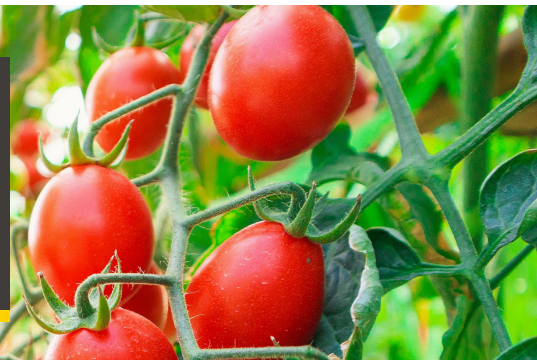


Agri-Food Institute

Industry Update – Q3 2023



Economic developments

A decline in hiring along with tamer wage growth is set to weigh on consumer spending in the months ahead. Wells Fargo (WF) economists maintain that the continued efforts by the Federal Reserve to restore inflation back to 2% will continue to squeeze household and business spending resulting in a mild downturn early next year. Based on latest trend in nonfarm payrolls, which rose by the smallest amount since 2020 in the June employment report, coupled with the slowing of personal consumption expenditures since early this year indicate that the job market is cooling, and consumers are running out of steam. In addition, the resumption of student loan payments will be a further headwind for spending for those households with educational debt.

One surprise in the latest data is related to the housing and construction sectors, says WF economists. Residential real estate activity looks to have steadied so far this year driven by a lack of inventory of existing homes for sale which has pushed buyers into a new home, boosting builder confidence and single-family construction. In addition, the strong demand and low inventory continue to support existing home prices and, by extension, homeowners' equity. However, high interest rates and slower economic growth are likely to limit single-family and multi-family construction, and home improvement spending through 2024.

A modest recession is still in the outlook as the latest WF U.S. Economist Forecast projects a 1.4% quarter over quarter decline in real GDP by Q1-2024. Goods and equipment spending are expected to improve; however, indications are that the labor market is slowing, and consumer price inflation remains stubborn, albeit with signs of moderating. Following the 25-bps rate hike at the July meeting, expectations are that the FOMC will have an extended pause with the federal funds target range at 5.25%-5.50%. WF economists expect the first rate cut to occur in Q2-2024.

The global growth outlook remains resilient, with global GDP growth expected to be 2.7% for 2023 with risks tilted toward slower growth as China's economy struggles to recapture momentum. Emerging markets remain a bright spot as Mexico and Brazil continue to experience resilient economic activity and are forecast to grow 2.0% - 2.5%, respectively. WF Economists continue to forecast a stable to slightly stronger U.S. dollar through the end of 2023 before starting to depreciate in 2024 as the Fed starts to consider rate cuts.¹

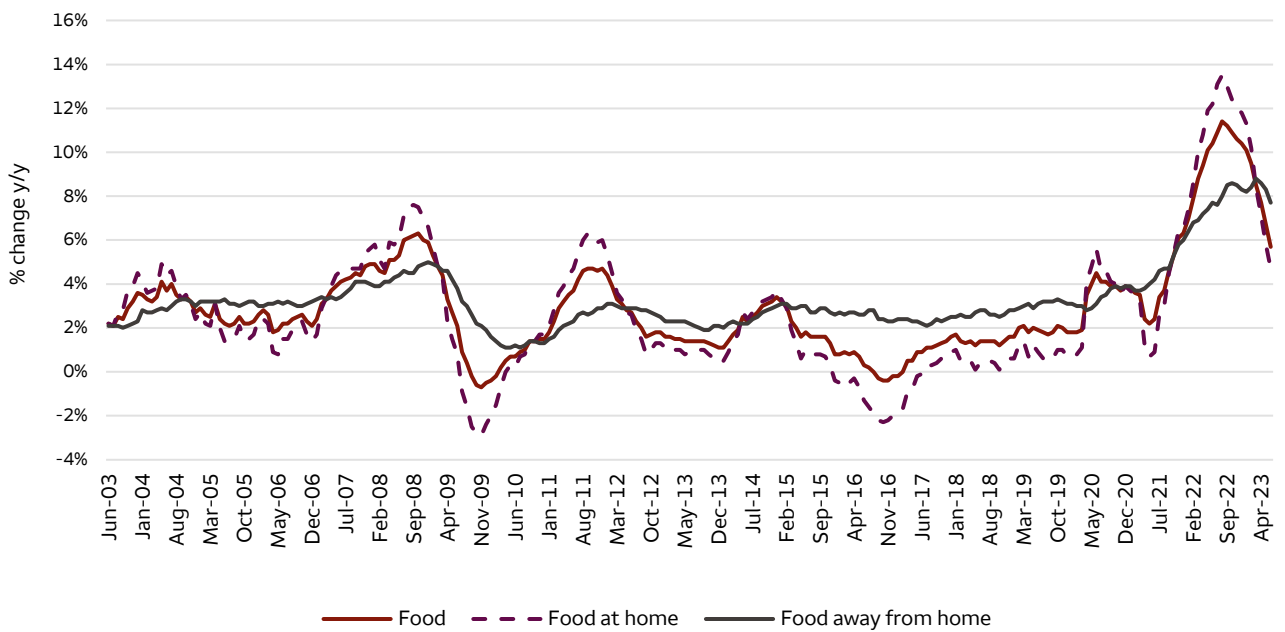
Key industry highlights

- The Senate cleared an amendment to the National Defense Authorization Act barring investors in China, Russia, Iran, and North Korea from purchasing U.S. farmland. Approved with a 91-7 majority and requiring a review from the Committee on Foreign Investment in U.S. (CFIUS) on overseas land purchases exceeding \$5 million or 320 acres from foreign investors. There is a provision for presidential discretion; investors can be exempt from these regulations if deemed crucial to U.S. national security interests.
- The Covid-19 pandemic, the Russia/Ukraine conflict, and climate change have steadily harmed small-scale farmers and residents of food-deficit countries. These crises have affected global food systems, impacting the availability of food, fertilizer, feed, fuel, and capital to producers. According to the USDA, in 2023 net farm income on U.S. small-scale farms is expected to decrease by 18.2% relative to 2022. High input costs resulting from drought conditions in 2022 and post-pandemic factors drive expenditures for farmers.²
- The rise of technology is revolutionizing agriculture. Advances in artificial intelligence, robotics, and sensors are making automation more feasible and affordable.³ AgriTech announced that the industry is facing ongoing pressure from increases in inputs and labor costs, putting profitability at risk. Globally, farmers report prices for inputs, notably fertilizer and crop protection, have risen 80-250% percent over the past few years.³

Food highlights

- The consumer price index for food at home is steadily declining while CPI for food away from home remains steady. The surge in the producer price index that started during the pandemic, including the volatility of cost inflation over the last year, also appears to have taken a solid move downward.⁴

Consumer Price Index Change Y/Y

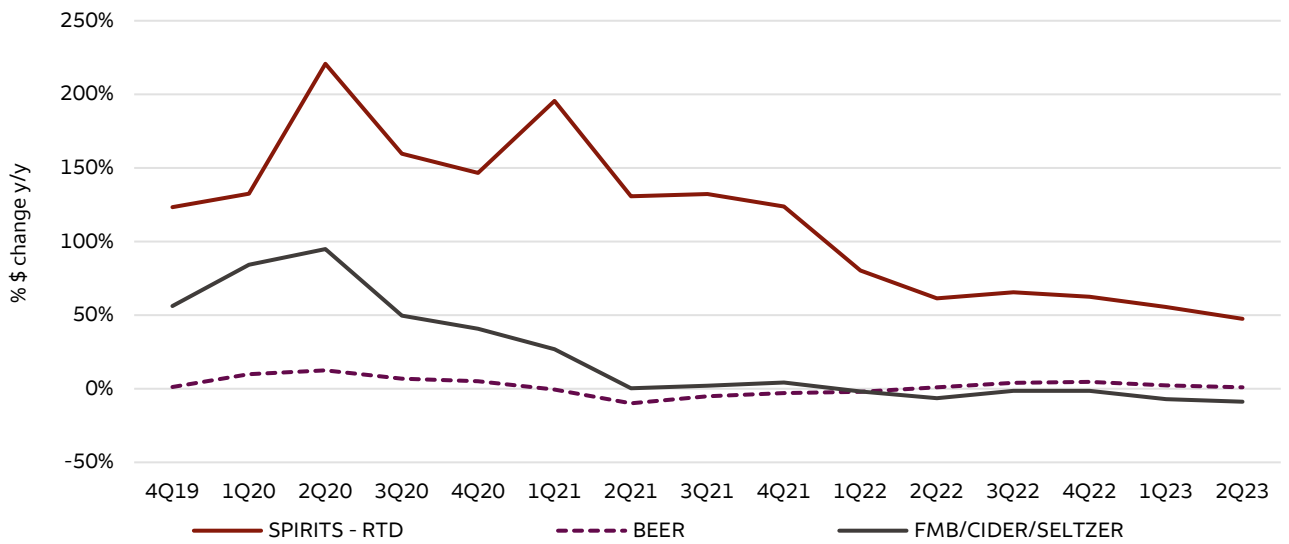


Source: U.S. Bureau of Labor Statistics

Beverage highlights

- Total beer trends have remained consistent with dollar sales increasing 3% YTD and volume declining -2.3%.⁵ Ready to drink (RTD) alcoholic beverages have surpassed \$10 billion in the latest 52 weeks and continue to reach new highs year over year.⁶ Consumers seeking “new and exciting” is a change for Hard Seltzers as consumers turn to spirits based RTD products. RTD products have been booming for years, with a surge of growth during the pandemic.

Beverage Nielsen Retail Trends



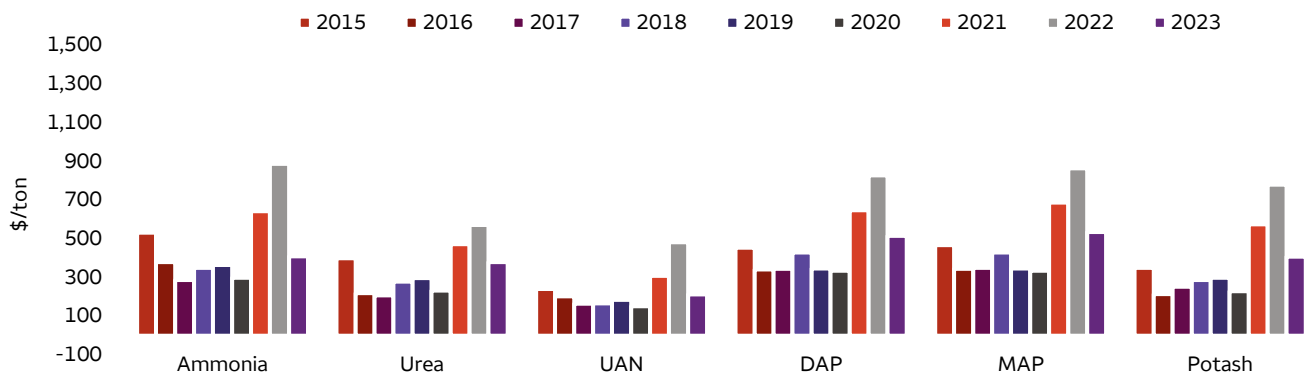
Source: Nielsen AOC

Commodity highlights

Crop Inputs

- The Russia-Ukraine conflict and cancellation of the Black Sea Grain Deal not only impacts grain prices, but also world fertilizer prices. Russia is one of the world leaders in Nitrogen, Potash, and Phosphate fertilizer exports. Following the cancellation, fertilizer prices saw an initial surge due to Russian grain supply shocks coupled with dry weather forecasts in the U.S. (potentially increasing fertilizer demand for the fall and spring crops). In the long term, however, total supplies are expected to remain unaffected by cancellation of the grain deal.⁷
- Retailers and growers are looking ahead to the upcoming fall season. While all segments have lowered inventory levels, StoneX reports a mixed bag for their fall outlook. For phosphates, after a few seasons of reduced application due to poor weather or high prices, the catch up is on. This points to sales opportunities for phosphate manufacturers. The price trend has been negative due to the return of Chinese exports. As the world's largest producer and exporter of DAP/MAP, China's return shifts the supply and demand picture. Ultimately StoneX does not predict a large downside risk between now and the fall for phosphates.⁸
- Recent activity illustrates a recovery in nitrogen prices. The U.S. summer fill programs for UAN (price and volume offerings from manufacturers for wholesale and retail outlets) have recently been released at slightly higher levels than those seen in the late spring. The ratios for corn farmers (relative fertilizer cost to Dec 2024 corn prices) are better than any year since 2008, encouraging demand. Urea does not have a 'fill' time. It is the most widely produced form of nitrogen and acts more like a commodity. Their values are also recovering, haven risen \$80-\$90/ton from their NOLA lows on the back of global support.⁸

Corn Belt Wholesale Fertilizer Prices as of Mid July



Source: Green Markets

- Glyphosate prices have dropped after hitting record high levels in 2022. These high prices were driven by weather impact on gulf plants and strict Covid-19 protocols in China restricting the active ingredients essential to make the herbicides. In the fall of 2021, glyphosate prices increased as much as 300% due to a lack of supply. Ag herbicides have now dropped substantially with a rebounding ample supply. China plants are back online and account for 60-70% of the global production. Prices in China have now dropped from \$16-\$17/gallon to under \$4/gallon. Reports are that crop input suppliers in the US are sitting on inventory that was purchased at a much higher price than where wholesale and retail prices are today.⁹

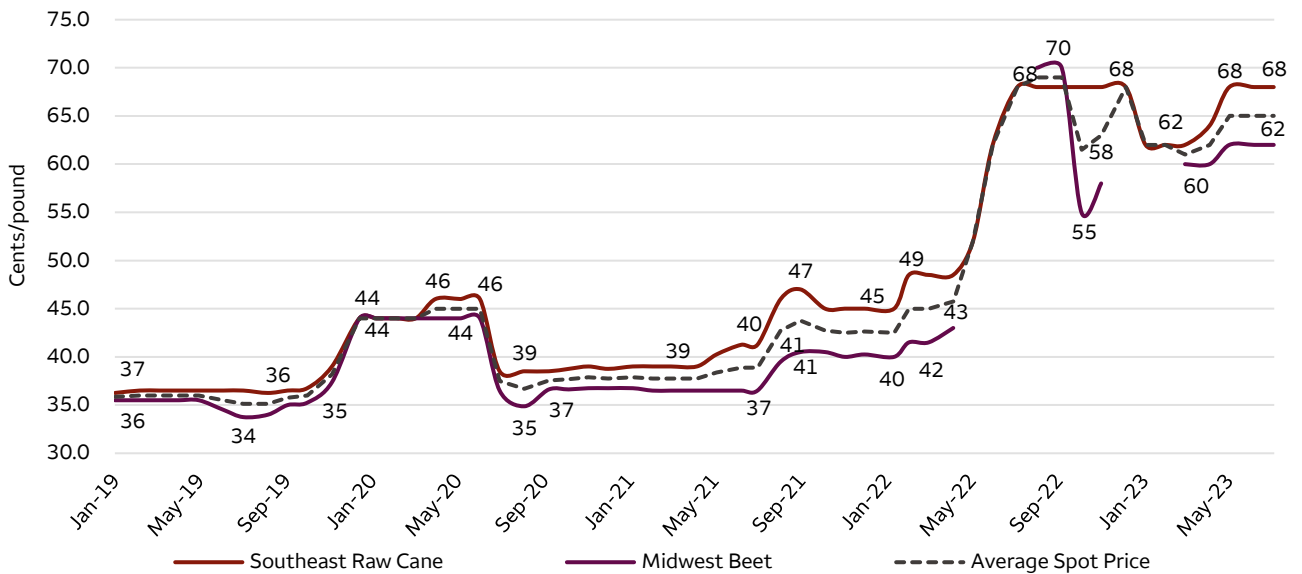
Sugar

- The U.S. sugar market has experienced significant volatility in the past few years due to multiple factors including supply issues, increasing domestic consumption, and inflationary pressures, all of which have contributed to elevated pricing for both contracted and spot sugar. While contract pricing is up, spot prices for both beet and cane sugar are still hovering around 62¢ to 68¢ per pound since the significant runup that began late in the 2020/21 crop year (April 2021) driven by shortages in beet sugar production by several producers which triggered force majeure clauses under their delivery contracts. The resulting scramble to replace the cancelled sugar volume pushed up spot prices by ~107% for beet (70¢/lb.) and ~87% for cane (68¢/lb.) in August of 2022.¹⁰

Sugar Contract Pricing (12 months)		
Crop Year	Beet	Cane
(Oct - Sept)	cents/pound	
2018/19	34 - 35	36 - 37
2019/20	33.5 - 34	35 - 37
2020/21	34 - 36	38 - 40
2021/22	39 - 41	43 - 45
2022/23	40 - 42	45 - 46
2023/24	52.5 - 55	54 - 57

Source: Sosland Sweetener Report

U.S. Spot Sugar Price Quotes



Source: Sosland Sweetener Report

Sugar (cont'd)

- The USDA in its July 2023 WASDE report raised its forecast of 2022/23 sugar supply as higher imports offset lower domestic sugar production and total use was lowered based on the observed slowdown in the pace of sugar deliveries for human consumption. As a result, projected ending stocks increased resulting in an increase in the stocks-to-use ratio to 14.4% vs 13.1% forecast in June. The expectation is that there will be some easing of current spot prices given the increase in the stocks-to-use ratio in July.¹¹

USDA Sugar Supply and Use							
(1,000 STRV)							
	Final	Est June	Est July	Change from June		Change from 2021/22	
Raw Value	2021/22	2022/23	2022/23	Tons	%	Tons	%
Begin. Stocks	1,705	1,820	1,820	-	0.0%	115	6.3%
Production	9,157	9,298	9,242	(56)	-0.6%	85	0.9%
Beet	5,155	5,171	5,147	(24)	-0.5%	(8)	-0.2%
Cane	4,002	4,127	4,095	(32)	-0.8%	93	2.3%
Imports	3,646	3,380	3,519	139	3.9%	(127)	-3.6%
T.R.Q.	1,579	1,730	1,868	138	7.4%	289	15.5%
Other Prog.	298	250	125	(125)	-100.0%	(173)	-138.4%
Mexico	1,379	1,150	1,176	26	2.2%	(203)	-17.3%
High tier	390	250	350	100	28.6%	(40)	-11.4%
Total Supply	14,508	14,498	14,581	177	1.2%	73	0.5%
Exports	29	35	35	-	0.0%	6	17.1%
Deliveries	2,578	12,780	12,705	(75)	-0.6%	127	1.0%
Food	12,470	12,675	12,600	(75)	-0.6%	130	1.0%
Other Prog.	107	105	105	-	0.0%	(2)	-1.9%
Miscellaneous	81	-	-	-	0.0%	(81)	-100.0%
Total Use	12,688	12,815	12,740	(75)	-0.6%	52	0.4%
Ending Stocks	1,820	1,683	1,841	177	10.3%	21	1.1%
Stocks-to-use	14.3%	13.1%	14.4%	+1.3		+0.1	

Source: USDA, WASDE July 2023

- As noted in the latest WASDE report, imports from Mexico were down 203 million tons (17%) YoY resulting in a 15.5% increase in TRQ imports. Mexico has concluded its 2022/23 crop year with total sugar production of 5.2 million MT, down 961,000 MT (16%) than the prior crop year. Despite a record-high acreage planted in 2022/23, the historic low recovery was the result of months long droughts during the growing season (Oct 2022-April 2023) combined with atypical late rains during the start of the harvest (Nov-Dec 2022) which reduced the sun exposure as well as prevented the timely harvest and delivery of cane to the mills. As a result, sugar production across the seven producing regions of Mexico declined between 62,000 to 348,000 MT (12 to 43%), respectively.¹²

Grain and Oilseeds

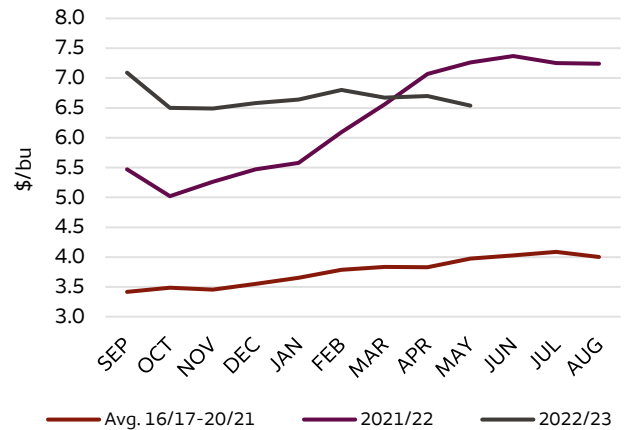
- The Russian/Ukraine conflict escalated as Russia destroyed Ukrainian grain loading ports. Prices across the crop markets surged higher following the attacks on Ukrainian Black Sea and Danube River port infrastructure that threaten to halt exports by water.¹³ Russia has warned that any ship in the region would be viewed as an act of war. These uncertainties have caused volatile markets with wheat being the most heavily impacted.
- USDA’s July report pegged the rating for the growing corn crop at 57% good to excellent while the rating for soybeans were 54% good to excellent. Weather in the Midwest and Plains has been described as stressful due to high temperatures and dryness in most of the region with both crops in key summertime developmental stages. Wheat harvest is pushing north with 49% of spring wheat rating good to excellent. This compares favorably to the winter wheat across the Central Plains which has been harvested and yielded one of the poorest crops on record due to winter/spring drought.¹⁴
- The USDA acreage report released on June 30, dropped soybean acreage from 87 million acres to 83 million acres. It increased corn acres from 92 million to 94 million.¹⁵ These are sizeable moves for this historically conservative report. Soybean prices have trended higher as rationing has begun to provide comfortable carryover into the new crop year. Corn prices have been more constant, and weather driven.

Annual Wheat Prices



Source: USDA, LMIC

Monthly Corn Prices



Source: USDA, LMIC

Dairy

- USDA announced it will conduct a hearing on proposals to amend Federal Milk Marketing Orders. This could be the first adjustment since the early 2000’s. The hearing, to be held on August 23, will cover 22 proposals on a range of issues such as adjusting the pricing of each component of raw milk and the ‘make allowance’. This is a highly debated subject that will certainly alter the dairy industry. However, it may take an extended amount of time to finalize.¹⁶
- Milk prices continue to be below average price (July Class III at \$13.80/cwt) despite the summer heat taking a toll on milk production. Cow numbers have also decreased this summer, with the herd shrinking by 16,000 head compared to May. Recent slaughter data showed culling hit a 37-year high in June. The herd is now at 9.4 million head, down 5,000 cows year-over-year.¹⁷
- Milk prices are expected to trend higher for the remainder of the year. Milk production will be in its seasonal low August through September. Schools will begin to open at the end of August and early September which will help beverage milk sales. By October butter and cheese stocks will start to build to meet the higher season sales of cheese and butter for Thanksgiving through Christmas. Class III futures show a continued improvement in the Class III price over \$15/cwt in August, over \$16/cwt by September and over \$17/cwt for the remainder of the year.¹⁸

Class III Milk Prices



Source: USDA, LMIC

Fresh Produce

- California fresh produce crops have been delayed from the wet winter and chilly spring weather. While some supply gaps existed in late spring, most berries, stone fruit, and vegetable crops are now in full production cycles. Economic impacts are still to be determined as the season progresses.¹⁹
- At the end of June, the overall produce market index was up 7.4%. Larger price movements are wet vegetables (broccoli, cauliflower, celery), 25% and leafy greens, up 16.7%. Stone fruit, tropical fruit, and citrus also experienced double digit price increases.²⁰
- Processing tomatoes experienced a delayed and erratic planting season that will hinder early-season volumes and push harvest into October. The later the tomato harvest, the harder it is to plan for plant operations. Further, the late crop requires processors to pay late-season premiums for product. Lastly, quality can be impacted as the crop moves into a late-season harvest.²¹

Tree Nuts

- June Almond shipments were 186.6MM pounds, down 49.3%. Based on current figures, California has 84% sold through inventory – the same as this time last year.
- The USDA Objective estimate for almonds was 2.6 billion pounds. Given current inventory and market conditions, prices continue to experience some downward pressure.
- The USDA Objective estimate was released on July 12th, forecasting a 2.6-billion-pound crop for 2023, up 1% from 2022 production. While the report noted less than ideal bloom conditions, the total crop size was impacted by expectations for larger nut sizes.
- The Almond Industry Shipment Report shows year to date shipments (8/1/2022-6/30/2023) down 3.5%. Domestic shipments were down 6.8%, and export shipments were down 2.2%.²²
- Grower pricing potential remains volatile, with reports of some handlers anticipating reduced prices to growers for the 2023 crop. This comes as the objective estimate called for a larger crop than had been forecast earlier this year.
- Total almond acreage appears to be stabilizing, with orchard removals on par with newly bearing acreage. Real estate listing appears to be picking up with almonds, walnuts, and other permanent crop listings on the rise.

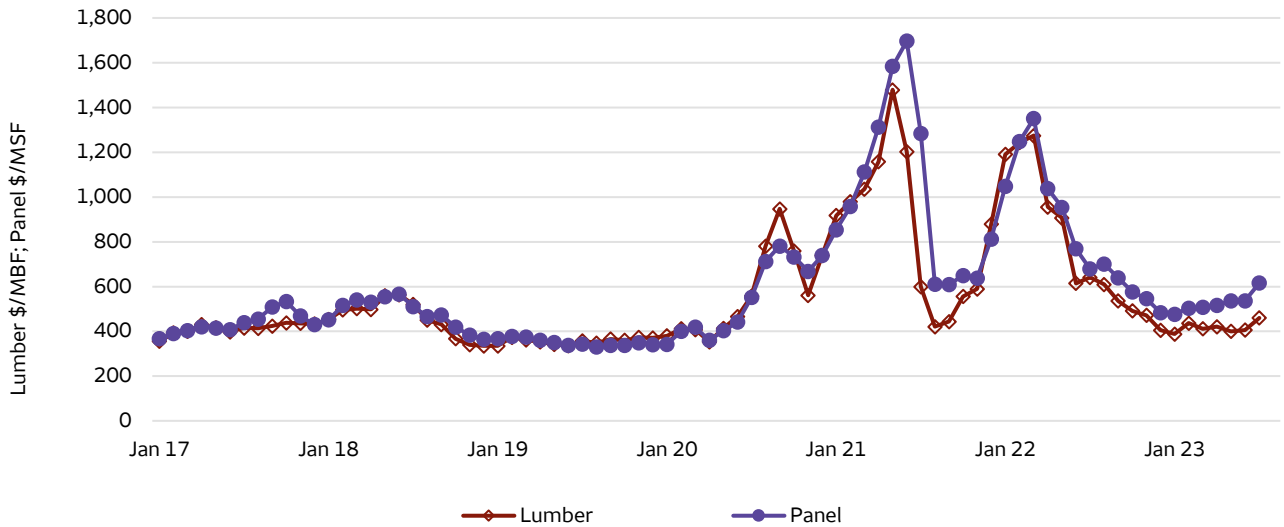
Citrus

- The most recent U.S. citrus crop forecast as of July 2023 by the USDA’s NASS projects total citrus production of 3.7mm tons for the 2022/23 crop year, down 33% from prior crop year’s production of 5.6mm tons. California citrus is having an off year with projected fresh market production down for all products except for mandarins and tangerines, which are up 25% (180,000 tons) over 2020/21 season. Weather has been a major factor in citrus production for the fresh market. Tangerines continue to experience increased demand and the summer months are when packers begin their import programs to provide year-round supply.²³
- Florida’s total orange crop for the 2022/23 season is forecast at 713,000 tons, down 13.5% YoY and the smallest crop since the 1936/37 season. The decline for the 2022/23 season was driven primarily by crop damage from Hurricane Ian which hit in the Fall of 2022 which resulted in average fruit droppage of ~70%, the highest ever since this data began to be collected for the 1960/61 season. As a result of the smallest production level in over 100 years, Florida orange juice may be increasing in price.²³

Forest Products

- Softwood framing lumber prices have been slowly climbing since hitting a low in January 2023, rising over 20% year-to-date. Right now, the framing lumber market at \$461/MBF is uncertain but wagering on the upside.²⁴ The Sep 2023 SPF lumber futures price continues to rise with a premium over cash, indicating an expectation of further price gains in the next few months. Due to the most recent rise in cash lumber prices and revenues, there have been fewer mill production curtailment announcements across the broader North American lumber market.
- Structural panel prices are following the same pattern, rising over 25% since hitting a low point in January 2023. The nominal structural panel composite value of \$606/MSF has been gaining for several weeks, possibly indicating some market strengthening.²⁴ Prices for OSB have climbed out of a red-ink basement, and softwood plywood prices are holding-up compared to stable veneer costs, which helps producer margins.

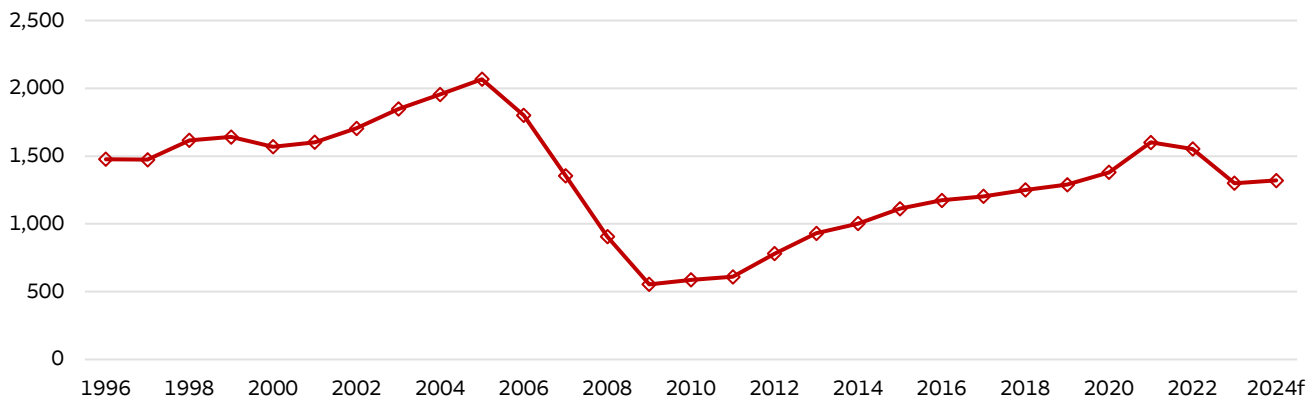
U.S. Framing Lumber and Structural Panel Composite Prices



Source: Random Lengths, thru Jul 2023

- Responding to some unexpected resilience in the housing markets, in June 2023 the Wells Fargo Economics Group adjusted its U.S. housing starts forecast slightly upward to 1,300,000 total starts in 2023, which still stands as a 16.3% YOY decline from 2022.¹ Headwinds remain the high cost of housing and rising mortgage rates, where 30-year fixed conventional rates have recently climbed back over 7.0%.²⁵ Nonetheless, the inventory of available houses is very low at 3.0 months of supply, resulting in competition for homes on the market.²⁶ These mixed indicators keep the housing market uncertain.

U.S. Annual Housing Starts, 1,000s

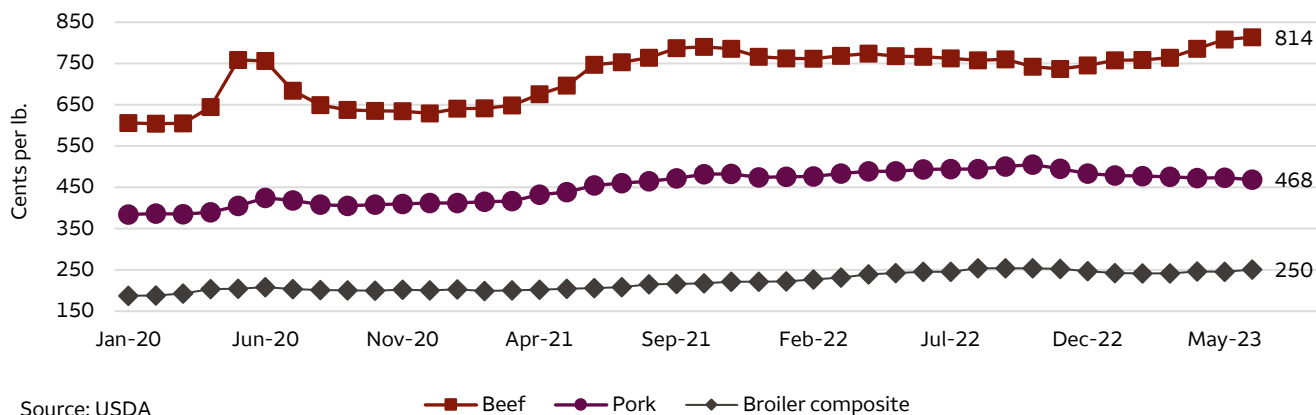


Source: U.S. Dept. of Commerce, Forecast by Wells Fargo Securities

Protein

- Beef: Beef retail prices in June hit a new all-time high for beef at \$8.14 per lb., 6% higher YoY. Both retail and wholesale beef prices have been supported by tighter cattle supplies and steady export demand.²⁷
- Chicken: Despite continued softness in wholesale chicken prices, retail prices climbed higher in June at \$2.50 per lb, 2% higher YoY.²⁷ Chicken processor margins have improved since early 2023, but the industry continues to struggle with weak profitability on strong production and sluggish demand.
- Pork: In May, the Supreme Court of The United States issued a final ruling on California’s Proposition 12 law. In their verdict, SCOTUS upheld the animal-welfare law approved by California votes in 2018. The new regulations took effect in July. As the pork industry transitions, more pork will likely be available on the domestic market outside of California.²⁸

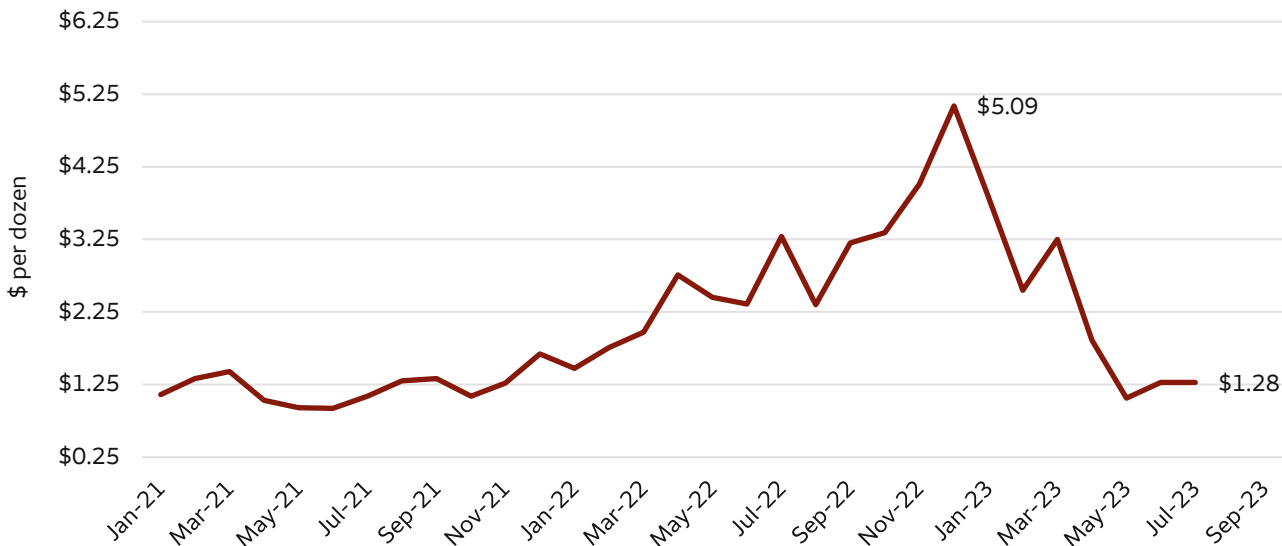
Retail Price: Cents per lb. Monthly



Source: USDA

- Egg: After egg prices collapsed from an all-time record high in December 2022, the market has been steady for most of the 2023 summer at a more affordable level.²⁹ Shell egg inventory continues to grow as the table eggs flock rebuilds from High Pathogenic Avian Influenza.

Egg Prices Midwest Large, Monthly Avg

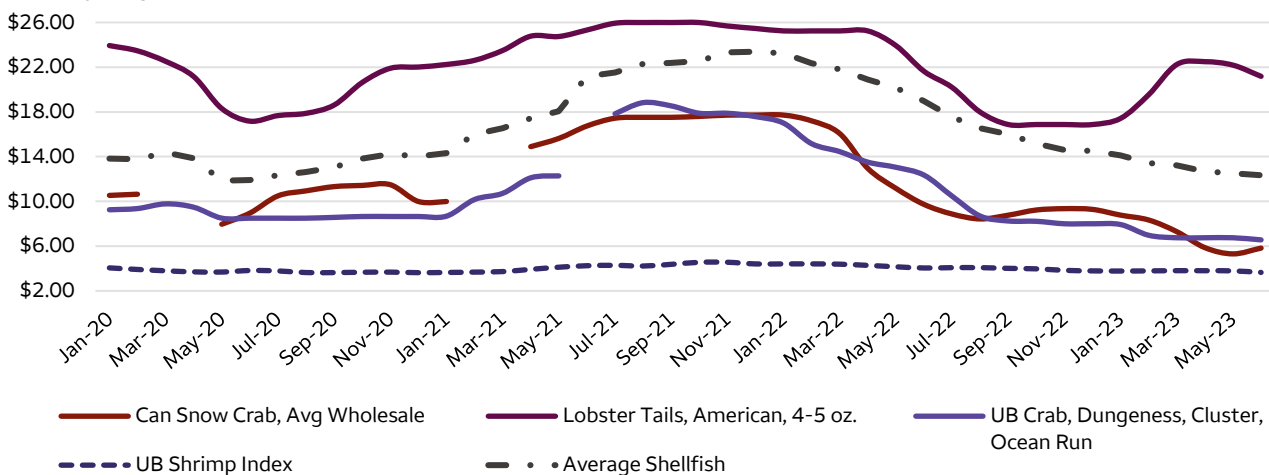


Source: Urner Barry Comtell

Seafood

Over the past two years the seafood industry has experienced what would be most appropriately described as “complex” supply & demand issues as a result of COVID which resulted in price behaviors across all sectors that have not followed patterns that would typically be expected under “normal” circumstances. Wholesale prices for most shellfish and finfish products, which reached record highs during 2021, were followed by record declines during 2022 due to impact of historically high inflation levels on consumer purchasing power which led to “trading down” purchases from premium products to more moderately priced seafood products.²⁹

Urner Barry Wholesale Shellfish Prices Monthly Avg - \$/lb

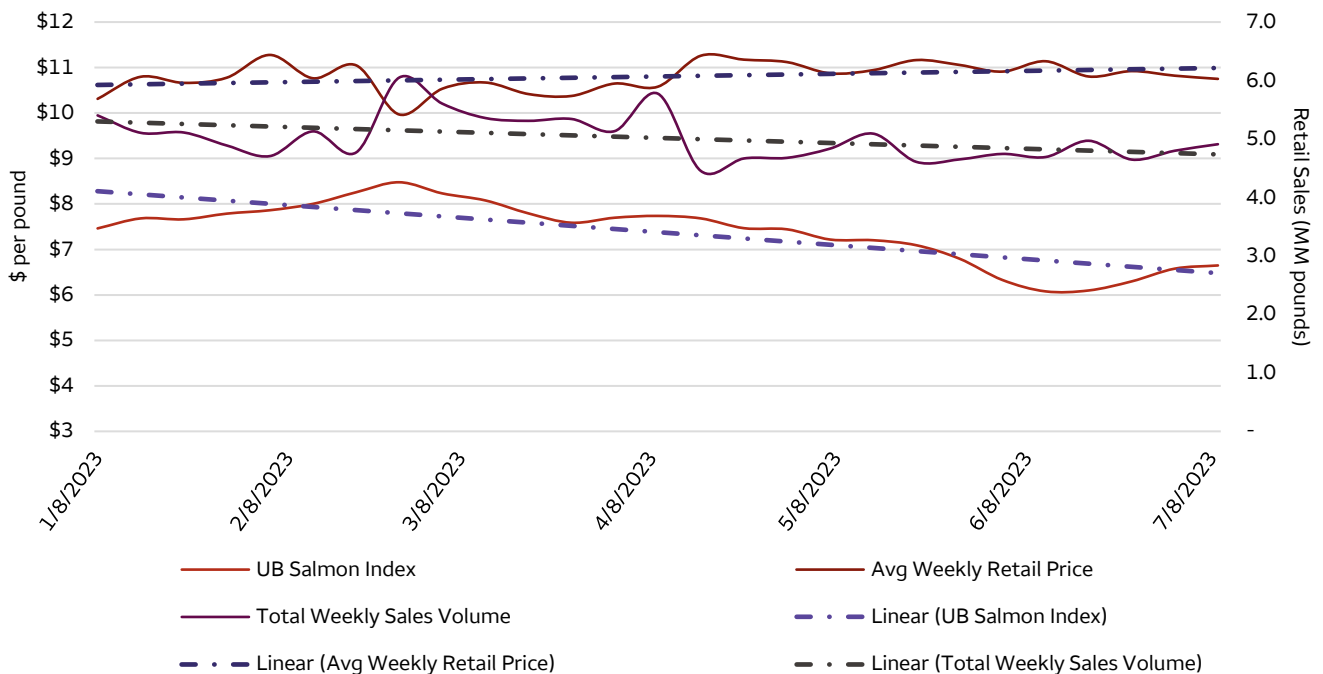


Source: Urner - Barry Comtell

Seafood (cont'd)

One interesting phenomenon that has been observed during this period is that while wholesale prices on average have declined from all-time highs achieved in late 2021/early 2022, retail prices as measured by the Urner Barry Retail Seafood Index have remained relatively flat over the same time period. An example of this is presented in the graph below which compares the wholesale UB salmon index price to the average weekly retail price and retail sales volume of salmon sold across the U.S. This comparison points out an interesting trend I've recently noticed that is occurring across multiple seafood species this year. Although wholesale prices have been declining, it appears most retailers, who are still trying to sell through high priced inventory purchased at peak prices in late 2021, would rather sell less volume of seafood at a higher price rather than take the significant loss if they marked their inventory down. Thus, as seen in this graph, while wholesale prices and total sales volume trends are declining, retail pricing has slightly increased for the same time period. Going forward it will be interesting to see if this trend continues or eventually reverts to a more "normalized" trend once retailers have sold through their higher cost inventory.³⁰

Fresh Salmon Retail vs Wholesale Price



Source: Urner-Barry Comtell

The U.S. shrimp market has experienced a 17% decline in average prices since November 2021 as indicated by the Urner Barry's White Shrimp Index. Despite the record or near-record low prices on imported shrimp, demand is on par with pre-pandemic levels but well below expectations. In general, it was thought that consistently low prices coupled with ample supply would boost demand both at the retail and food service level. However, that has not been the case and this issue currently has importers and wholesalers around the country stumped; thus, importers are currently waiting and watching to see if consumers eventually take notice of current price trends or there are other factors coming into play that may be influencing current buying patterns.³⁰

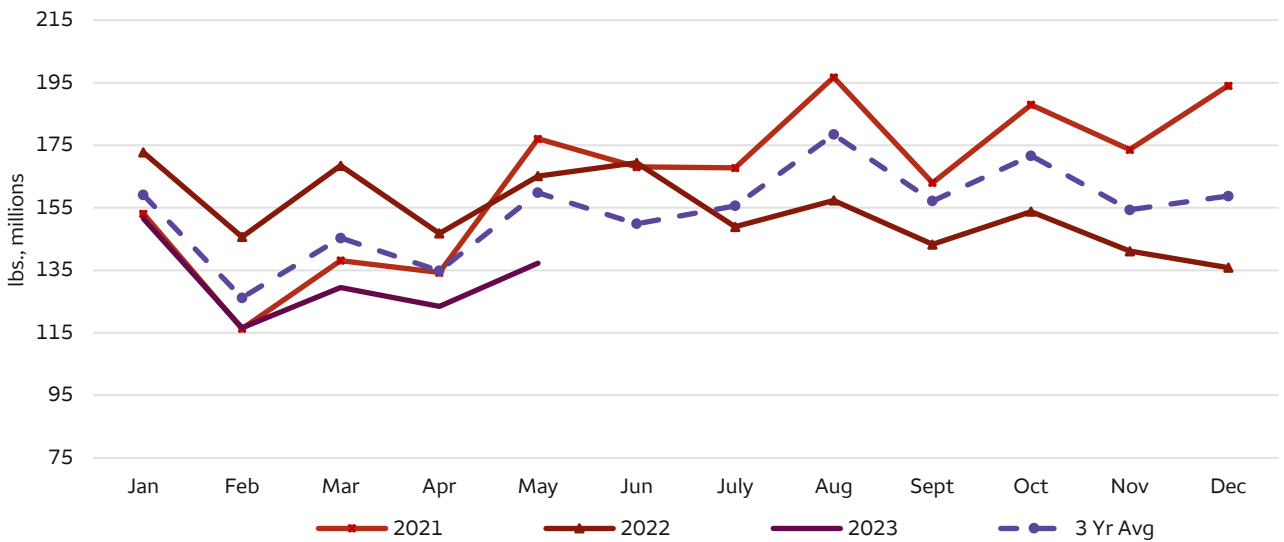
Seafood (cont'd)

**Urner Barry Farm-Raised White Shrimp Index
Monthly Avg - \$/lb**



Source: Urner Barry - Comtell

**U.S. Total Shrimp Imports
UB, Monthly Avg**

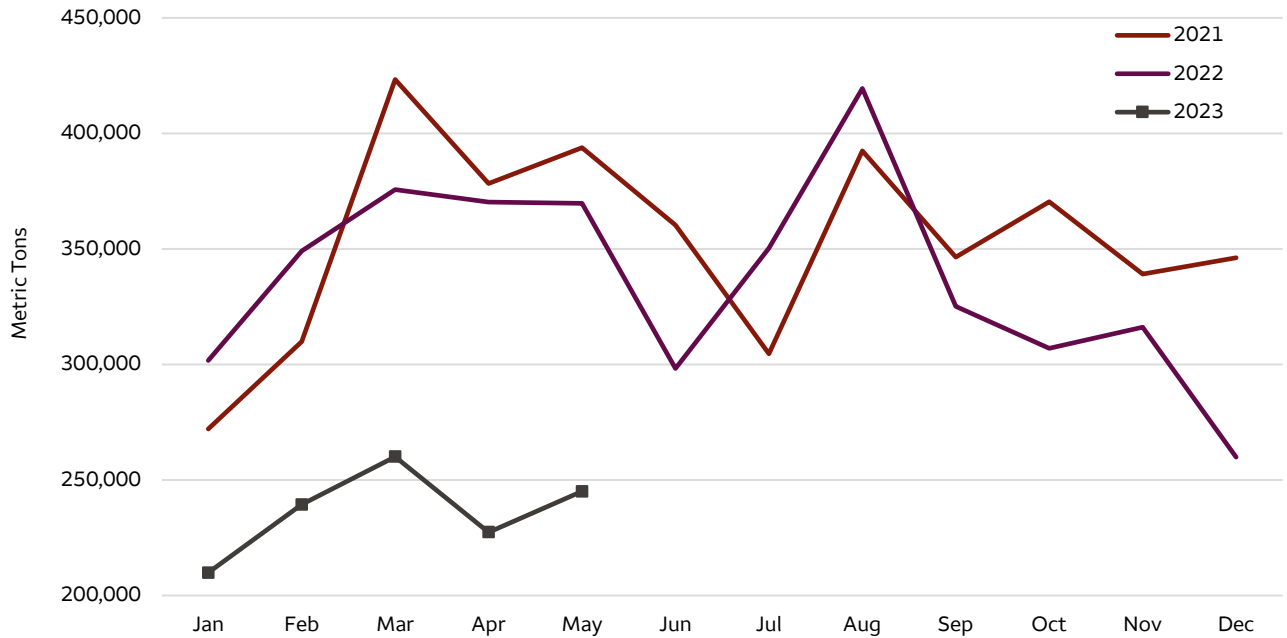


Source: U.S. Dept of Commerce, Urner Barry - Comtell

Specialty Crops

U.S. hay exports year-to-date in 2023 are down significantly at 34% lower YoY. Export demand have been lower to each of our top three trade partners, Japan, China and South Korea.³¹

U.S. Hay Exports to All Countries Monthly, Metric Tons



Source: USDA -FAS

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