

Agriculture Industry Is Still Sweating This Year's Droughts

Oct. 13, 2022

This report does not constitute a rating action

Key Takeaways

- This year's multiple droughts, which occurred on the back of already disrupted agricultural trade flows from the Russa-Ukraine war, will likely pressure corn, rice, and livestock supplies and lead to elevated prices of agricultural commodities.
- Although largely contained so far, credit risks are mounting and spreading to more sectors across the agricultural supply chain.
- Increasing recession risk limits companies' ability to offset food and agricultural input-cost inflation by passing costs to consumers.
- Consumer price inflation and input cost volatility may become more prevalent credit risks for agribusiness and consumer products companies if future droughts are more severe and occur more frequently.

This year's Northern Hemisphere droughts--hitting major economies including Europe, the U.S., and China--has businesses and consumers fearing the worst in terms of food shortages and inflation. This comes as global supply chains struggle to recover from pandemic-related disruptions while two of the world's largest agricultural exporters are at war. The World Food Programme estimates that globally the number of people affected by food shortages has more than doubled, to 345 million (roughly 4% of world population), from 135 million pre-pandemic.

The risk of severe supply shortages in the 2023 crop marketing year has eased, with grain exports slowly resuming out of Ukraine, a bumper wheat crop expected out of Russia, an increasing grain harvest in South America after a drought-ravaged 2021-2022 crop, and moderate--though not disastrous--declines expected for the critical upcoming U.S. harvest.

Still, global supplies remain tight as industries' growing appetite for agricultural commodities leaves little margin for error out of key producing regions next year--including South America's harvest at the start of 2023. And while tight supply should favor certain mid- and upstream segments of the agricultural supply chain, inflation and supply disruption may continue to pressure margins for several downstream players in the food industry (see chart 1). Moreover, prolonged droughts could have knock-on effects to other sectors and the economy (see "China's Summer Struggle: Drought, Food Inflation, And Shortages," published Aug. 30, and "Western U.S. Drought: Declining Supply, Rising Challenges," published Aug. 16.) Food inflation remains a key macro-credit concern.

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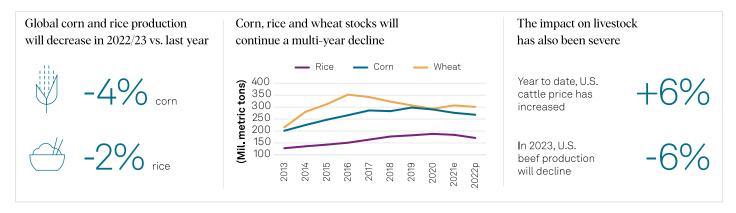
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Against this backdrop, we can expect increasing drought frequency and severity in many global regions--including Asia, Africa, and Central and South America--according to the Intergovernmental Panel on Climate Change's (IPCC) sixth Assessment Report (AR6).

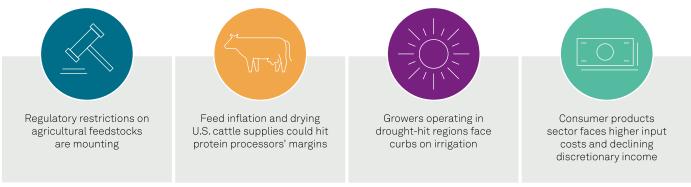
Chart 1

Northern Hemisphere Droughts Add Pressures To Agriculture Supply Chain



Credit Impact Varies Across The Agricultural Supply Chain





Sources: USDA, S&P Global Ratings.

Northern Hemisphere Droughts Add Pressures

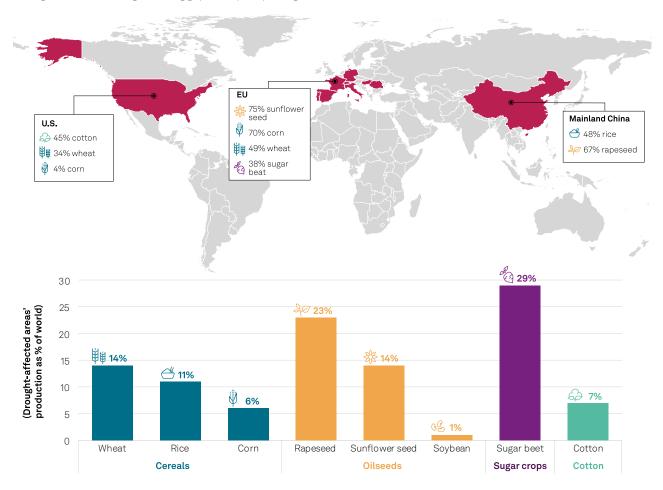
Key agricultural regions of China, Europe, and the U.S. hit by droughts

This year, severe droughts hit major economies in the Northern Hemisphere. China suffered its worst drought on record as soaring temperatures dried up key parts of the Yangtze River. Provinces including Anhui, Jiangxi, Hubei, Hunan, Chongqing, and Sichuan were particularly hurt. Europe, too, suffered a persistent lack of rainfall combined with heatwaves in May-July, leading to widespread stress on vegetation, especially in the north of Italy, southern, central, and western France, central Germany, Portugal, northern Spain, and some areas of Hungary and Romania. In the U.S., close to 70% of the country faced drought conditions this summer, and more than 15% suffered extreme or exceptional conditions according to U.S. Drought Monitor. And the conditions were most severe in the western states.

The drought-affected regions contribute significantly to agricultural production, regionally and globally. In fact, they produce more than one-tenth of the world's wheat and rice, close to one-third of sugar beets, and play important roles for oilseeds and cotton as well (see chart 2).

Drought-Affected Regions Supply Many Key Crops

Chart 2



Drought-affected areas—China: Anhui, Jiangxi, Hubei, Hunan, Chongqing and Sichuan; Europe: France, Germany, Hungary, Italy, Portugal, Romania and Spain; U.S.: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming — Production data of Chinese provinces are 2017-2021 five-year averages, sourced from National Bureau of Statistics of China. Production data of European countries are 2017-2021 five-year averages, sourced from Eurostat. Production data of U.S. states are 2017-2021 five-year averages, sourced from FAOSTAT. Source: S&P Global Ratings.

Droughts may be becoming more frequent and severe, hampering agriculture and food.

According to the U.N., the number and duration of droughts globally has risen by almost one-third since 2000, and the agriculture industry bore the majority of the losses (U.N., 2022). From 2008-2018, droughts led to a loss of more than 34% of crop and livestock production in the least developed and lower-middle-income countries (FAO, 2021). The direct costs of the 2021 drought for the California agriculture sector are about \$1.2 billion (Medellín-Azuara et al., 2022).

In a global study of the vulnerability of 135 countries to climate change over the next 30 years, we found that the regional effects of climate hazards--including, but not limited to, water stress and droughts--are most pronounced in South and Central Asia, and that lower- and lower-middle-income countries are likely to see 3.6x higher losses on average than higher-middle and higher-income countries (see "ESG Research: Weather Warning: Assessing Countries' Vulnerability To Economic Losses From Physical Climate Risks," published April 27). Recent research also suggests that droughts across the northern hemisphere this summer were made at least 20 times more likely due to climate change and that drought will continue to increase under warmer pathways, as reported by World Weather Attribution.

Globally, corn and rice production are under more stress

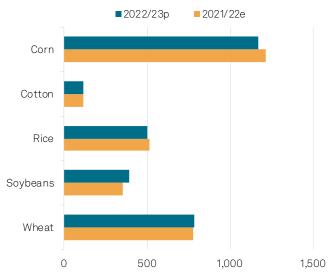
From a global production perspective, corn and rice were more stressed in 2022. Corn and rice production are projected to decrease 4% and 2%, respectively, for marketing year 2022-2023, according to the latest World Agricultural Supply and Demand Estimates by the U.S. Department of Agriculture (USDA; see chart 3). Corn production in the EU will decline because of reductions for France, Romania, and Germany due to drought concerns, and U.S. production is forecast to drop 8% from last year amid reductions to harvested area and yield. Regarding rice, China's production will decline 2 million tons, to 147.0 million, on drought conditions in the south. Production prospects are also being hit by continued dry conditions in northeast India and August flooding in Pakistan.

Production of other commodities, including wheat, cotton, and soybean look intact, with better harvests in some areas offsetting potential shortfalls elsewhere. For example, better harvests in key growing regions in South Asia and China, where droughts spared cotton-growing regions in Xinjiang province, should make up for lower U.S. cotton production. Wheat production is decreasing in Argentina, Australia, the EU and Ukraine, while Canada and Russia are expected to have a large crop. Soybean production is projected to rebound with a much stronger South American harvest.

Still, the global stock of wheat, corn, and rice is on a multiyear downward trend. While the so-called ending stocks of cotton and soybeans show a slight uptick from the previous year, wheat, corn, and rice stocks will decline, suggesting potential tightness in those commodity supply chains (see chart 4).

Chart 3

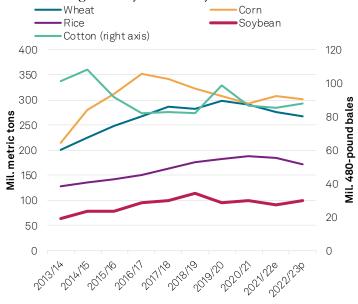
2022/2023 Production Projection By Commodity



Unit is million metric tons for wheat, corn, rice and soybeans, and million 480-pound bales for cotton. e--Estimate. p--Projection. Source: USDA World Agricultural Supply and Demand Estimates (WASDE), Oct. 12, 2022.

Chart 4

Global Ending Stock By Commodity



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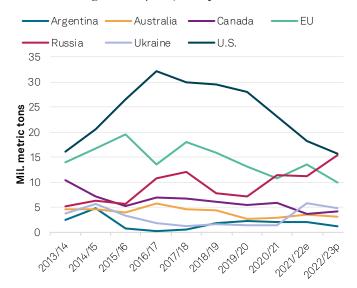
e--Estimate. p--Projection. Source: USDA.

Tight supply combined with trade restrictions could disrupt certain trade flows. Focusing on major exporters, ending stocks for U.S. wheat and corn, EU wheat, and all rice exporters (plus China, which is top producer and major importer of rice) have been decreasing in recent years (see charts 5-7). This means destination countries of these products may need to identify alternative sources to make up for any potential shortfalls, which can be a difficult task especially for those that don't have a well-diversified trading partner base (see charts 8-10). For example, Algeria, where domestic wheat yields already suffered from drought earlier in the year, could face more challenges if EU's export capacity decreases.

Meanwhile, trade restrictions add more risks. As of Sept. 25, 2022, 20 countries have implemented food export bans, and seven have implemented export-limiting measures to address potential domestic food shortages in light of the pandemic and the Russia-Ukraine war (World Bank, 2022). Notably, India recently introduced export restrictions on rice, which could further strain rice trade.

Chart 5

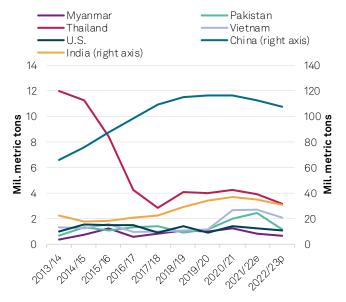
Wheat Ending Stock By Major Exporter



e--Estimate. p--Projection. Source: USDA.

Chart 7

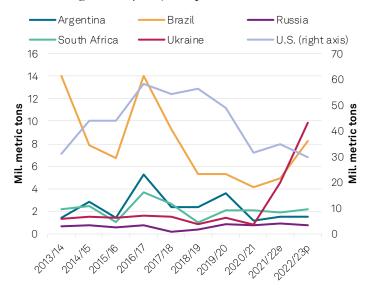
Rice Ending Stock By Major Exporter + China



e--Estimate. p--Projection. Source: USDA.

Chart 6

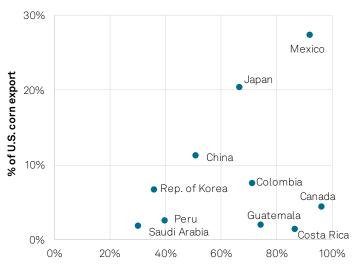
Corn Ending Stock By Major Exporter



e--Estimate. p--Projection. Source: USDA.

Chart 8

Import Concentration Of Top 10 U.S. Corn Importers

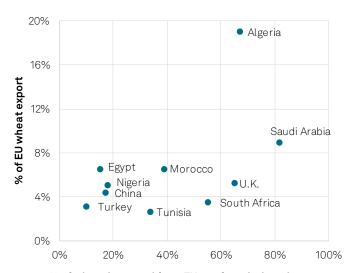


% of corn imported from the U.S. as of total corn import

Based on 2017-2021 average trade value. Sources: UN Comtrade, S&P Global Ratings.

Chart 9

Import Concentration Of Top 10 EU Wheat Importers

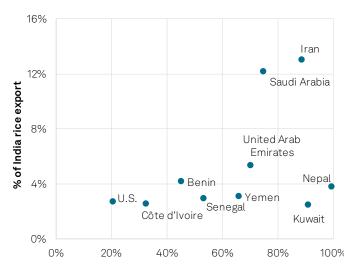


% of wheat imported from EU as of total wheat import

Based on 2017-2021 average trade value. Sources: UN Comtrade, S&P Global Ratings.

Chart 10

Import Concentration Of Top 10 India Rice Importers



% of rice imported from India as of total rice import

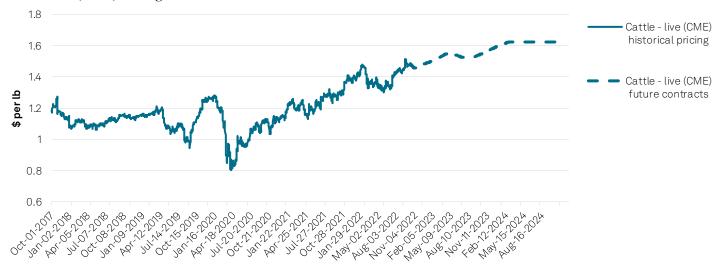
Based on 2017-2021 average trade value. Sources: UN Comtrade, S&P Global Ratings.

This year's droughts have also further cut into livestock supplies

The impact on livestock has been more severe than on grains and oilseeds. Droughts across the midwestern U.S. have exacerbated dwindling livestock supplies, particularly cattle, as farmers continue sending herds to slaughterhouses as droughts make raising cattle more expensive. In turn, U.S. cattle prices have climbed 6.4% year to date (see chart 11). In Europe, lower cereal production is raising prices for animal feed, which, combined with drought's damage on pastures and forage, could threaten livestock production.

Chart 11

Cattle - Live (CME) Pricing



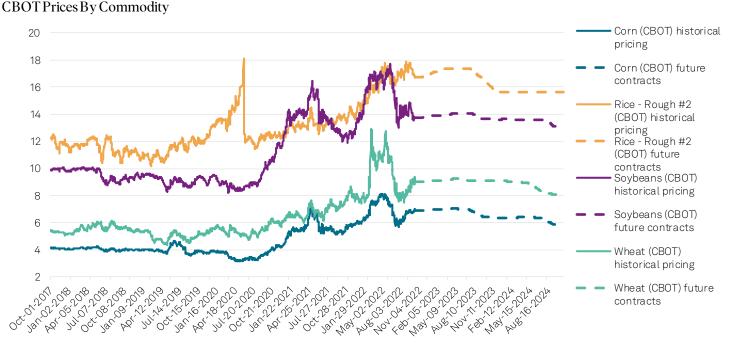
Source: S&P Global Market Intelligence, as of Oct.12, 2022.

Rising global demand means food prices will become more volatile

In the short term, agricultural commodities prices will likely stay elevated. While prices have come off their peaks earlier this year amid the Russia-Ukraine war and logistic bottlenecks caused by COVID-19 since 2020, there has been an uptick in prices for wheat and corn (see chart 12). In recent months, rice prices have also been rising. Futures contracts suggest prices will stay elevated into next year. In addition, the increased likelihood of extreme weather in the next several months could further damage production and boost prices. Drought conditions across southern Africa, flooding in Australia and southeast Asia, and a third straight year of "La Niña" (which cools the surface of the central Pacific and can increase rainfall and flooding) add to concerns about recurring dry conditions in eastern East Africa, southern South America, Central and Southern Asia, and southern North America (GEOGLAM, 2022).

CDOTD: D.C. Iv

Chart 12

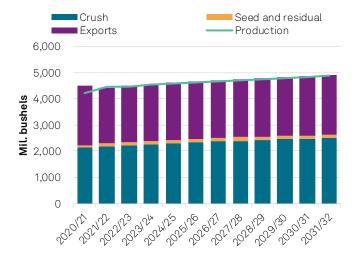


Source: S&P Global Market Intelligence, as of Oct.12, 2022. Unit for corn, soybean and wheat pricing is \$ per bushel, rice is \$ per hundredweight.

Growing global demand for food and industrial uses could worsen the effects of droughts on supplies and increase food costs. According to a systematic literature review, the total global food demand is expected to increase by 35%-56% from 2010-2050 across several socioeconomic scenarios (van Dijk et al., 2021). Growing per capita income is a key driver behind this, creating more demand for grains and oilseeds for livestock feed, as wealthier economies adopt higher protein-based diets. In addition to rising food demand, other industrial uses for agricultural commodities are also growing, particularly biofuels that rely on agricultural feedstocks like soybeans and other vegetable oils (see charts 13-14). On the supply side, the ability of productivity to keep pace with demand may prove difficult if droughts increase in frequency and severity. Droughts have caused many of the agricultural-commodity supply shocks of the past five years, including wheat in 2018, soybeans in 2021, and now corn and rice (see charts 15-16).

Chart 13

U.S. Soybean Production And Uses Projections

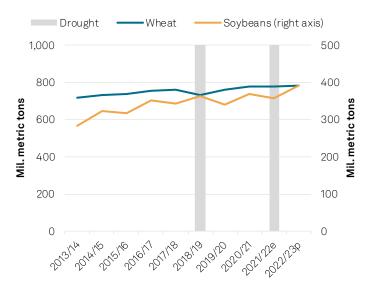


Source: USDA.

Chart 15

Previous Droughts Hit Wheat And Soybean Production

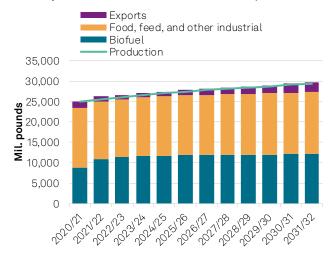
Global Production



 $\hbox{\it e--Estimate.} \ \hbox{\it p--Projection.} Source: USDA.$

Chart 14

U.S. Soybean Oil Production And Uses Projections

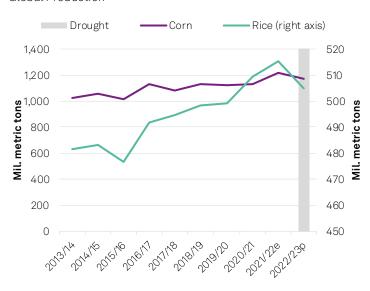


Source: USDA.

Chart 16

This Year's Droughts Pressure Corn And Rice

Global Production



 $e\text{--Estimate.}\ p\text{--Projection.}\ Source:\ USDA.$

Some Segments Benefit From Dislocation

Grain and oilseed traders continue to benefit from tight supplies

Global grain and oilseed originators and processors have performed very well in the past two years, despite drought conditions. Tight grain supplies, global trade disruptions amid the Russia-Ukraine war, changes in China's import patterns, and a strong dollar have created a ripe operating landscape for strong origination margins and trading profits. This has led to historically low leverage for borrowers in the sector. In the past three years, the global grain traders and processors we rate have grown EBITDA at an average compound annual rate of 24% and reduced their debt-to-EBITDA ratios by an average of 1.6x (see table 1).

Table 1

Grain Trading Companies Rated By S&P Global Ratings

Issuer	ICR	Outlook	Commodities traded/processed	Prior fiscal year end debt/EBITDA (x)	Most recent fiscal year end debt/EBITDA (x)
Archer Daniels Midland Co.	А	Stable	Barley, corn, oilseeds, peanuts, rice, wheat	2.0	1.3
Bunge Ltd.	BBB	Positive	Barley, corn, oilseeds, palm, wheat	2.3	1.2
Cargill Inc.	А	Stable	Barley, cattle, cocoa, corn, oilseeds, palm, poultry, sugar, wheat	0.6	0.5
Louis Dreyfus Co. BV	BBB	Stable	Barley, coffee, corn, cotton, oilseeds, sugar, wheat	2.9	1.8
Viterra Ltd.	BBB-	Stable	Barley, cotton, corn, oilseeds, rice, sugar, wheat	2.4	1.2

 $ICR - Issuer\ credit rating.\ EBITDA--Earnings\ before\ interest, taxes,\ depreciation,\ and\ amortization.\ Source:\ S\&P\ Global\ Ratings.$

Fertilizer producers in certain regions stand to benefit

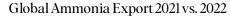
An extraordinary set of circumstances, partially related to Russia-Ukraine, is bolstering credit quality of many fertilizer producers and overshadowing the drought as a potential credit factor.

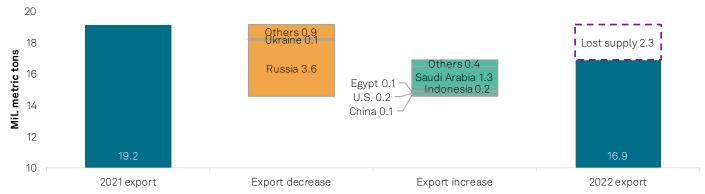
Not all droughts are identical in their effects on the fertilizer sector, but, typically, fertilizer demand declines briefly during a drought, only to pick up quickly (sometimes sharply) post-drought, as farmers try to improve yields and offset losses from drought-hit planting and harvest seasons.

However, the ongoing drought is happening against the backdrop of a sharp reduction in fertilizer supply, in general, which has pushed prices to record highs in many regions.

Fertilizers are generally in short supply across most parts of the world because of disruptions related to the war as the Russia-Ukraine-Belarus region produces a large amount of nitrogen-based and potash-based fertilizers. Reduced global supply is exacerbating more general supply chain and logistics problems that have affected global trade. High natural gas prices and energy uncertainty especially in Europe have hampered nitrogen fertilizer production, which is likely to continue at least in the near term. All of this has pushed fertilizer prices to record highs, which in turn has contributed to an extraordinary spike in earnings at many producers. Chart 17 below illustrates the large impact that the absence of Russia-Ukraine supply has had on global trade for ammonia, the key intermediate for nitrogen fertilizers. Global trade is forecast to drop to 16.9 million tons in 2022 from 19.2 million tons in 2021, mainly on account of the war.

Chart 17





Source: Ammonia Outlook, August 2022, S&P Global Commodity Insights.

We don't anticipate the drought by itself will have any meaningful impact on the global fertilizer sector under these circumstances. We anticipate that the Russia-Ukraine war, and supply chain issues will be significantly more consequential in shaping credit quality. The fallout from the runup in fertilizer prices caused by this supply shortfall could also become an important credit factor. At least some farmers in regions such as Asia are finding fertilizer to be unaffordable and are cutting down on purchases, a factor that could compress demand in the short term. Still, this demand dip is very unlikely to offset the gains from constrained supply at fertilizer companies.

Our view for the next several years and even decades is that fertilizer demand, across all three major categories of fertilizer (nitrogen, phosphate, and potash) will grow steadily. A decline in arable land, growing global populations, and increasing urbanization across the world are key factors that contribute to a rising need to improve food production and farm yield. Droughts, weather-related events, and climate change in general remain risks to the sector.

Still, we believe the current runup in fertilizer prices is unsustainable in the long run and expect prices to fall from their highs. Since a key reason for the high prices is the war, it's hard to predict when prices will return to historically "normal", or midcycle, prices. Credit metrics at fertilizer producers are strong at the current ratings, but we built in an expectation for a decline from these highs based on our assumption that fertilizer prices will eventually retreat from these stratospheric levels. Still, the current strength in credit metrics speaks to the very favorable operating conditions in the industry (see table 2).

Table 2
Select Fertilizer Companies Rated By S&P Global Ratings

Issuer	ICR	Outlook	Fertilizer type	FFO/debt (%) (June 2022)	S&P expectation of FFO/debt at current ratings (%)
CF Industries Holdings Inc.	BBB	Stable	Nitrogen, hydrogen	508.2	45-60
Fertiglobe PLC	BBB-	Stable	Nitrogen	1700.6	30-45
LSB Industries Inc.	В	Stable	Nitrogen	39.4	Above 20
Mosaic Co. (The)	BBB	Stable	Potash, phosphate	117.9	30-45
Nutrien Ltd.	BBB	Positive	Nitrogen, potash, phosphate	108.0	70
OCI N.V.	BBB-	Stable	Nitrogen	300.8	30-45
Yara International ASA	BBB	Stable	Nitrogen, potash, phosphate	94.9	30-45

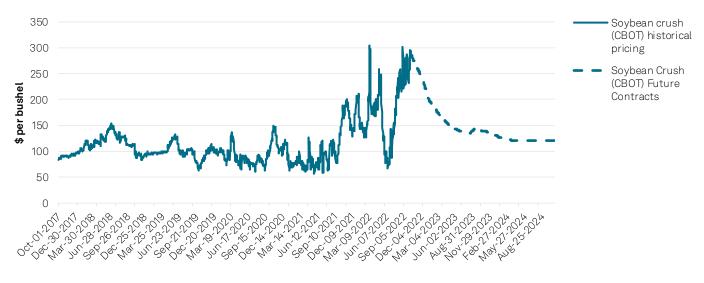
 ${\tt ICR--Issuer\ credit rating.\ FFO--Funds\ from\ operations.\ Source:\ S\&P\ Global\ Ratings.}$

Oilseed processors are still enjoying good "crush" margins

Several factors continue to benefit strong crush margins (the value of oil minus the cost of beans) for oilseed producers. The Russia-Ukraine war hurt sunflower oil availability, causing several food manufacturers, particularly in western Europe, to source other vegetable oil varieties as substitutes--thus creating a strong pricing environment. At the same time, global crush capacity remains constrained, and only now are companies starting to build more capacity (albeit primarily for biofuel production, not edible oils). Lastly, large U.S. crops and less export demand have kept U.S. soybeans relatively cheap to crush. After a sudden drop in soybean crush margins at the onset of the war, crush margins for the rest of this crop-year remain at all-time highs (see chart 18). Although global crush margins are expected to normalize next year given a smaller U.S. soybean crop in the aftermath of the droughts, crush contracts for next year's crush season continue to trade well above historical levels of \$100/bushel on expectations of a much better South American soybean harvest following last year's drought-reduced output.

Chart 18

Soybean Crush Pricing



Source: S&P Market Intelligence, and as of Oct. 12, 2022.

Downside Risks Are Heating Up

Regulatory restrictions on agricultural feedstocks are mounting as certain governments choose food over fuel to ease inflation

Following record-high prices for sugar and ethanol producers in Brazil, we saw prices moderating after the government's recent suspensions of gasoline taxes to help reduce the pain at the pump for consumers facing high inflation. This has lowered prices by 10%-15% and hurt ethanol margins in Brazil, where 75% ethanol-blended gasoline is a direct substitute for petroleum-based gasoline. Sugarcane margins at Brazilian mills look set to rebound from last year's drought that curbed the harvest by more than 15% in the center south region of the country (where more than 90% of production is located), pressuring cane cost and utilization rates. While Brazilian mills can and will shift their production mix to more sugar refining and increasing ethanol exports, doing so won't be as profitable in the next harvest, given the expectations for softer global sugar prices.

Governments in western Europe, too, are curbing a fledgling biofuel industry to ease inflationary pressures on consumers where edible oils, in particular, have become expensive.

Droughts across much of western Europe decimated oilseed stocks already in tight supply. According to S&P Global Commodity Insights, governments across Europe have modified biofuels mandates to address the high petrol prices and secure food supplies. Four of the 10 EU member states that have lowered mandates for either this year or next have targeted lowering crop-based biofuels use. Of the four, Germany's proposal to phase out crop-based biofuels by 2030 is particularly important as Germany is the biggest market for biofuels in Europe and the region's largest producer.

Feed inflation and drying U.S. cattle supplies could hit protein processors' margins

U.S. beef processors are finally seeing softer margins as cattle supplies steadily tighten following the drought this summer. With U.S. beef production projected by the USDA to fall 6% next year, high prices and lower availability will likely reverse consecutive years of record margins for beef processors. Feed-cost inflation and decreasing supplies following weak U.S. poultry-hatching cycles last year also could hurt poultry processors, which have been enjoying record margins as tight stocks enabled strong pricing to wholesalers and retailers. Still, the likely margin contraction for protein processors is unlikely to weigh on ratings as companies have built significant headroom in their leverage ratios to avoid material credit deterioration.

Additionally, higher beef production in Brazil (the world's largest exporter) should partially soften global beef inflation. This is because there is an increase in cattle availability in that region following herd rebuilding in the past three years. Current drought-free conditions also favor longer on-pasture feeding, which is increasing animal weights and mitigating some of the lower production levels we expect in the U.S. Local cattle prices are now softening and gradually improving beef processors' margins and volumes. This will help partially offset margin pressure for issuers that operate in both regions.

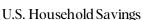
Growers operating in drought-hit regions face curbs on irrigation

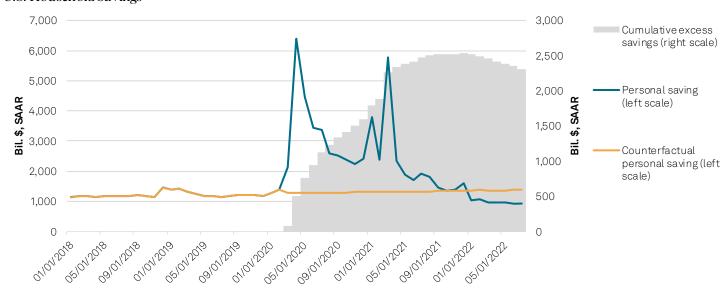
Commodities processors with regional concentration will likely bear the brunt of credit deterioration. California is a hard-hit growing region where water management is limiting farmer resources. Access to alternative water sources, such as well water, are key mitigants. Still, default risk is unsurprisingly highest for the limited number of companies we rate that are exposed to California farmland. Last year's drought in the northwestern U.S. also caused a potato shortage that has significantly hurt margins in that industry, including Lamb Weston Inc., which has suffered a nearly 500-basis-point margin compression in part because of limited potato availability—though effects on its credit quality have been mitigated by the company's modest leverage levels. Other commodities processors for dairy and bakery ingredients, hit hard by declining dairy production in western states and wheat shortage concerns at the start of the Russia-Ukraine war, have so far been successful in passing through pricing, thus limiting downside risks.

Consumer Products Sector Faces Higher Input Costs And Declining **Discretionary Income**

Packaged foods, household products, and personal care companies have deployed different strategies to pass through higher input costs. At each step in the agricultural commodities and food supply chain, companies attempt to protect their margins by passing along higher costs to customers. Packaged foods, household products, and personal care companies typically have relatively good pricing power because of the essential nature of their products. Food and most household products are necessities, and personal care products are typically relatively smallticket items that consumers use daily. Still, buyers will seek alternatives if price hikes give them sticker shock. Therefore, companies have developed multiple less-obvious techniques to pass costs to consumers. Depending on the category in which they participate and the strength of their brands, they may be able to simply raise prices to cover costs. More often they will use a combination of higher prices, smaller package sizes ("shrinkflation"), and ingredient substitution. In categories with high private-label penetration, it's more difficult to pass on costs because consumers will likely trade down if price gaps grow too wide.

However, making these changes takes time and some ratings will be under pressure. The lag between higher input costs and pricing actions pressures margins, at least temporarily. In periods of relatively low, predictable inflation, these lags can be easily absorbed. However, the severity of the recent inflation in commodity inputs, labor, freight, and other expenses has meaningfully pressured margins of many packaged foods and consumer products companies struggling to keep prices apace with costs. To date, consumers have been relatively financially healthy and have continued to spend at higher levels than pre-pandemic in most categories, even adjusted for inflation. However, with a recession looming in 2023, excess savings dwindling, and the jobs market beginning to turn, price sensitivity is likely to grow, making it more difficult to pass on costs (see chart 19). Given these challenges, our rating outlooks on these companies are negatively biased; we expect more downgrades than upgrades over the next one to two years. One potential tailwind in packaged foods is the likely shift to food-at-home consumption from food-away-from-home as consumers limit eating out to conserve cash.



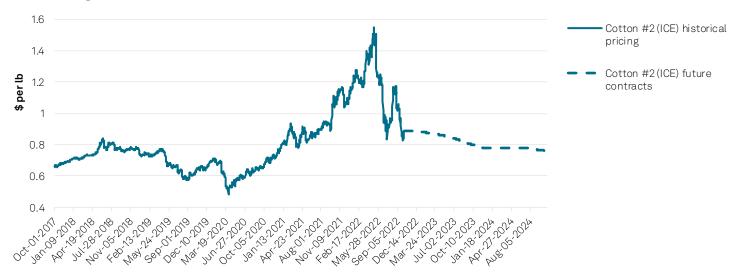


Sources: U.S. Bureau of Economic Analysis and S&P Global Ratings Economics

Commodity input shocks have also had an impact on the apparel subsector of consumer products; albeit confined to the U.S. Severe dry weather is affecting the U.S. cotton crop, leading to lower yields and higher prices. Cotton prices spiked to more than \$1.50 per pound earlier in the year (see chart 20). This is compared with the \$0.79 average in 2020-2021 and \$0.68 in 2019. Although global production has remained stable due to good crops expected out of Brazil, China, and India offsetting the U.S. shortfall, textile producers may face margin pressure from waning demand as economic growth slows.

Chart 20

Cotton Pricing



Source: S&P Market Intelligence, and as of Oct. 12, 2022.

Rated branded apparel companies could see gross margin contraction into 2023. Typically, our branded apparel issuers can offset higher cotton costs through prices increases because of their brand equity. However, the outlook for the rest of 2022 and 2023 has been unique because apparel issuers are also navigating a lower demand environment. Demand for apparel products is weakening as inflation of consumer staples like food and fuel has a negative impact on consumers' discretionary incomes. Additionally, apparel disproportionately benefited from the pandemic as consumers spent less on travel and services and more on products. These dynamics, combined with the changing length of the supply chain, have led to higher apparel inventory across the system, which companies will most likely sell at heavy discounts, limiting their ability to offset higher prices they are currently facing. Therefore, we are forecasting gross margin contraction from these dynamics for the remainder of 2022 and into 2023. Longer term, we expect apparel manufacturers to effectively manage cotton price volatility by passing costs to customers and by using substitutions in textile innovation.

Certainly, recent acute inflation has forced packaged foods and other consumer products companies to learn new ways to absorb and pass on costs. As drought or other shocks cause spikes in commodities costs in the future, companies will implement many of their recent learnings to pass costs forward and protect profitability.

Food Inflation Remains A Key Macro-Credit Concern

Against the backdrop of the Russia-Ukraine war and the droughts, food inflation remains high. Latest monthly data between May and August 2022 shows that 144 of 163 economies across income groups have seen food inflation levels above 5% year on year, and many are experiencing double-digit inflation (World Bank, 2022). S&P Global Ratings' analysis indicates that low- and low- to middle-income countries in Central Asia, the Middle East, Africa, and the Caucasus are being hit hardest by the first-round effects of the Russia-Ukraine war (see "The Global Food Shock Will Last Years, Not Months," published June 1).

Higher food and energy prices can weigh on consumer discretionary spending and confidence, hurting corporate profitability. Amid fears of a global recession, consumers could become more selective with discretionary spending as their purchasing power is further squeezed by higher food and energy prices. This in turn could make it more difficult for companies to pass through higher input costs, leading to profit erosion.

Sovereigns could face heightened pressures to deal with rising food and energy prices. Each government faces different challenges, but they overall have less fiscal room to address new challenges as the pandemic significantly eroded sovereigns' fiscal accounts. Energy and food inflation is pressuring governments to deliver support programs to contain the impact of rising prices. While the rationale for those types of support mechanism is clear, the additional fiscal burden as well as the rising financing cost will likely put negative pressures on most governments' balance sheets.

Food inflation will likely stay as extreme weather events become more frequent. This year has seen harsh droughts, severe floods (most recently in Pakistan), while the number and severity of fires around the world have reached historic highs. These extreme weather events can cause high human and material losses, as well as increase the likelihood of potential shortages in food supplies and cause supply-chain disruptions (see "Global Credit Conditions Q42022: Darkening Horizons," published Sept. 29).

Related Research

S&P Global Ratings Research

- Global Credit Conditions Q4 2022: Darkening Horizons, Sept. 29, 2022
- China's Summer Struggle: Drought, Food Inflation, And Shortages, Aug. 30, 2022
- Western U.S. Drought: Declining Supply, Rising Challenges, Aug. 16, 2022
- The Global Food Shock Will Last Years, Not Months, June 1, 2022
- ESG Research: Weather Warning: Assessing Countries' Vulnerability To Economic Losses
 From Physical Climate Risks, April 27, 2022
- Russia-Ukraine Conflict Will Test Agribusiness Supply Chain Efficiencies And Consumers'
 Appetite For More Food Inflation, March 18, 2022
- Russia-Ukraine Conflict: Implications For European Corporate And Infrastructure Sectors,
 March 16, 2022

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