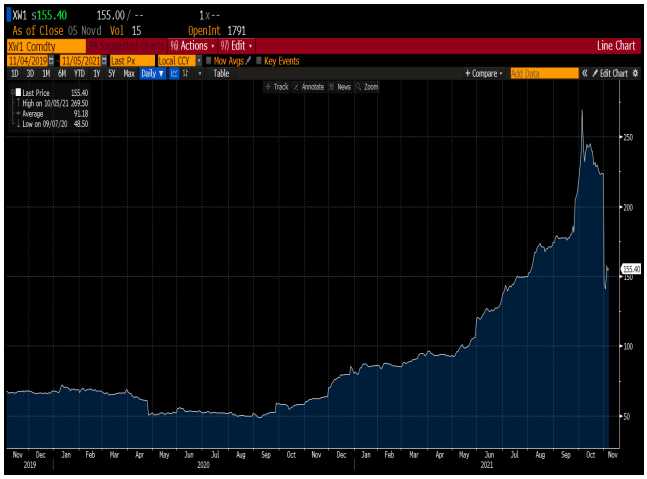
Long Corn Futures

Thesis: Nitrogen fertilisers are used to provide important nutrients for crops and increase agricultural yield. The production of these fertilizers occurs through a process heavily dependent on natural gas and coal. Recent shortages in these commodities are having a spill-over effect on the availability and cost of nitrogen-based fertilisers. Corn requires the most nitrogen fertiliser per acre and the transmission of these costs will exert upward pressure on corn prices.

Persisting energy shortages

As world demand for energy recovered with economic re-openings and the widespread easing of lockdown restrictions, energy producers failed to increase supply on par with the spike in demand due to concerns over the consistency of demand's recovery and worries over a repeat of the massive losses producers experienced at the start of the pandemic. OPEC+ has rejected Biden's call for increased production and major energy companies like Chevron, Exxon, Shell have also been wary of increasing investment and capex in conventional fossil fuel projects to pre-pandemic levels, instead opting to reduce accumulated debt and increase dividends for shareholders. Recently, this has led to spiking prices and global shortages of energy commodities.

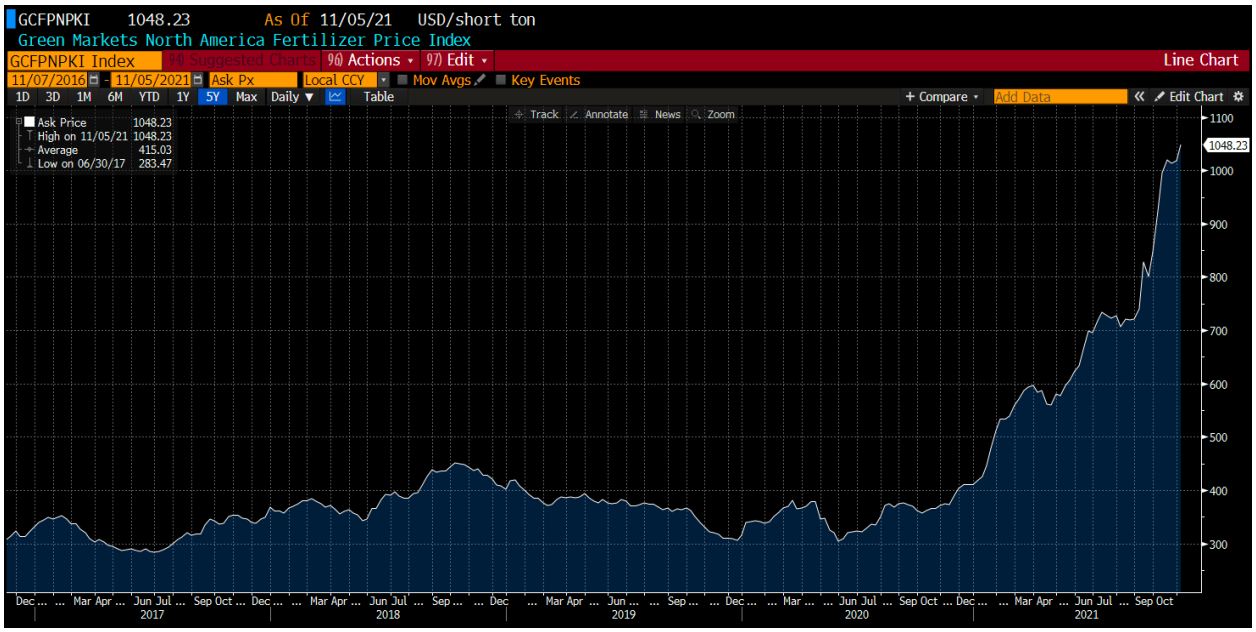
Generic 1st Natural Gas Future



Generic 1st Coal Future

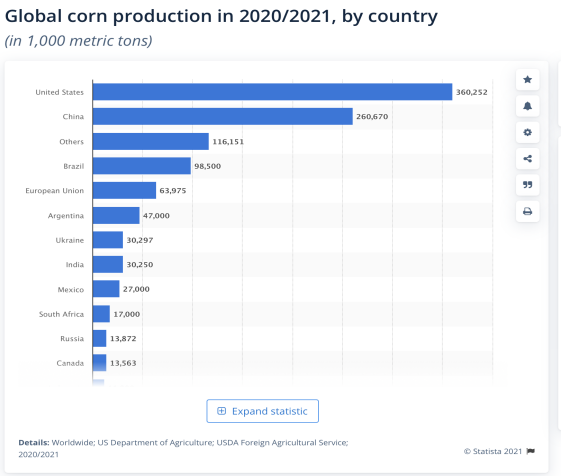
Spillover into fertiliser

The largest producers of nitrogen fertiliser are China and India, though due to high domestic consumption of these fertilisers, the top exporters by dollar-value are Russia, China, Canada, and the US. On a global level, increased costs of energy commodities, specifically natural gas and coal, have resulted in lower output of nitrogen-based fertiliser at higher cost.



Price pressures on corn commodities

The leading producer of corn is the US, followed by China and Brazil. The US is also the largest exporter of corn. Global corn prices largely depend on the price dynamics of corn in these key markets. Prices will be lifted by increasing input costs, such as the spiking price of fertiliser. Other price pressures include growing wages in the US market and higher costs for international shipping. The combination of these factors will contribute to pushing corn prices higher in the future.



Risks

Due to measures by the Chinese and Indian governments, the spiking costs of coal, which is a key input in the production of nitrogen-based fertiliser, have shown reversal after peak shortages in October. This could result in a more moderated increase in fertiliser prices and exert downward pressure on corn prices. However, costs still remain significantly above levels seen prior to the pandemic and even in the first half of this year. Paired with shipping costs, even a persistence at this level will likely contribute to accelerating inflation in corn commodity prices.

Conclusion: The spillover of increasing prices of energy commodities into input costs for corn, specifically fertiliser and shipping, will translate into higher corn commodity prices until these energy prices normalise.