Santander

Brazil Macro | July 2022

Commodities

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SUMMARY

Low inventories for most raw materials, coupled with idiosyncratic factors (e.g., adverse weather, past underinvestment, high cost of production) have contributed for the booming prices of late. The ongoing geopolitical shock from the war in Eastern Europe adds to these global supply disruptions, and the economic sanctions imposed against Russia further aggravate the supply issues for key commodities (e.g., grains, fuel, fertilizers).

Yet global macro headwinds (higher interest rates, slowing economic activity) could hinder demand for raw materials. We estimate these two opposite forces on supply and demand might offset each other for some time, so that we have not made material changes to our forecasts and continue to look for a gradual softening in international material costs for the coming years.

For oil, we keep our forecast at USD115/bbl for YE2022 and USD95/bbl for YE2023. For agriculture and metal commodities, however, we made a slight downward adjustment to our expected path. All in all, we keep our expectation for a downward path for the headline CRB Index and still forecast a slow “normalization” in commodity prices, meaning an extension of the cycle started in 2020.

OVERVIEW

01

Macro Headwinds Amid Still Tight Supply-Demand Balances

- The ongoing geopolitical shock coming from Eastern Europe adds to the global supply disruptions and the economic sanctions imposed against Russia further aggravates the supply-demand imbalances for key commodities (e.g., grains, fuels, fertilizers).
- Since our last revision, we downgraded our forecast based on the demand elements, but we still envision a slow “normalization” in commodity prices, meaning an extended cycle.

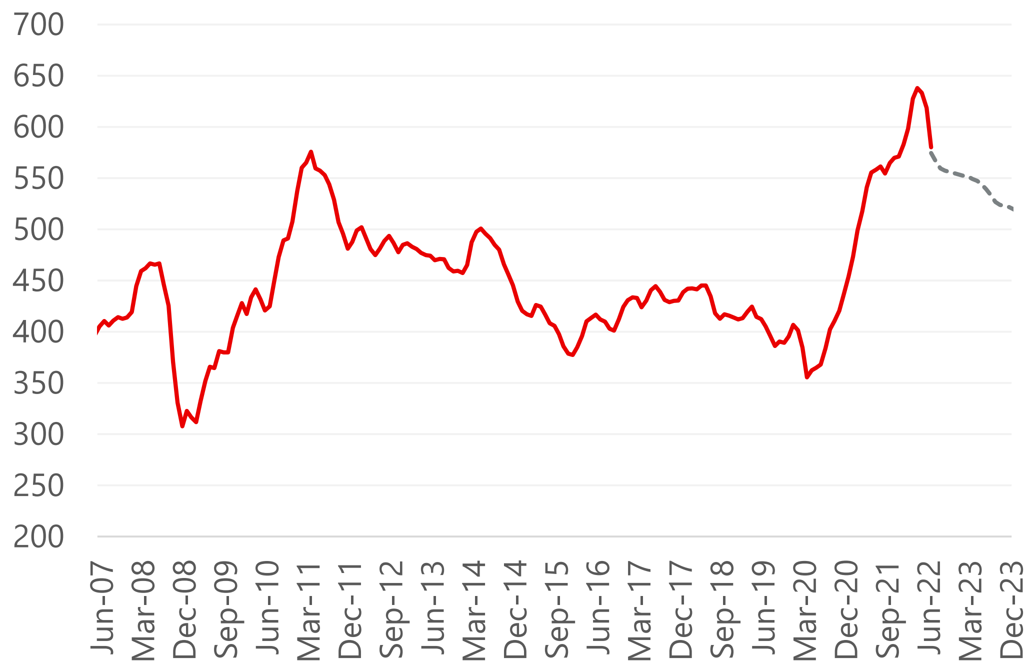
Our Forecasts for CRB Index – End of Period

YE	2019	2020	2021	2022e	2023e
CRB Food	331	355	483	515	464
CRB Energy	1647	1161	1521	1850	1809
CRB Metal	749	887	1259	1229	1107
CRB	401	444	571	555	521

YE YoY	2019	2020	2021	2022e	2023e
CRB Food	1%	7%	36%	7%	-10%
CRB Energy	2%	-30%	31%	22%	-2%
CRB Metal	-11%	18%	42%	-2%	-10%
CRB	-3%	11%	29%	-3%	-6%

Sources: Bloomberg, Santander.

Our Forecasts for CRB Index – Monthly Averages



Sources: Bloomberg, Santander.

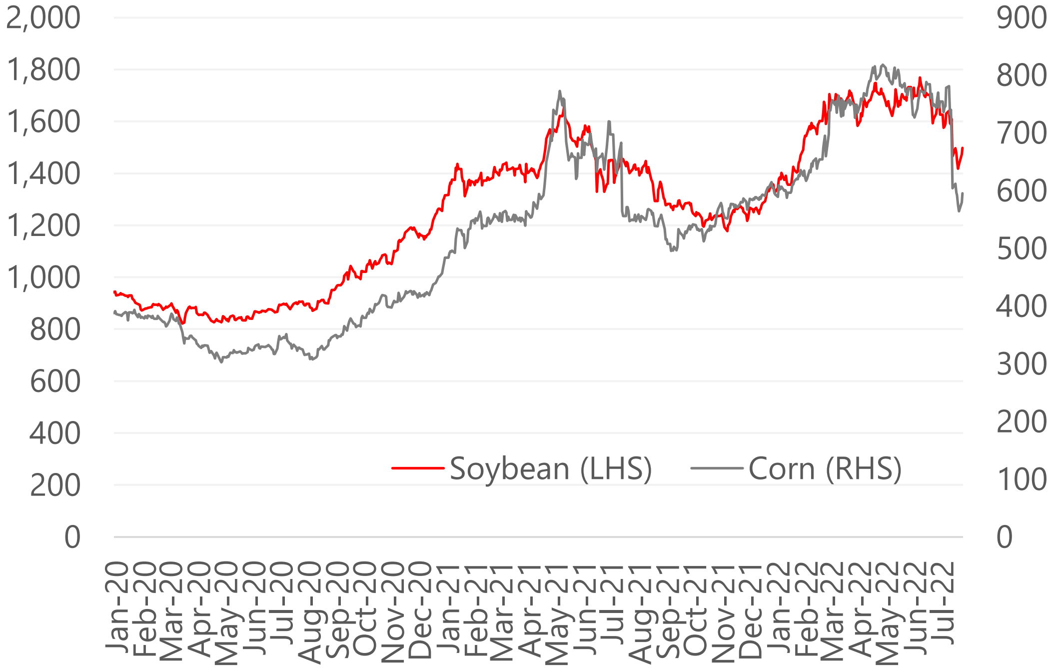
AGRICULTURE

02

Low Stocks Fueled By Weather And Geopolitical Shock

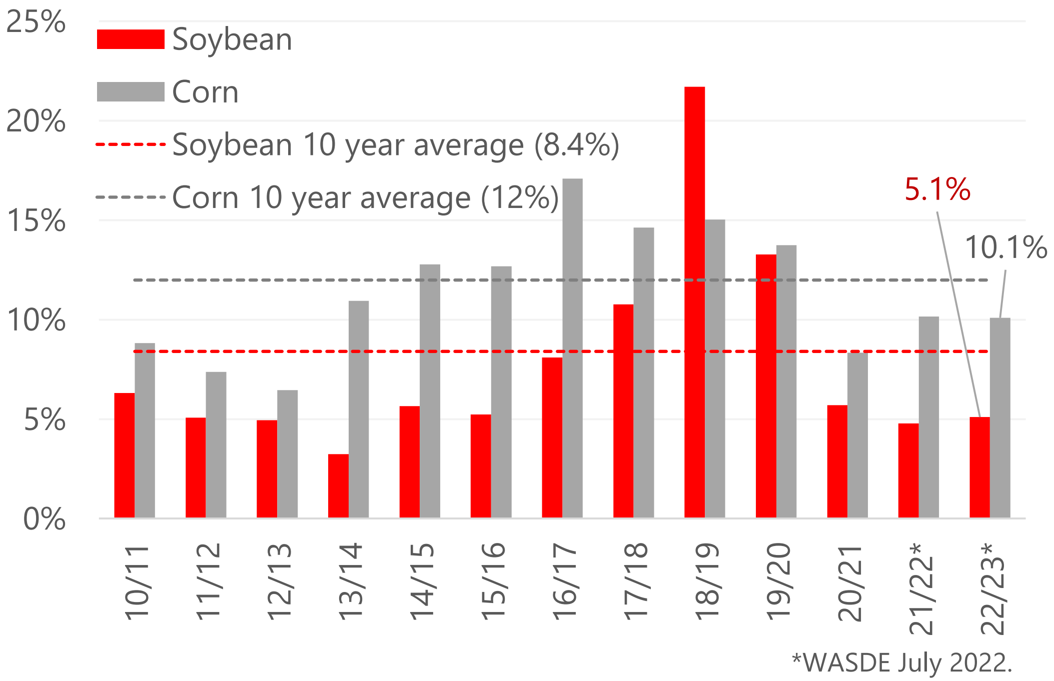
- Low stock-to-use ratio of grains in the US point to a tight market. Adverse weather (heatwave in US and in Europe) is a risk for crop yields in the north hemisphere.
- However, the global macro backdrop has been prevailing, with fears of a recession triggering a sell-off in most commodities.

Chicago Board of Trade - Grains (USD cents)



Sources: Bloomberg, Santander.

US: Stock-to-Use Ratio in Grains (%)

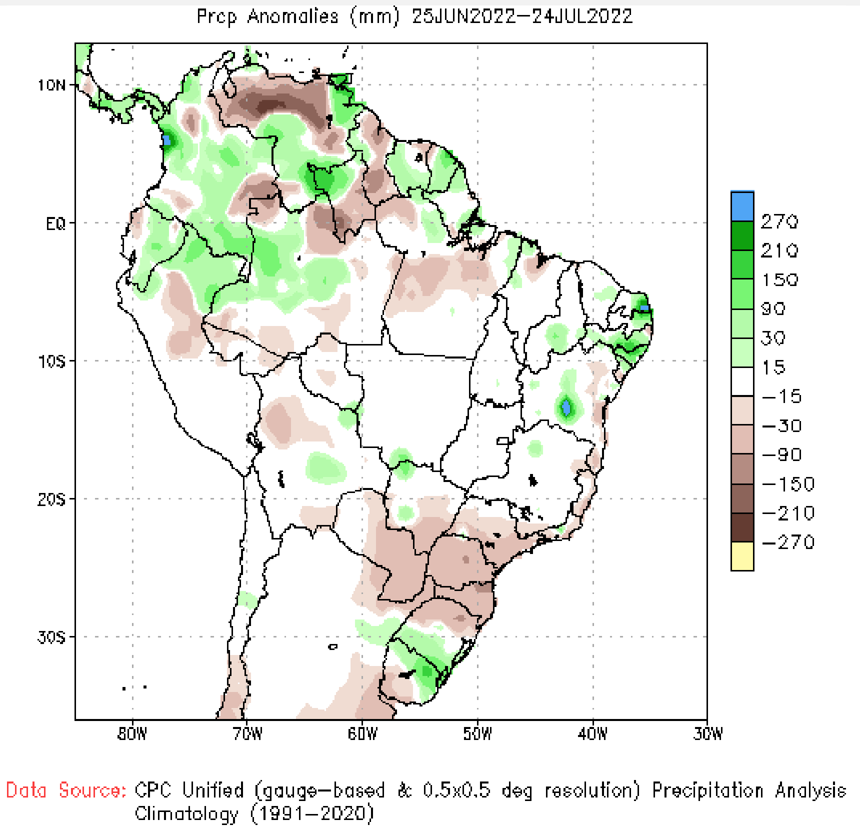


Sources: USDA, Santander.

Low Stocks Fueled By Weather And Geopolitical Shock

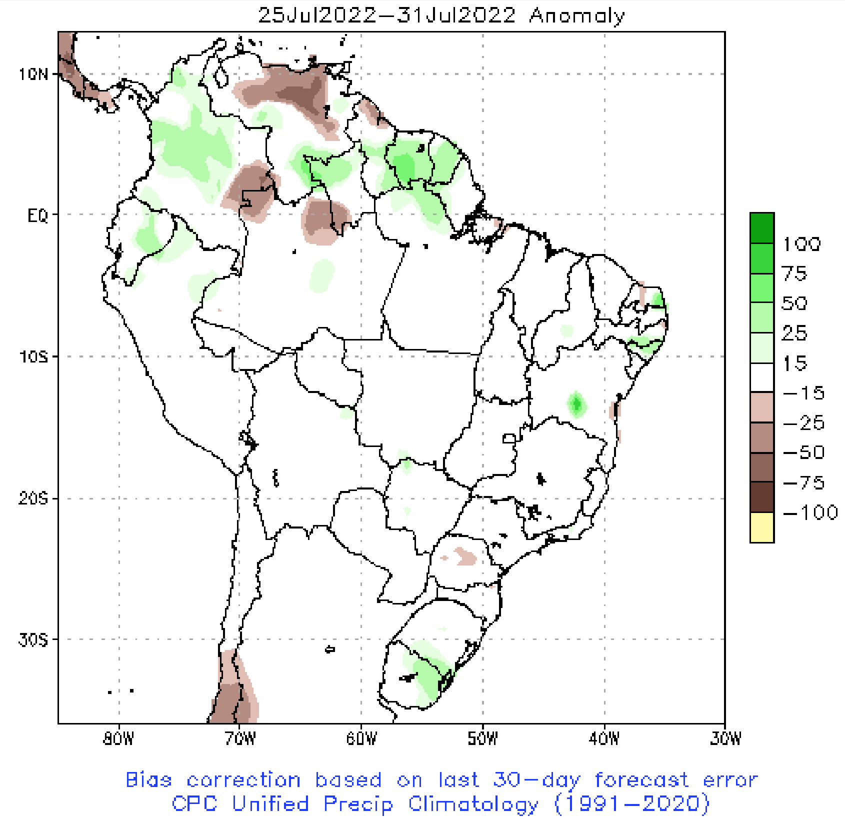
- Harvest of “safrinha” corn continues to advance, with estimates hovering around 90 mmt (+43% last years output), as weather has been significantly more favorable than the previous marketing year.
- Soybean planted area is likely to increase for 2022/23, as the fertilizer shortage risk reduced at the margin.

Precipitation (30-day anomaly)



Sources: NOAA, Santander.

GFS Precipitation Forecasts (7-day anomaly)

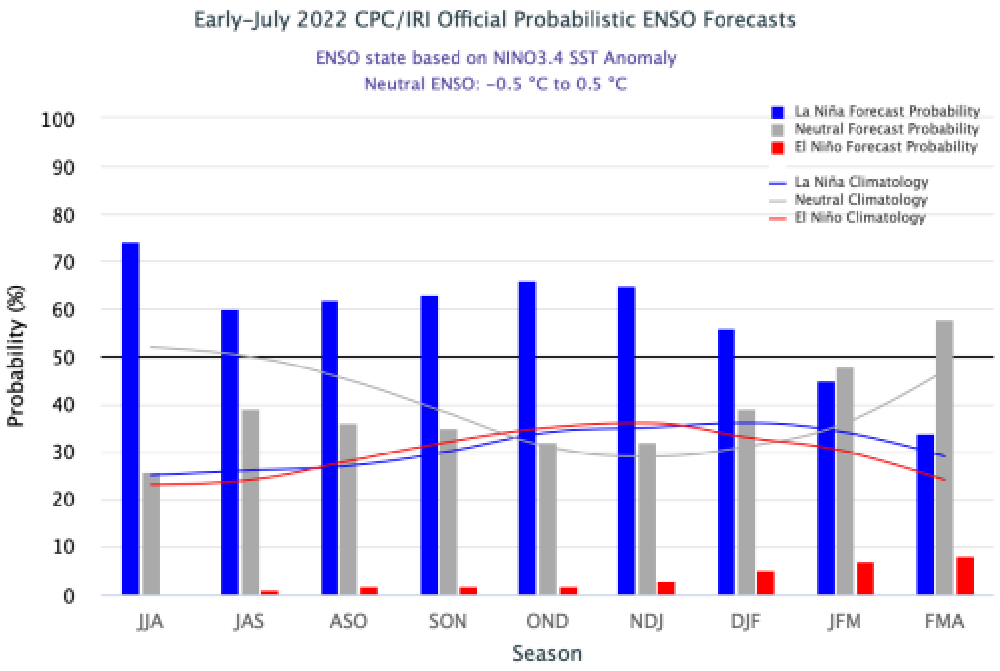


Sources: NOAA, Santander.

Low Stocks Fueled By Weather And Geopolitical Shock

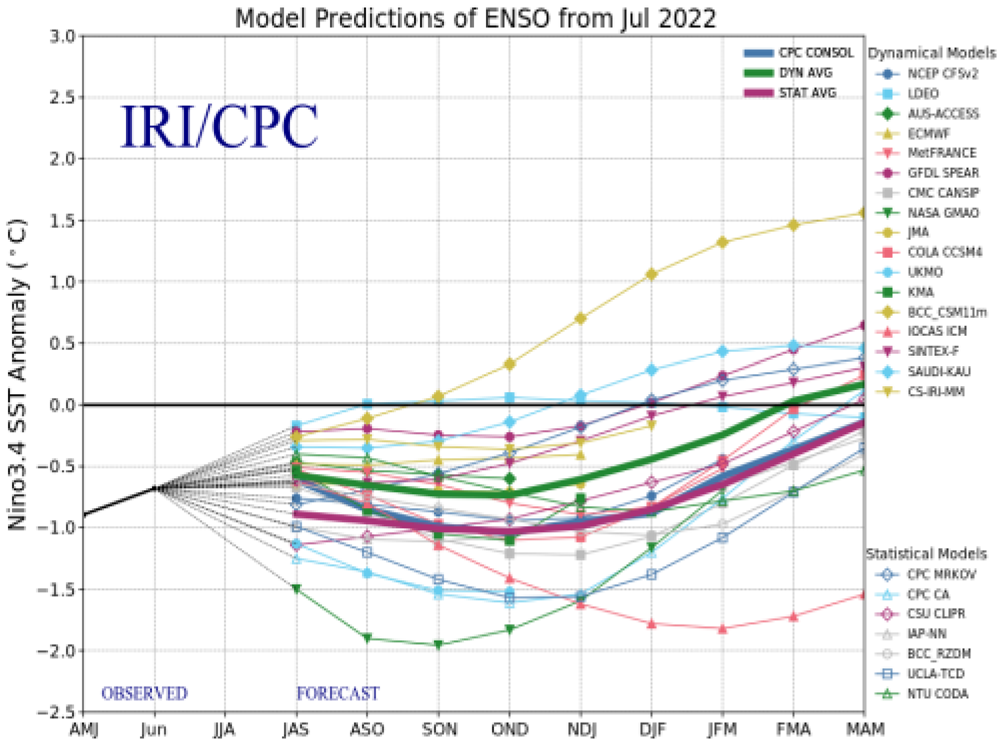
- According to NOAA forecast, La Niña is expected to weaken, but persist through the Northern Hemisphere summer and into early winter 2022-23. It will be the third year running, imparting risks for the upcoming season.

La Niña Outlook – CPC/IRI PROBABILISTIC
First half of July



Sources: NOAA, Santander.

La Niña – Model Prediction

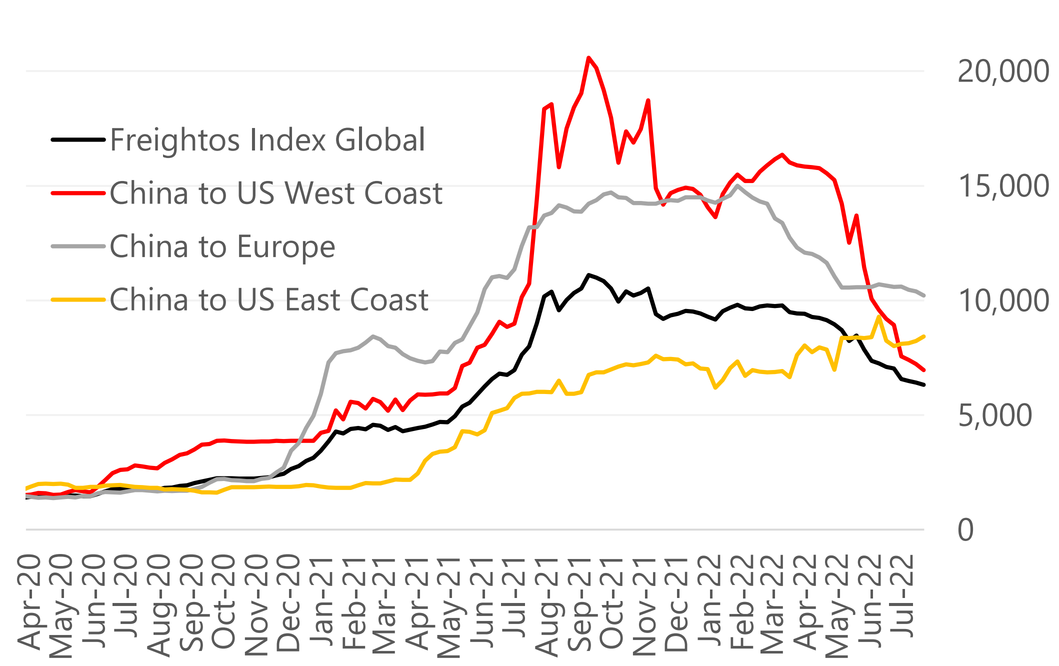


Sources: NOAA, Santander.

Low Stocks Fueled By Weather And Geopolitical Shock

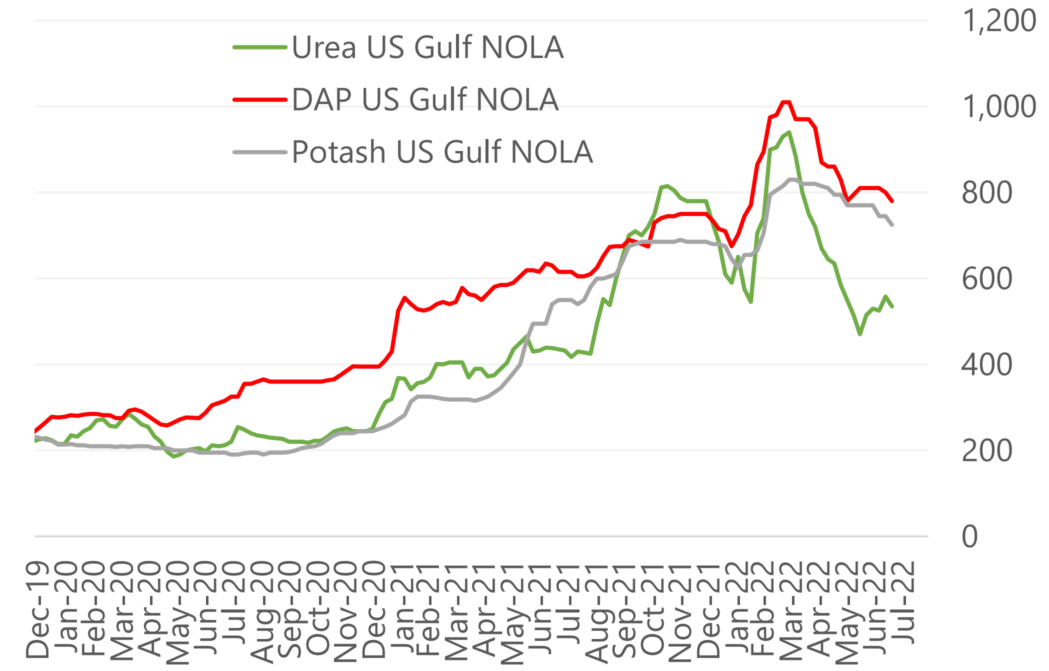
- Prices of material inputs (ammonia, nitrogen, nitrates, phosphates and potash) for the fertilizer market rose significantly since 2020. However, in YoY terms freight costs continue to slowly trend down.
- The Russia-Ukraine conflict added to this tight market, as Russia (and ally Belarus) are significant producer of fertilizer ingredients. As with freight costs, we see a downward trend at the margin.

Freight Costs Index



Sources: Bloomberg, Santander.

Fertilizers prices (USD/t)

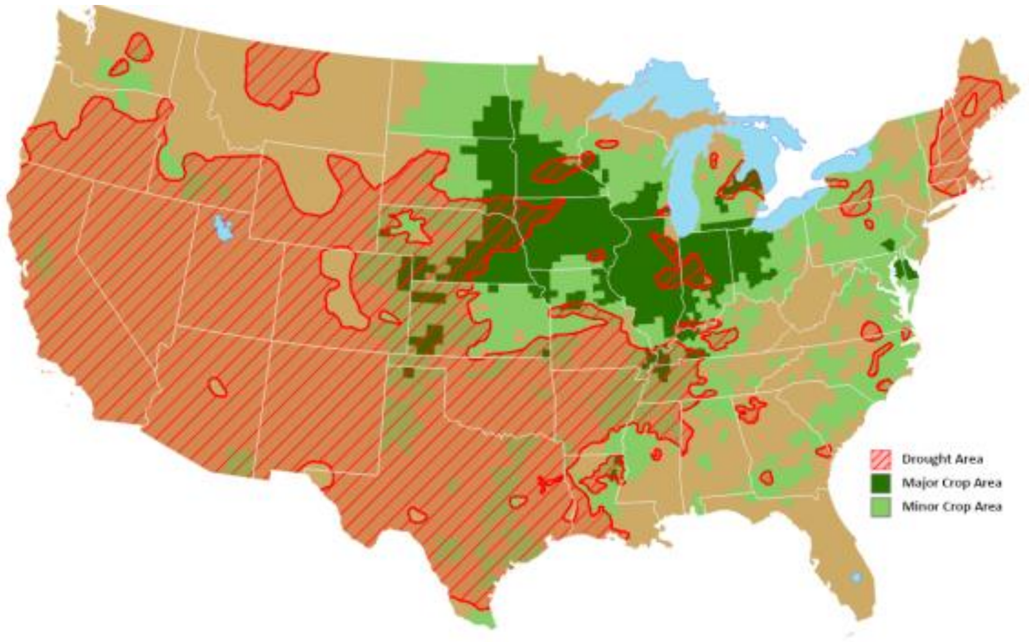


Sources: Bloomberg, Santander.

Low Stocks Fueled By Weather And Geopolitical Shock

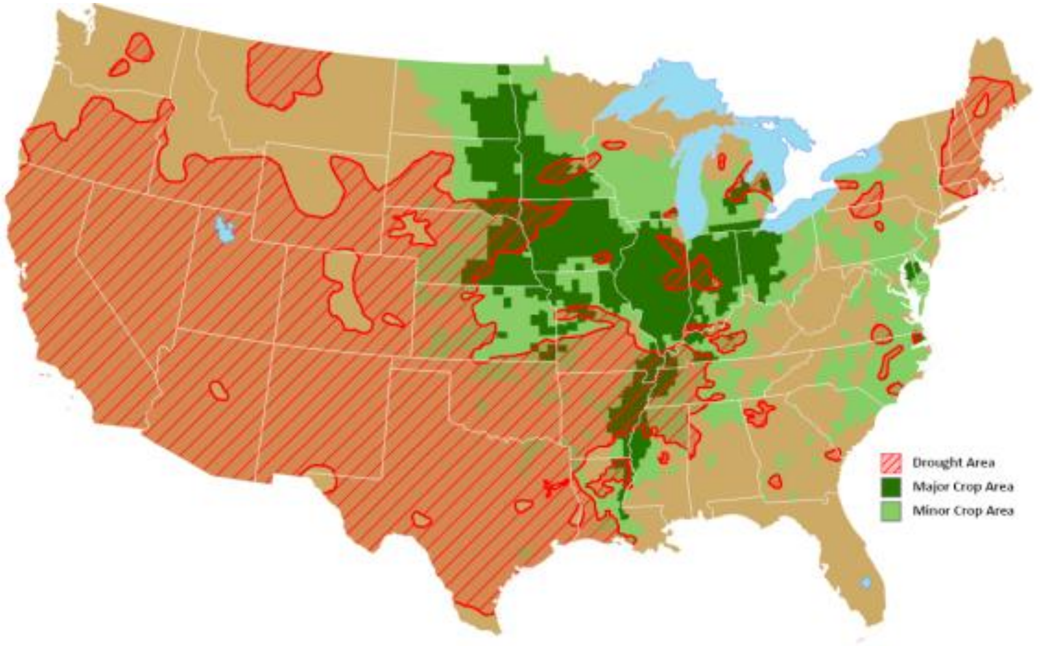
- Approximately 29% (up from 20% from our last Chartbook) of corn production is within an area experiencing drought; for soybean, 26% (up from 12%).

U.S. Corn Areas in Drought
July 19, 2022



Sources: USDA, Santander.

U.S. Soybean Areas in Drought
July 19, 2022



Sources: USDA, Santander.

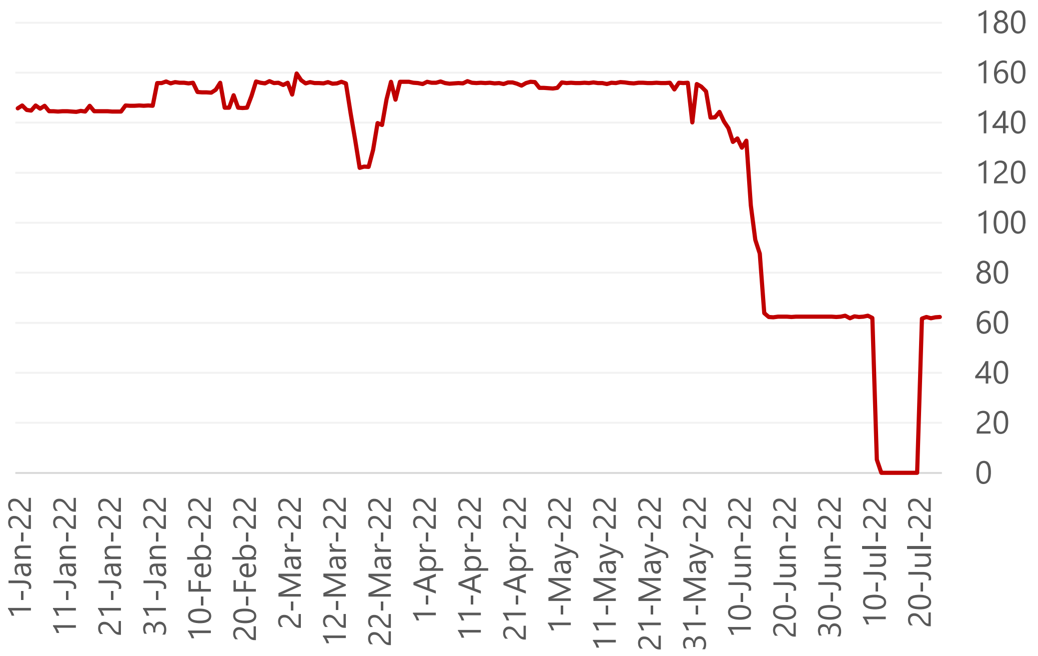
ENERGY

03

Natural Gas in Europe Soars As Russia Cuts Supply

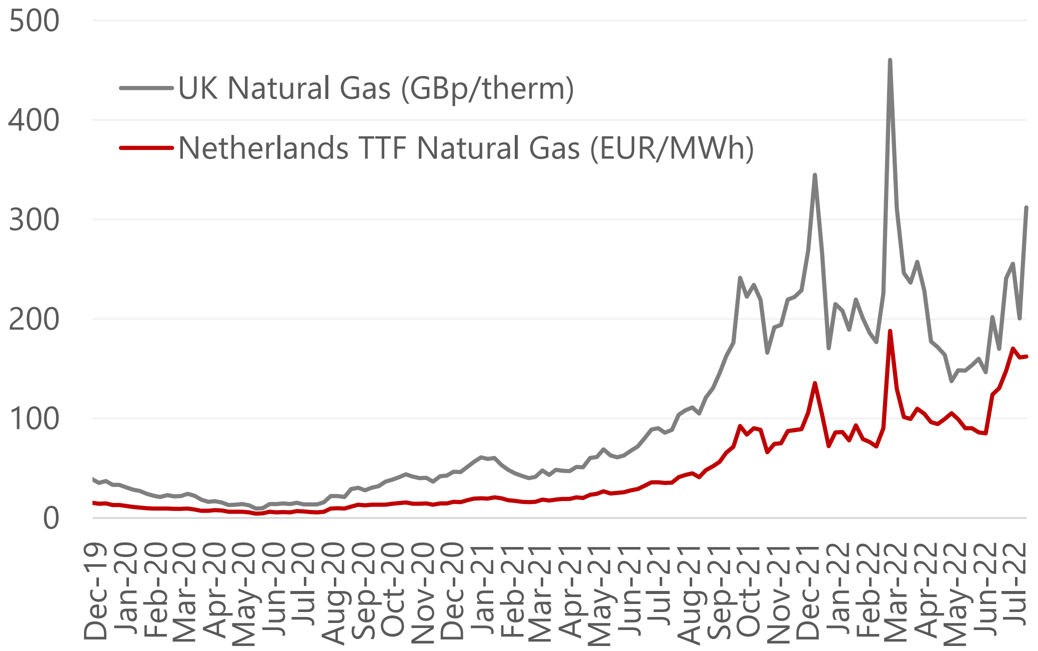
- Deliveries through the Nord Stream 1 have been reduced to 40% owing to a turbine repair, and could further be reduced to 20%.
- As a result, natural gas prices in Europe are rising consistently, a risk for some energy intensive industries such as the metal, and gas intensive such as the fertilizer.

Gas Flow from Russia to Northwestern Europe (MCM/d)



Sources: Bloomberg, Santander.

Europe Natural Gas

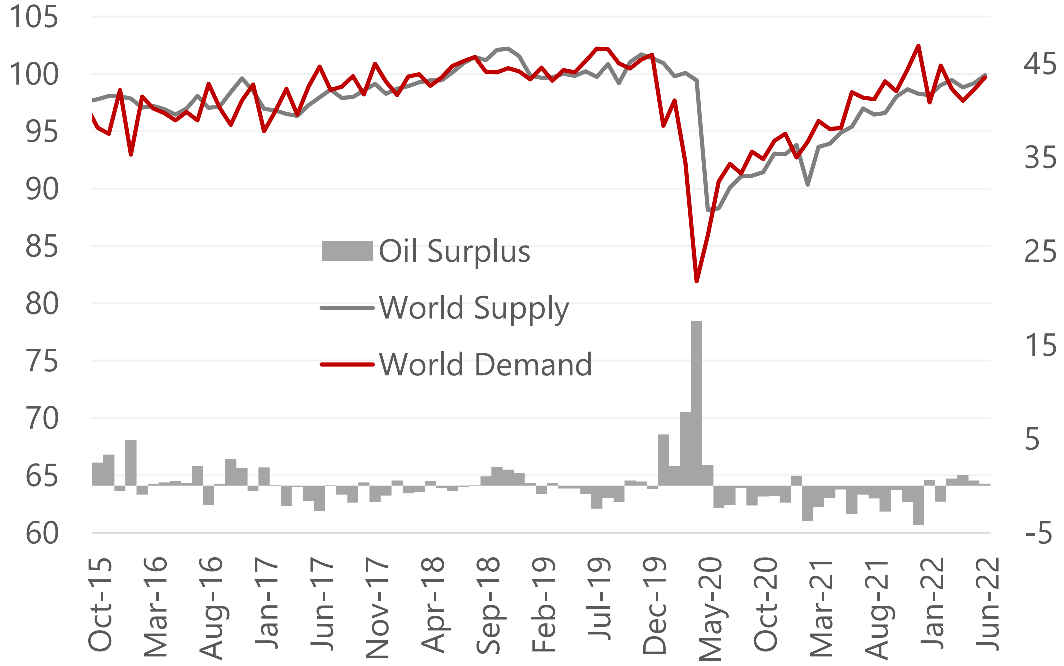


Sources: Bloomberg, Santander.

Geopolitical Shock Adds Volatility to a Constrained Market

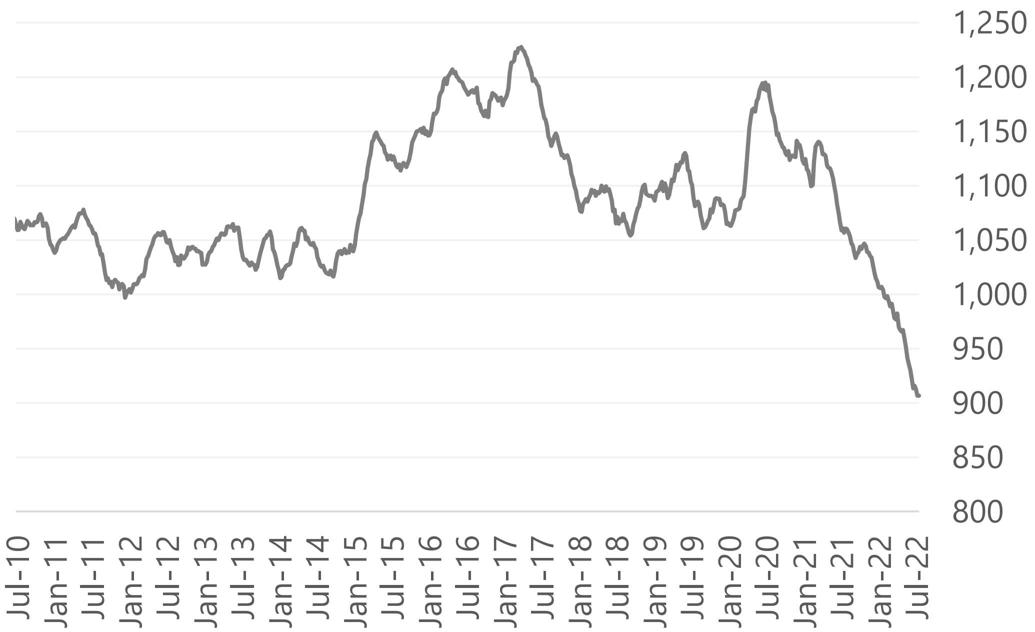
- As the economy recovers from the coronavirus pandemic and majors oil producers fall short of output, the global oil balance of supply and demand has been consistently running on deficit, though at the margin the gap has been narrowing.
- US crude inventories is already below 2011-2015 levels when Brent crude oil stayed above $100/bbl, with strategic reserves drawing down.

World Oil Supply x Demand (mbd)



Sources: Bloomberg, Santander.

U.S. Total Oil Crude Stocks (million barrels)

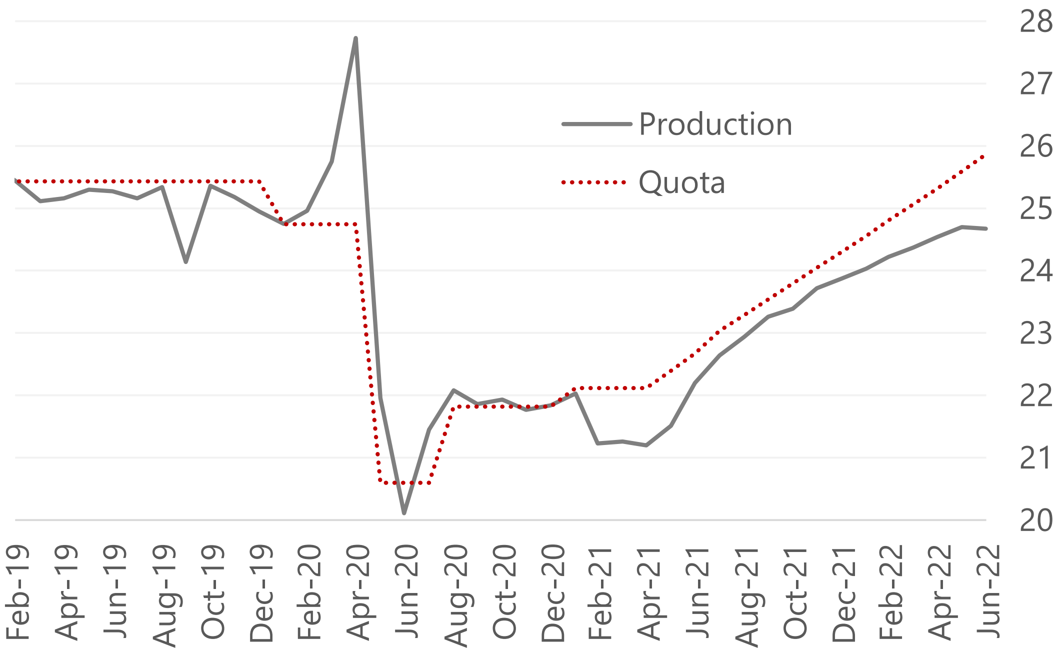


Sources: Bloomberg, Santander.

Geopolitical Shock Adds Volatility to a Constrained Market

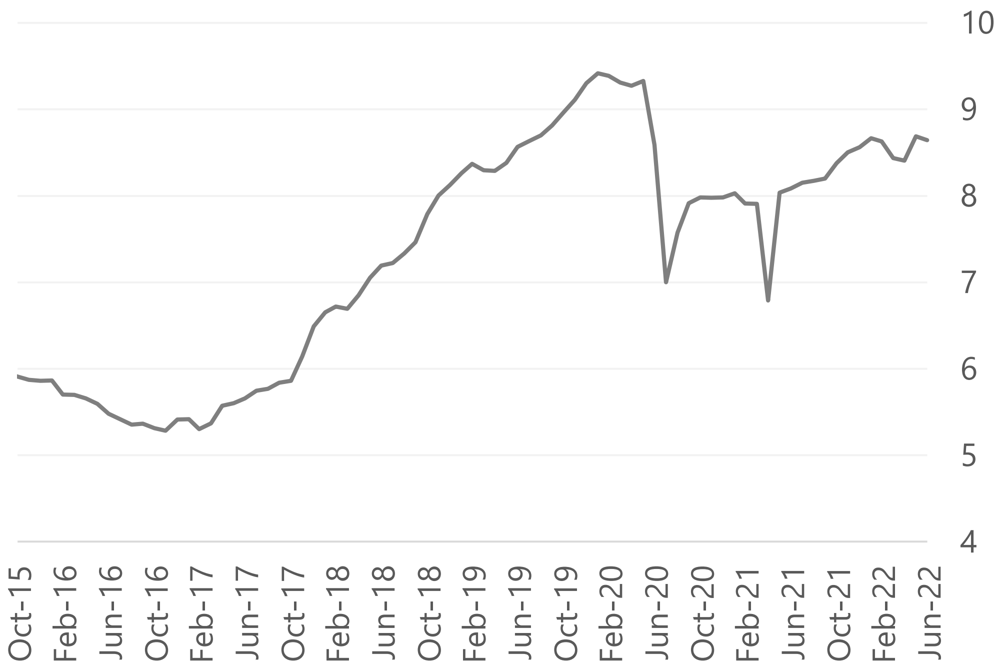
- The organization has been gradually increasing its production quota on a monthly basis. However, it has been failing to meet its target due to production shortfalls in several members, owing to low investments before and during the pandemic.
- US oil production is currently at 11.9 million barrels, still 9% down the pre-pandemic level. This discipline – to prioritize investor's return rather than output growth - has so far proved resilient to higher oil prices.

OPEC Production (members with quota) (mbd)



Sources: Bloomberg, Santander.

US Shale Production (mbd)

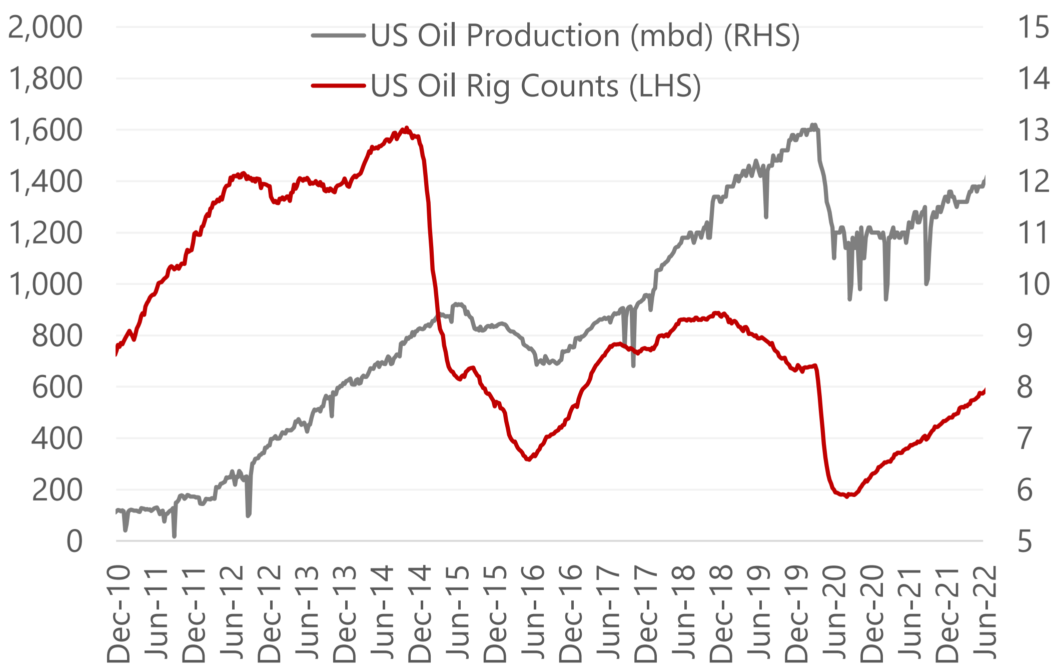


Sources: Bloomberg, Santander.

Geopolitical Shock Adds Volatility to a Constrained Market

- Rig counts in the US are increasing, but are still below pre-pandemic levels.
- Following the Russian invasion of Ukraine, Brent oil reached $130/bbl, and it is now within the $100-$105 range. Risks are skewed to the upside, in our view.

US Oil Production



Sources: Bloomberg, Santander.

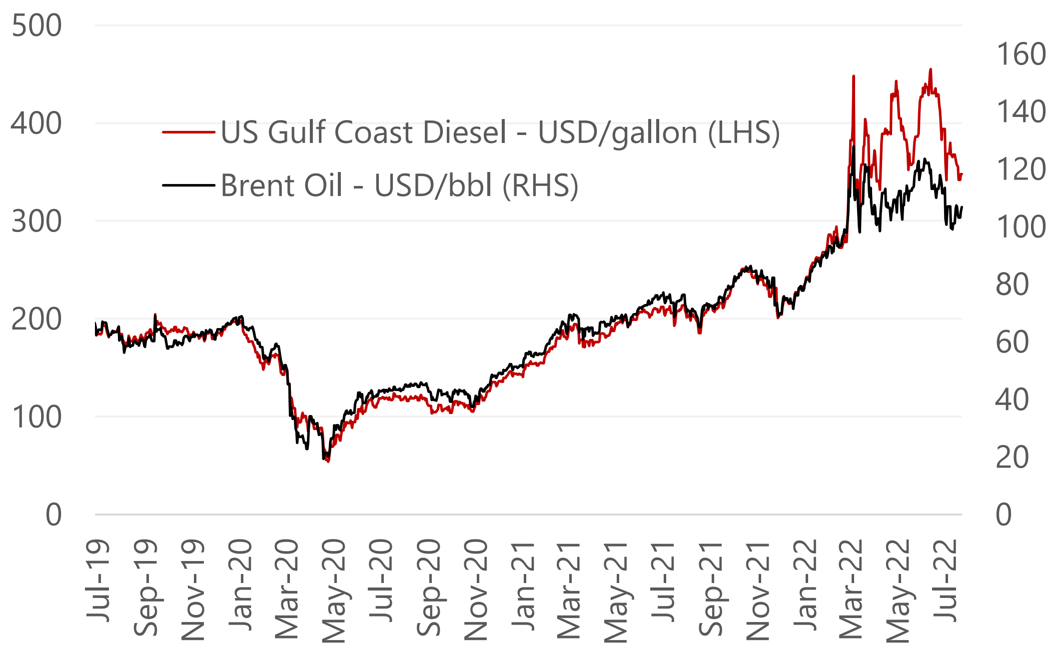
Brent Crude Oil (USD/bbl)

Sources: Bloomberg, Santander.

Diesel Shortage Looms Over Brazil, But Risks Have Decreased Marginally

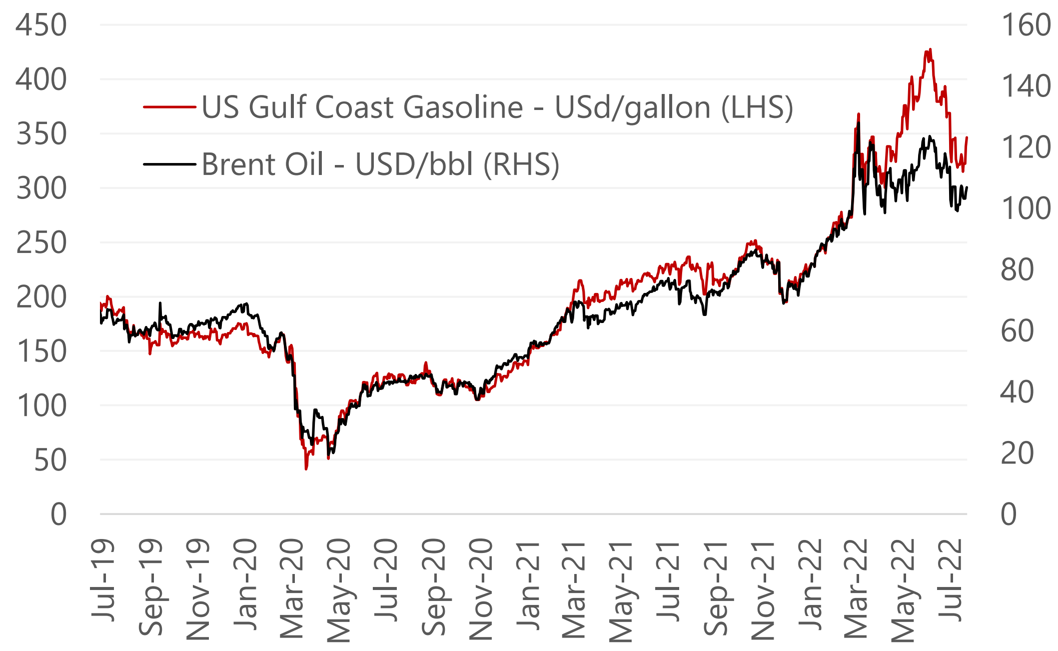
- Brazil imports nearly 30% of its domestic demand for diesel, of which 80% comes from the U.S. Gulf Coast.
- The gap between oil products (diesel and gasoline) and oil has narrowed recently, though it is still detached in historical terms. A peak of diesel demand is expect in Brazil in 3Q22 on the back of grains exports.

Oil and Refined Products Price Gap - Diesel



Sources: Bloomberg, Santander.

Oil and Refined Products Price Gap - Gasoline



Sources: Bloomberg, Santander.

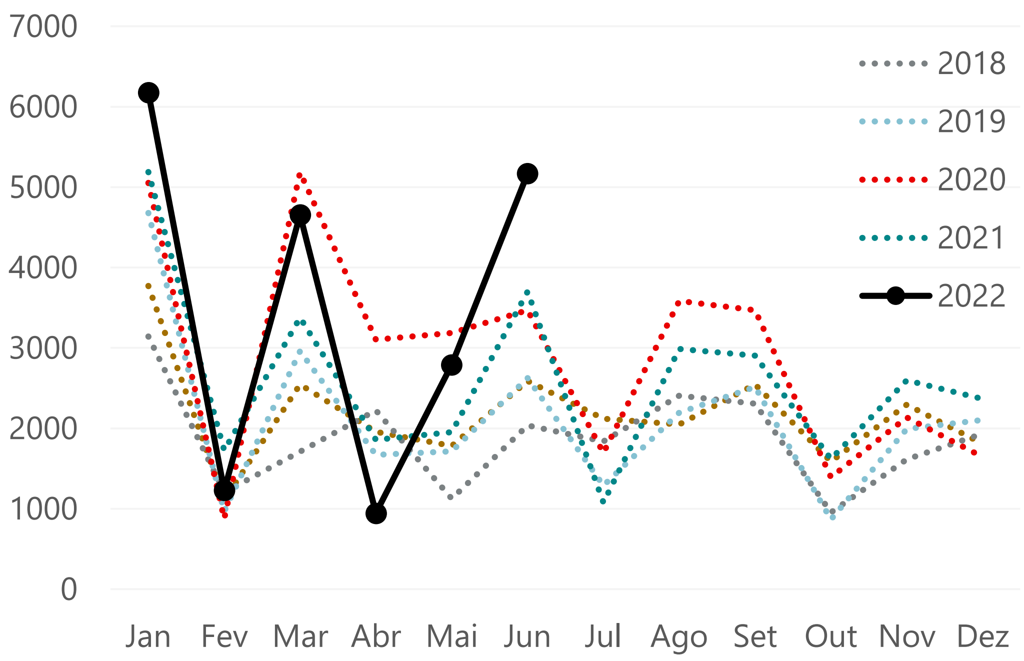
METALS

04

China Will Keep Adding Stimulus To Support Growth

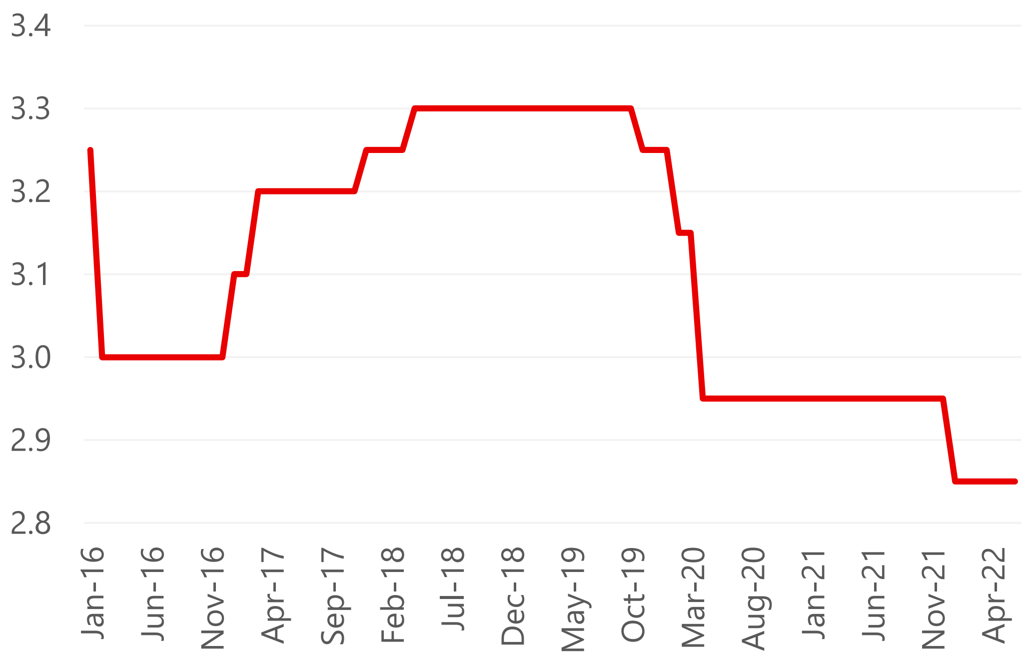
- Assuming that the economy reopens in June, and that there are not new lockdowns in the months ahead, the economy should benefit from strong momentum once the government add stimuli, a tailwind for industrial metals.
- Recently, mortgage boycotts have been spreading in China, which could deepen the real state crisis in the country. However, rumors that a bailout fund would be created to help troubled developers provided some support for metal prices, particularly iron ore.

Aggregate Financing (CNY Billions)



Sources: PBOC, Santander

1 Year Medium Term Lending Facility (%)

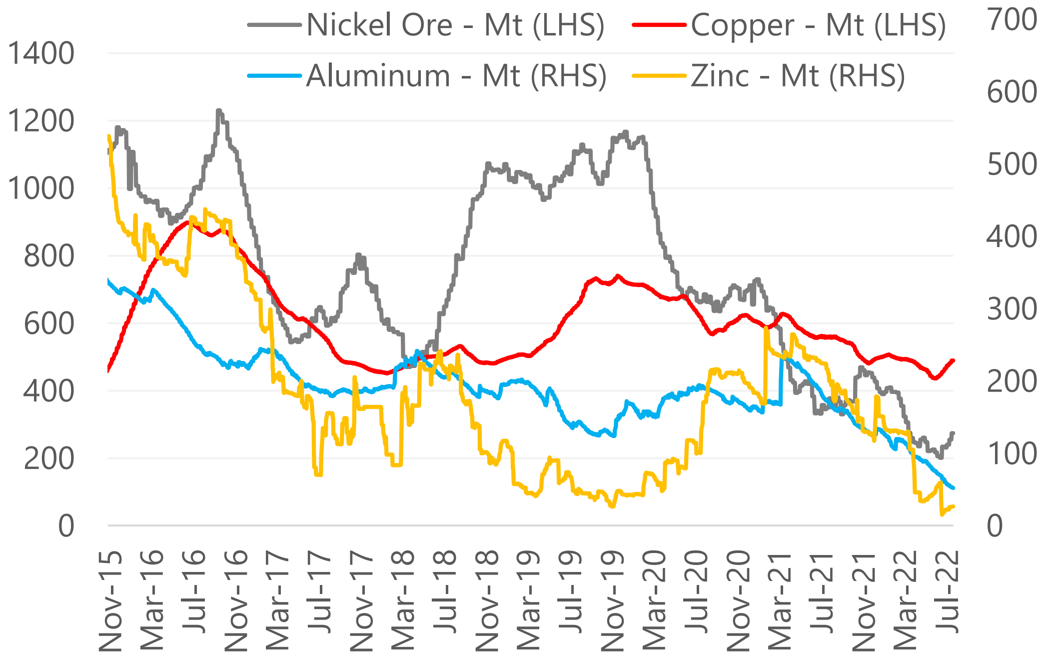


Sources: Bloomberg, Santander

Several Metals Facing Low Stocks and High Production Costs

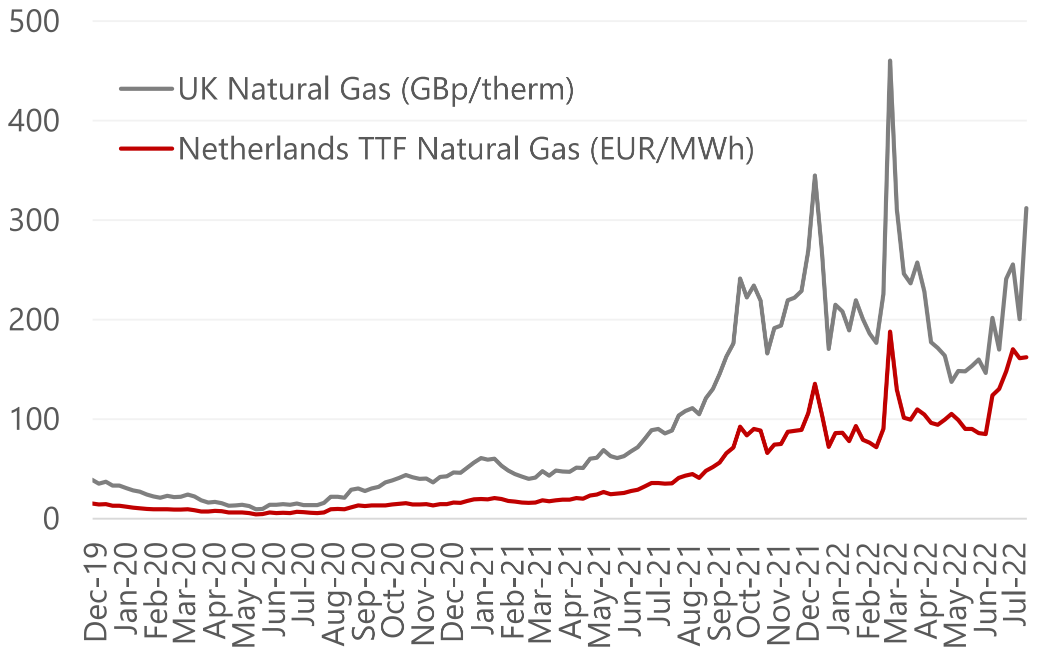
- From London to Shanghai warehouses, some metals have inventory levels at multi-year lows.
- The power crunch in China and Europe send prices up, raising concerns about supply shortage in industrial metals. The geopolitical shock adds to this already tight scenario.

Base Metals Inventories



Sources: Bloomberg, Santander.

Europe Natural Gas



Sources: Bloomberg, Santander.

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