



Commodity Monthly Monitor

# Commodities past peak bearishness

21 June 2023 — 21 July 2023

## Contents

<b>01</b>	<a href="#"><u>Commodities Market Overview</u></a>	
<b>02</b>	<a href="#"><u>Sector Overview</u></a>	
	Agriculture	7
	Energy	9
	Industrial Metals	10
	Precious Metals	11
<b>03</b>	<a href="#"><u>Technical Overview</u></a>	
	Positioning	13
	Inventories	14
	Curve Dynamics	15
	Technicals	16
<b>04</b>	<a href="#"><u>Summary Tables</u></a>	
	Prices	18
	Roll Yields	19
	CFTC Net Positioning	20
	Inventory Levels	21
<b>05</b>	<a href="#"><u>CFTC Net Positioning</u></a>	
	Agriculture	23
	Energy	24
	Industrial Metals	25
	Livestock	26
	Precious Metals	27
<b>06</b>	<a href="#"><u>Inventories</u></a>	
	Agriculture	29
	Energy	31
	Industrial Metals	32
	Livestock	33
<b>07</b>	<a href="#"><u>Moving Average and Volumes</u></a>	
	Agriculture	35
	Energy	36
	Carbon	37
	Industrial Metals	38
	Livestock	39
	Precious Metals	40
<b>08</b>	<a href="#"><u>Future Curves</u></a>	
	Agriculture	42
	Energy	43
	Carbon	44
	Industrial Metals	45
	Livestock	46
	Precious Metals	47
<b>09</b>	<a href="#"><u>Commodity Monthly Matrix Explained</u></a>	
<b>10</b>	<a href="#"><u>Calendar</u></a>	

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## Summary

The International Monetary Fund (IMF) raised its outlook for the world economy this year, acknowledging that risks have eased in recent months after the US averted a default and authorities staved off a banking crisis in the US and Europe. The Fund seems to be joining a growing number of voices that see a potential soft landing in the US. This view was validated by higher-than-expected Q2 US GDP growth of 2.4% versus consensus expectations 1.8% driven by resilient consumption and a rebound in fixed business investment.

The improvement in sentiment around US growth improved the outlook for demand, helping broad commodities rebound by 2.9% over the prior month. Yet weaker economic activity indicators in other parts of the economy, such as China, Eurozone and UK, are likely to weigh on the overall demand outlook for commodities. The stark divergence between strength in services and manufacturing weakness appears to be a common theme among leading economies – US, China, Germany and Japan.

Elsewhere, President Xi hosted the Politburo meeting on 24 July to line out the overall economic assessment and the policy outlook for the rest of 2023. Policy makers acknowledged the weak domestic demand as a primary concern but insisted that the current downturn was a temporary trough. They pledged stronger "counter-cyclical" adjustment, in line with the raft of previously announced piecemeal measures, however they stopped short of announcing an aggressive stimulus package or hinting at any timeline for a potential one. We expect more meaningful measures to materialise with a delay.

With inflation dynamics looking more encouraging, the Federal Reserve (Fed) and the European Central Bank (ECB) displayed a significant change in tone at the recent central bank meetings. The Fed upgraded its assessment of the economy, which is now judged to be growing "moderately" rather than "modestly" and suggested a more gradual pace of hikes could follow. At the ECB meeting, President Christine Lagarde sounded much less sure about further rate hikes, admitting that the near-term economic outlook for the Euro-area had

deteriorated.

We were reminded last month that it's not just central banks, legislators and fiscal policy makers that set the tone for policies that drive commodity markets: the market is finally taking the Organization of Petroleum Exporting Countries' and its allies (OPEC+) group seriously. Energy (up 9%) was the best performing subsector within the commodity complex last month. The market has come to the realisation that the OPEC+'s pledge to tighten the oil market is not just empty rhetoric. OPEC+ production saw a sizeable 670,000 b/d drop in May 2023 to a 19-month low, with seven countries joining Russia in introducing voluntary cuts. These cuts will remain in force until the end of 2023.

Geopolitical risks rose to the fore with Russia unexpectedly withdrawing from the Black Sea Grain Initiative deal. The flaring of Black Sea tensions added to volatility in global grain markets. The obstacles to any renewal of the agreement have increased of late. Russian military stepped up its attacks on the port of Odessa – an important grains port – and Russia's Defence Ministry also warned that ships heading to Ukrainian ports would be viewed as potential carriers of military supplies and, thus, as viable targets.

Russia has ratcheted up the pressure by giving the United Nations, which is acting in an intermediary capacity, a deadline of three months to present concrete results for negotiations to be resumed. Russia is demanding that its conditions are met, including giving an agricultural bank access to the SWIFT system again – this request has been rejected by the EU so far.

Market attention is turning towards El Niño. El Niño is likely to worsen the impacts of climate change that we are already experiencing – hotter heatwaves, more severe drought and more extreme wildfires, depending on its intensity. Updated forecasts for the El Niño weather event show an 81% chance of it reaching moderate to strong intensity this Northern hemisphere winter, providing a tailwind for several agricultural commodities.

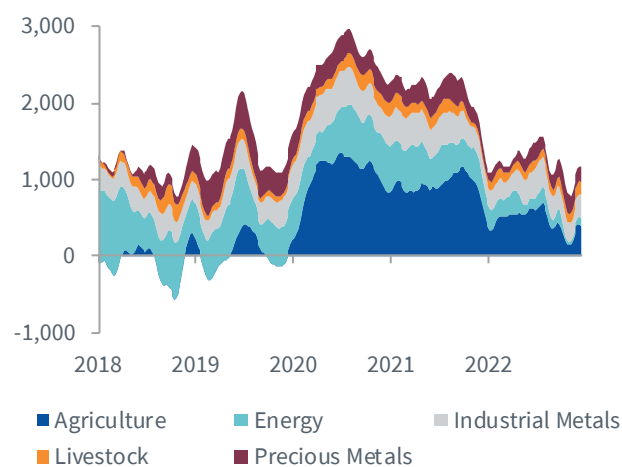
## Performance

Performance*	- 1 Mth	- 6 Mth	- 12 Mth
All Commodities	2.9%	-2.9%	-4.3%
Energy	9.0%	-10.2%	-31.5%
Industrial Metals	-1.5%	-16.8%	2.5%
Precious Metals	2.5%	2.2%	18.5%
Agriculture	-0.7%	7.1%	16.9%
MSCI World	2.9%	10.7%	14.5%
US Aggregate Bond	-0.1%	-0.6%	-1.7%

\*Bloomberg TR Indexes for basket returns, data to Friday 21 July 2023. Source: WisdomTree, Bloomberg. **Historical performance is not an indication of future performance, and any investments may go down in value.**

## CFTC Net Speculative Positioning

(in '000 contracts)



Source: WisdomTree, Commodity Futures Trading Commission (CFTC), Bloomberg. **Historical performance is not an indication of future performance, and any investments may go down in value.**

- + **Rise in speculative interest drives a silver rally, but the metal has so far failed to keep pace with gold this year.** Gold remains resilient as investors seek their defensive hedges.
- + **Industrial metals continue to be weighed down by cyclical headwinds.** With the exception of tin, all base metals were down last month as markets await a trigger to lift risk sentiment – be it fiscal stimulus in China or policy tightening from central banks coming to an end.
- + **Geopolitical risk and extreme weather conditions continue to dominate agricultural commodities.** Russia’s withdrawal from the Black Sea grains deal, alongside its attacks on Ukrainian ports, has added significant volatility to the grains market. The expected tightness in the wheat market leaves it more vulnerable to other supply disruptions, allowing prices to remain well supported. Extreme weather conditions, ranging from heavy rains in West Africa and scorching heat in China, are impacting soft commodities such as cocoa and cotton respectively.
- + **The market is finally taking the OPEC+ group seriously: the cartel intends to keep supplies tight and prices higher.** Oil prices rebounded with Brent hovering around the US\$80/bbl level. Fiscal breakevens indicate that Saudi Arabia has enough incentives to push prices even higher, perhaps around the US\$90/bbl level. Markets are getting noticeably excited about heating oil (or Ultra Low Sulphur Diesel), where net speculative positioning is close to a standard deviation above historic average. However, positioning elsewhere in energy still reflects pessimism.

## Commodity Monthly Matrix<sup>1</sup>

Commodity	Current Price <sup>2</sup>	Returns (-1 Mth)	Price vs 200 days MA	Inventories <sup>3</sup> (- 3 Mths)	Positioning <sup>4</sup> (- 1 Mth)	Roll Yield <sup>5</sup>	21 July Score	23 June Score
WTI Oil	77.1	9.3%	0.6%	-0.8%	22.2%	0.4%	3	(1)
Brent Oil	81.1	6.8%	-1.1%	-0.8%	-24%	0.2%	2	0
Natural Gas	2.71	8.9%	-22.6%	47.9%	11%	0.2%	1	(1)
Gasoline	2.80	7.4%	10.4%	-1.2%	10%	1.6%	2	4
Heating Oil	2.75	10.9%	-5.2%	8.5%	29%	0.3%	1	1
Carbon	89.9	-3.3%	6.1%	-	-	-0.2%	(1)	0
Wheat	6.98	0.3%	-2.4%	2.1%	41%	-2.8%	0	0
Corn	5.27	-18.1%	-17.9%	-3.0%	-93%	-1.7%	(3)	3
Soybeans	15.0	1.6%	2.4%	23.0%	28%	5.0%	2	0
Sugar	0.25	-4.6%	13.6%	-	-30%	-0.3%	(2)	(2)
Cotton	0.85	5.5%	3.0%	0.8%	101%	0.7%	2	(3)
Coffee	1.62	-8.8%	-7.7%	-	-138%	0.2%	1	1
Soybean Oil	0.69	16.4%	13.5%	7.8%	53%	5.1%	0	0
Cocoa	3,415	8.7%	21.9%	-	15%	0.3%	1	0
Aluminium	2,177	-1.3%	-6.4%	-24.8%	-5%	-0.7%	(2)	1
Copper (COMEX)	3.80	-1.9%	-1.9%	74.0%	-281%	-0.2%	(3)	0
Copper (LME)	8,444	-1.3%	-0.9%	15.5%	30%	-0.1%	(2)	0
Zinc	2,368	0.6%	-16.7%	10.7%	23%	-0.1%	(1)	2
Nickel	20,622	-5.9%	-15.9%	-8.8%	-11%	-0.4%	0	2
Lead	2,148	0.0%	1.4%	56.7%	-10%	-0.2%	(1)	0
Tin	28,700	4.7%	14.0%	31.9%	0%	0.2%	1	1
Gold	1,964	1.5%	4.4%	-	23%	-0.1%	(1)	(4)
Silver	24.7	6.5%	7.7%	-	174%	-0.1%	(1)	(4)
Platinum	963	-1.3%	-4.2%	-	-16%	-0.3%	(1)	1
Palladium	1,282	-6.0%	-18.9%	-	-27%	0.5%	1	(1)
Live Cattle	1.80	1.6%	9.9%	-	2%	-1.0%	1	4
Lean Hogs	1.01	5.0%	20.4%	-	341%	19.5%	0	0
Feeder Cattle	2.46	5.9%	23.4%	-	-13%	-1.3%	0	0

The score matrix is designed to highlight significant changes in key variables but should not be viewed as predictor of performance. Source: WisdomTree. Information not available.

**Green** = returns positive, inventories falling, positioning rising, roll yield positive.

**Red** = the opposite. **Black** = neutral.

<sup>1</sup> Detailed explanation of the matrix calculations can be found at the end of this report.

<sup>2</sup> All prices are futures prices to Friday 23 June 23. Broad sector returns based on Bloomberg Commodity Index family.

<sup>3</sup> % change in inventory over the past 3 months except for sugar and coffee which are based on past 6 months as data is updated bi-annually by USDA.

<sup>4</sup> CFTC futures and LME COTR net positioning as at July 18 2023, % change from previous month.

<sup>5</sup> Calculated as % difference between front month and second month futures prices on report date. Historical performance is not an indication of future performance and any investments may go down in value.

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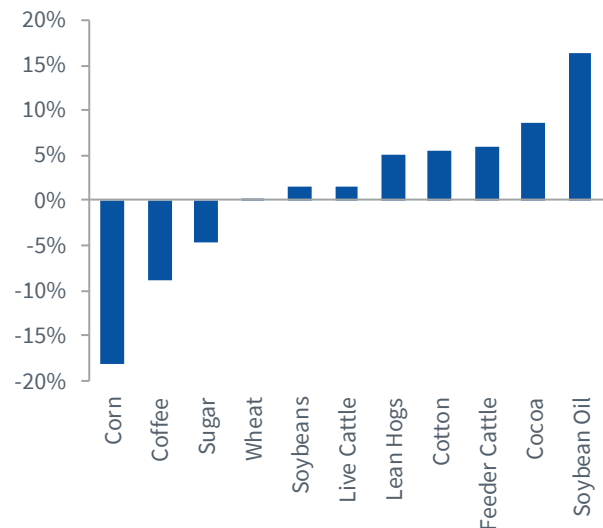
# Sector Overview

## Agriculture

+ Wheat rose 16.3% in the week (17 July to 25 July) following Russia's withdrawal from the Black Sea Grain deal. Attacks on Ukrainian ports left no doubt that the grains corridor through the Black Sea is no longer safe. Seaborne transport of Ukrainian grains abroad is, thus, likely to have come to a de facto standstill. While the Russian actions are likely to further restrict exports from Ukraine, Russia itself is shipping huge volumes to world markets. The country could export as much as 60 million tons of grain in the new season, according to Russian Grain Union President Arkady Zlochevsky, citing another record crop. President Vladimir Putin defended Russia's withdrawal from the Black Sea deal at a summit with African leaders on Thursday, and said Russia is ready to send 25,000 to 50,000 tons of grain for free to Burkina Faso, Zimbabwe, Mali, Somalia, Central African Republic and Eritrea in the next three to four months. The USDA estimates that other top producers will also step up their exports this season, including Argentina, the European Union (EU) and Canada. Overall, however, the USDA expects lower global exports than last season due, among other things, to much lower Australian exports which are set to plunge by around 30%. The global wheat market was already set to tighten this season but assuming 3-4m tonnes of less Ukrainian export supply, the market would tighten even further - leaving global wheat stocks (excluding Ukraine) at their lowest levels since 2015/16.

+ Corn was the worst performing commodity -18.1%, dragging the overall performance of agricultural commodities lower. This is largely due to USDA's upward revision for the US corn crop in its latest World Agricultural Supply and Demand Estimate (WASDE) report. According to USDA, the conditions of corn plants has improved of late, despite the ongoing dry conditions in many growing regions. The recent brightening of the prospects for the US corn crop is likely to ease the supply situation. Corn rose 11.7% in the week (17 July to 25 July) following Russia's withdrawal from the Black Sea Grain deal helping offset some of the losses following the release of the WASDE report. The shortfall in Ukrainian supply will weigh more heavily on the corn market because Ukraine has a larger share of this market. However, it's important to note Ukraine corn production fell to 27mmt in 2022 during the first year of the war and might be down to 23-24mmt in 2023. The downtrend in production should reduce corn export availabilities by 8-10mmt from pre-war levels to around 17-18mmt in 2023/24. So far, China has been the largest buyer of Ukrainian grains exports via the Black accounting for 24% of overall export. China is likely to replace the shortfall with higher imports from Brazil owing to its record crop harvest and export pace.

Agriculture — July Returns\*



Source: *Bloomberg*. \*July returns refer to returns from 21 June 2023 to 21 July 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

## Agriculture

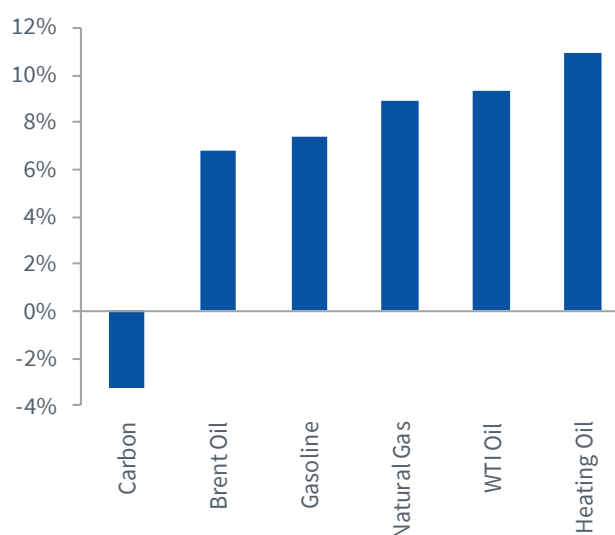
- + Heavy rains in West Africa, which dominates the world's cocoa production, risk hurting output and threaten to plunge the cocoa market into a third year of deficit in the 2023-24 season. The damp weather has also contributed to the spread of diseases such as black pod and swollen shoot, damaging productive trees. Cocoa supplies are expected to fall short of consumption by about 140,000 tons in the 2022-23 season, according to the International Cocoa Organization. That prediction, combined with concerns that a strong El Niño weather phenomenon could also hurt the 2023-24 midcrop harvest and the maincrop for the next season, has helped cocoa trend higher. However, it is important to note, higher prices are impacting demand. The Q2 grinding figures from Europe showed a decline of nearly 6% over the prior year according to the European Cocoa Association (ECA).
- + Cotton rose 5.5% last month. The significant rise in the oil price last month has played a role, as this makes synthetic fibres that compete directly with cotton more expensive. In addition, drought and high temperatures could lead to crop outages in China, the world's largest producer and consumer. This is likely the reason for the announcement by the Chinese Authority that cotton would be released from state reserves at the end of July. The Chinese Agricultural Ministry also called on domestic cotton producers to irrigate and fertilise more to enable the plants to cope better with higher temperatures. In addition, China also announced additional import quotas for non-state companies on 28 July. On the other hand, US cotton crops appear to be coping better despite the hot and dry temperatures prevailing there. According to the USDA, 46% of crops were in good or excellent condition, 12% more than a year ago. However, in Texas (the main growing state), the corresponding figure was only 24% with 40% of crops rated as being poor or very poor condition. The USDA might have to downwardly revise its US crop forecast which should keep cotton prices well supported.



## Energy

- + The energy sector posted gains of 9% in the past month, marking the best monthly performance this year (trailing months to the 21st). Crude oil, natural gas, gasoline, and heating oil all posted gains. Heating oil or Ultra Low Sulphur Diesel and gasoline prices had plummeted around 30% between June 2022 and March 2023. But, since that local low was reached, prices have bounced around 25%. While there are international price caps on Russian crude exports, only the European Union has significant restrictions on petroleum products from the nation. Also, the export of cheap crude from Russia to India and China has meant that refining activity on both countries has expanded and hence the initial glut of petroleum products. However, that appears to have run its course.
- + The market has come to the realisation that the Organization of Petroleum Exporting Countries' and its allies (OPEC+) pledge to tighten the oil market is not just empty rhetoric. OPEC+ production saw a sizeable 670,000 b/d drop in May 2023 to a 19-month low, with seven countries joining Russia in introducing voluntary cuts. These cuts will remain in force until the end of 2023. Saudi Arabia announced a further 1 million b/d cut for at least July and August, while Russia, which had already pledged a 500,000 b/d cut, said that it would lower crude oil exports by 500,000 b/d in August. The group is cutting production in a bid to tighten the market and shore up oil prices, which continue to be weighed down by weak global economic indicators. OPEC+ ministers are not due to meet to discuss market conditions and production volumes until 26 November but have said they remain on standby for an extraordinary meeting before then if market conditions warrant. OPEC's 13 countries increased their output by 70,000 b/d in June to 28.23 million b/d, led by increases in Iran, Iraq, Nigeria, and Venezuela. Growing OPEC production was partially offset by a 60,000 b/d drop from non-OPEC members of the coalition, which pumped a collective 13.11 million b/d, leaving net OPEC+ at 10,000 b/d up in June (which is a modest increase compared to the large drop of 670,000b/d in May).
- + Hot weather in many parts of the US account for the bounce in natural gas prices in the past month. Close to 40% of electricity in the US is made from natural gas. As air-conditioning demand spikes, so does electricity demand. Despite the modest increase, natural gas prices are still down 65% year on year.
- + Carbon was the only commodity in the energy complex that saw losses in the past month. Worries about economic conditions, combined with the front-loading of EUA sales to fund RePowerEU, are weighing on the market.

Energy — July Returns\*



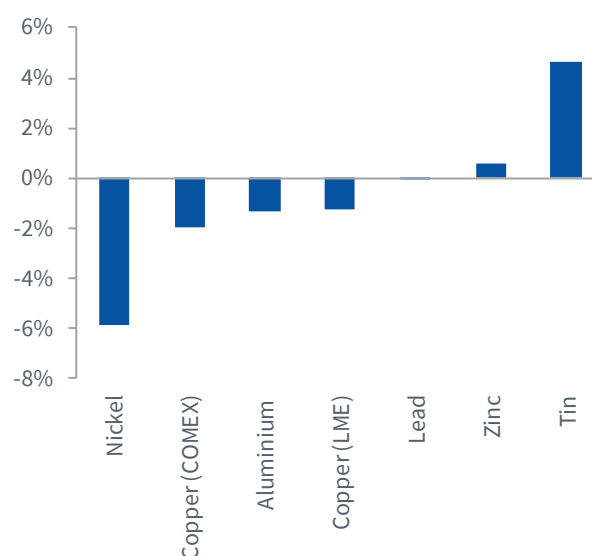
Source: *Bloomberg*. \*July returns refer to returns from 21 June 2023 to 21 July 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

## Industrial Metals

- + Industrial metals were the worst performing commodity sector last month and were down 1.5%. Over the last six months, the sector is down 16.8% and has created the biggest drag on the overall performance of commodities.
- + Copper's COMEX and London Metal Exchange (LME) prices were down 1.9% and 1.3% respectively last month. While falling inflation numbers, particularly in the US, have lifted sentiment in equity markets, the same has not been true for industrial metals. The sector had pinned its hopes on a strong economic recovery in China which, so far, has been disappointing relative to expectations. Manufacturing Purchasing Managers' Index for China, often seen as a key leading indicator for copper's fortunes, pulled back to 50.5 in June (signalling only a very slight expansion with 50 being flat economic activity) from 50.9 in May. Markets are, therefore, not yet convinced if China's economic growth story is compelling enough to lift base metal prices. A turnaround could hinge on the country introducing fiscal stimulus to induce growth.
- + Nickel was among the biggest detractors and was down 5.9% last month. According to the International Nickel Study Group (INSG), around two-thirds of nickel's total end-use demand comes from stainless steel – a sector hit particularly hard by the cyclical pressures facing the global economy. INSG also forecast that nickel may have a 239kilo tons (kt) surplus in 2023. The INSG state that historically, market surpluses have been linked to LME deliverable/class I nickel (which is used in electric vehicle (EV) batteries) but, in 2023, the surplus will be mainly due to class II and nickel chemicals (principally nickel sulphate). Going forward, nickel's biggest source of demand growth is expected to come from electric vehicles (EVs) which will require class I nickel. As a result, many forecasters, including the INSG, foresee a tighter nickel market by 2025 as demand for EV batteries continues to rise rapidly.
- + Aluminium was down 1.3% last month. European producers are facing pressures from the Europe's economic slowdown which has hit demand for the metal and, therefore, profit margins for aluminium producers. For now, large quantities of Russian aluminium are still trading on the LME with China being the chief buyer of it. But if the exchange introduces restrictions on Russian aluminium, this could push prices up.

- + The only exception to the disappointing fortunes of base metals last month was tin, which was up 4.7% as potential supply disruption from Myanmar has helped lift prices in recent months.

Industrial Metals – July Returns\*

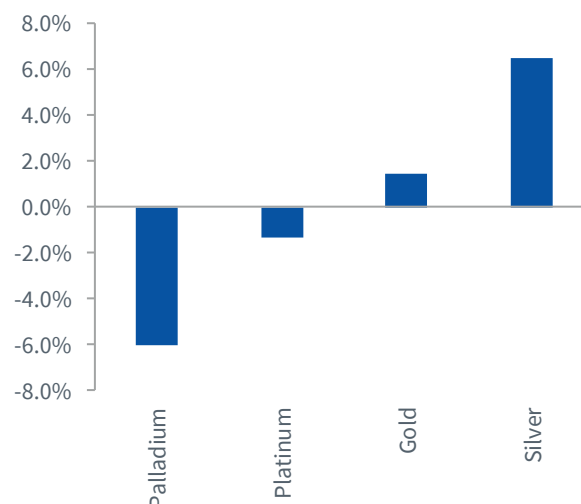


Source: *Bloomberg*. \*July returns refer to returns from 21 June 2023 to 21 July 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

## Precious Metals

- + With the exception of tin, gold has been the best performing metal so far this year (8.1% to 21 July 2023). The fact that the defensive metal has beaten copper, nickel, aluminium etc, indicates that markets remain uncertain about the future course of the global economy. Bloomberg's recent surveys put the odds of a recession in the US and Eurozone at 60% and 50% respectively<sup>1</sup>. Gold is exceptional in that it is one of the few assets that do well in times of recession. Markets are broadly expecting the 26 July rate hike to be the last for Federal Reserve in this current rate cycle. Once interest rates stop rising, one of the headwinds for the yellow metal will be removed.
- + Real bond yields spiked in early July. That would normally drag gold lower, but gold held its own and continued to rise. Longer-term US inflation expectations, based on 10-year breakevens have been edging up again and are at the highest levels since April 2023. Higher levels of inflation expectations tend to support gold (other things being equal). US dollar depreciation has been largely supportive for gold in the past month. The dollar appreciation in the past week (to 21 July), has not yet pulled gold any lower.
- + The Central Bank of Türkiye has been a seller of gold in the last three months, which has reversed the trend of global central banks being net buyers this year. However, these sales are a response to local market dynamics (very strong gold demand and a temporary partial ban on gold bullion imports) rather than a change to their long-term gold policy. Excluding Turkish sales, central bank demand for gold remains strong.
- + Silver was the best performing precious metal in the past month, gaining 6.5%. However, the metal has declined in the past week (to 21 July) and has not caught up with gold year-to-date (3.3% to 21 July 2023). Speculative positioning in silver has shot up massively in the last reporting week to 44k (18 July 2023) from only 18k the prior week (11 July 2023). As recently as March 2023, the positioning in silver was net negative and now we are seeing the highest net positioning since April 2022.

Precious Metals — July Returns\*



Source: *Bloomberg*. \*July returns refer to returns from 21 June 2023 to 21 July 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

<sup>1</sup> Survey of 41 US economists between 14-19<sup>th</sup> July and Survey of 14 Eurozone economists between 14-19<sup>th</sup> July.

# Technical Overview

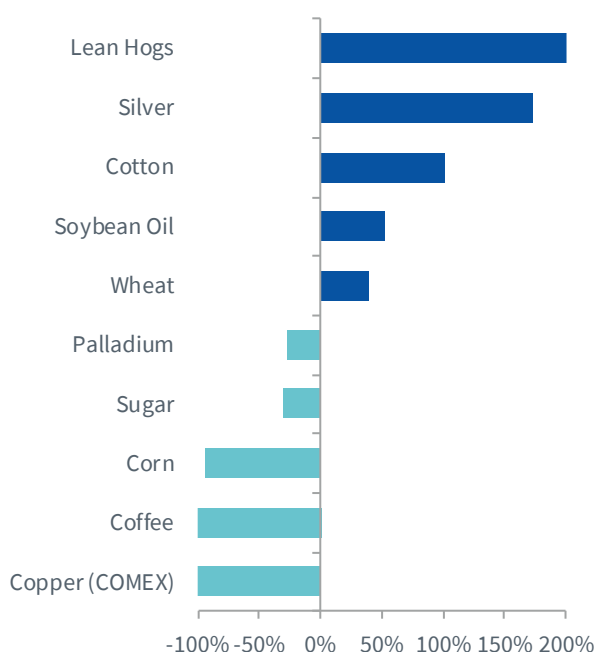
as of 21 July 2023

## Positioning

- + Speculative positioning in silver has shot up massively in the last reporting week to 44k (18 July 2023) from only 18k the prior week (11 July 2023). We can rule out a short-covering rally: this was purely a gain in longs, whilst shorts remained stable. As recently as March 2023, the positioning in silver was net negative and now we are seeing the highest net positioning since April 2022.
- + Net speculative positioning in palladium is at an all-time low and close to 2 standard deviations below the 5-year average. The metal used for internal combustion vehicles has fallen 28% year to date, as demand for electric vehicles continues to rise.
- + Speculative positioning in COMEX copper has been oscillating between positive and negative territories in recent months and entered negative territory again last month.
- + During the first half of 2023, pork demand was weak. Weak demand for bacon has been a key part of the declining demand for pork. However, in the past few weeks, pork cutout value has increased alongside pork bellies according to the Livestock Marketing Information Centre. Soaring prices for pork bellies, used to make bacon, have helped buoy lean hog prices. Sentiment has seen a marked turnaround on the lean hogs market evident from shift in net speculative positioning from net short to net long.
- + Net speculative positioning in cotton rose 101% helped by an 18% unwind in short positions and a 9% increase in long positions. Sentiment has been improving on the back of warm weather and lower acreage in key producing countries such as the US and China.
- + Soybean oil saw also a sharp turnaround in sentiment as net speculative positioning turned from net short to net long.
- + The impact of Russia withdrawing from the Black Sea Grain Deal initiative was witnessed in the improvement in sentiment towards wheat as net speculative positioning rose 40.6% over the prior month.
- + Net speculative positioning in sugar fell by 30% owing to a 21% decline in long positioning alongside a 5% increase in short positions owing to improving supply prospects from Brazil.

- + Sentiment on the corn market deteriorated with net speculative positioning declining 93.4%.
- + Net speculative positioning in coffee turned to net short from net long a month ago underscoring a decline in investor sentiment. The global coffee market is expected to move into a small surplus in the season that starts in September, following two consecutive years of deficit and that appears to be weighing on sentiment.

Top 5/Bottom 5 Change in CFTC Net Positions (over past month)\*



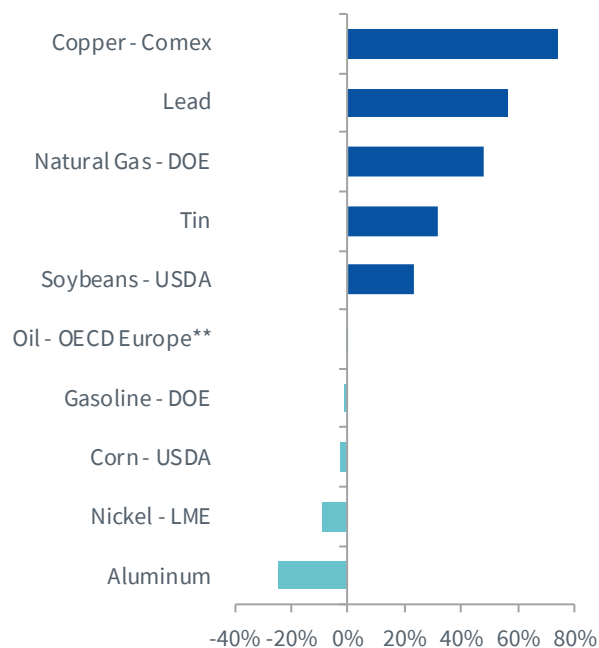
Source: Bloomberg

\*CFTC futures net positioning as at report date, percent change from previous month. **Historical performance is not an indication of future performance and any investments may go down in value.**

## Inventories

- + COMEX copper inventory is up 74% compared to 3 months ago. Copper held in COMEX is one of the smaller stores of the metal. When combining London Metal Exchange, Shanghai Futures Exchange and COMEX, copper inventory is still 18% below where it was 3 months ago.
- + Aluminium futures inventory is 25% lower than 3 months ago, mainly because of Shanghai Futures Exchange inventory declining over that time window.
- + Lead and tin inventories have been on the rise over the last 3 months and were up 57% and 32% respectively.
- + Natural gas inventories continue to remain close to 1 standard deviation above the historic average for this time of the year. Inventories rose 9% in the past month, 48% in the past 3 months. Despite the hot weather, production of natural gas appears ample.
- + The effects of sanctions on Russia appear to be making European oil supplies tighter based on OECD Europe oil inventory data. Europe oil inventory is close to 1 standard deviation below historic average for this time of year and close to where it was in 2022, when oil prices were considerably stronger and worries of tightness more acute following the Ukraine invasion.

**Top 5/Bottom 5 Change in Inventories (over past 3 months)\***



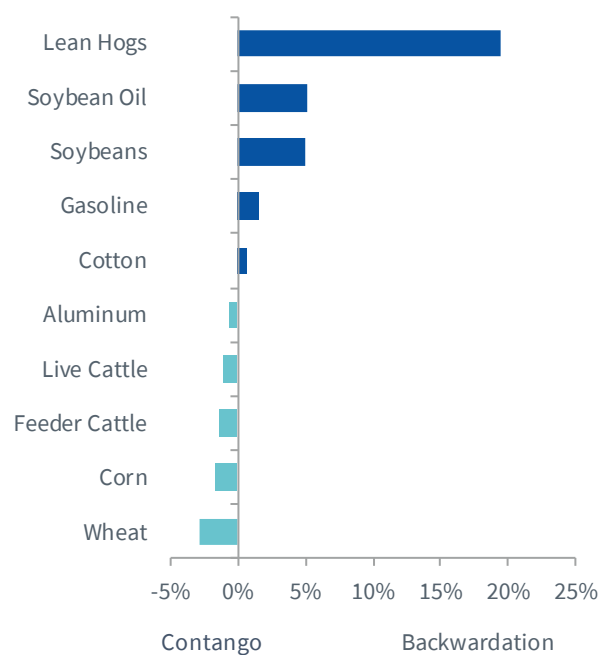
Source: Bloomberg

\*Percent change in inventory based on 3-month change (in %). **Historical performance is not an indication of future performance and any investments may go down in value.**

## Curve Dynamics

- + The front end of the lean hogs futures curve has extended its backwardation, now providing investors the highest roll yield across agricultural commodities at 19.5% compared to 2.1% last month.
- + Soybean Oil futures curve also extended its backwardation at the front end of the curve, suggesting near term tightness.
- + The front end of the cotton futures curve moved from contango into backwardation from last month, enhancing returns for long term investors by 0.7%.
- + In contrast, the front end of the corn and live cattle futures curve moved from backwardation into contango.
- + Contango at the front end of the wheat futures curve steepened to present a -2.8% roll drag, up from -1.8% last month.
- + The front end of the gasoline futures curve is in seasonal backwardation. Although not as backwardated as this time last year, when fears of energy supply tightness were particularly acute, gasoline futures are still providing a 1.6% front-month roll yield.
- + Contango in the aluminium futures curve means the front month contract is offering a roll return drag of 0.7%.

Top 5/Bottom 5 Roll Yields (front to next month)\*



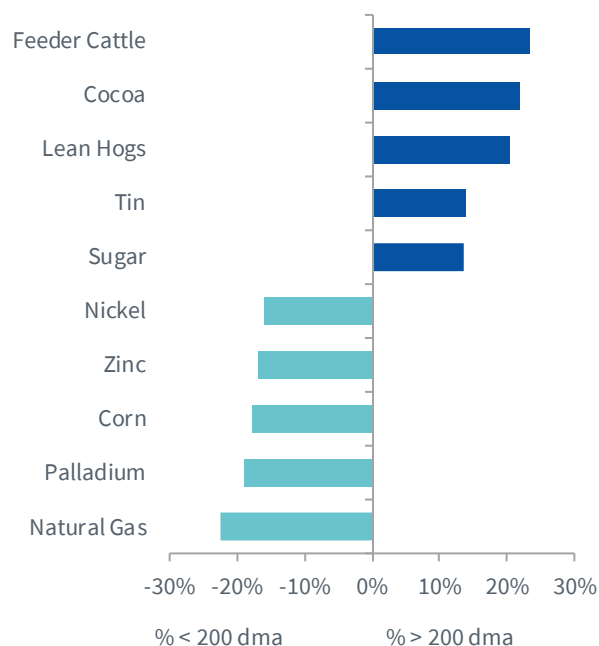
Source: Bloomberg

\*Roll yields calculated as percent change between front month futures price and next month futures price on 21 July 2023. **Historical performance is not an indication of future performance and any investments may go down in value.**

## Technicals

- + Feeder Cattle are continuing their strong gains this year, benefitting from the weakness in corn futures prices (given their inverse relation), are now trading 23.4% above its 200-day moving average (dma).
- + Expectations for the cocoa market to remain in a deficit for a third year in a row have helped cocoa futures prices to 21.9% above its 200-dma.
- + Lean hogs, continuing their strong gains this year, are now trading at 20.4% above their 200-dma.
- + Despite the 4.6% price drop last month, sugar continues to trade 13.6% above its 200-dma aided by an improving supply situation.
- + Corn's 18.1% price drop last month has taken it to 17.9% below its 200-dma.
- + Natural gas prices are trading 22.6% below their 200-dma. Despite the uptick in prices in the past month, prices have largely trended downwards this year.
- + Tin was the only base metal to make gains last month. After being up 4.7%, tin is now trading 14% above its 200-dma.
- + Nickel and zinc are trading 15.9% and 16.7% below their respective 200-dmas. Market pessimism about the cyclical economic environment is continuing to weigh on these metals.
- + Palladium is trading 19% below its 200-dma. Its price hit the lowest level since 2018 on at the beginning of July 2023, but has bounced 4% up from that point by 21 July 2023.

Top 5/Bottom 5 Price Diff to 200 day moving av. (dma)\*



Source: Bloomberg

\*Percent difference between the front month futures price and its 200-day moving average on 21 July 2023. **Historical performance is not an indication of future performance and any investments may go down in value.**



# Summary Tables

## Prices

	Current	Unit	1 Month	3 Month	6 Month	1 Year
<b>Energy</b>						
WTI Oil	77.1	USD/bbl.	9.3%	-1.0%	-5.2%	-20.0%
Brent Oil	81.1	USD/bbl.	6.8%	-0.7%	-7.5%	-21.9%
Natural Gas	2.71	USD/MMBtu	8.9%	21.5%	-14.5%	-65.8%
Gasoline	2.80	USD/gal.	7.4%	7.7%	5.9%	-11.0%
Heating Oil	2.75	USD/gal.	10.9%	10.3%	-20.8%	-23.5%
Carbon	89.9	EUR/MT	-3.3%	2.9%	9.2%	15.6%
<b>Agriculture</b>						
Wheat	7.0	USD/bu.	0.3%	5.4%	-5.9%	-13.5%
Corn	5.3	USD/bu.	-18.1%	-20.5%	-22.1%	-8.5%
Soybeans	15.0	USD/bu.	1.6%	1.2%	-0.4%	5.8%
Sugar	0.25	USD/lb.	-4.6%	0.7%	26.8%	36.3%
Cotton	0.85	USD/lb.	5.5%	8.5%	-1.9%	-14.6%
Coffee	1.62	USD/lb.	-8.8%	-16.7%	4.6%	-25.0%
Soybean Oil	0.69	USD/lb.	16.4%	30.0%	12.0%	18.4%
Cocoa	3,415	USD/MT	8.7%	7.7%	32.9%	48.2%
<b>Industrial Metals</b>						
Aluminum	2,177	USD/MT	-1.3%	-8.9%	-15.9%	-10.1%
Copper	3.80	USD/lb.	-1.9%	-4.4%	-10.5%	15.2%
Copper (LME)	8,444	USD/MT	-1.3%	-4.0%	-9.4%	15.4%
Zinc	2,368	USD/MT	0.6%	-12.7%	-31.1%	-20.9%
Nickel	20,622	USD/MT	-5.9%	-15.6%	-27.9%	-3.9%
Lead	2,148	USD/MT	0.0%	-0.8%	3.1%	5.9%
Tin	28,700	USD/MT	4.7%	7.2%	-2.9%	14.0%
<b>Precious Metals</b>						
Gold	1,964	USD/t oz.	1.5%	-0.8%	2.0%	14.7%
Silver	24.7	USD/t oz.	6.5%	-1.4%	3.6%	32.2%
Platinum	963	USD/t oz.	-1.3%	-14.8%	-7.2%	12.4%
Palladium	1,282	USD/t oz.	-6.0%	-20.1%	-25.2%	-31.5%
<b>Livestock</b>						
Live Cattle	1.80	USD/lb.	1.6%	3.5%	14.9%	32.6%
Lean Hogs	1.01	USD/lb.	5.0%	30.7%	29.4%	-13.4%
Feeder Cattle	2.46	USD/lb.	5.9%	20.7%	38.2%	37.9%

Performance of front month futures from 21 Jul 22 (1 Year), 21 Jan 23 (6 Month), 21 Apr 23 (3 Month) and 20 Jun 23 (1 Month) to 21 Jul 23.

**Historical performance is not an indication of future performance and any investments may go down in value.**

## Roll Yields\*

	Unit	Exchange	21-Jul	1 Week	1 Month	3 Month
<b>Energy</b>						
WTI Oil	USD/bbl.	NYMEX	0.4%	0.1%	0.0%	0.2%
Brent Oil	USD/bbl.	ICE	0.2%	0.3%	0.0%	0.2%
Natural Gas	USD/MMBtu	NYMEX	0.2%	0.4%	-3.0%	-7.3%
Gasoline	USD/gal.	NYMEX	1.6%	2.4%	3.4%	1.0%
Heating Oil	USD/gal.	NYMEX	0.3%	0.3%	2.8%	0.4%
Carbon	EUR/MT	ICE	-0.2%	-0.2%	-0.4%	-0.3%
<b>Agriculture</b>						
Wheat	USD/bu.	CBOT	-2.8%	-3.0%	-1.8%	-1.7%
Corn	USD/bu.	CBOT	-1.7%	18.4%	7.6%	7.8%
Soybeans	USD/bu.	CBOT	5.0%	1.0%	4.8%	2.4%
Sugar	USD/lb.	NYBOT	-0.3%	-0.6%	0.1%	2.0%
Cotton	USD/lb.	NYBOT	0.7%	1.8%	-3.4%	-2.2%
Coffee	USD/lb.	NYBOT	0.2%	0.7%	-0.1%	1.4%
Soybean Oil	USD/lb.	CBOT	5.1%	4.4%	1.6%	-0.3%
Cocoa	USD/MT	NYBOT	0.3%	-1.3%	-2.3%	6.3%
<b>Industrial Metals</b>						
Aluminum	USD/MT	LME	-0.7%	-0.7%	-0.6%	0.0%
Copper	USD/lb.	COMEX	-0.2%	-0.1%	-0.1%	0.0%
Copper (LME)	USD/MT	LME	-0.1%	-0.1%	0.1%	0.0%
Zinc	USD/MT	LME	-0.1%	-0.6%	-0.1%	-0.1%
Nickel	USD/MT	LME	-0.4%	-0.4%	-0.3%	-0.1%
Lead	USD/MT	LME	-0.2%	-0.5%	0.1%	0.2%
Tin	USD/MT	LME	0.2%	0.4%	1.6%	0.2%
<b>Precious Metals</b>						
Gold	USD/t oz.	COMEX	-0.1%	-0.2%	-0.1%	-0.1%
Silver	USD/t oz.	COMEX	-0.1%	-0.2%	-0.2%	0.0%
Platinum	USD/t oz.	NYMEX	-0.3%	-0.6%	0.9%	-0.6%
Palladium	USD/t oz.	NYMEX	0.5%	0.5%	0.0%	-0.7%
<b>Livestock</b>						
Live Cattle	USD/lb.	CME	-1.0%	-1.3%	4.4%	5.7%
Lean Hogs	USD/lb.	CME	19.5%	6.0%	2.1%	-10.5%
Feeder Cattle	USD/lb.	CME	-1.3%	-1.0%	-1.6%	-4.1%

\*Roll return non-annualised from front month futures into second month on the date shown. 21 Apr 23 (3 Month), 21 Jun 23 (1 Month), 14 July 23 (1 Week). **Historical performance is not an indication of future performance and any investments may go down in value.**

## CFTC Net Positioning<sup>1</sup>

	Current	5 Yr Average	1 Month	6 Month	1 Year
<b>Energy</b>					
WTI Oil	239,292	434,079	195,837	269,062	324,274
Brent Oil <sup>2</sup>	-83,602	67,401	-67,326	-1,158	53,434
Natural Gas	-97,822	-97,100	-109,891	-180,669	-121,592
Gasoline	57,043	65,014	51,976	56,613	39,773
Heating Oil	21,350	9,038	16,543	18,110	9,097
<b>Agriculture</b>					
Wheat	-43,097	-101	-72,546	-45,713	-4,183
Corn	7,567	167,699	114,506	245,001	162,387
Soybeans	107,279	76,643	83,500	173,250	80,557
Sugar	161,211	110,995	230,430	192,122	110,774
Cotton	23,778	42,887	11,827	2,775	37,351
Coffee	-9,673	9,155	25,425	-37,467	24,949
Soybean Oil	44,991	45,640	29,400	55,917	21,743
Cocoa	78,367	19,031	67,955	13,469	-18,238
<b>Industrial Metals<sup>3</sup></b>					
Copper (COMEX)	-4,032	5,668	2,224	17,682	-23,312
Copper (LME)	63,946	43,623	49,021	52,341	33,187
Aluminum	138,911	164,289	146,214	204,857	153,609
Nickel	23,943	27,221	26,909	26,846	23,816
Zinc	28,949	48,725	23,461	42,576	26,754
Lead	51,070	51,765	56,823	65,613	30,959
Tin	9,954	7,994	9,977	8,052	6,585
<b>Precious Metals</b>					
Gold	200,311	195,393	163,132	176,793	92,501
Silver	43,845	28,909	16,029	33,850	-677
Platinum	16,684	17,937	19,976	23,452	-5,233
Palladium	-8,386	2,824	-6,594	-2,749	-3,751
<b>Livestock</b>					
Live Cattle	140,326	83,080	138,047	93,069	39,090
Lean Hogs	33,306	44,560	7,552	7,214	44,302
Feeder Cattle	15,767	2,567	18,100	-7,571	-2,365

<sup>1</sup> Net positions in number contracts.

<sup>2</sup> Brent 5-Yr average of net positions from January 2011 as positions were not reported by CFTC before then.

<sup>3</sup> All Industrial metals positioning data (excluding copper) is sourced from LME COTR data in Bloomberg from 30 January 2018 (first available date) under post-MIFID rules.

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## Inventory Levels\*

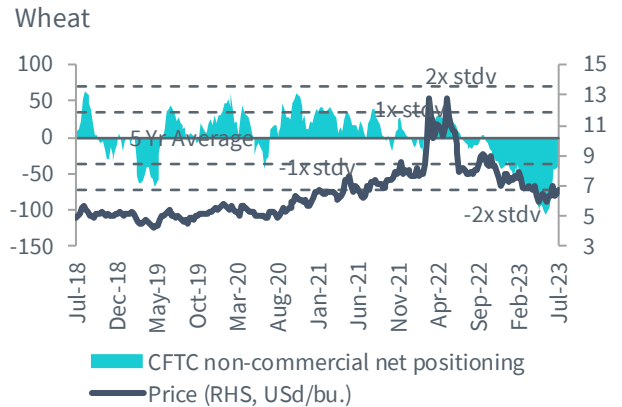
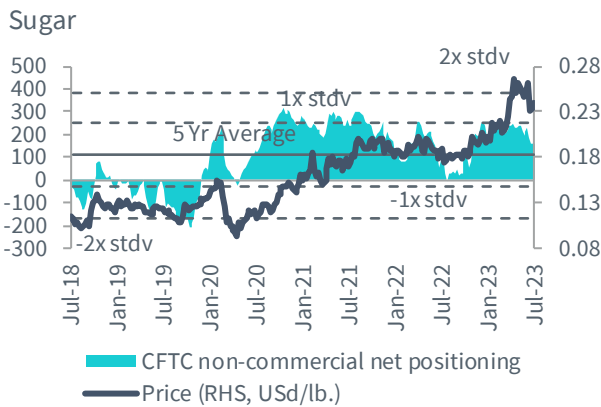
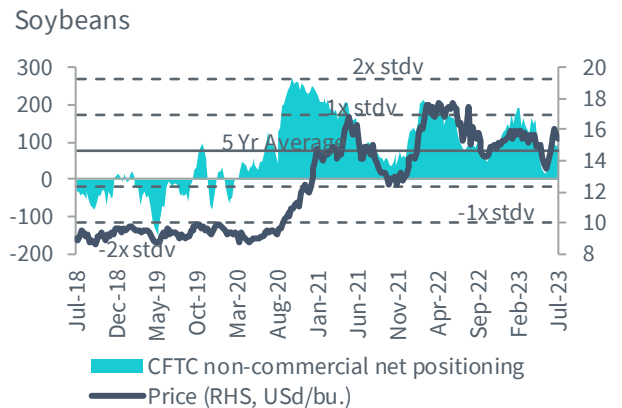
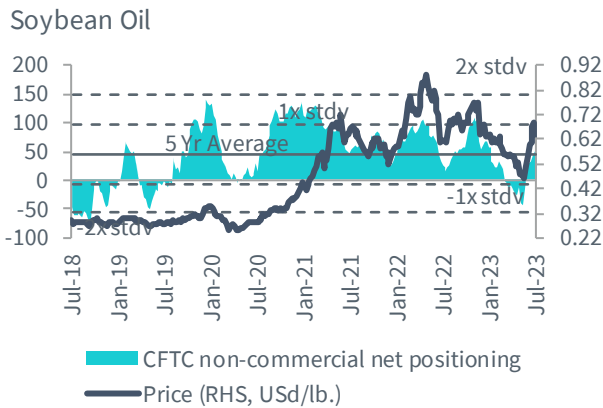
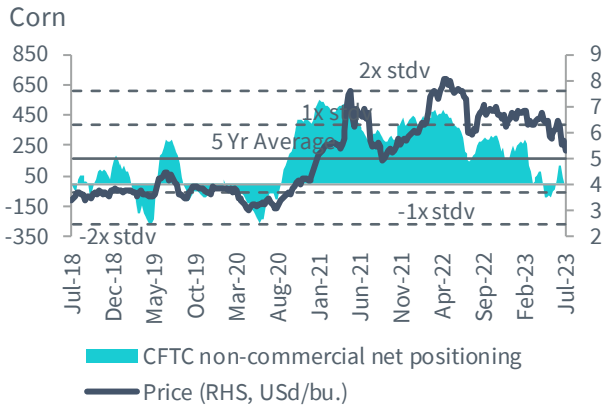
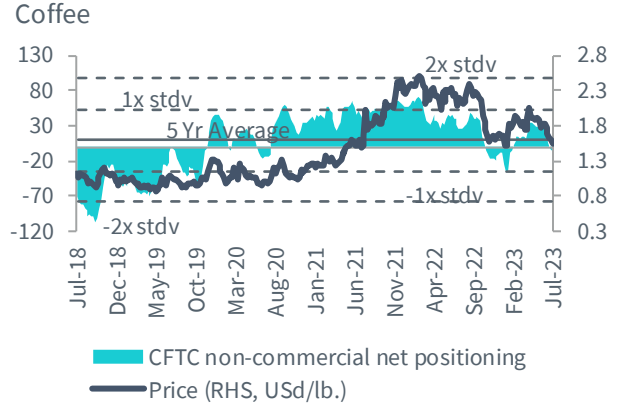
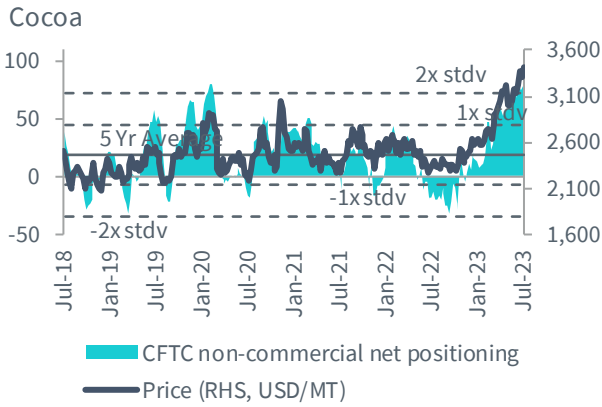
	Current	5 Yr Average	1 Month	3 Month	6 Month
<b>Energy</b>					
Oil - US	457,420	-0.8%	-1%	-1%	2%
Oil - OECD Europe**	341	-2%	0.9%	-0.8%	3%
Natural Gas - DOE	2,971	7.4%	9%	48%	9%
Gasoline - DOE	218,386	-6%	-1%	-1%	-6%
Heating Oil - DOE	7,833	-9%	1%	8%	2%
<b>Industrial Metals</b>					
<b>Aluminium</b>	<b>626,445</b>	<b>-55%</b>	<b>-8%</b>	<b>-25%</b>	<b>3%</b>
Aluminium - LME	513,400	-51%	-7%	-10%	35%
Aluminium - SHFE	113,045	-68%	-14%	-57%	-50%
<b>Copper</b>	<b>182,131</b>	<b>-48%</b>	<b>4%</b>	<b>-18%</b>	<b>-28%</b>
Copper - LME	59,900	-62%	-29%	15%	-25%
Copper - SHFE	77,898	-41%	29%	-47%	-44%
Copper - COMEX	44,333	-31%	51%	74%	38%
<b>Nickel - LME</b>	<b>37,518</b>	<b>-76%</b>	<b>-4%</b>	<b>-9%</b>	<b>-28%</b>
<b>Zinc</b>	<b>147,667</b>	<b>-30%</b>	<b>10%</b>	<b>11%</b>	<b>135%</b>
Zinc - LME	90,725	-32%	14%	70%	386%
Zinc - SHFE	56,942	-26%	5%	-29%	29%
<b>Lead</b>	<b>90,905</b>	<b>-28%</b>	<b>16%</b>	<b>57%</b>	<b>23%</b>
Lead - LME	51,350	-28%	29%	59%	154%
Lead - SHFE	39,555	-27%	2%	53%	-26%
<b>Tin</b>	<b>13,977</b>	<b>61%</b>	<b>24%</b>	<b>32%</b>	<b>43%</b>
Tin - LME	4,755	41%	100%	210%	62%
Tin - SHFE	9,222	74%	4%	2%	35%
<b>Agriculture</b>					
Wheat - USDA	270,710	-5.6%	2.4%	2.1%	1.3%
Corn - USDA	297,550	-5%	0.0%	-3.0%	-2.7%
Soybeans - USDA	123,340	22%	0.7%	23.0%	23.3%
Sugar - USDA	44,488	-10%	-	-	-
Cotton - USDA	92,790	8%	0.6%	0.8%	1.8%
Coffee - USDA	32,565	-5%	-	-	-
Soybean Oil - USDA	4,532	-4%	-1%	8%	3%

\*Current inventories relative 1, 3, 6 months ago. The column "5-yr average" is the current inventory level relative to 5 years average inventory. For energy, 5-yr average is the average of the same month as report month over the past 5 years. SHFE started reporting inventory data from April 2015. \*\* (OECD) inventory data reported with 3-month lag with current = Apr 2023.

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# CFTC Net Positioning

# Agriculture

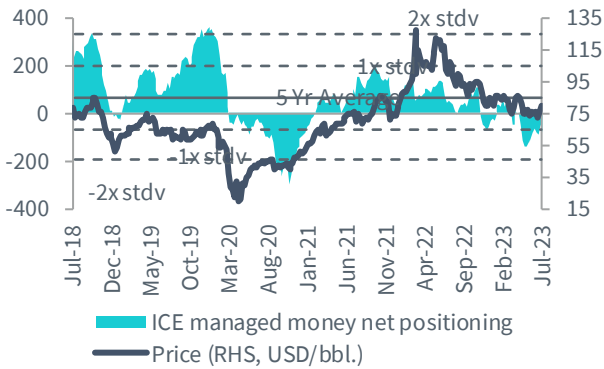


Source: Bloomberg, WisdomTree.

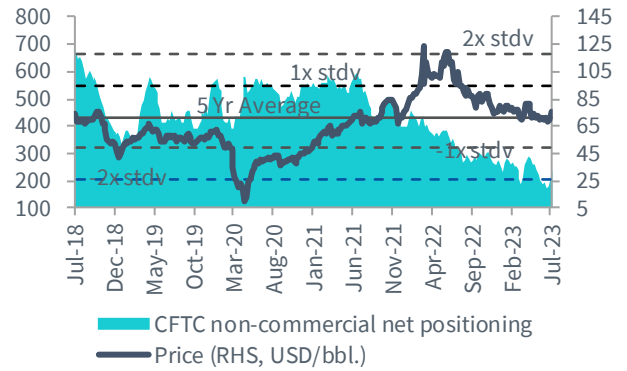
Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. All commodity futures price data is denominated in USD unless otherwise indicated. CFTC futures and LME COTR net positioning as at Jul 18 2023. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Energy

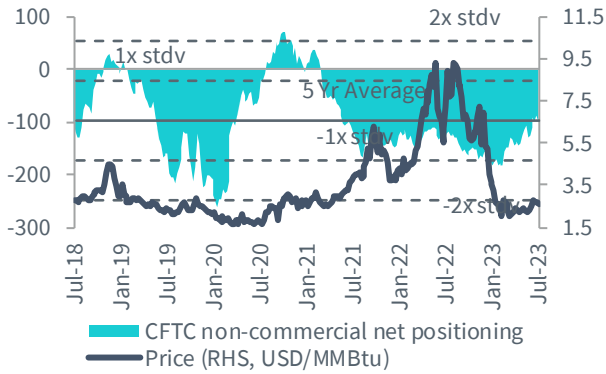
Brent Oil



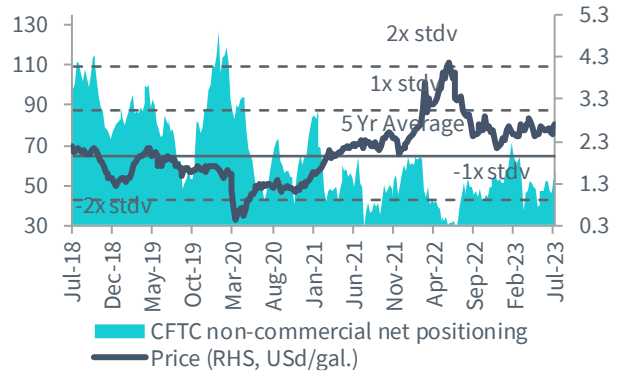
WTI Oil



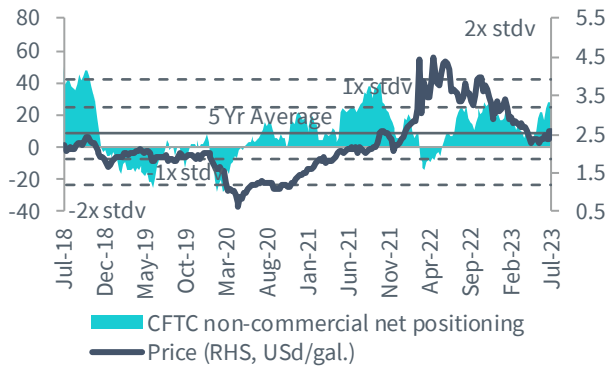
Natural Gas



Gasoline



Heating Oil

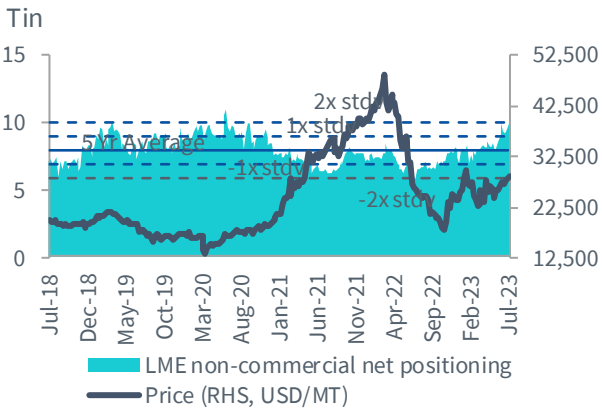
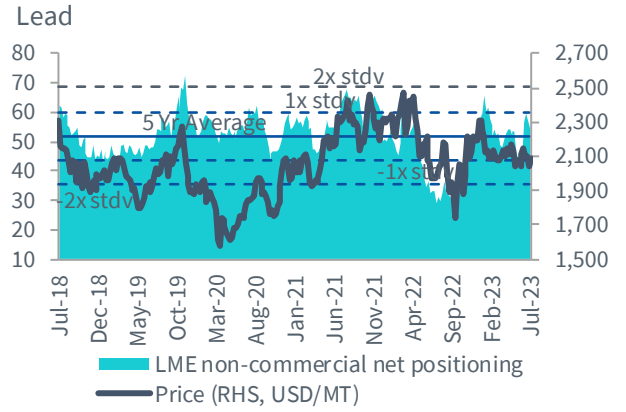
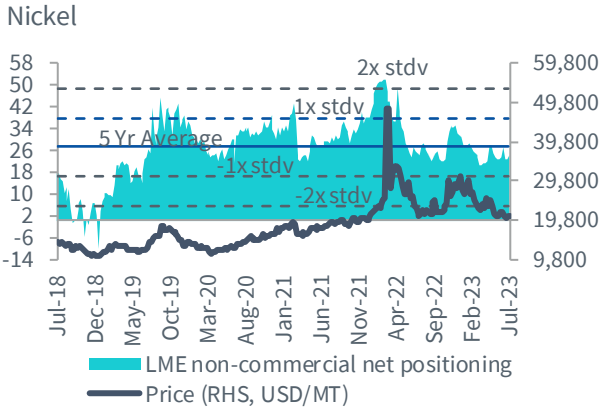
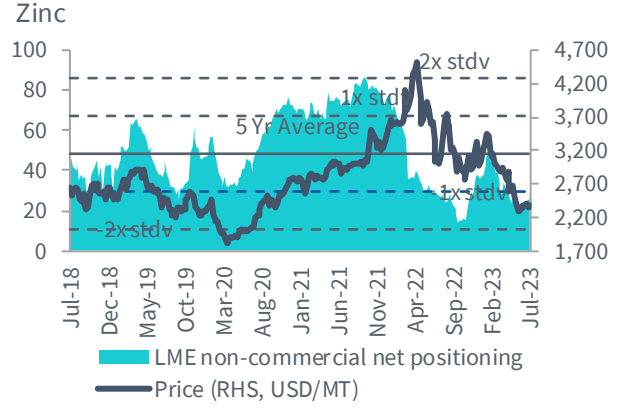
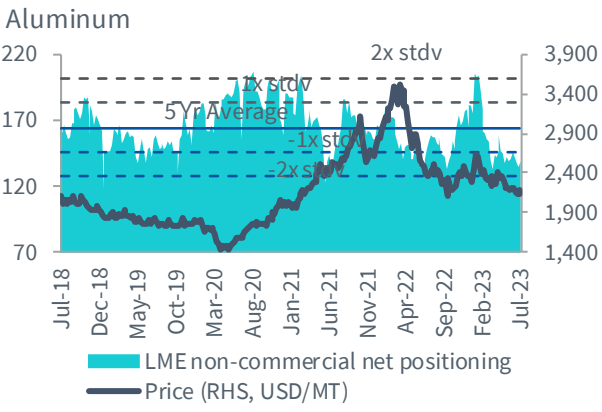
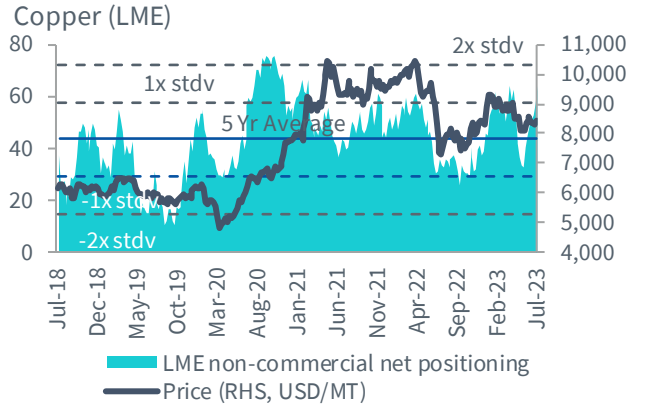
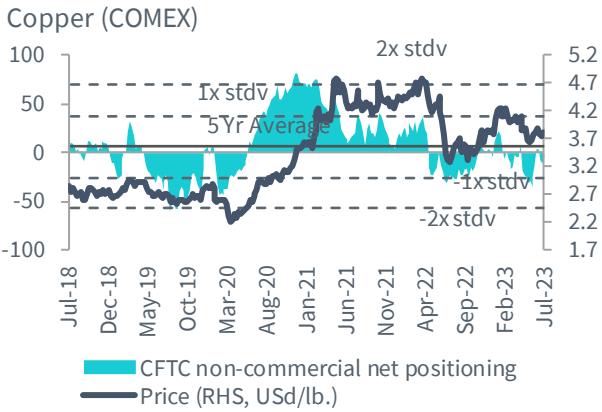


Source: Bloomberg, WisdomTree.

Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. All commodity futures price data is denominated in USD unless otherwise indicated. \*Brent average of net positions from January 2011 as positions were not reported by CFTC before then. **Historical performance is not an indication of future performance and any investments may go down in value.**



# Industrial Metals

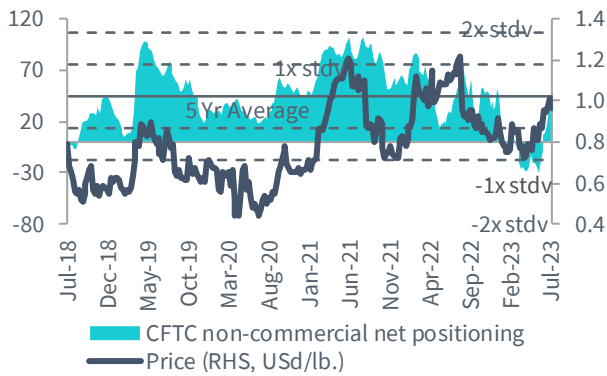


Source: Bloomberg, WisdomTree.

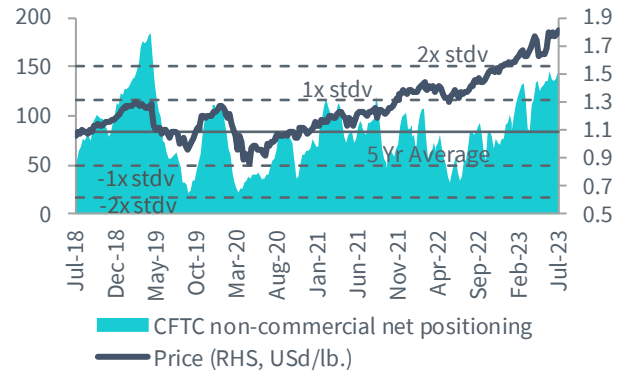
Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. LME non-commercial net positions from 30 January 2018 post MIFID II data and respective graphs represent daily data. All commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Livestock

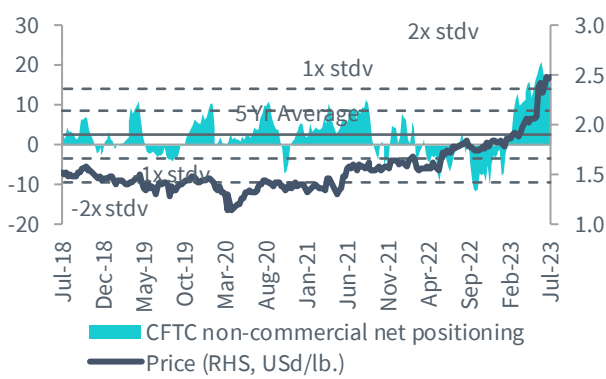
## Lean Hogs



## Live Cattle



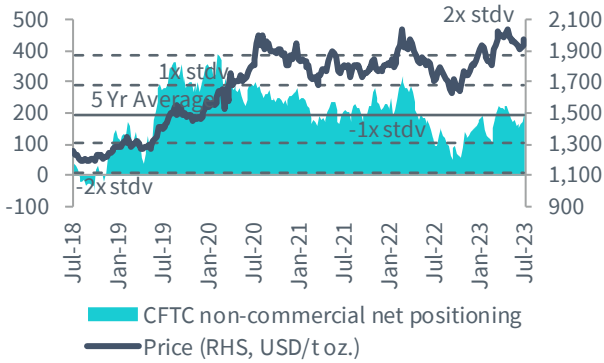
## Feeder Cattle



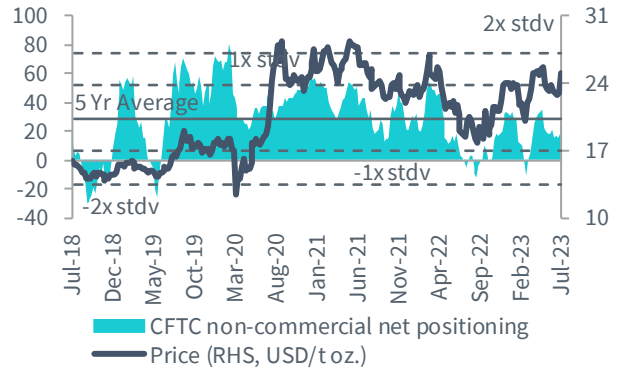
Source: Bloomberg, WisdomTree. Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. respective graphs represent daily data. All commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Precious Metals

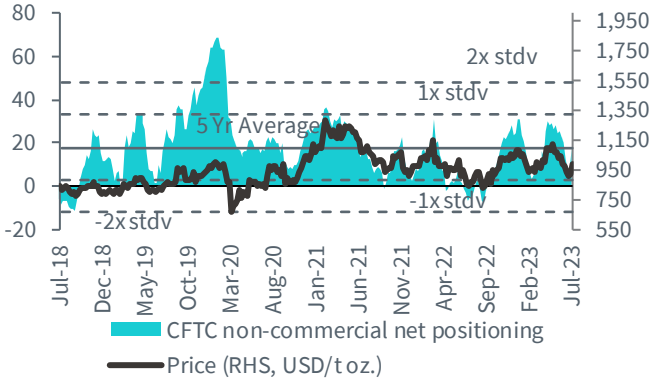
Gold



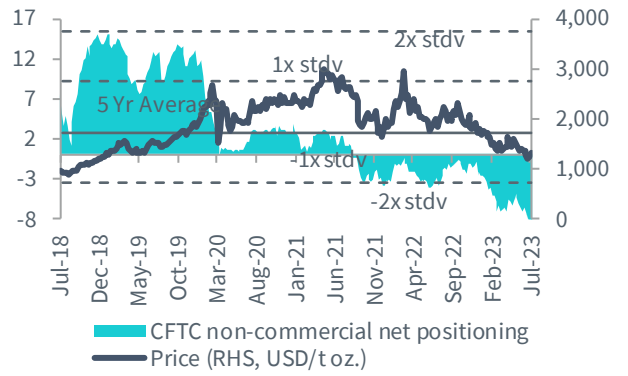
Silver



Platinum



Palladium

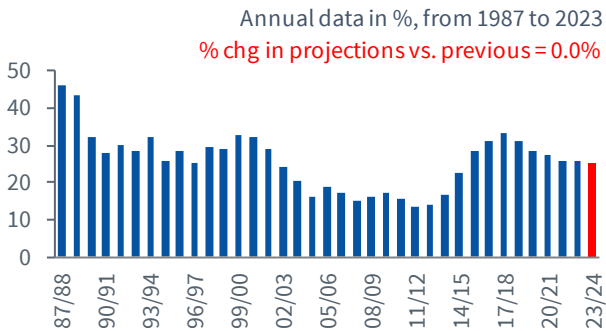


Source: Bloomberg, WisdomTree. Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. respective graphs represent daily data. All commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

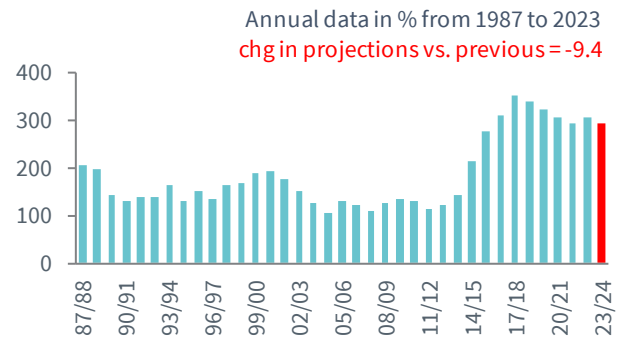
# Inventories

# Agriculture

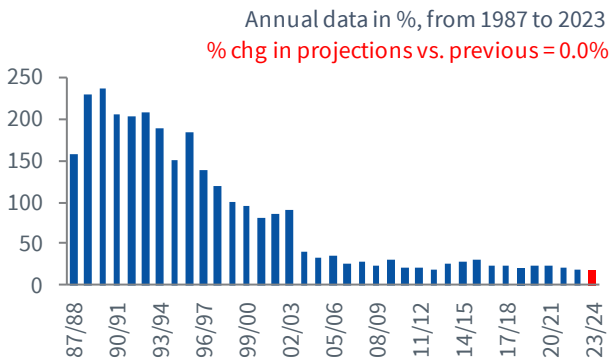
Corn - Stock to Use



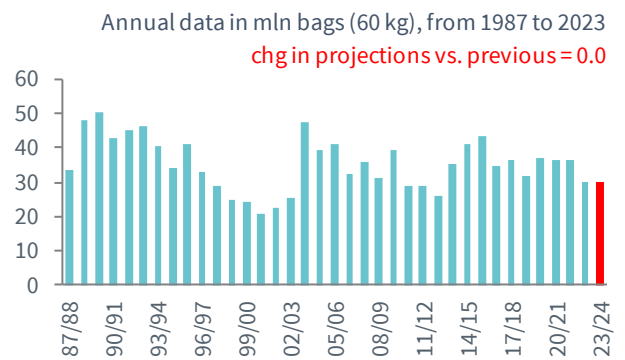
Corn - Ending Stocks



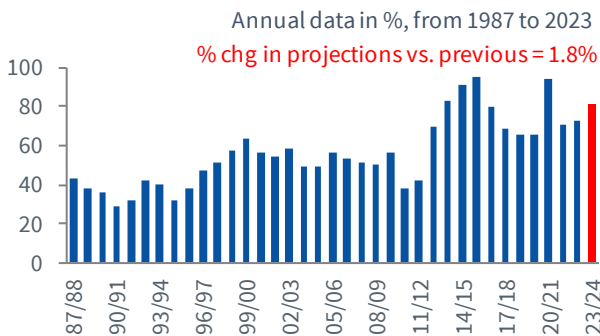
Coffee - Stock to Use



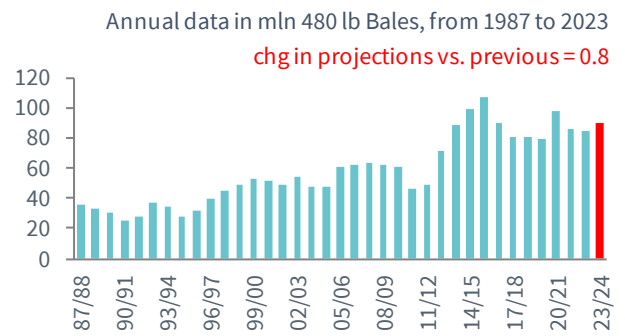
Coffee - Ending Stocks



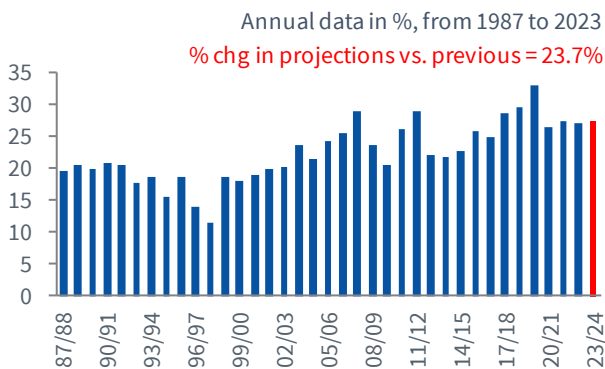
Cotton - Stock to Use



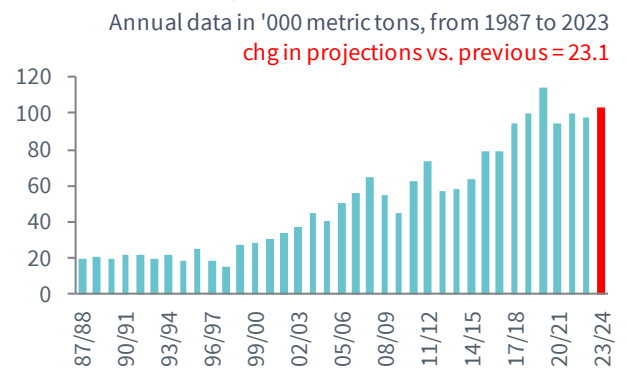
Cotton - Ending Stocks



Soybeans - Stock to Use



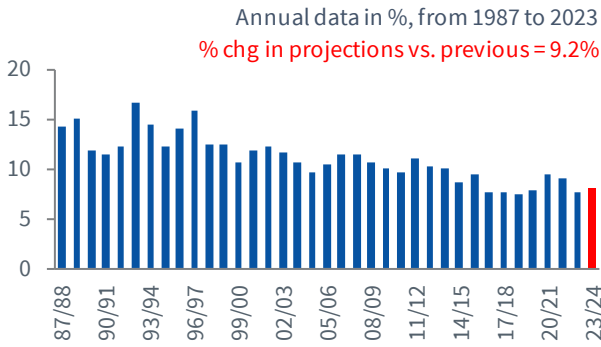
Soybeans - Ending Stocks



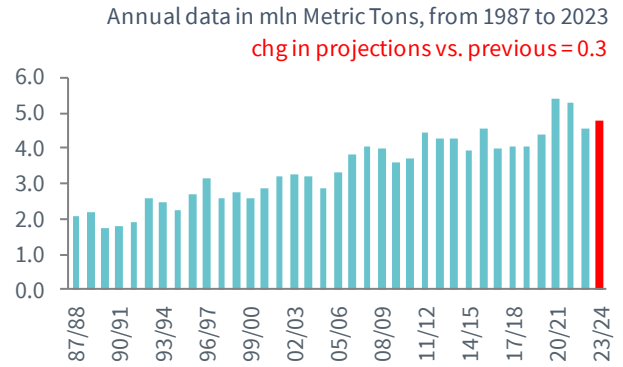
Source: USDA, Bloomberg, WisdomTree. Note: Ending stocks, inventories and stock to use data from the USDA are annual with monthly update of 2023/2024 estimates. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Agriculture

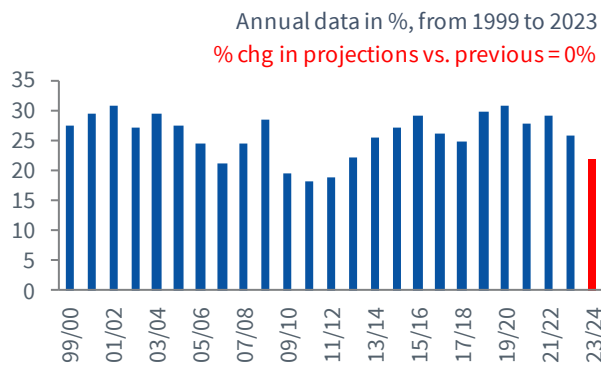
Soybean Oil - Stock to Use



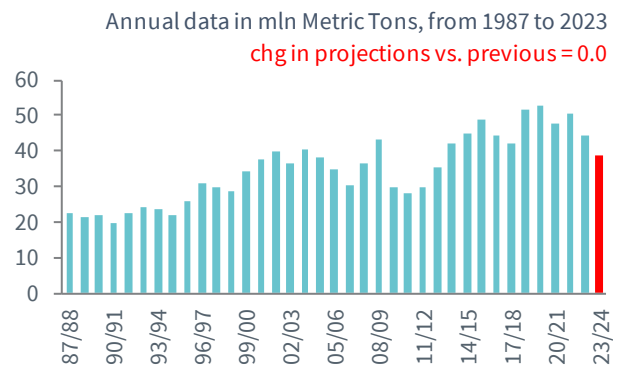
Soybean Oil - Ending Stocks



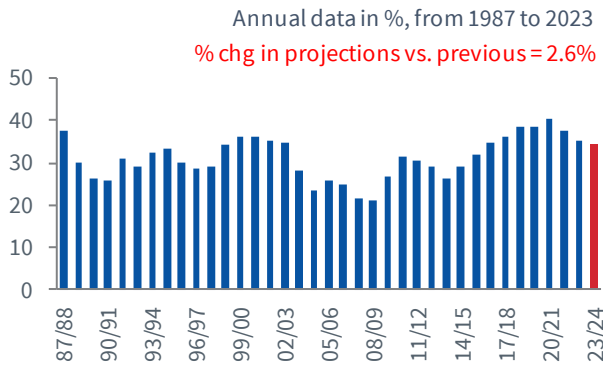
Sugar - Stock to Use



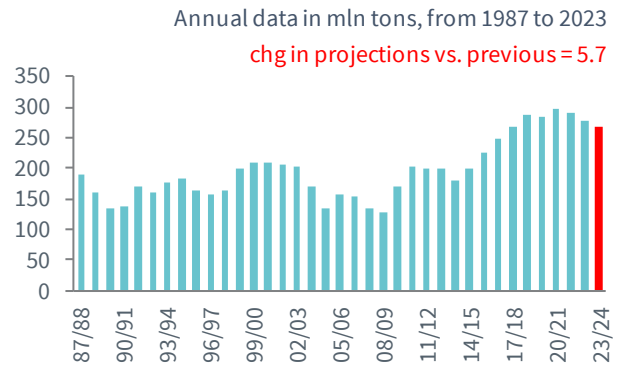
Sugar - Ending Stocks



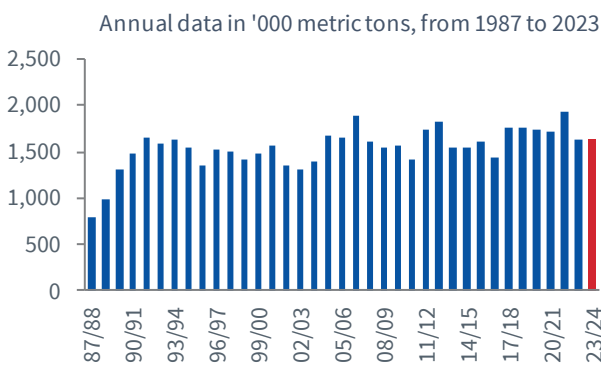
Wheat - Stock to Use



Wheat - Ending Stocks



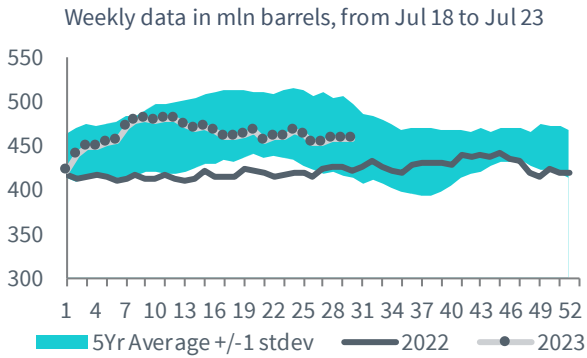
Cocoa - Inventory



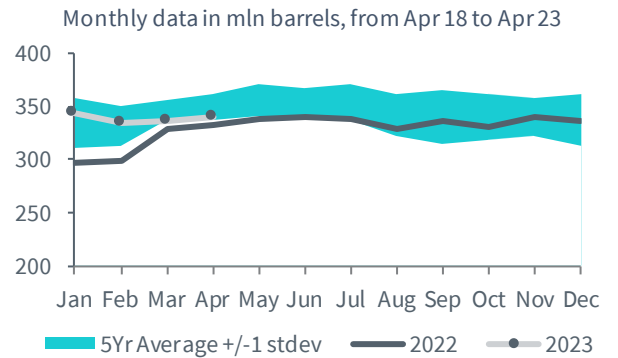
Source: USDA, Bloomberg, WisdomTree. Note: Ending stocks, inventories and stock to use data from the USDA are annual with monthly update of 2023/2024 estimates. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Energy

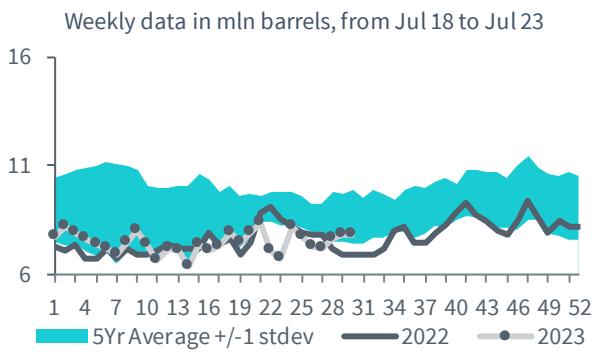
US Oil Inventory



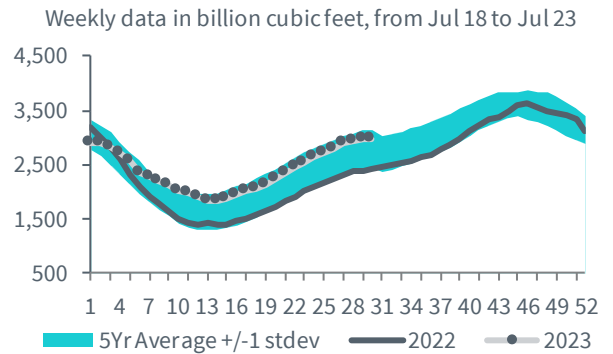
OECD Europe Oil Industry Inventory



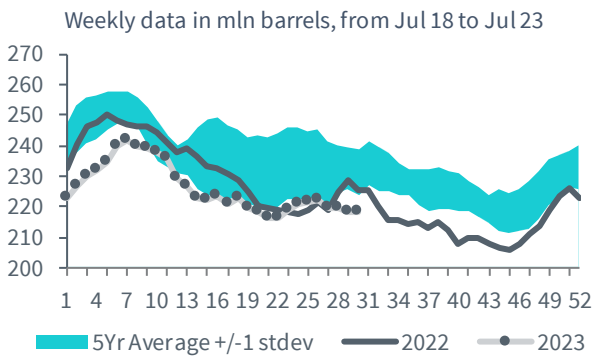
Heating Oil Inventory



Natural Gas Inventory



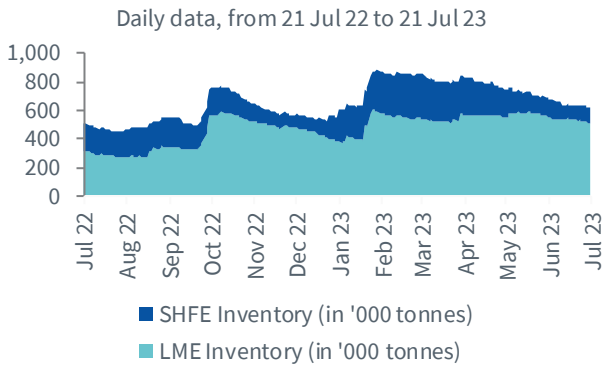
Gasoline Inventory



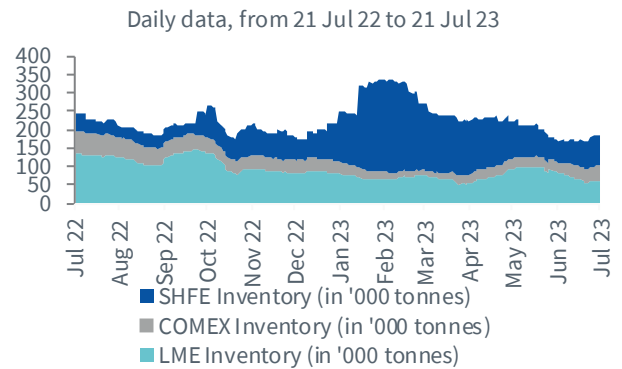
Source: Source: IEA / DOE, Bloomberg, WisdomTree. Note: "Oil - OECD Inventory" represents OECD industry stocks and is reported with a 3-month lag. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Industrial Metals

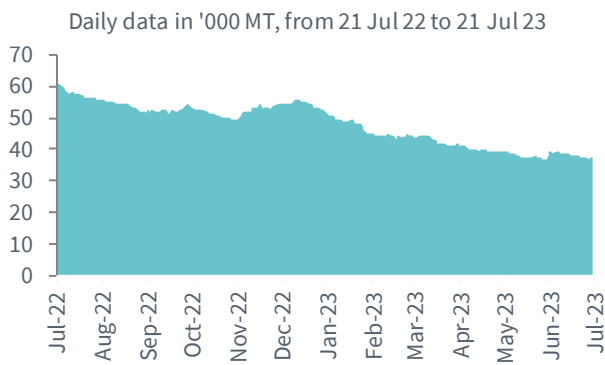
## Aluminum Inventory



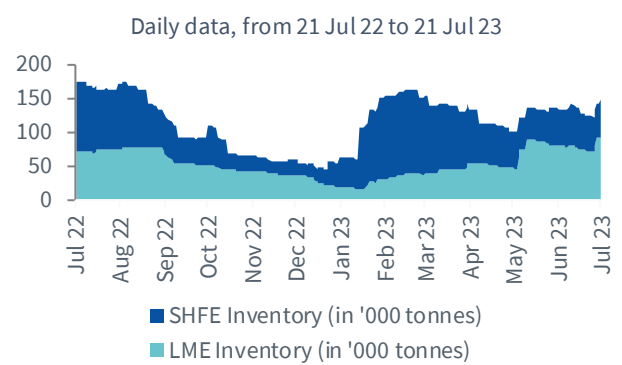
## Copper Inventory



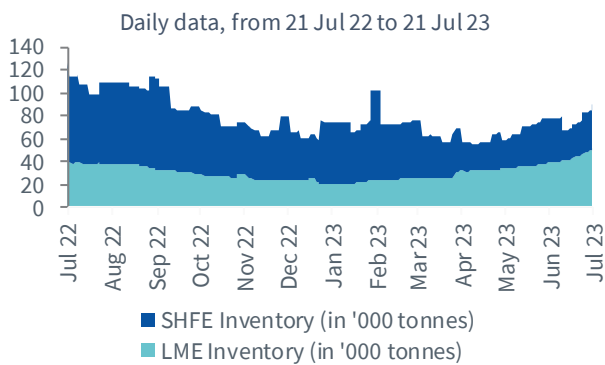
## Nickel Inventory



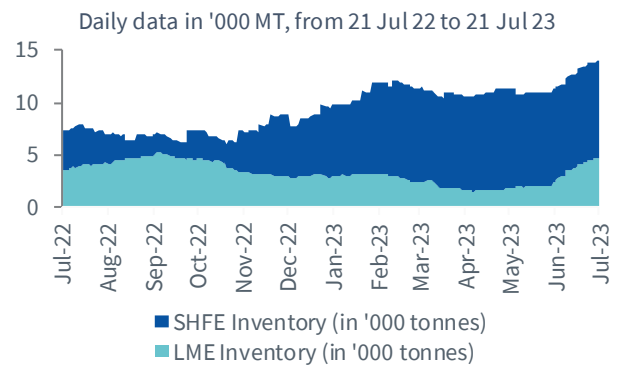
## Zinc Inventory



## Lead Inventory



## Tin Inventory



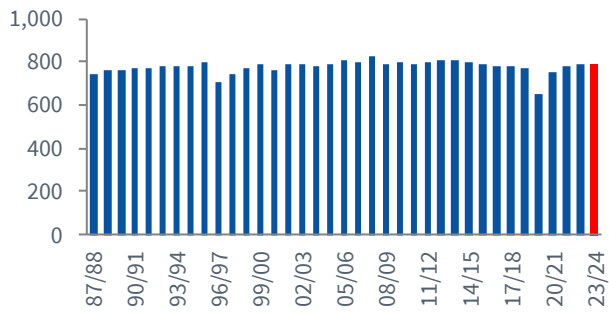
Source: Bloomberg, WisdomTree. Historical performance is not an indication of future performance and any investments may go down in value.



# Livestock

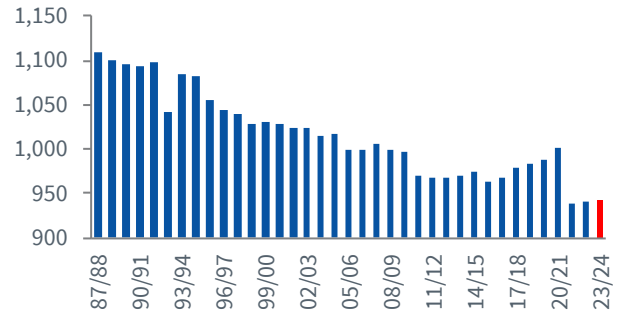
### Lean Hogs Inventory

Annual data in mln Heads, from 1987 to 2023



### Live Cattle Inventory

Annual data in mln Heads, from 1987 to 2023



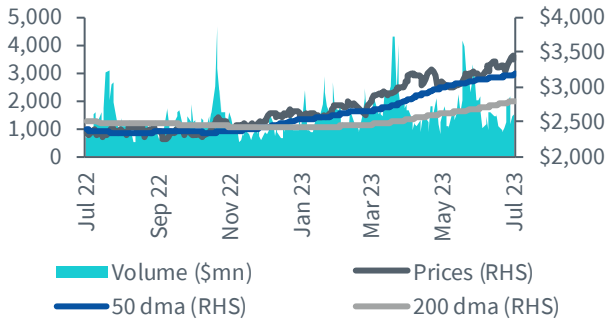
Source: USDA, Bloomberg, WisdomTree. Note: Ending stocks, inventories and stock to use data from the USDA are annual with monthly update of 2023/2024 estimates. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Moving Average and Volumes

# Agriculture

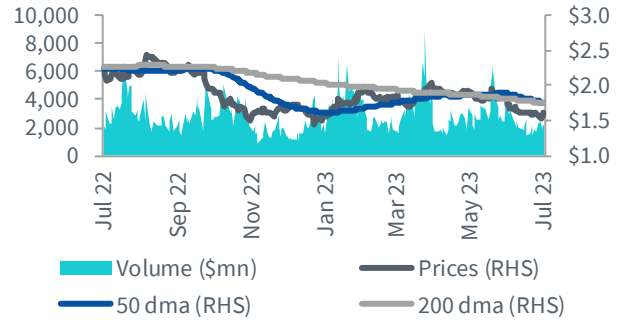
Cocoa Front Month Futures Price

Daily data in USD/MT, from 21 Jul 22 to 21 Jul 23



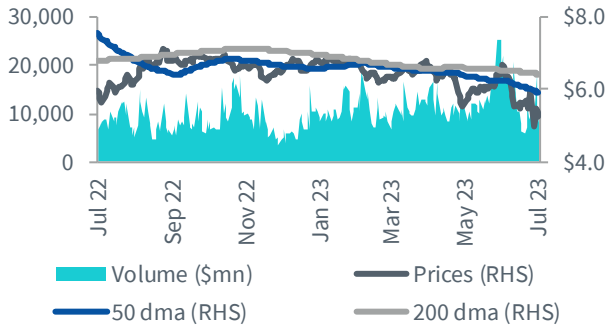
Coffee Front Month Futures Price

Daily data in USD/lb., from 21 Jul 22 to 21 Jul 23



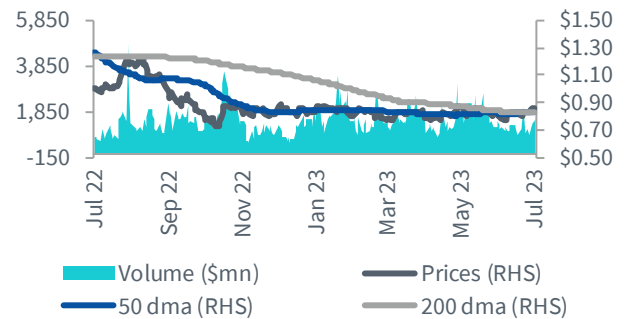
Corn Front Month Futures Price

Daily data in USD/bu., from 21 Jul 22 to 21 Jul 23



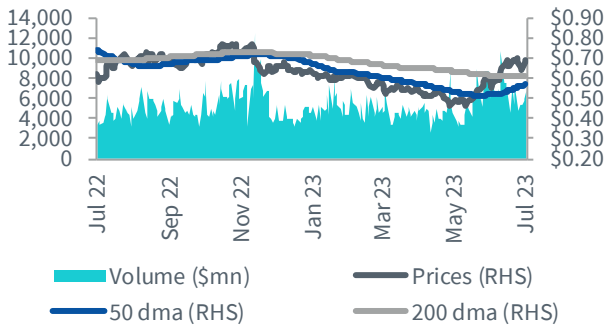
Cotton Front Month Futures Price

Daily data in USD/lb., from 21 Jul 22 to 21 Jul 23



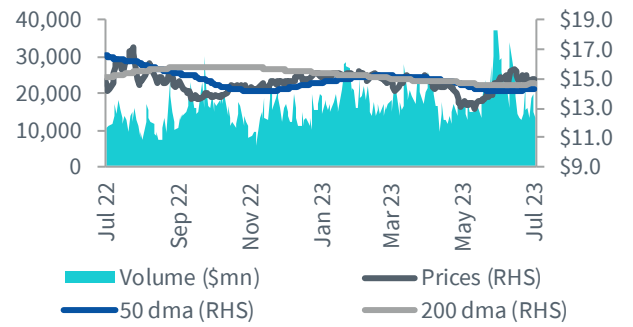
Soybean Oil Front Month Futures Price

Daily data in USD/lb., from 21 Jul 22 to 21 Jul 23



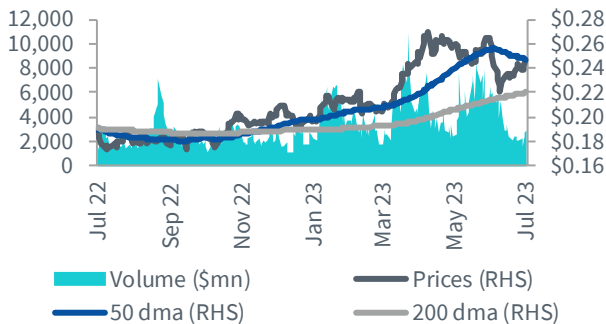
Soybeans Front Month Futures Price

Daily data in USD/bu., from 21 Jul 22 to 21 Jul 23



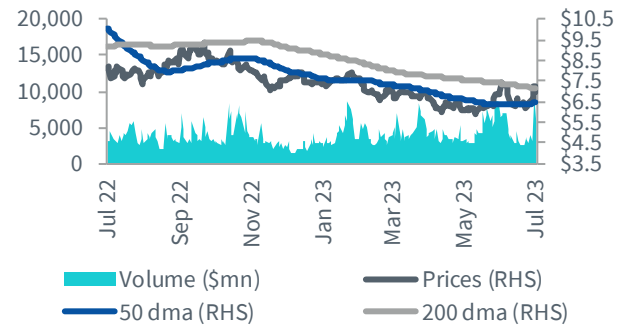
Sugar Front Month Futures Price

Daily data in USD/lb., from 21 Jul 22 to 21 Jul 23



Wheat Front Month Futures Price

Daily data in USD/bu., from 21 Jul 22 to 21 Jul 23

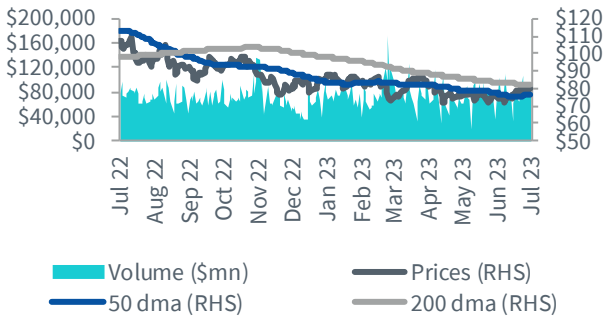


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Energy

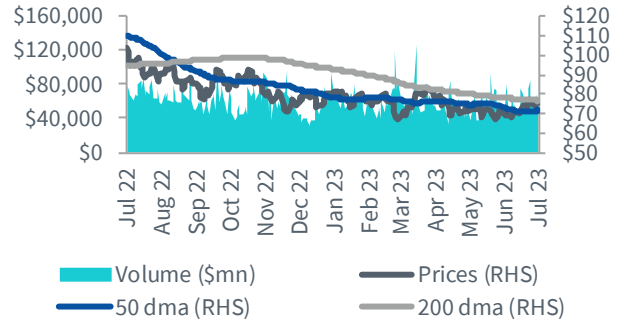
### Brent Oil Front Month Futures Price

Daily data in USD/bbl., from 21 Jul 22 to 21 Jul 23



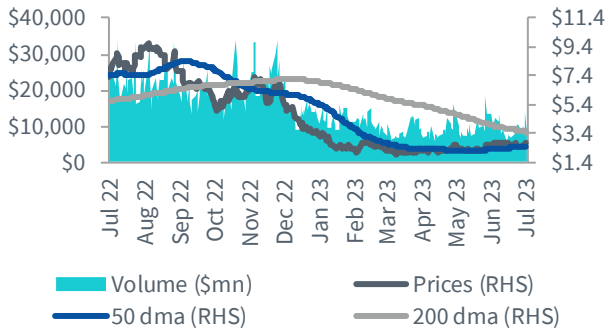
### WTI Oil Front Month Futures Price

Daily data in USD/bbl., from 21 Jul 22 to 21 Jul 23



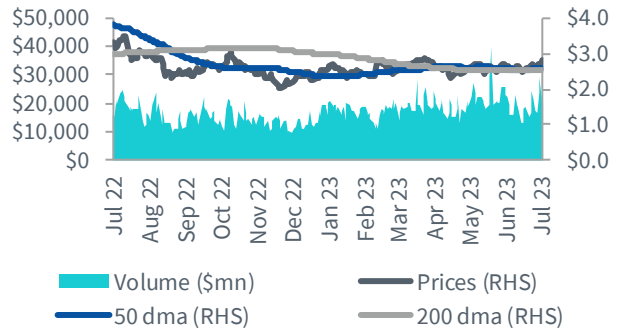
### Natural Gas Front Month Futures Price

Daily data in USD/MMBtu, from 21 Jul 22 to 21 Jul 23



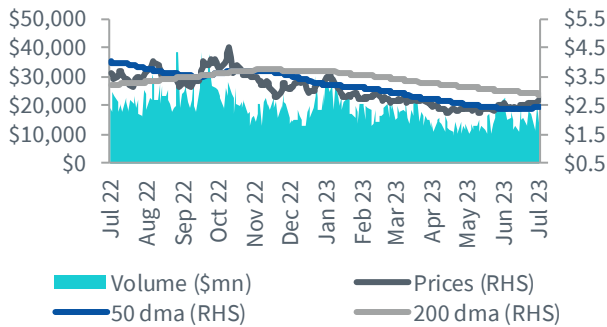
### Gasoline Front Month Futures Price

Daily data in USD/gal., from 21 Jul 22 to 21 Jul 23



### Heating Oil Front Month Futures Price

Daily data in USD/gal., from 21 Jul 22 to 21 Jul 23

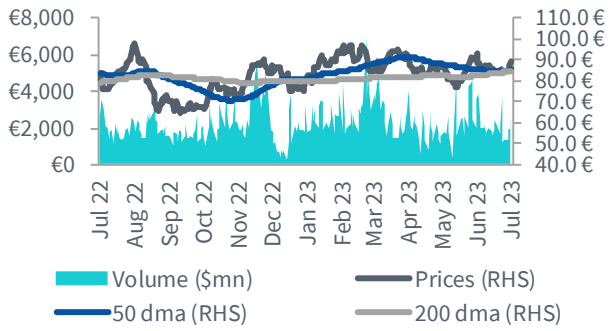


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Carbon

## Carbon Front Month Futures Price

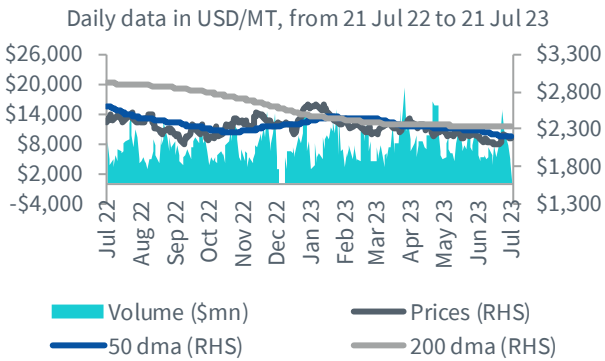
Daily data in EUR/MT, from 21 Jul 22 to 21 Jul 23



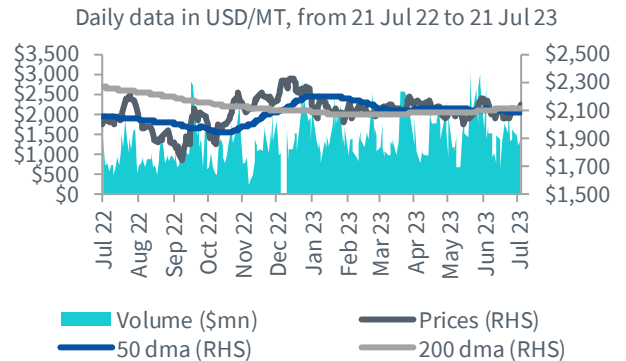
Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Industrial Metals

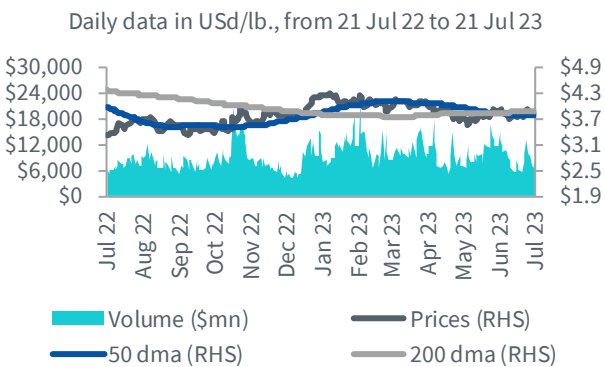
Aluminum Front Month Futures Price



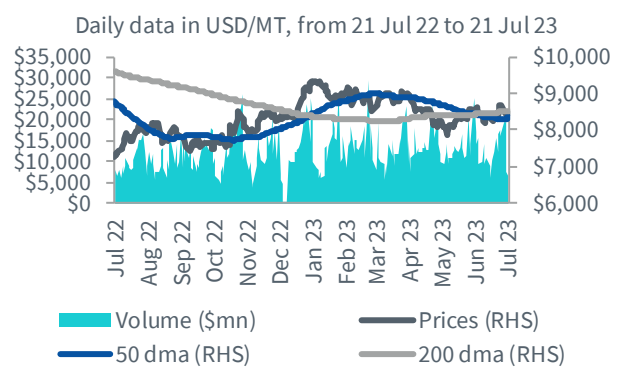
Lead Front Month Futures Price



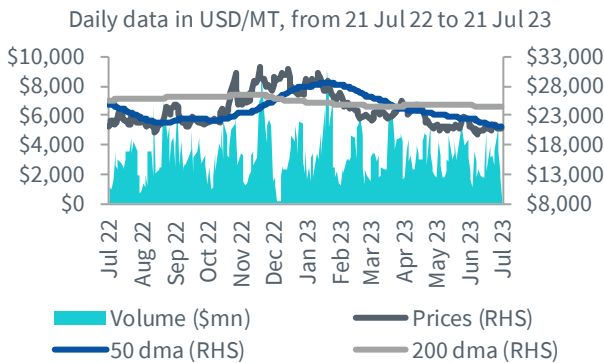
Copper (COMEX) Front Month Futures Price



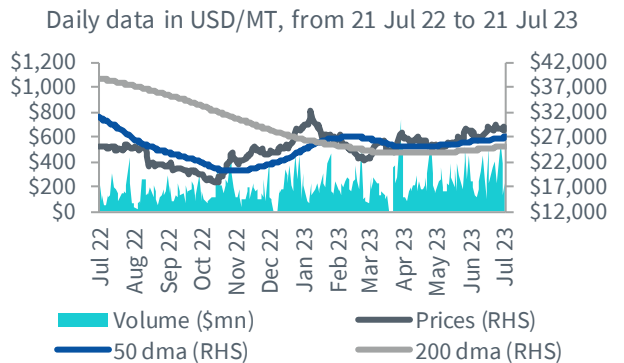
Copper (LME) Front Month Futures Price



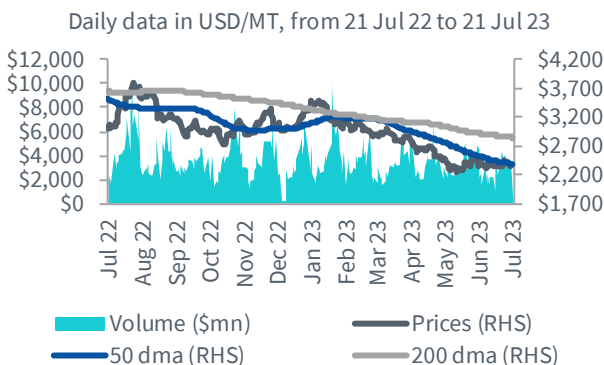
Nickel Front Month Futures Price



Tin Front Month Futures Price



Zinc Front Month Futures Price

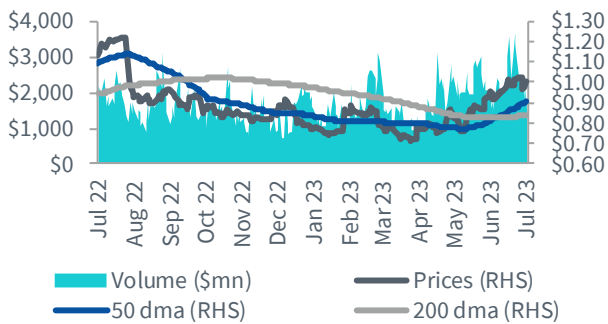


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Livestock

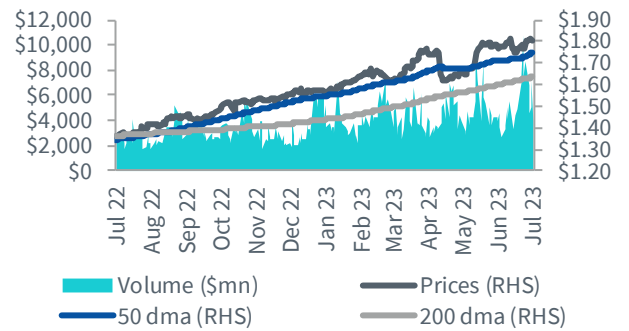
### Lean Hogs Front Month Futures Price

Daily data in USD/lb., from 21 Jul 22 to 21 Jul 23



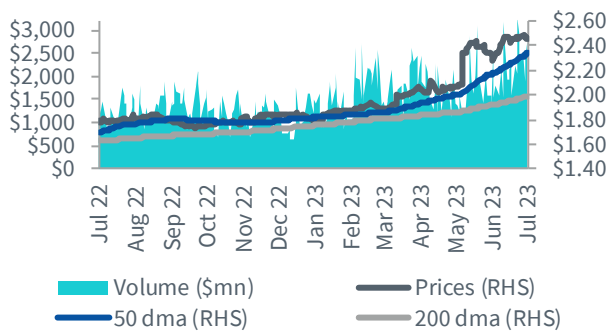
### Live Cattle Front Month Futures Price

Daily data in USD/lb., from 21 Jul 22 to 21 Jul 23



### Feeder Cattle Front Month Futures Price

Daily data in USD/lb., from 21 Jul 22 to 21 Jul 23

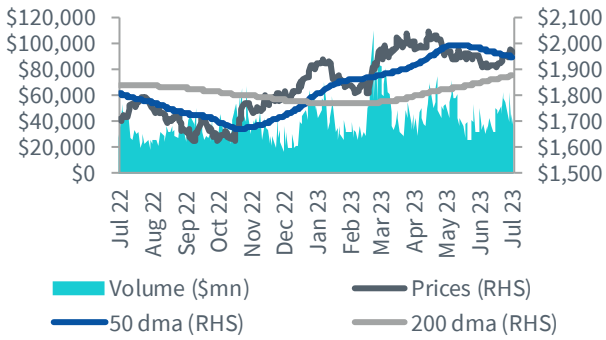


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Precious Metal

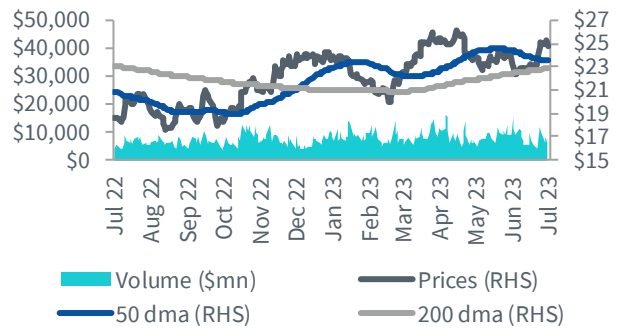
Gold Front Month Futures Price

Daily data in USD/t oz., from 21 Jul 22 to 21 Jul 23



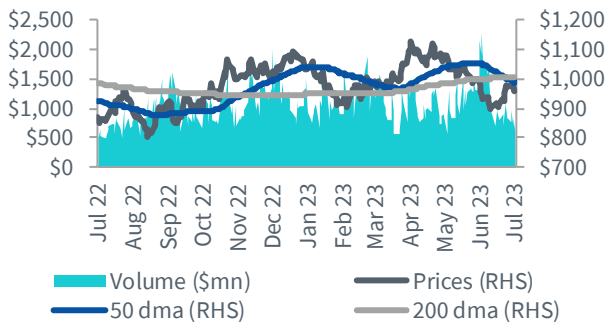
Silver Front Month Futures Price

Daily data in USD/t oz., from 21 Jul 22 to 21 Jul 23



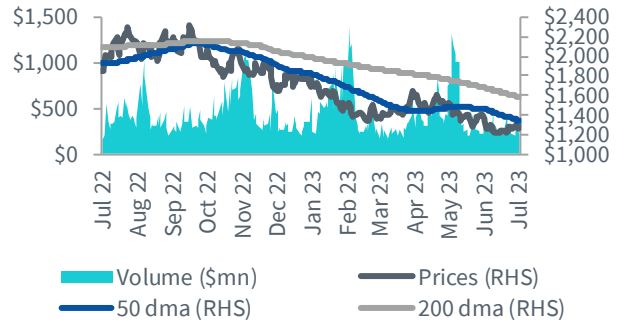
Platinum Front Month Futures Price

Daily data in USD/t oz., from 21 Jul 22 to 21 Jul 23



Palladium Front Month Futures Price

Daily data in USD/t oz., from 21 Jul 22 to 21 Jul 23



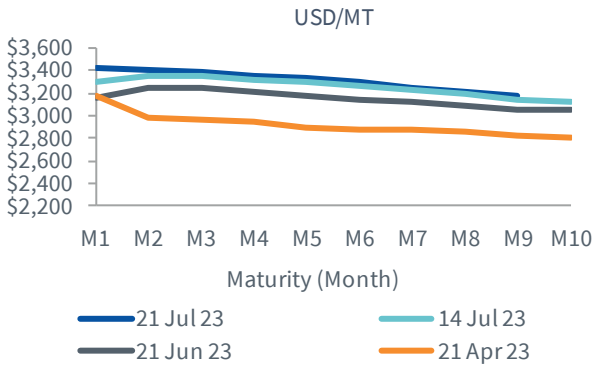
Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**



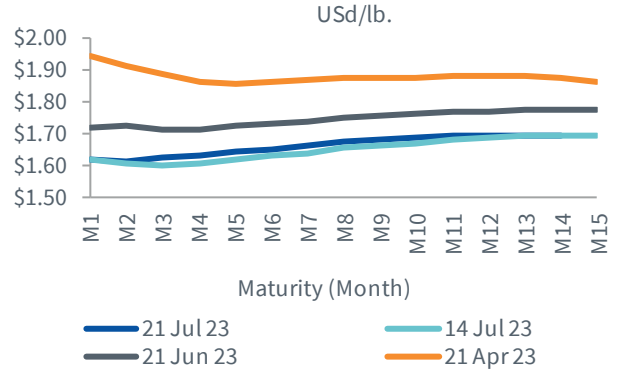
# Future Curves

# Agriculture

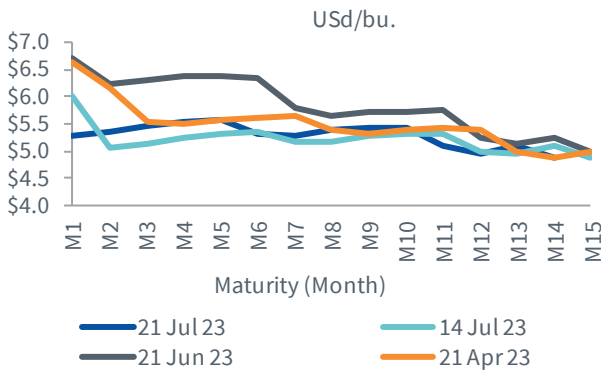
Cocoa Futures



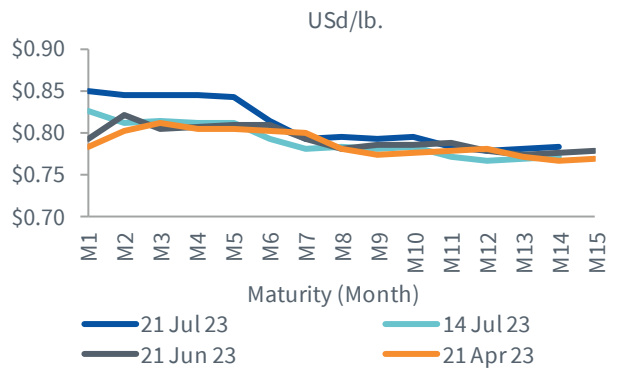
Coffee Futures



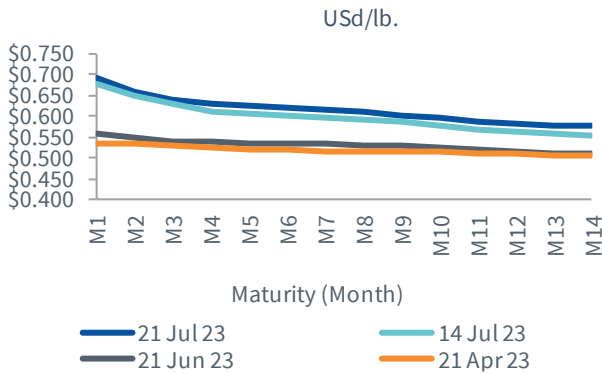
Corn Futures



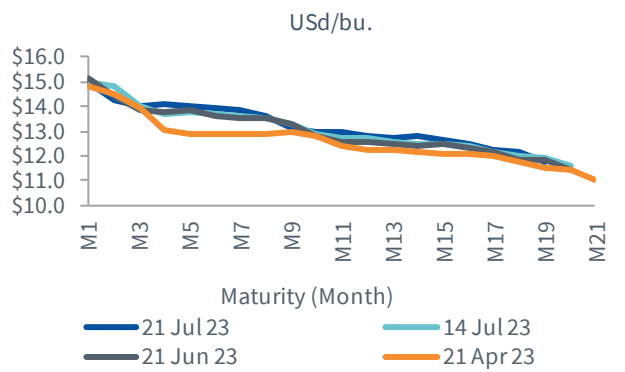
Cotton Futures



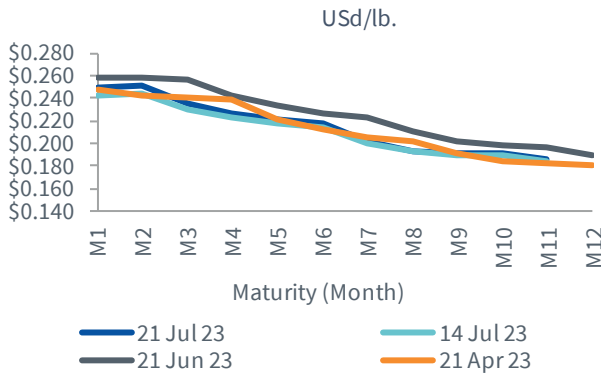
Soybean Oil Futures



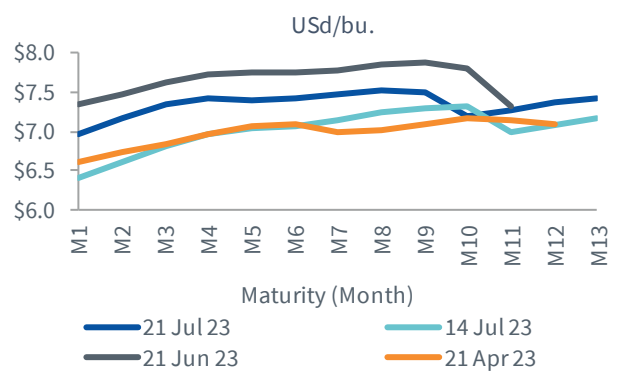
Soybeans Futures



Sugar Futures



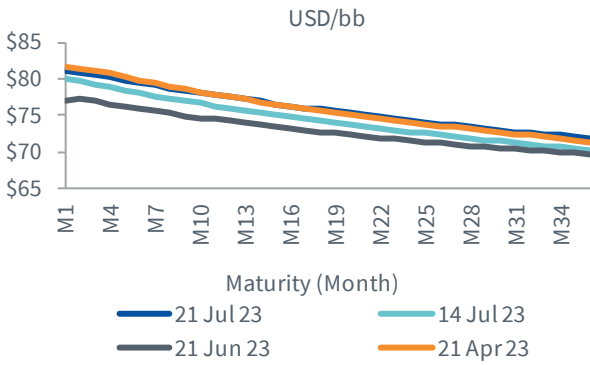
Wheat Futures



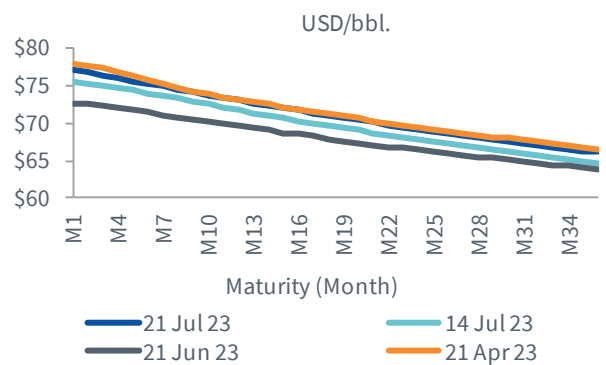
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. Historical performance is not an indication of future performance and any investments may go down in value.

# Energy

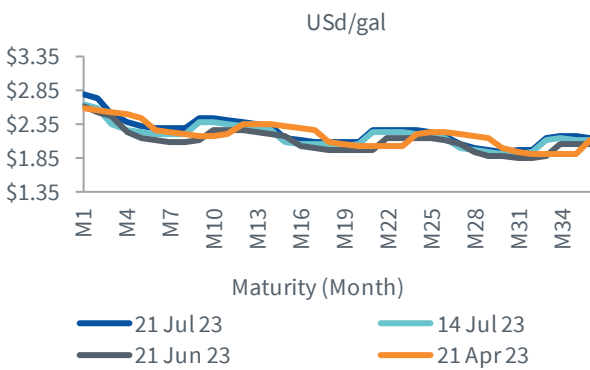
Brent Oil Futures



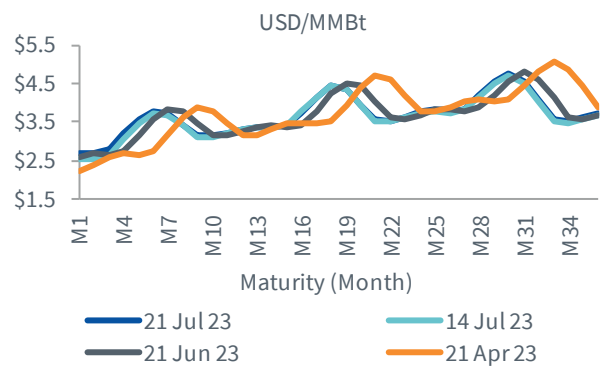
WTI Oil Futures



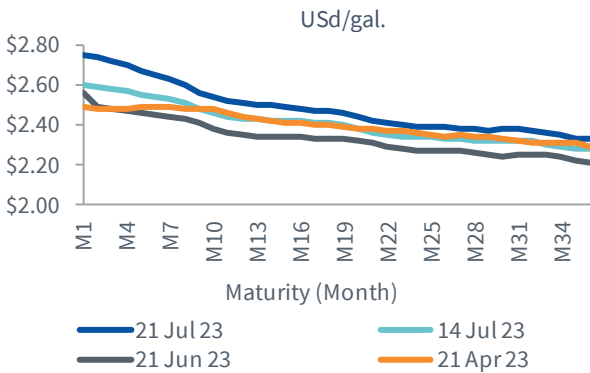
Gasoline Futures



Natural Gas Futures



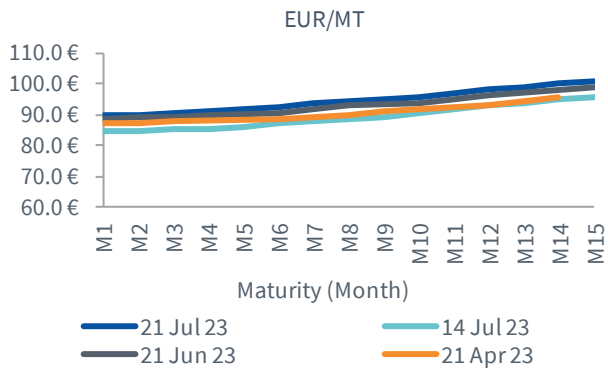
Heating Oil Futures



Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Carbon

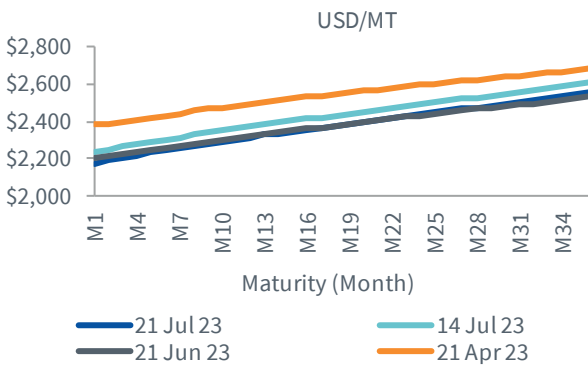
## Carbon Futures



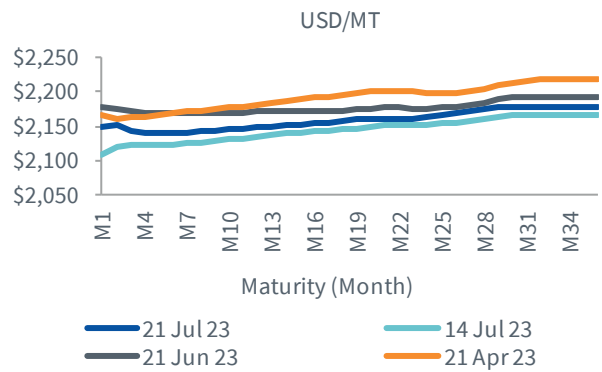
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Industrial Metals

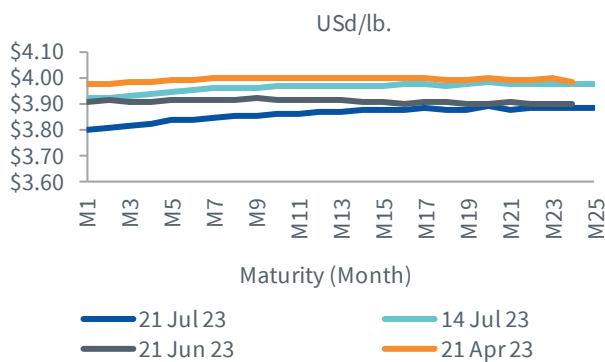
Aluminum Futures



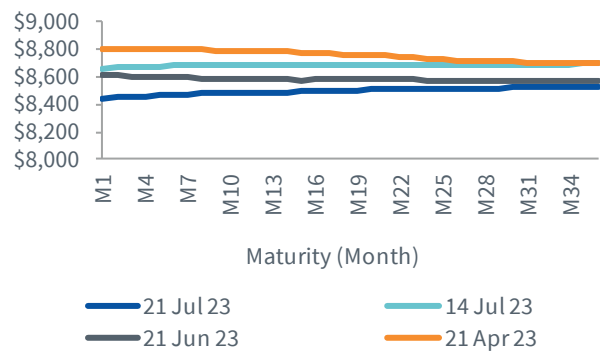
Lead Futures



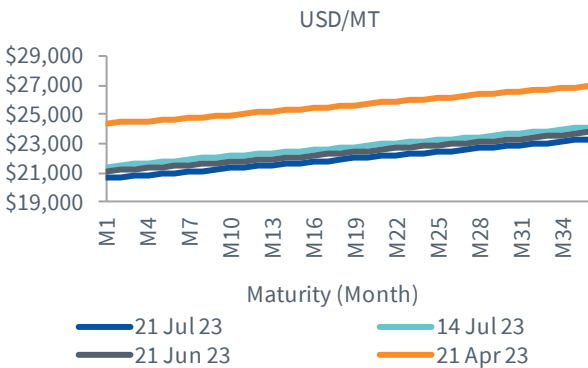
Copper (COMEX) Futures



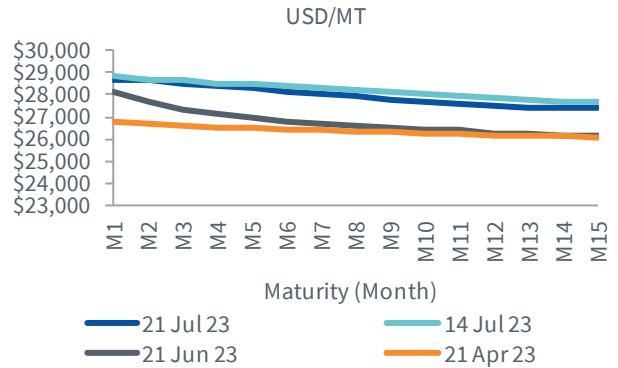
Copper (LME) Futures



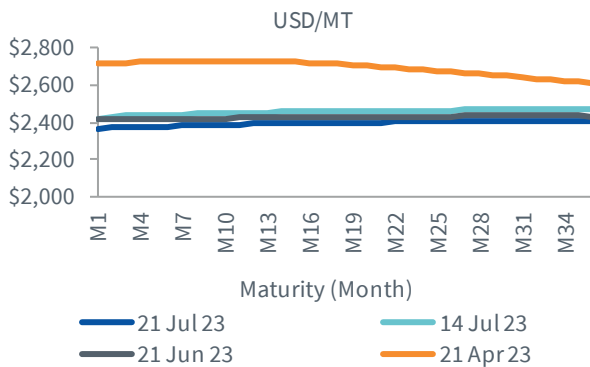
Nickel Futures



Tin Futures



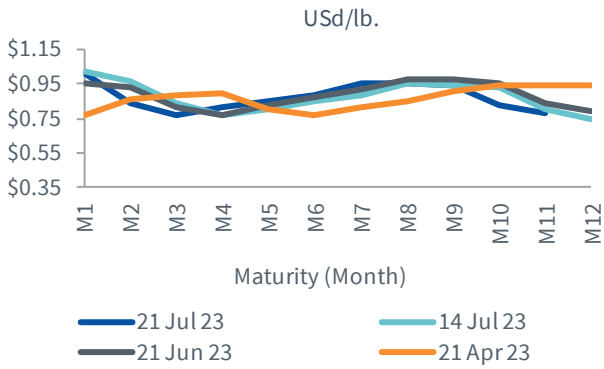
Zinc Futures



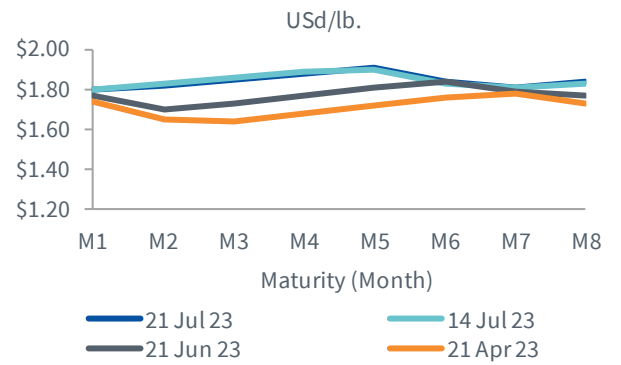
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Livestock

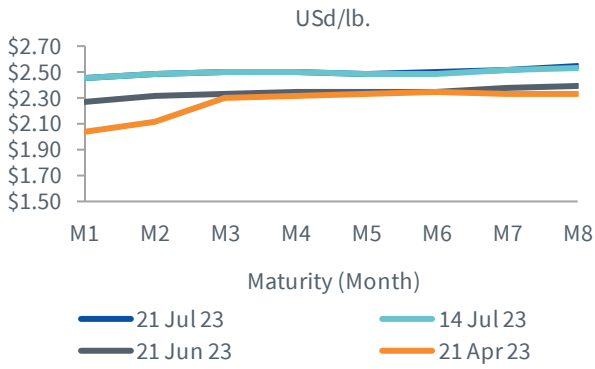
Lean Hogs Futures



Live Cattle Futures



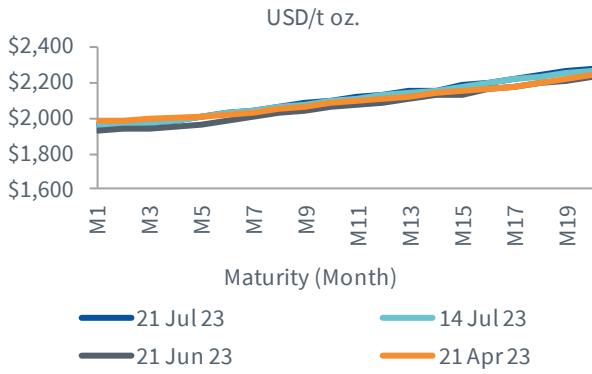
Feeder Cattle Futures



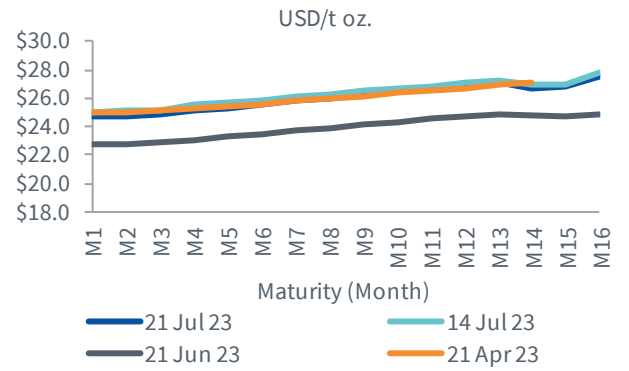
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. Historical performance is not an indication of future performance and any investments may go down in value.

# Precious Metals

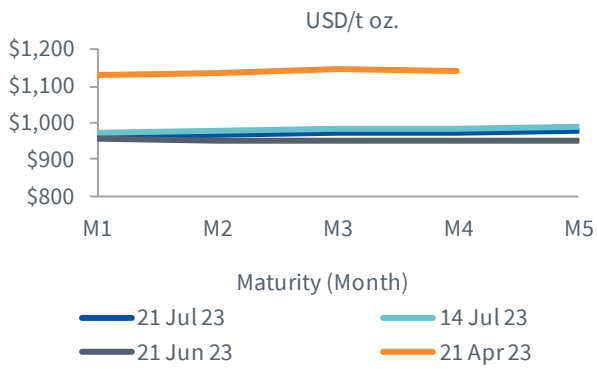
Gold Futures



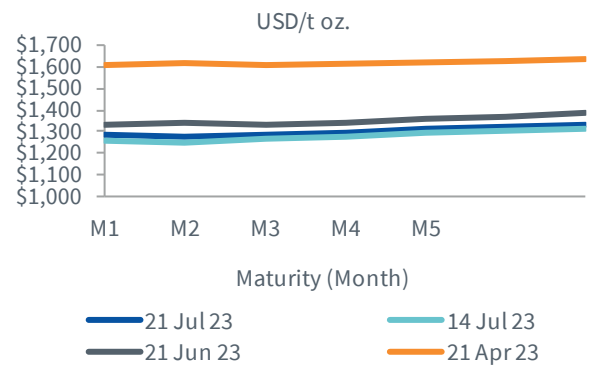
Silver Futures



Platinum Futures



Palladium Futures



Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. Historical performance is not an indication of future performance and any investments may go down in value.

## Commodity Monthly Matrix Explained

Score based on unweighted sum of four fundamental/technical measures detailed below with each measure awarded a possible score of -1, 0, or 1 depending on whether variable is viewed as fundamentally negative, neutral or positive. Score ranging from -4 to +4. For commodities where data is not available or not relevant, scores are calculated on remaining variables and adjusted to the -4 to +4 scale. The score matrix is designed to highlight significant changes in key variables but should not be viewed as predictor of performance.

The four fundamental/technical measures are as follow:

- + Price vs. 200 days moving average: 1 when price is above 200dma and return is positive, -1 when price is below 200dma and return is negative, 0 otherwise.
- + % change in net positioning over the past month: 1 when % change is positive, -1 when % change is negative, 0 when no change.
- + % change in inventory level over the past 3 months: 1 when % is negative, -1 when % is positive, 0 when no change.
- + Roll yield between the front and second month futures contracts: 1 when in backwardation, -1 when in contango, 0 when no change.



## Calendar

WisdomTree - Recent Blogs		
27-Jul-23	Mobeen Tahir	<a href="#">How AI could turn electric vehicles into money-making machines</a>
26-Jul-23	Mobeen Tahir	<a href="#">What's Hot: What the NASDAQ 100's special rebalance does and does not mean for investors</a>
24-Jul-23	Pierre Debru	<a href="#">Looking back at equity factors in Q2 2023 with WisdomTree</a>
20-Jul-23	Chris Gannatti	<a href="#">Is AI excitement creating a stock market bubble?</a>
19-Jul-23	Blake Heimann	<a href="#">Navigating AI investments: diversification and valuation within the AI theme</a>
17-Jul-23	Nitesh Shah	<a href="#">Looking for a free lunch? Consider putting carbon in your portfolio.</a>
14-Jul-23	Aneeka Gupta	<a href="#">What's Hot: The end of the tightening cycle is nigh</a>
13-Jul-23	Pierre Debru	<a href="#">The role that high-quality dividend growers play in a portfolio</a>
12-Jul-23	Elvira Kuramshina	<a href="#">Differentiating your AI exposure from the Nasdaq-100</a>
10-Jul-23	Pierre Debru	<a href="#">One clear sign that sets good stocks apart from the rest</a>
07-Jul-23	Nitesh Shah	<a href="#">What's Hot: Tit-for-tat in the green arms race should tighten metal supplies</a>
06-Jul-23	Chris Gannatti	<a href="#">Amidst the frenzy for Nvidia, don't forget the data centres</a>
05-Jul-23	Elvira Kuramshina	<a href="#">Why the Nasdaq-100 may not capture the full growth potential of AI...and where to look instead</a>

WisdomTree - Past Issues of Commodity Monthly Monitor		
May-Jun 2023	Research Team	<a href="#">Geopolitics back in the driving seat</a>
Apr-May 2023	Research Team	<a href="#">Still waiting for China to rebound</a>
Mar-Apr 2023	Research Team	<a href="#">Firing on multiple cylinders</a>
Feb-Mar 2023	Research Team	<a href="#">Risk-off in commodities as the impact of long and variable policy lags arrives</a>
Jan-Feb 2023	Research Team	<a href="#">Supply tightness vs macro headwinds</a>

The research notes are for qualified investors only.

Key Reports			
Current	Next release		
12-Jul-23	11-Aug-23	USDA	<a href="#">World Agricultural Supply and Demand Estimates</a>
11-Jul-23	08-Aug-23	EIA	<a href="#">Short-Term Energy Outlook</a>
13-Jul-23	10-Aug-23	OPEC	<a href="#">OPEC Oil Market Report</a>
13-Jun-23	11-Aug-23	IEA	<a href="#">IEA Oil Market Report</a>

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