Commodity Markets

A price reversal for agricultural commodities?

November 2021

What is happening

A rundown

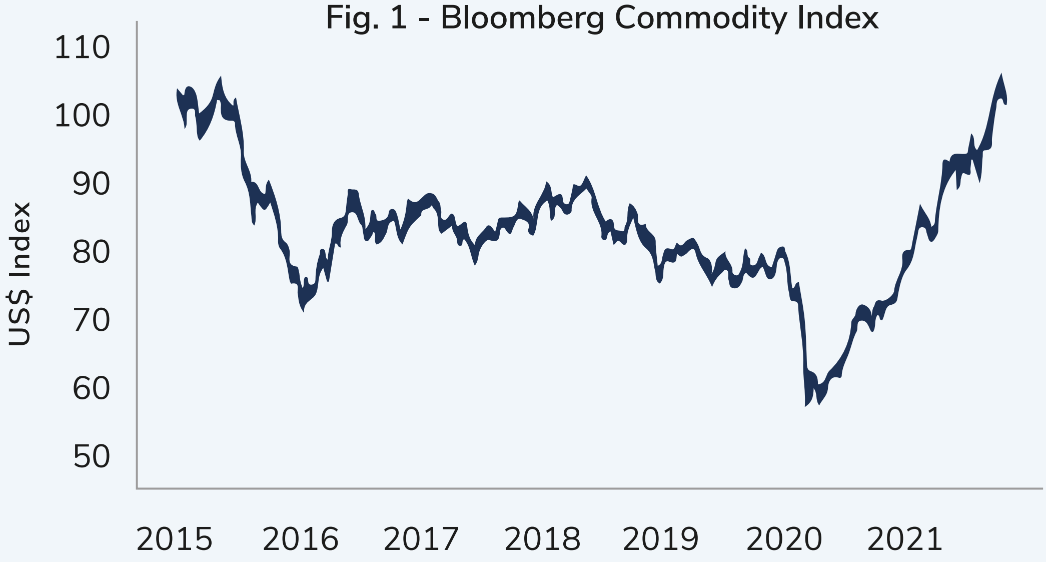
The world is in an era of uncertainties and unevenness. Just when there is hope for more consistency on the path of economic recovery, problems well known by now keep emerging in unique ways: new covid epicenters, supply chain disruptions, political instabilities, natural calamities, energy crisis, etc. This unpredictability, along with constantly rising demand and speculations around the supply of primary goods is the triad responsible for the spikes seen across various commodity markets.

On October 25, 2021, the BCOM peaked at US$ 105.8, a six-year high.

Globally, physical commodities traded in commodity markets are the foundation for economic activities. These commodities range from energy to metals to agricultural produce within the primary sectors. Their production, prices, international demand, and supply are significant determinants to evaluate the global economy's health and forecast future market trends.

On October 25, 2021, the Bloomberg Commodity Index (BCOM)[1], a financial benchmark designed to provide diversified exposure to physical commodities via futures contracts, peaked at US$ 105.8, a six-year high. To put this into perspective, after the commodities supercycle of the 2000s (2000-2015), the BCOM index hovered around US$ 75 to US$ 90. In fact, throughout 2019, before the coronavirus shook the world, the index averaged just close to US$ 80 (Fig.1). If we look at the Bloomberg Spot Index (BCOMSP) now, it is at an all-time high.

Fig. 1 - Bloomberg Commodity Index



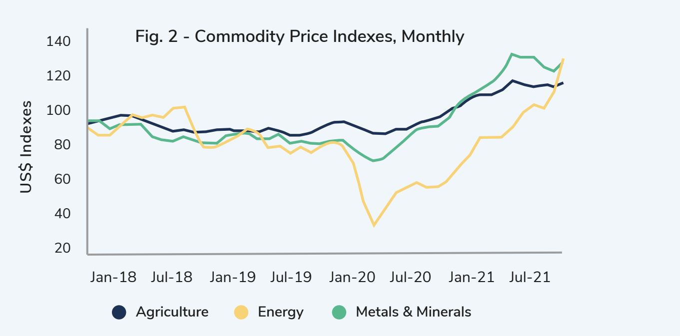
Source: Bloomberg | Last observation is November 12, 2021

1. We assume the BCOM index to be a good proxy to understand what has been happening in commodity markets. This is because no single commodity dominates the index and it has exposure to all major commodities.
https://www.bloomberg.com/quote/BCOM:IND

Price Spikes

How it started

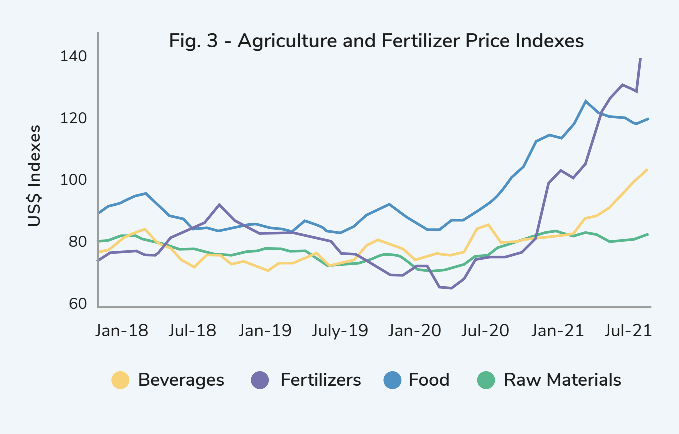
So, what is expected to happen to commodity prices for the rest of the year and heading into 2022? Is the rally over? If yes, would prices return to their usual pre-pandemic means? According to the World Bank Commodity Price Data (The Pink Sheet), the energy index has risen over its pre-pandemic levels only this year while the metals and agriculture indices have persistently been much above their usual values over the past six years (Fig.2). Precisely, the metals index has increased by over 50% in October 2021 compared to the average levels during the 24-month period from January 2018 to December 2019. And the agriculture index has shot up by almost 30% for the same period.



Source: World Bank | Last observation in October, 2021

According to the US Bureau of Labor Statistics (BLS), the consumer price inflation rate surged to 6.2% in October 2021, the largest 12-month increase since the period ending November 1990. While energy costs recorded the biggest gain (30% vs. 24.8% in September), part of this upward pressure came from food (5.3% vs. 4.6%, the highest since January 2009), namely food at home (5.4% vs. 4.5%).

This becomes evident when we look at the subindices under the agriculture index (Fig.3). While the raw materials and beverages index has not increased significantly, the food index has risen by almost 35% since December 2019. Astoundingly, the fertilizer index is up a staggering 113% for the same period. Urea, a commonly used inorganic fertilizer, costs almost US$ 613 per metric tonne, up from the usual US$ 200-300 range seen in the last eight years.



Source: World Bank | Last observation in October, 2021

Overall, this is going to increase the input cost for all crops significantly as farmers commence the new sowing season. This could mean that while basic food products are already more expensive, they might continue to be so in the following year. And, if farmers take the risk of holding out before buying for the next growing season in hopes that costs come down, they could end up purchasing at even higher prices. Also, in order to reduce costs, they could either cut application rates or eliminate fertilizers entirely, hoping for lower future pricing or reduce other farm products to account for the bigger expected spend. These risks could further lead to a deteriorated quantity and quality of crop yield and continued shortages.

If rising prices are not just transitory temporary shocks or uncorrelated across commodities, over time, they start passing onto other related goods and services and have implications on the macroeconomic drivers. Currently, with both rising inflation expectations and demand perceptions, this all the more seems to be the case. At present, supply lines are in a situation where one effect on the market for product 'X' is feeding into another impact on the market for product 'Y' and so on. Beyond high demand, rising costs of common expenses like sea freight and energy, labor and raw material shortages, etc., are responsible for the price rallies seen in staple agricultural commodities like soybean, corn, cotton, sugar, coffee, wheat, and palm oil.

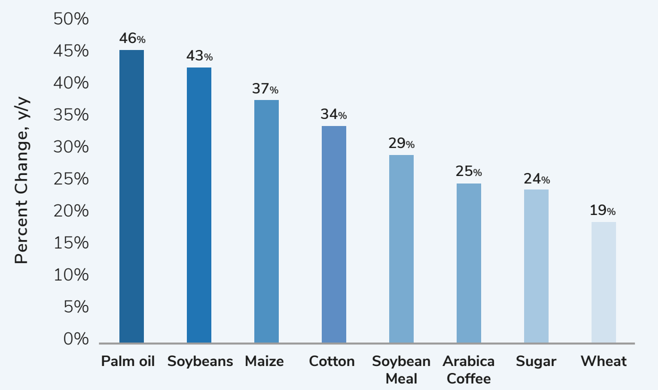
Volatile Prices

Revised expectations

Constantly rising demand not being met by equivalent supplies is one of the primary reasons for prices spiraling upwards. While there might be other factors at play like hoarding, artificial shortages, etc., it is interesting to analyze the data released by the World Bank. Almost all the price forecasts for the coming years for agricultural commodities have significantly increased in the October 2021 release compared to the October 2020 release[2].

Market sentiments, during the depths of the pandemic, were starkly different from what they are in 2021.

Fig. 4 - Change in price forecasts for 2022



Source: World Bank Data

One of the main reasons for prices shooting above the pre-pandemic levels stems from what occurred at the start of 2020. As consumers reduced their purchases, retailers canceled their orders. And this translated into factories producing at low capacities and some even shutting down operations entirely due to their inability to cover the overheads. Similarly, for core agricultural commodities, many farmers abandoned their lands because it was becoming unaffordable to produce. Simultaneously, this meant containers were piling up and not being shipped, ships did not set sail, and orders for new vessels and containers were getting canceled. Overall, businesses wanted to safeguard themselves and started exercising much more caution to limit the potential losses they would incur during uncertain times.

But once China resumed its activities at an unexpected rate, other countries followed suit. And as the US and the EU countries announced their fiscal stimulus packages, demand overshot supply at every stage of the supply chain. For example, when China fired up its steel plants, they were soon out of iron ore, and it takes much longer to produce iron ore. They also needed more coal to keep factories running, and extracting this energy resource takes time too. As a result, there was unevenness at every point, causing bottlenecks and constraints.

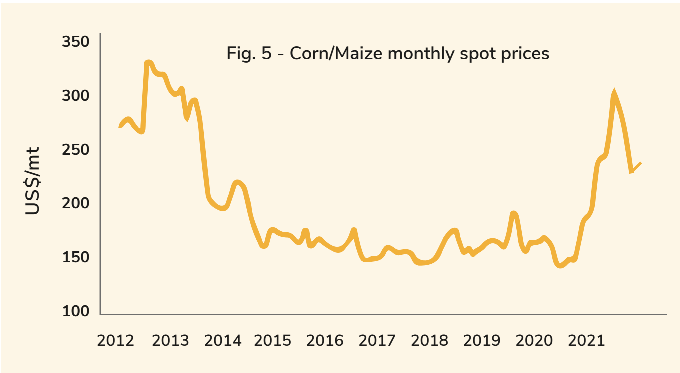
2. We compare price forecasts for the year 2022 when the data was released in October 2020 to price forecasts for year 2022 when the data was released in October 2021.

Essential Agro Commodities

Supply-demand mismatch

While there are multiple global drivers for commodity prices, and these are wide-ranging, some essential underlying factors have affected the markets in recent times. And, understanding them could help determine whether agro commodity markets are witnessing a bullish backwardation[3] structure or if the new prices will remain sustainable in the coming year. In this section we deep dive into four commodities that have exhibited significant volatility over the last two years.

Corn

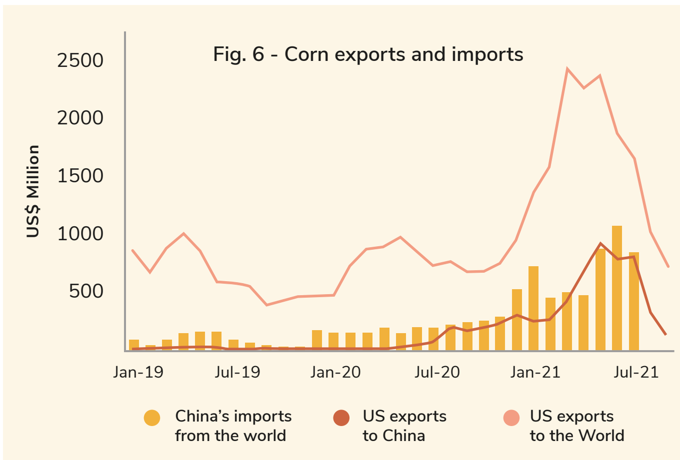


Source: World Bank | Last observation in October, 2021

Corn futures traded on the Chicago Board of Trade (CBOT) are up by over 50% --US$ 5.7 per bushel since December 2019.

High demand for ethanol in the US as more trucks were back on the road and China's move to ensure more food security in its country are partly the causes for these price rises. Simultaneously, China required and still needs to fatten its hogs to replace those killed to fend off the African swine fever outbreak. In 2020, China doubled its corn imports in a year to almost US$ 2.5 billion. In May 2021, the monthly exports from the US to China went from a few million dollars a year ago to over US$ 900 million. The US has exported over US$ 15.2 billion worth of corn in just nine months until September 2021, the highest ever.

But, even after accounting for seasonality, US corn exports are witnessing a downward trend, and volumes have reduced significantly. Buyers are waiting for prices to cool down before placing new orders for the coming season. Traders are keeping a close eye on ending stocks, output speculations, and market perceptions. According to the Bloomberg Commodities Outlook released on November 1, 2021, corn may have passed the supply-elasticity test, and shortages should soon disappear. Corn is one of the most significant commodities used for human consumption, animal feed, and as a biofuel. Moreover, an earlier outlook predicts that corn may face storage-facility constraints at the year-end due to a bumper crop. The weather seems favorable overall for the US and China crops despite the drought and the frost that impacted Brazil.



Source: UN, International Trade Centre | Last observation for US data is September, 2021
Last observation for China data is July, 2021

3. Backwardation is when the current price of an underlying asset is higher than prices trading in the futures market. Backwardation can occur as a result of a higher demand for an asset currently than the contracts maturing in the coming months through the futures market.

As per the recent report released by the United States Department of Agriculture (USDA) World Agricultural Supply and Demand Estimates (WASDE), corn use is rising slightly more than supply in the US, lowering corn ending stocks by seven million bushels. This is only a marginal drop because global corn ending stocks are at 304.4 million tons, up by 2.7 million. With the greatest price-production incentive in about a decade, many farmers and processors have rushed into this market to enjoy its benefits. This being the case, demand, supply, and competition dynamics from classic economics theory dictate that in the long run, the industry should return to making normal profits.

Going forward, one determinant that could reverse the downward pressure on corn prices towards the US$ 4/bushel average would be the crude oil prices. Historically, whenever crude prices have breached the US$ 80 mark, ethanol has become an attractive substitute. With the ongoing tensions around the energy crisis and prices for everything from natural gas to coal at an all-time high, for the last quarter of 2021, corn prices could continue being above US$ 5.

Cotton

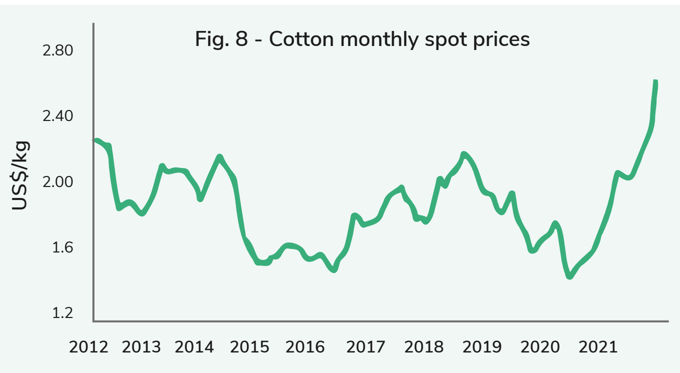


Fig. 8 - Cotton monthly spot prices

Source: World Bank | Last observation in October, 2021

Cotton futures on the Intercontinental Exchange (ICE) have been up almost 80% since December 2019.

Cotton futures are trading around the $1.2 a pound handle after 10 years, primarily due to tight supplies. Cotton is the world's most widely-used natural fiber for clothing. China, the US, and India are the top producers and exporters of this commodity.

Demand for cotton is high from China because it needs to make goods to ship back to the US in time for the holiday season and partly due to the Trump administration's ruling[4]. But on the supply end, poor weather conditions in the US are delaying harvest, leading to falling stockpiles. In India, the attack of pink bollworm pests has raised concerns over reduced supplies. The Cotton Association of India (CAI) has predicted a 38% drop in exports in the 2021-2022 season. And, Cotlook a leading researcher that provides information analysis and other resources for the world's cotton industries, has revised its global cotton deficit expectations upwards by 70% to 207,000 tons since the numbers projected in September 2021.

While cotton prices in 2022 will mainly be determined by its supplies, the changing trends in the apparel demand from Europe will also be an important factor. Europe has been importing a considerable share of its textile and clothing products from West African manufacturing plants post its Economic Partnership Agreement in 2014. Since demand in the Eurozone is currently muted, demand for cotton in Africa is low as well. If European markets pick up, cotton prices will be tugged on much more and for longer. At present, beyond China, the demand for cotton from production centers in Latin America and Bangladesh has been keeping the prices up.

4. CNBC: Last December, the Trump administration blocked companies in the United States from importing cotton and other cotton products that originated in China's Western Xinjiang region over concerns it was being produced using forced labor by the Uyghur ethnic group. The ruling, which has remained in place during the Biden administration, has now forced Chinese companies to buy cotton from the U.S., manufacture goods with that cotton in China, and then sell it back to the U.S.

Soybean

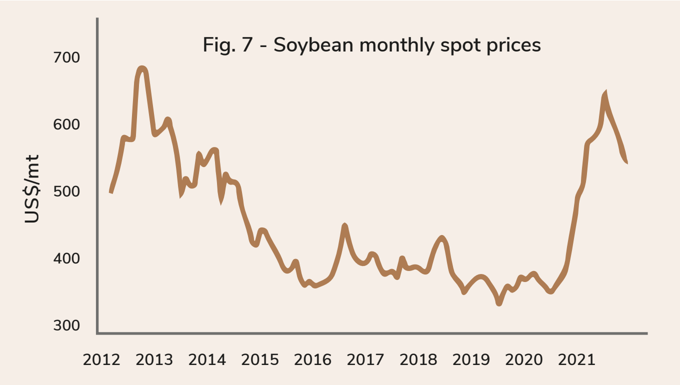


Fig. 7 - Soybean monthly spot prices

Source: World Bank | Last observation in October, 2021

Soybean futures traded on CBOT are up almost 40% compared to the US$ 9/bushel average before the second half of 2020.

The US and Brazil own more than 80% of the global soybean export market and in 2020, China's share of overall world imports was more than 60%. Soybean is an annual crop and usually, its price in the market is determined by two factors- production and logistics cost. But, with retailers wanting to stock up on inventories, demand-side drivers too became important determinants for this market.

Globally, usually, prices of soybean decrease in October to December quarter, the harvest season for the crop. The product reaches local markets (for example, '*mandis*' in India) for buyers to procure. This process continues for the January to March quarter as well, and prices are similar to that in the previous quarter. In the last two quarters, i.e April to June and July to September, the prices of the crop peak as this is the main consumption period. For the 2020-2021 crop year, the market was higher than usual at every juncture. In May 2021, soybean prices went up to US$ 16.2/bushel, a figure seen after eight years.

As supplies are outgrowing demand, and stocks are much above the market expectations, traders are monitoring US exports and the upcoming harvesting season. The current market sentiment seems to be that prices will revert to the average of US$ 10/bushel usually seen by the end of the year. The only potential factor now that could drive up this market is a jump in Chinese demand should the country decide to hold up to the promises they had made in the trade deal with the former US government.

Sugar

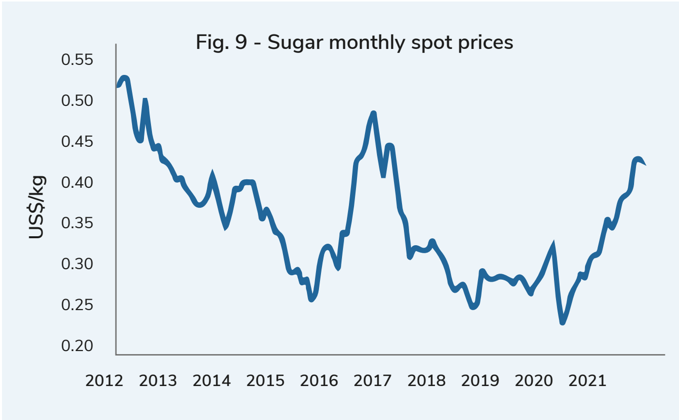


Fig. 9 - Sugar monthly spot prices

Source: World Bank | Last observation in October, 2021

Sugar futures on the ICE have risen more than 50% since December 2019.

Sugar futures are trading around 20 cents per lb, close to levels not seen since early 2017. Brazil, India, and Thailand are the largest producers of cane sugar, while the EU, Russia, and the US produce beet sugar. Globally, stakeholders in this industry are expecting lower supplies owing to poor weather conditions. Secondly, the surge in energy prices from crude oil to coal and natural gas has further prompted the use of sugarcane in producing more ethanol - a substitution effect at the expense of sugar output.

Compounded Effect

Pandemic magnifies distress

The covid-19 pandemic continues to impact people's lives and the global economy. Supply chain operators across the world continue to deal with uncertainties predominantly caused by localized lockdowns, labor shortages, port jams, among other things.

Changing buying behavior

There has been a major structural change in terms of buying patterns during the pandemic year. No buyer booked stocks the way they did until 2019. For example, soybean stocks arrive in the market by October, and up till 2017/2018, contracts were drawn for the entire year. But in the last year and a half, no one has been willing to enter into long-term contracts. Traders are much more comfortable buying at the rates offered in the spot market- a reason why the market is in backwardation. However, this year, the buying patterns are gradually normalizing, and bookings are taking place for future months, though not at a significant pace. Due to the uncertainty and unevenness covid-19 brought forth, traders have understood that booking long-term contracts can even be disadvantageous. For instance, suppliers sometimes backed out of their contracts because there was a lack of parity in spot and contract prices. The differences between the two prices were huge.

Survival of the fittest

It had been a challenge for every small and medium-sized business to stay afloat and continue business as usual in the past year. Many suppliers ended up dropping out of the global supply chains, and some even filed for bankruptcy. In the agro commodities market, suppliers who handled a small part of the entire supply network found it challenging to sustain the pandemic adversities. For example, processors who were buying the commodity, processing it, and then selling it struggled because they were impacted by prices in all markets- the buying and selling side. But, companies that possessed their own infrastructure, from plantations, processing plants to warehouses, etc., could procure for the entire year and store the crops easily during the downtime and utilize the stocks when demand went up. Essentially, the larger hold a business had on the entire supply chain, the easier it was to survive covid-19.

Shipping Crisis

The supply chain disruptions only seem to be getting worse by the day. Rising freight costs and congestions at transshipment ports have strained everyone. To maneuver the issues, traders have been trying out different solutions. Some even loaded their shipments on dry bulk vessels instead of using containers to tackle the shortages and diffuse the container costs. Uncertainty has damaged the previously strong structure. When prices are high, negotiating deals and entering contracts takes much longer, causing longer lead times for the supply chain and further delays.

Conclusion

Agriculture commodity prices across many markets had rallied in the first half of 2021 and some are still rising. But, as supply catches up, stocks are replenished and more on-ground information gets revealed, speculative behavior will start normalizing. While this will lead to a market correction towards the usual price averages in due time, for the better part of 2022, prices will stay up owing to uncertainty and unevenness across regions worldwide. Beyond climate conditions, the implementation of the Federal Reserve's tapering program and its impact on consumer prices along with prices in the energy, and fertilizer markets will determine the size and direction of price changes in 2022.

About Drip Capital

Drip Capital is a digital trade finance company based in Palo Alto, California. The company offers working capital solutions to small and medium-sized companies engaged in cross-border trade in India, Mexico, and the United States using technology and data analytics.
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