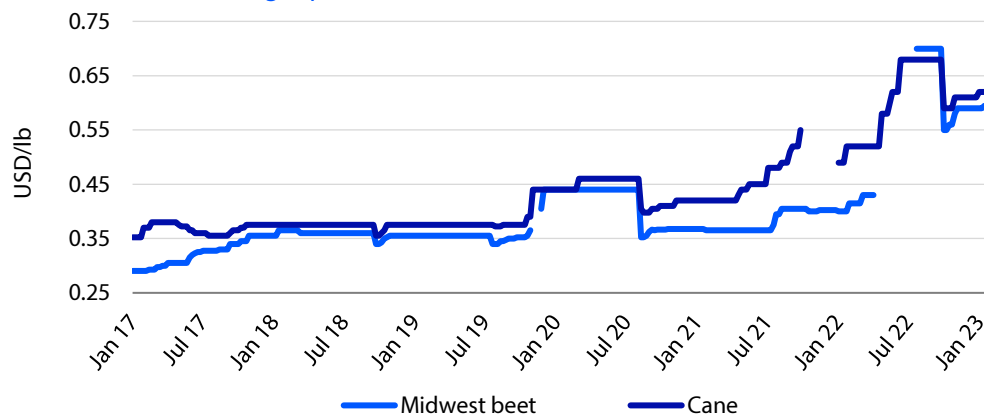
Sweeteners

Prices still firm despite evidence pointing otherwise

- **Cash sugar prices remain firm despite growing supplies, smaller deliveries in Q1, and increasing stocks and stock-to-use ratio.** However, outside influences such as weather, logistics, and a plant closure, as well as tight nearby supplies, keep prices well supported as are new crop offers.
- **In the February WASDE, the USDA continued to adjust 2022/23 production figures. Louisiana cane production decreased due to December freeze.** At the same time, beet sugar production increased by 52,000 metric tons, as sugar recovery from the 2022 crop continues to increase. Adequate supplies from the 2022 production are not stopping price increases. Both cane and beet sugar are well sold for 2023. There is no beet sugar available for buyers, but some cane refiners had limited supplies of cane to sell.
- **The American Crystal Sugar Company's beet processing facility in Sidney, MT will be permanently closed as of April 2023.** The company said it was getting more difficult to attract beet acres with returns from other, more attractive crops. The 75,000 metric tons of beet sugar production will come from other plants in the region. This is another indication of how difficult it is to attract acres away from corn, wheat and soybeans.
- **The Mexican government's announcement to restrict imports of genetically modified corn into Mexico quickly stirred up a political storm on both sides of the border.** The government has recently clarified the ban applies only to corn for human consumption and not to corn for livestock feed. Why is this important to the sweetener sector? Is high-fructose corn syrup imported by Mexico considered a GMO product for human consumption? If so, this has major implications for US corn wet millers and US corn farmers. Anyone ready for Suspension

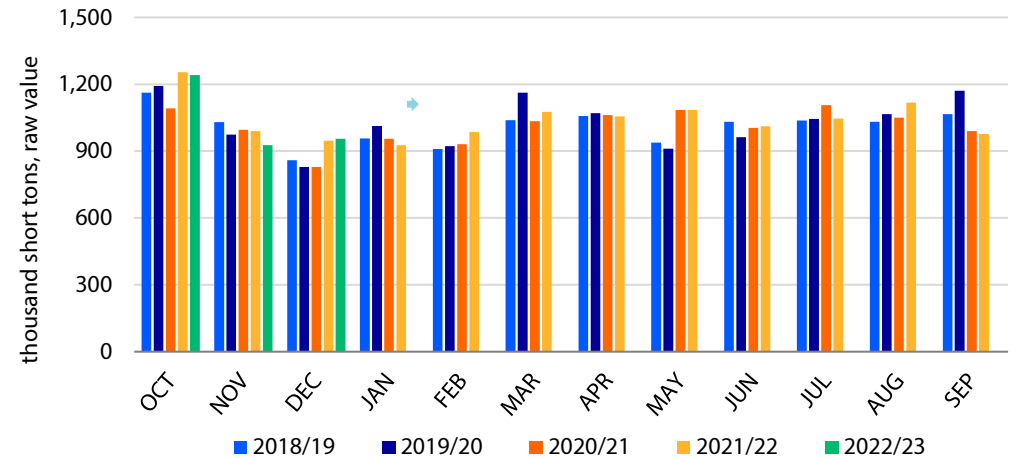
Agreement part II negotiations?

Domestic wholesale sugar prices have remained stout



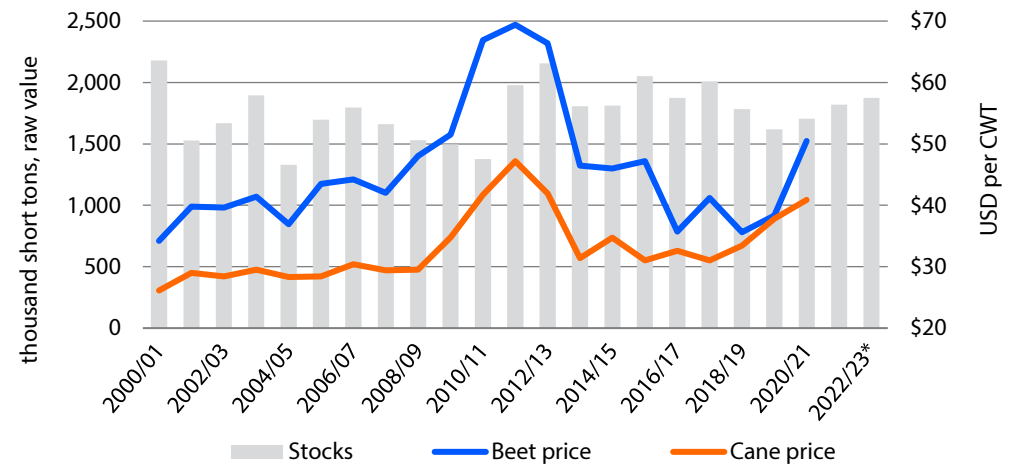
Source: Milling & Baking News, Food Business News, Rabobank 2023

Total deliveries have slowed, down 2.1% though Q1 2022/23



Source: USDA FSA, Rabobank 2023

Sugar prices continue to rise despite increased stocks



Source: USDA ERS, Rabobank 2023

Tree Nuts

Some macro factors to boost exports in the second half of the marketing season

Almonds: Crop receipts to date remain below 2.5bn pounds, down 12% YOY. Final crop size will most likely be below the industry estimate of 2.6 bn pounds for 2022/23. Shipments are up 3% YOY through January, with domestic shipments down 7% from the previous season and exports up 7% YOY. Exports have picked up in December and January, increasing 24% and 47% YOY, respectively. Exports in January 2023 were 163m pounds, a record for a January. Industry sources report increasing market activity in China after Covid19 restrictions were lifted. A depreciating dollar against currencies in key markets, improved logistics, and lower transportation costs will boost exports during the second half of the 2022/23 marketing year. The improved shipment outlook will not only revert the downward price trend, but is also likely to provide a much-needed price lift. A lot of moving pieces as the pollination season starts.

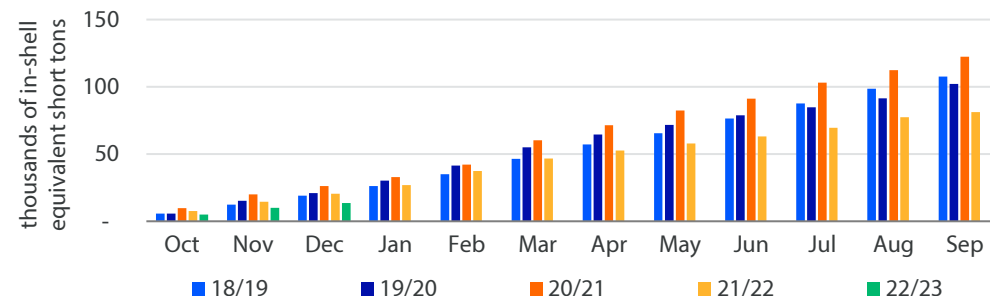
Hazelnuts: Shipments in 2022/23 through November were up about 3% YOY, with domestic kernel shipments increasing 4% YOY and in-shell exports expanding 8% YOY. Industry sources report that after a record crop in 2021/22, yields in the Pacific Northwest were lower in 2022/23.

Walnuts: Total US shipments were up 4% YOY, with exports declining 1% YOY, and domestic shipments increasing 14% YOY in 2022/23 through January. Although exports started the marketing year with declining YOY figures, in December and January exports grew 5% and 25% YOY, respectively. January reached multi-year high exports for this time of the year, which are encouraging signs of improvement. Quality continues to be a relevant issue. More affordable fertilizer and energy in 2023, as well as an improved water outlook in California, will help to reduce pressure on the cost side.

Pistachios: Industry reports show the 2022 crop receipts at 884m pounds, 24% down from the record crop in 2021. Shipments for the 2022/23 marketing season were down 3% YOY through December, with domestic shipments at 0% YOY change, while exports, that accounted for 72% of shipments, were down 3% YOY. In-shell pistachio exports in December 2022 were up 43% YOY. Estimated marketable inventory was down 17% YOY through December. The market is expected to remain 'very stable' per industry sources.

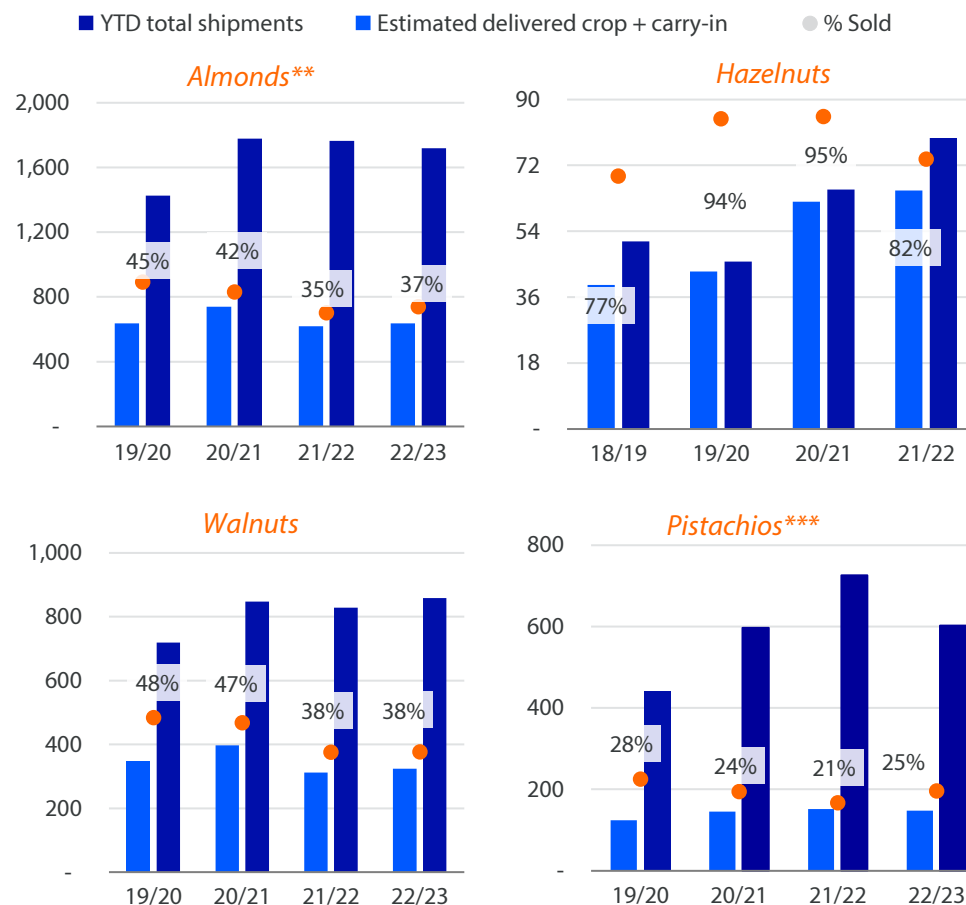
Pecans: US pecan export volumes in the 2022/23 marketing season through December were down 33% YOY as both shelled and in-shell exports have considerably declined, according to USDA figures. Supplies from Mexico are reported as light. Prices are expected to improve in the next few months.

Cumulative US pecan exports



Source: USDA FAS, Rabobank 2023

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 2023.* Through January 2023, 2022/23 marketing season for almonds and walnuts; December 2022 for pistachios June 2022, 2021/22 marketing year for hazelnuts; **Meat pound equivalent. ***Not considering inventory adjustment/loss.

Vegetables

Prices expected to descend from historical highs as supply pressures ease

By the end of 2022, retail dollar sales of fresh vegetables reached USD 37bn, a 4% increase YOY, according to the IFPA. The retail price of fresh vegetables increased by 8% YOY, offsetting a nearly 4% drop in sales volume. Leading the pack in terms of YOY price increases are fresh potatoes (16%), dry onions (13%), lettuce (13%), followed by broccoli (9%) and cucumbers (7%). Limited supply was the main factor behind the surge in prices. According to the BLS, the Producer Price Index of vegetables and melons increased in 2022 by 50% YOY on average, the largest relative increase over the last two decades. Price inelastic demand of potatoes and onions contributed to their high price jump relative to other vegetables. Cucumbers were the only vegetable with a positive increase in retail sales in both value and volume, pointing to strong demand.

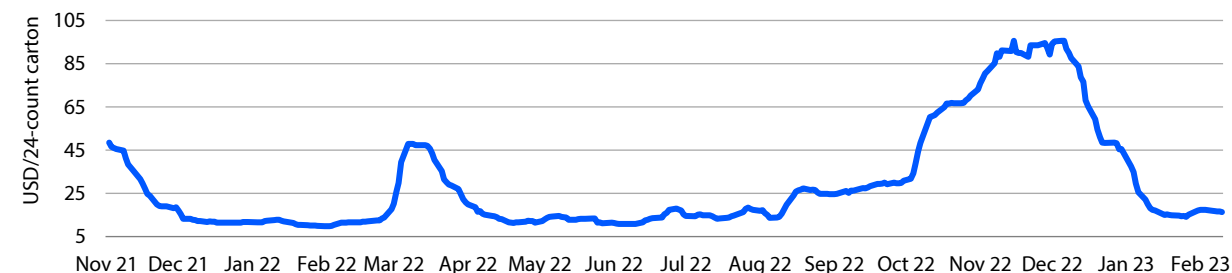
The outlook for 2023 is for prices to begin descending, albeit slowly in the first half of the year, and pending average weather, improved water availability, and success in preemptive control of weed and disease spread. Signs of slowdown are evident in softer retail prices of dry onions in addition to the seasonal price drop of lettuce as production peaks in Southern California and Western Arizona. Recently released BLS Consumer Price Index (CPI) data showed the fresh vegetables price index cooling off in recent months. In January, the fresh vegetables CPI was the fastest dropping index at 2.3% MOM, showing retail prices reacting to upstream's price ease.

Potatoes: The USDA estimates that potato growers produced about 397m cwt of potatoes during 2022, the smallest US potato crop since 2010. With this estimate, US potato production has effectively been in decline mode for four consecutive years – a situation that never happened before. Prices are at historic highs, accordingly. Burbank and Russet 50 Count shipping-point prices are around USD 53 and USD 56, an astounding 75% increase YOY. Until the new crop, prices will remain supported as processors lean on the open markets to secure raw material for their highly demanded finished products.

Leafy Greens and Brassica: As production transitioned seasonally to the desert, supply improved and prices eased after climbing to historic highs by the end of California's season. At USD 11.87 and USD 16.33, romaine 24s and hearts (12x3) are higher by 12% YOY and lower by 2% YOY, respectively, whereas at USD 16.92 iceberg wrapped 24s price is up 55% YOY. For broccoli and cauliflower, YTD shipments are higher YOY and prices are relatively strong. At USD 13.00 per 20-pound carton, broccoli crown price is up 9% YOY. Prices usually drop by early spring, and remain relatively flat until late summer and early fall.

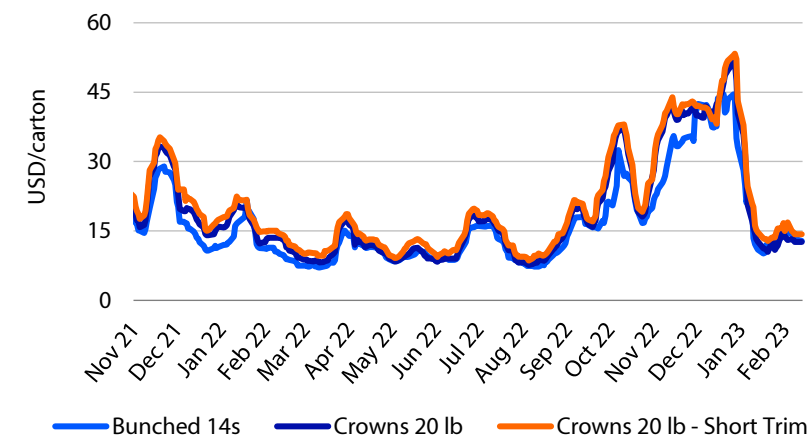
Others: YTD shipments and shipping-point prices are higher YOY for carrots, celery, cucumbers, sweet corn and bell peppers, a combination of short supplies and strong demand. For tomatoes and sweet potatoes, prices are slightly up YOY due to supply shortages, as seen in lower YTD shipments compared to last year. Prices are expected to ease as the supply picture improves, but they are expected to remain volatile.

Wrapped iceberg lettuce – US daily shipping-point price, 2022-2023



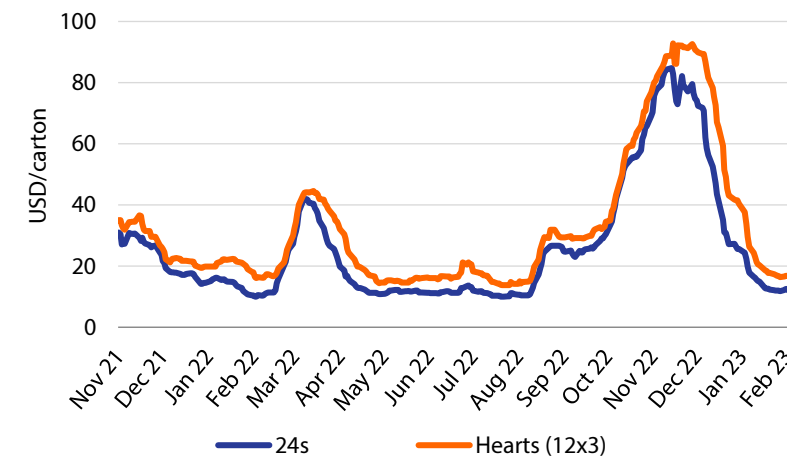
Source: USDA AMS, Rabobank 2023

Broccoli – US daily shipping-point price, 2022-2023



Source: USDA AMS, Rabobank 2023

Romaine lettuce – US daily shipping-point price, 2022-2023



Source: USDA AMS, Rabobank 2023

Wheat

Volatility remains high

The wheat market and prices remain volatile. There are many factors to think about: poor US winter wheat crop conditions, decreasing inventories in exporters' hands, and increasing instability in the Black Sea region.

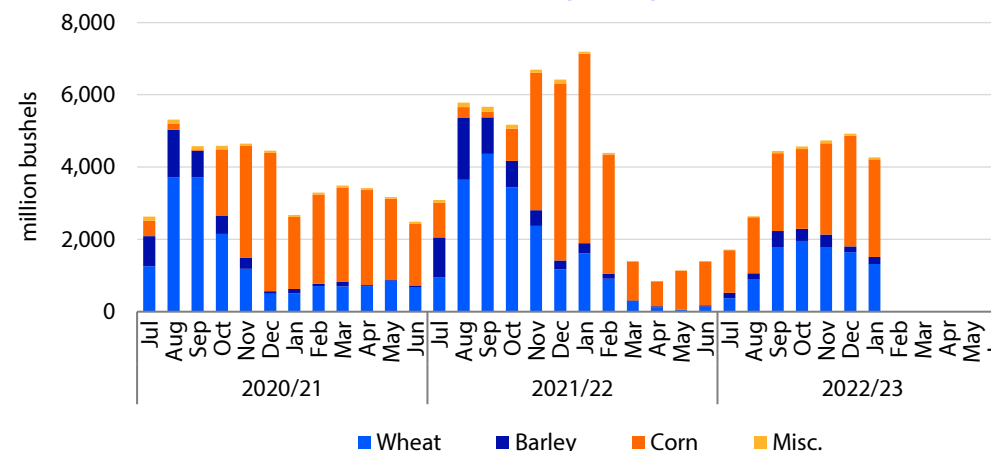
As written in previous agribusiness reviews, the US winter wheat crop went into dormancy with one of lowest crop condition ratings on record. Unfavorable conditions have persisted throughout this crop's life. It was dry during planting and emergence, resulting in poor stands. Poor crop starts do not often result in good yields. While fall crop condition ratings are not always a good predictor of final yields, the die is often cast and the crop has a difficult time recovering, particularly after such a challenging start. However, there is more cushion against a bad year with 36.950m planted acres, an increase of 3.7m over 2022. If you assume 75% harvested acres and using last year's 47.0 bushel per acre yield, the additional acres have a potential of producing nearly 130m more bushels, which would be 12% of last year's winter wheat crop. The additional acres potentially take the upper end off prices in 2023.

Food security, geopolitical instability, volatile prices, frequent droughts and ensuing short wheat crops have resulted in the building of strategic stocks piles by major importers. Even though total world wheat is nearly 10% below the record high in 2019/20, exporter stocks continue to decline, as does the volume of free stocks available for export/import. In the 1990/91 crop year, major exporters accounted for 45% of total stocks and the rest-of-world accounted for 55%. Projections for the 2022/23 crop year show major exporters only controlling 27% of total stocks and rest-of-world controlling 73%. We saw a similar relationship back in the late 1990s, when stocks reached record levels, but US prices at that time stayed rather depressed. However, the difference today is that there is not one country that holds a majority of the stocks. China holds currently about 54% of the world's total wheat stocks. Therefore, wheat importers are all buying from a smaller pool of available wheat, and thereby bidding up the price to secure supply. This will only change if all the market factors described above change course, otherwise expect prices to remain at elevated levels.

The Black Sea Grain Initiative continues to function and keeps wheat moving out of the region. However, the agreement will be up for renewal mid-March and the Russians continued to express dissatisfaction for one reason or another. Having said that, there will be significant global pressure to keep the agreement in place to keep trade channels open. One development to watch: the tragic earthquake in Turkey and Syria may create more instability in the region. President Erdogan of Turkey, who is a partner to the Black Sea Grain Initiative, is under immense pressure for the lack of response to the earthquake. Another destabilizing event in a region that is already unstable.

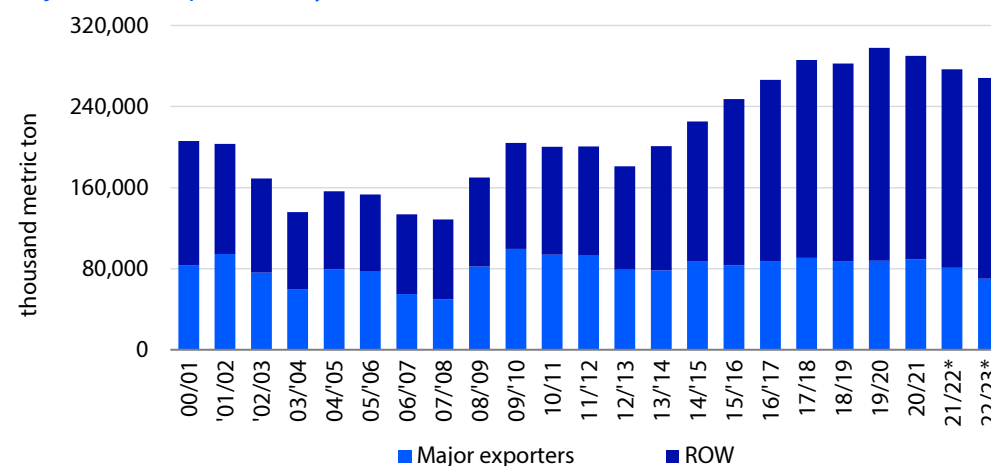
Wheat markets have been trading in a wide sideways pattern since last year's harvest. Since July of 2022, Chicago has been trading in a USD 7.25 to USD 9.50 per bushel range, Kansas City trading between USD 8.00 to USD 10.00 and Minneapolis has been trading between USD 8.50 to USD 10.00 per bushel. These are nearly the same ranges they traded in between 2007-2014. The bottom end of these ranges has been acting as a strong floor for prices. One could argue, that this sideways pattern is a basing action for another leg up, so stay tuned.

Black Sea Grain Initiative has let Ukraine export grain again



Source: USDA ERS, Rabobank 2023

Major wheat exporters only control 27% of the world's wheat stocks

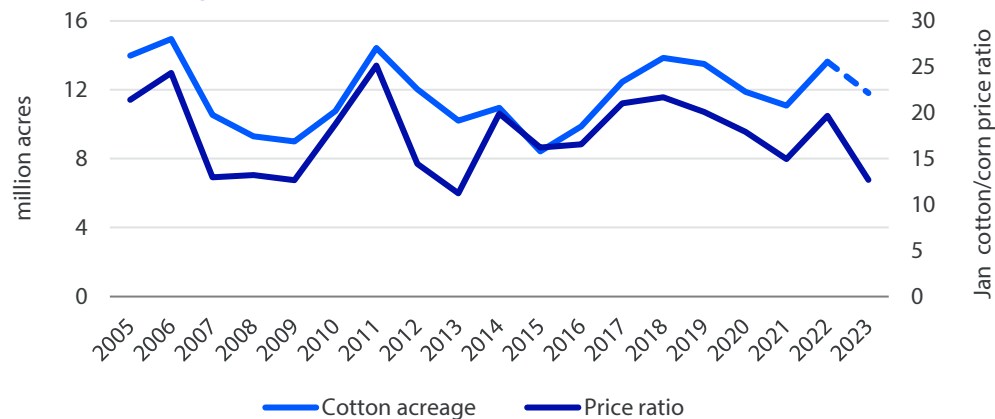


Source: USDA FAS GATS, Rabobank 2023

Cotton

- With most of Texas' dryland cotton production abandoned because of drought, **the US wrapped up the 2022 planting season with 14.7m bales of production on 7.4m harvested acres – the lowest harvest acreage figure seen since 1983.** Because the USDA sets insurance prices early in the year, most producers were able to insure their crop at prices of upwards of USD 1.00 per pound. This means that for those growers who opted for full 70% Revenue Protection, the cottonseed endorsement and supplemental STAX coverage, **insurance indemnities could have been better in some instances (particularly for operations with yields below county averages) than if they had made a crop and sold it into the spot market at today's low price.**
- While crop insurance worked well for cotton growers in 2022, going into 2023 the calculus looks a lot different.** In the face of economic headwinds, cotton prices have taken a beating. The insurance price is now around 85-cents per pound, while prices for other row crops (particularly carbohydrates) have been resilient. The figure below illustrates the sensitivity of cotton acreage to the relative price of corn early in the year. **For 2023, the cotton/corn ratio stands at its lowest point in ten years with next year's area expected to fall 20% as a result to roughly 11.5m acres.** With US cotton acreage under pressure from poor margins, **the prospect of losing the mantle as the world's top exporter to Brazil becomes a more distinct possibility.** For its part, Brazil, where dryland yields are double those of the US, is expected to see a 2% increase in acreage for 23/24, with exports there benefitting from a weak real.

US cotton acreage response to cotton/corn price ratio

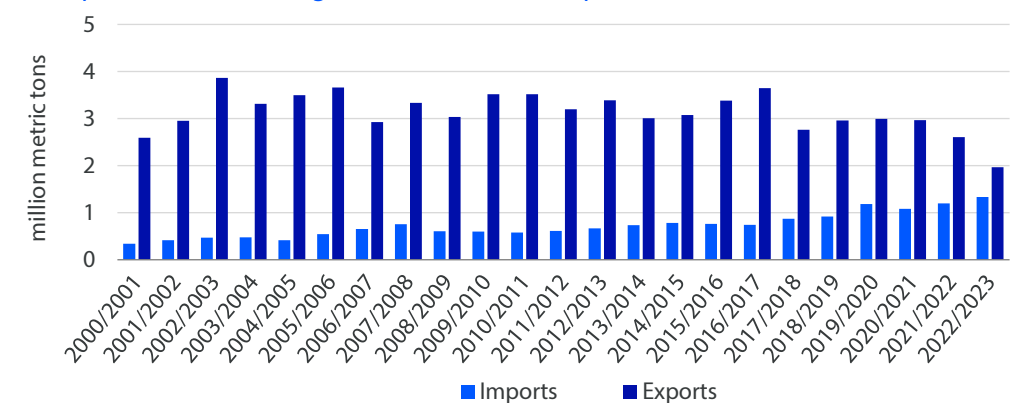


Source: USDA, Rabobank 2023

Rice

- Imports are lower but remain at a record level: The USDA February outlook updated the total imports of rice revising it lower by 3m cwt due to a lower pace on purchases in December data. While imports have been revised downward, 2022/23 continues to be the largest import volume in US rice history.
- Exports declining on higher prices, tight supplies and strong competition: The unfavorable outlook for the US driven by tight supplies and record high prices has left the US at the margin in the global market. Competitors from South America, mainly Brazil and Uruguay, have taken much of the US export market share in traditional markets like Mexico, El Salvador, Honduras, Guatemala and Costa Rica. All these markets represent key markets for US rough rice.
- Record prices and good weather: The season average farm price for rice stands at USD 19.40/cwt, the highest on record. Due to drought challenges in California and decline in production in other regions, prices have soared ~20% from previous year. As California recovers from a drought, this planting season could help offset some of the decline in production and help prices move downward.

US imports of rice reaching record levels, while exports are lowest since 1985

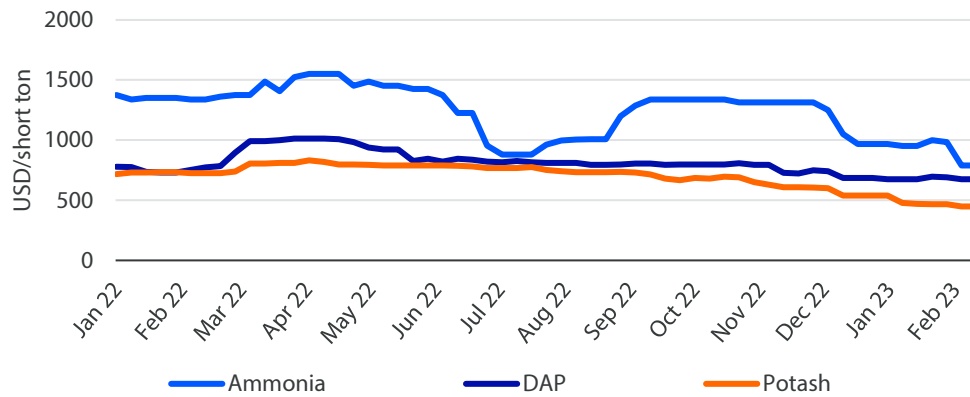


Source: USDA NASS, USDA ERS, Rabobank 2022
Note: Average rough rice basis

Input Costs

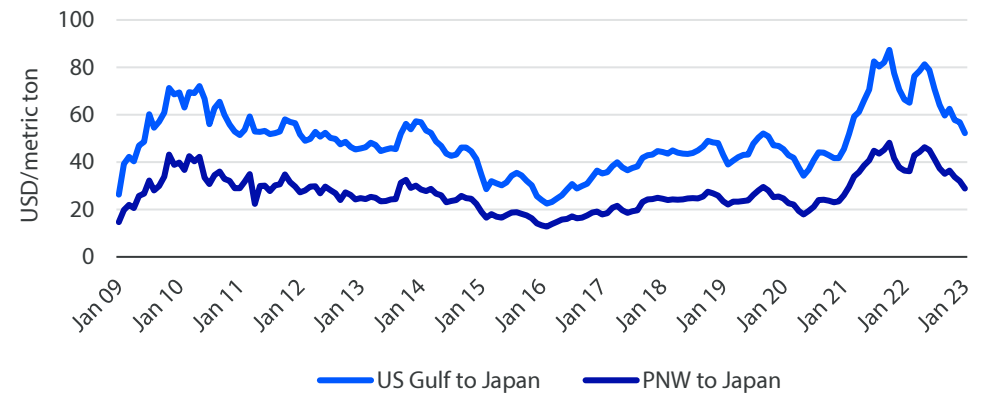
As of February 15, 2022

Corn Belt input prices*



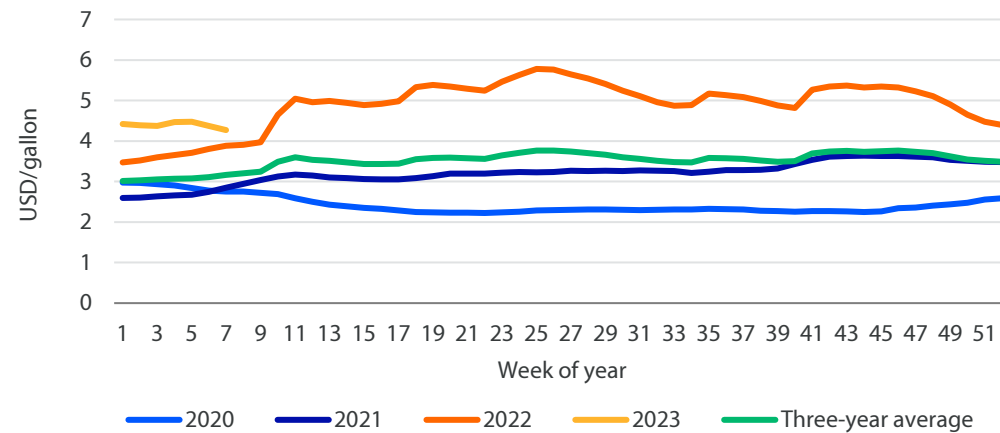
*Note: granular potash
Source: Bloomberg, Rabobank 2023

Ocean freight



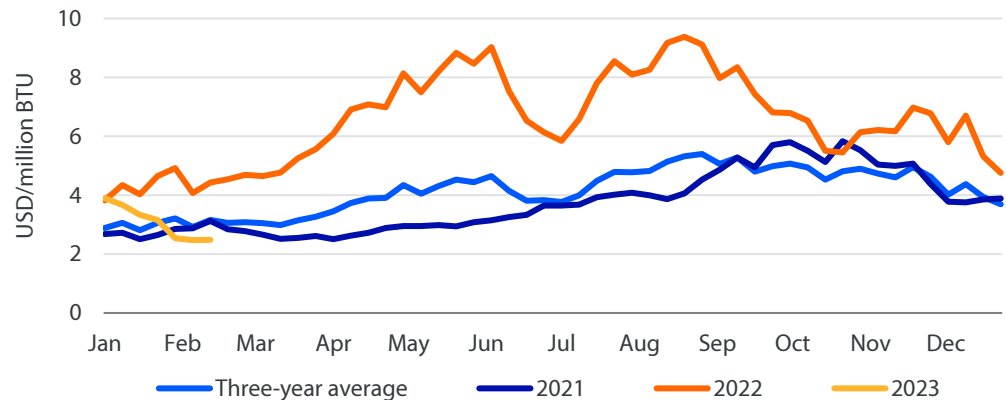
Source: O'Neil Commodity Consulting, USDA AMS, Rabobank 2023

Diesel – Midwest



Source: EIA, Rabobank 2023

Natural gas spot



Source: NYMEX, Rabobank 2023

Forward Price Curves

As of February 15, 2022

CBOT – Corn



Source: CBOT, Rabobank 2023

CBOT – Soybeans



Source: CBOT, Rabobank 2023

CBOT – Soymeal



Source: CBOT, Rabobank 2023

CBOT – Soy oil



Source: CBOT, Rabobank 2023

Forward Price Curves

As of February 15, 2022

CBOT – Wheat



Source: CBOT, Rabobank 2023

CBOT – Feeder cattle



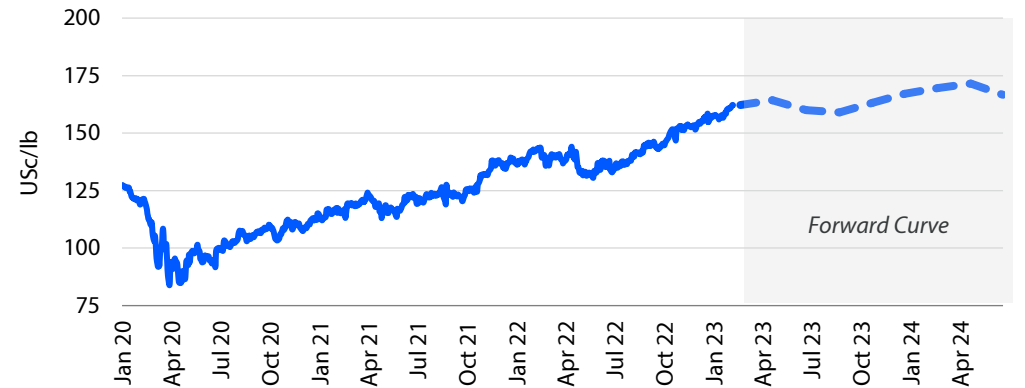
Source: CBOT, Rabobank 2023

CBOT – Lean hogs



Source: CBOT, Rabobank 2023

CBOT – Live cattle



Source: CBOT, Rabobank 2023

Forward Price Curves

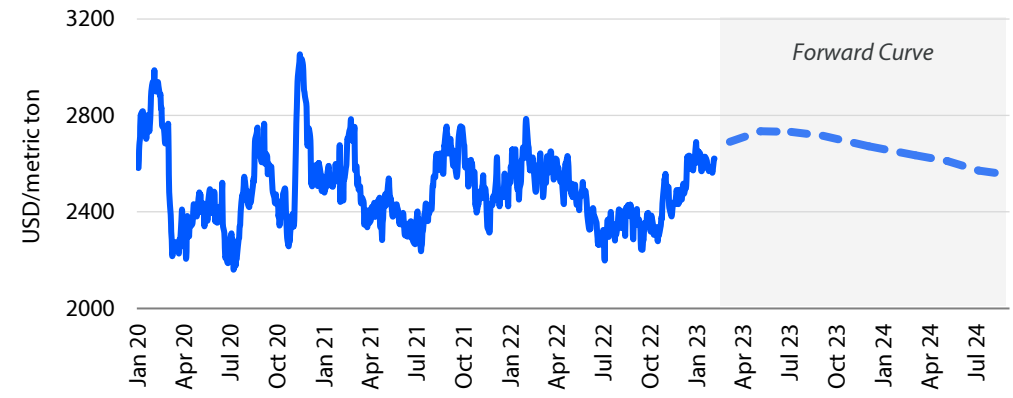
As of February 15, 2022

ICE – #2 Cotton



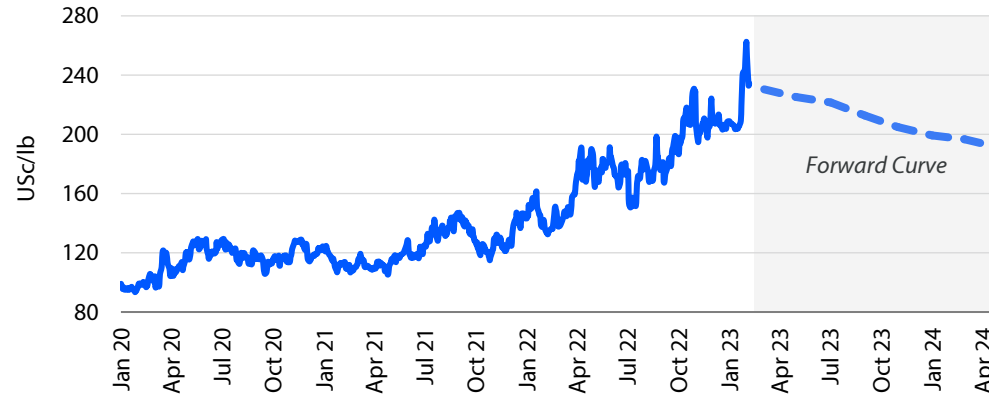
Source: ICE, Rabobank 2023

ICE – Cocoa



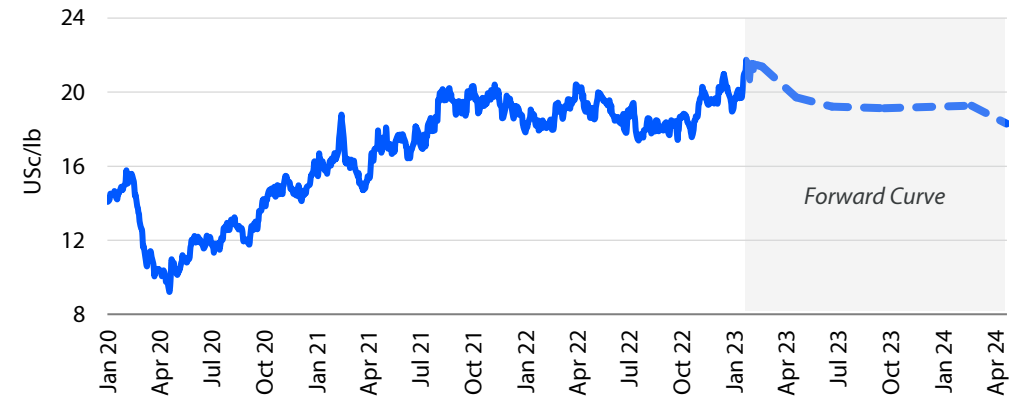
Source: ICE, Rabobank 2023

ICE – FCOJ



Source: ICE, Rabobank 2023

ICE – #11 Sugar




Source: ICE, Rabobank 2023


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