



Commodity Monthly Monitor

# Commodities bounce back despite the higher for longer narrative

21 August 2023 — 22 September 2023

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## Summary

A slew of central bank meetings last month in the US, UK, and Switzerland echoed the theme of rates remaining restrictive for an extended period of time. These central bank announcements were accompanied by a significant upward breakout in bond yields. Interestingly most of the increase in yields has been driven by higher real yields rather than breakeven inflation signifying a tightening of conditions. Risk assets such as equities and credit struggled as global bonds yields continued to grind higher. September is shaping up to be the worst month in 2023 for the US equity benchmark indices. Commodities stood out amongst the pack, posting a sharp rebound of 2.4% over the prior month despite the strength of the US dollar.

Looking under the surface, energy was the best performing sub sector, up 5.5% last month. Higher oil prices have been triggered by the announcement from Saudi Arabia and Russia to extend their significant supply cuts beyond September to the end of the year. These cuts were responsible for global production falling slightly so far in 2023. Markets are now embracing for a soft landing of the US economy. At the Federal Open Market Committee (FOMC) meeting on 20 September, the Federal Reserve (Fed) added to these expectations by significantly raising its growth forecasts. These expectations have also raised concerns that supply in the oil market could fall short of demand in the coming months.

Even other cyclical subsectors such as industrial metals rose 2.3% over the prior month. A large part of the strength in commodity markets last month was supported by the improvement in economic data from China aided by a series of policy support measures. A few targeted measures aimed at shoring up its ailing property sector such as the decision to cut down payments and lower rates on existing mortgages. The nationwide minimum downpayment to be set at 20% for first time buyers and 30% for second home buyers, alongside a reduction in mortgage rates is expected to be in effect from 25 September. These measures are being introduced at a time when sales by the country's largest developers fell 34% over the prior year, marking the steepest decline in over a year.

While China's recovery is still uncertain, recent measures to stabilise the property market have helped improve sentiment on the industrial metals complex.

In the precious metals market, the hawkish tone of the Federal Reserve continues to reverberate and keep prices in check for gold. The Fed's dot plot, which the US central bank uses to signal its outlook for the path of interest rates, shows the median year-end projection for the federal funds rate at 5.6%. Furthermore, the 2024 and 2025 rate projections notched up by 50Bps, a signal the Fed expects rates to stay higher for longer. While gold continued to face outflows from exchange-traded products (ETPs), retail gold demand was strong. In addition, the People's Bank of China announced a 29-tonne purchase of gold in August, marking 10 consecutive months of gold buying. While many other central banks have not reported their August purchases yet, July data shows continued net buying.

Agricultural commodities ended the prior month -0.7%. We noticed a sharp divergence between the performance of soft commodities and grains. The resurgence of the El Niño weather phenomenon, continued to make its presence felt evident from the stronger price performance of cocoa and sugar which historically have witnessed a price positive environment in prior El Niño cycles. On the other end of the spectrum, grains continued to struggle as the United States Department of Agriculture outlined a more bearish outlook for corn while bullish for wheat. The prospects for the wheat crop amongst major producer countries are becoming increasingly weak, yet the market continues to ignore the improving backdrop, we expect wheat to benefit from these rising tailwinds.

## Performance

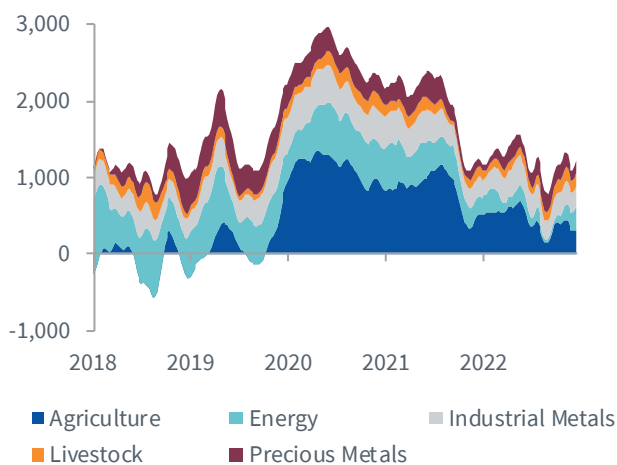
Performance*	- 1 Mth	- 6 Mth	- 12 Mth
All Commodities	2.4%	6.3%	-3.9%
Energy	5.5%	20.4%	-17.6%
Industrial Metals	2.3%	-6.2%	-2.0%
Precious Metals	1.6%	-0.2%	16.5%
Agriculture	-0.7%	1.8%	-2.6%
MSCI World	-0.8%	7.5%	16.5%
US Aggregate Bond	0.1%	-3.2%	0.4%

\*Bloomberg TR Indexes for basket returns, data to Friday 22 September 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.**

+ Precious metals are facing the headwinds of a bond sell-off and an appreciating US dollar. Gold is managing to stay afloat with the help of central and retail demand continuing to remain strong. Auto sector woes however have sent palladium to a 5-year low.

+ Industrial metals rebound as economic data in China improves. Industrial production, retail sales and lending activity in China rose more than forecast in August over the prior year helping lift sentiment across industrial metals. However, fixed-asset investment grew less than expected as the drop in property investment deteriorated. The international Study Groups will be gathering for their autumn meeting and publishing their latest forecasts prior to the London Metal Exchange (LME) Week. It appears that most metals are better supplied than was anticipated back in March. Base metals are likely to struggle over the medium term unless global economic data improves meaningfully.

+ Agricultural commodities face sharp divergence as softs lead and grains lag. Soft commodities, led by sugar and cocoa, posted higher performance as extreme weather conditions tighten the supply outlook. Live cattle and feeder cattle also helped drive gains across the agriculture complex owing to tightening cattle and beef supply fundamentals. Meanwhile the United States Department of Agriculture's (USDA) latest monthly report painted a bearish outlook for corn while bullish for wheat.

+ Energy was the top performing subsector in the commodity markets in the past month, with a 5.5% gain. Crude oil prices rallied as Saudi Arabia and Russia extended their voluntary supply cuts. It remains a question whether they seek to push prices higher, but their decisive action indicates they won't contemplate prices falling from these levels.

## 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>	22 Sep Score	21 Aug Score
WTI Oil	90.0	11.5%	17.0%	-10.1%	38.0%	1.9%	3	1
Brent Oil	93.3	10.4%	14.2%	4.6%	95%	1.4%	0	1
Natural Gas	2.64	0.2%	-2.5%	23.1%	13%	-8.4%	0	(2)
Gasoline	2.56	-7.6%	-1.6%	-0.4%	-20%	2.0%	0	0
Heating Oil	3.31	6.1%	17.7%	6.5%	5%	2.1%	0	0
Carbon	84.6	-2.7%	-2.1%	-	-	-1.1%	0	(1)
Wheat	5.80	-3.3%	-13.9%	-3.0%	-33%	-4.5%	(2)	(2)
Corn	4.77	1.7%	-20.6%	1.1%	-78%	-3.0%	(1)	(1)
Soybeans	13.0	-5.4%	-10.9%	-1.4%	-17%	-1.3%	(1)	1
Sugar	0.27	15.3%	15.5%	-	52%	-1.1%	0	(1)
Cotton	0.84	-0.5%	0.6%	-4.8%	40%	-2.2%	1	3
Coffee	1.51	2.4%	-12.2%	-	71%	-0.7%	1	(1)
Soybean Oil	0.61	-10.5%	1.5%	3.9%	-2%	2.1%	(1)	0
Cocoa	3,582	6.8%	17.6%	-	22%	0.1%	1	(1)
Aluminium	2,215	5.0%	-3.0%	-15.5%	7%	-0.6%	0	(2)
Copper (COMEX)	3.67	-1.4%	-6.0%	-15.0%	32%	-0.8%	1	(4)
Copper (LME)	8,199	-0.9%	-4.7%	102.6%	1%	-0.2%	(2)	(4)
Zinc	2,551	10.5%	-6.2%	13.7%	52%	-0.3%	0	(2)
Nickel	19,253	-3.4%	-17.6%	5.6%	-6%	-0.4%	(3)	(3)
Lead	2,230	1.9%	4.1%	94.9%	33%	0.7%	3	0
Tin	26,137	2.4%	-0.6%	27.2%	-2%	-0.3%	(1)	(4)
Gold	1,927	1.8%	-0.1%	-	38%	-0.9%	0	(4)
Silver	23.6	1.1%	0.3%	-	16%	-1.0%	0	(4)
Platinum	934	2.3%	-5.6%	-	1074%	-0.6%	1	1
Palladium	1,245	0.5%	-13.1%	-	-9%	-0.9%	(3)	(4)
Live Cattle	1.87	4.5%	9.9%	-	19%	-2.2%	1	(1)
Lean Hogs	0.82	1.1%	-3.7%	-	55%	13.0%	0	0
Feeder Cattle	2.54	3.0%	18.1%	-	38%	-1.9%	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 22 September 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 September 19 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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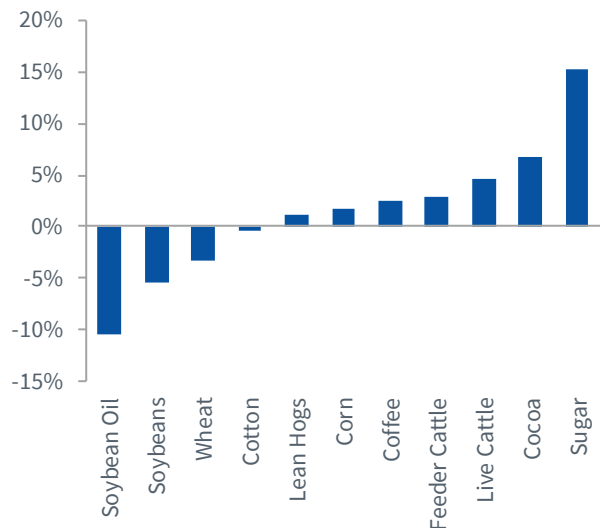
# Sector Overview



## Agriculture

- + Sugar rose 15.3% over the prior month owing to rising uncertainty of supply from India and Thailand. India may decide to impose an export ban on sugar in the 2023/24 crop year that starts in October according to Reuters. Weak monsoon rains in two of the key growing states in India (which account for 50% of India's total production) has resulted in lower sugar production. According to the Indian Sugar Mills Association (ISMA) production volume at 31.7mn tons is expected to be 3% lower over the prior year but enough to meet domestic demand of around 27.5mn tons. This would still leave enough sugar available for export, however less than the current crop year when sugar mills were permitted to export 6.1mn tons.
- + However, the government expects an even more pronounced decline in production. We expect Brazil (the world's largest producer and exporter) to fill the gap. According to Unica, production in the country's main Centre-South (CS) growing region between the start of the crop year in April and mid-August already amounted to 22.7mn tons, which is up 22% over the same period last year. What's more, the sugar mix increased to 51.1% in H1 September, up from 50.7% in H2 August signalling that Brazilian mills continue to favour sugar production over ethanol amidst higher sugar prices. Extreme weather conditions in China have reduced domestic supplies. China is also planning to release 1.3mn tons of sugar from its reserves, to increase domestic supplies and stabilise prices.
- + Cocoa continued its upwards trajectory rising 6.8% over the prior month. The latest data from Ivory Coast's Customs Department shows cocoa exports declined by around 10% over the prior year to 1.3mn tons in the current season through until the end of July. Adverse weather alongside the spread of the swollen shoot virus have impacted the domestic cocoa crop. Virus and disease risks are likely to continue in 2023/24 which could keep supplies tight for next year. Other key African producers including Ghana and Nigeria have also been facing similar supply problems this year with both production and exports declining.
- + Live Cattle have had a strong run this year owing to tightening cattle and beef supply fundamentals. The beef cow herd at the start of 2023 was the lowest since 1962 and continues to reduce in size. The projected 2023 US calf crop is 2.5mn head smaller than the peak attained in 2018. Feedlot inventories have been smaller annually since September 2022. Cattle slaughter is down 3.9% so far this year, leading to a 4.9% decrease over the prior year, in beef production.
- + The retention of heifers and reduced cow culling is likely to lower feeder cattle supplies, cattle slaughter, and beef production to lower levels. Cattle prices upward trajectory is likely to gain momentum when herd rebuilding begins in earnest.
- + Soybean continued its downward trajectory, declining 5.4% over the prior month. The USDA latest monthly report revised the 2023/24 global soybean ending stocks marginally lower from 119.4mt to 119.3mt, however the market was expecting a number over 118mt. Brazil's agriculture agency CONAB expects Brazil's soybean production to rise 5.1% over the prior year to 162.4mt in 2023/24, if achieved this would be yet another record crop. Chinese buyers had already been snapping up Brazilian beans for delivery in the fourth quarter as early as July. An abundant harvest also meant Brazil's soybean sellers can offer more competitive prices than rival producers. This has left US suppliers with a narrower-than-usual window in which to attract Chinese buyers.

**Agriculture — September Returns\***



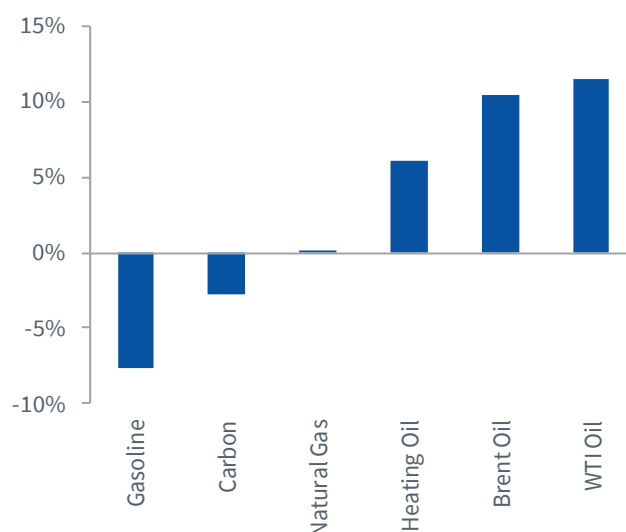
Source: *Bloomberg*. \*September returns refer to returns from 21 August 2023 to 22 September 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

## Energy

- + In September, oil prices reached their highest level since November 2022. Brent recently broke through the \$95/barrel mark, following a sustained rally that began at the end of June. While oil's behaviour in the first half of this year was largely characterised as 'rangebound,' recent price action is prompting a debate about whether oil is in a bull market.
- + The appreciation in oil prices carries profound implications for the hottest topic in financial markets over the last two years: inflation. Rising energy prices have been cited as the reason for an increase in the US headline inflation rate, which rose to 3.7% in August from 3.2% in July .
- + Originally, voluntary cuts, amounting to 1 million barrels per day (mb/d) from Saudi Arabia and 300,000 b/d from Russia, were set to conclude in August. However, they will now continue through December, subject to a monthly review.
- + The influence of OPEC+ has been evident throughout the year, but this latest announcement has prompted the markets to take the group's commitment to tightening oil markets more seriously. Bulls argue that there is no sign of a pivot from the group, which has maintained all year that the demand for oil is weak and, therefore, the cuts are warranted.
- + The International Energy Agency (IEA) in its September Oil Market Report, states that global oil demand is on track to grow by 2.2 mb/d in 2023, reaching 101.8 mb/d. The agency has consistently pointed to strong Chinese consumption as the primary driver in its monthly reports throughout the year. The extension of voluntary cuts will maintain a substantial market deficit throughout the fourth quarter of the year.
- + The IEA acknowledges that additional oil supply from non-OPEC producers has partly offset the tightness created by Saudi Arabia and Russia. However, we note that US oil production has now been declining for three months, following rig counts peaking at the end of 2022.
- + Russia has introduced a ban on exports of diesel and gasoline, according to a government decree published 21 September. The ban, which will be enforced from the day of its official publication, includes also volumes purchased on the exchange floor but excludes exports to countries within the Eurasian Economic Union which are foreseen under intergovernmental agreements.

- + The Eurasian Economic Union includes Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia. US traded gasoline and diesel had a relatively muted reaction to this news. However, the data confirms the markets are very tight even prior to the ban and will likely tighten further as a result of the ban.

Energy – September Returns\*



Source: *Bloomberg*. \*September returns refer to returns 21 August 2023 to 22 September 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

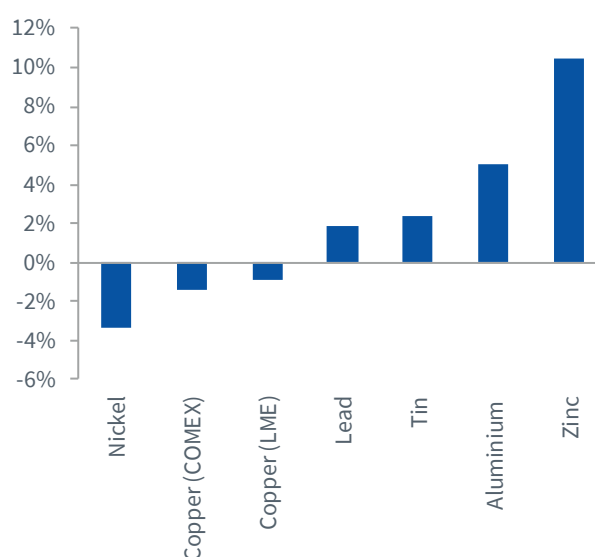


## Industrial Metals

- + Zinc was the best performing industrial metal up 10.5% over the prior month. China's imports of refined zinc have garnered momentum since July. Chinese zinc imports have attained levels seen four years ago after slumping during the COVID-19 pandemic. Stocks on the Shanghai Futures Exchange (SHFE) have fallen 15% over the prior month pointing to robust demand. Construction activity is likely to have increased as local authorities have stepped up their infrastructural investments. Stocks on the LME have also declined 28% over the prior month. In view of zinc's application in energy storage and its low-cost corrosion protection in solar power and wind turbines, prices are likely to remain supported amidst lower inventories.
- + Copper has been struggling for direction over the past month amidst concerns over the Fed policy and a disappointing economic recovery in China. At the latest Federal Open Market Committee (FOMC) meeting, the Fed communicated that its policy would remain restrictive for longer, which pushed the dollar to a six-month high. Additional rate hikes alongside a strong dollar adds to the list of headwinds facing copper at a time of already weakening demand for copper. While China's new home prices fell for a third month in August, there are some signs of economic activity picking up in August. Industrial production rose by 4.5% over the prior year while retail sales rose 4.6%.
- + According to the International Aluminium Institute (IAI), the long-term upward trend in global aluminium production has begun to falter. This is largely due to slowing expansion of production in China, which accounts for 60% of global primary production. The shutdown's during the COVID-19 pandemic alongside production cuts resulting from electricity rationing in the province of Yunnan have been responsible for falling production. The Australian Department of Industry, Science and Resources expects production in China to increase until 2025 but at a weaker growth rate. The lack of any recovery in Europe's aluminium industry points to further tightening in supply. However Aluminium prices have failed to garner momentum this year as the downturn in the China's real-estate sector has been weighing on sentiment. Construction is the second most-important demand segment for aluminium after transport. Over the past month, aluminium gained 5% aided by the recovery of Purchasing Managers Indices (PMIs) in the construction sector in August. However, as China's real estate sector struggles amidst high debt levels, we expect demand from the construction sector to remain weak.

- + In transport sector – US, Europe, and China have witnessed strong growth rates in passenger car registrations over the past 8 months in part owing to the pent-up demand due to the pandemic. Data from the European Automobile Manufacturers' Association (ACEA) even shows that the slump in new car registrations seen during the pandemic has not nearly recovered yet.

Industrial Metals — September Returns\*

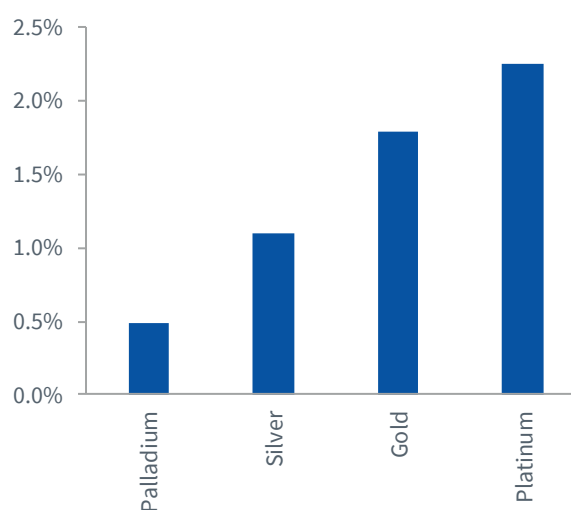


Source: *Bloomberg*. \*September returns refer to returns 21 August 2023 to 22 September 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

## Precious Metals

- + Headwinds of a bond sell-off and an appreciating US dollar have sent gold below the psychologically important US\$1900/oz mark again (at the time of writing, 27/09/23). Despite real yields 10-year Treasury at 2.11% - the highest since 2008 - gold is holding its own, with the yellow metal posting a 1.8% gain the past month (as of the reporting month, to 22/09/23). It's even more remarkable given the 5.8% appreciation in the US dollar basket between 13/7/23 and 22/9/23. Gold in non-dollar currencies is exhibiting considerable strength. Gold in yen is at an all-time high. Gold in euros is only 2.9% below its all-time high reached in on 17 March 2023.
- + Gold continued to see outflows from exchange-traded products (ETPs). That seems to reflect apathy towards physical gold from many institutional investors. In a higher interest rate environment, some institutional investors are opting for gold futures exposure (due to the positive collateral yield embedded in futures prices). That accounts for why speculative positioning in gold futures remain around the long-term average.
- + Retail gold demand, however, remains strong. Especially in China, where the price premium over the institutional London market has risen to an all-time high. As the Chinese government stimulates the economy, we could see continued strength in Chinese demand. Given the large arbitrage, we are likely to see gold flow from London to China. According to the World Gold Council, Chinese gold ETPs saw inflows for three consecutive months - June, July and August - marking a clear divergence from international trends. In August 2023 Chinese ETP purchases were at the highest since July 2022 amidst poor local equity performance and currency weakness.
- + In addition, the People's Bank of China announced a 29-tonne purchase of gold in August, marking 10 consecutive months of gold buying. While many other central banks have not reported their August purchases yet, July data shows continued net buying. As we commented in earlier editions of this report, April and May data were aberrations due to Turkey's central bank selling gold to meet local gold liquidity needs when gold imports were temporarily halted. Since those halts have been removed, Turkey's central bank has resumed gold purchases, with 11 tonnes in June and a further 17 tonnes in July.
- + Silver has largely traded on gold's coattails. Indian August silver imports hit a 2023 high of 192 tonnes, but these volumes were still down 83% year-on-year, as the government has aligned silver import tariffs with the higher tariffs on gold implemented last year.
- + Platinum prices have fallen since the data cut-off of this report and at US\$903/oz (27/09/23), represent a fall over the month. However, new sources of demand for the metal are expanding: Nel Hydrogen are to build a gigafactory in Detroit, Michigan with an investment of US\$400m. Hydrogen electrolyzers are an emerging source of demand for platinum.
- + Palladium has been the weakest in the precious metals basket. Its price fell to the lowest level since November 2018, in September 2023. As a metal only used in the internal combustion (ICE) auto industry, demand could be on a long-term subdued path. Nissan's announcement that by 2030 it will only sell electric vehicles in Europe highlights the woes faced by the metal. However, UK seems to be dialling back its net zero commitments and could push out its ban on ICE vehicles. If other countries follow, that offers the metal an extended life.

**Precious Metals — September Returns\***



Source: *Bloomberg*. \*September returns refer to returns 21 August 2023 to 22 September 2023. **Historical performance is not an indication of future performance, and any investments may go down in value.**

# Technical Overview

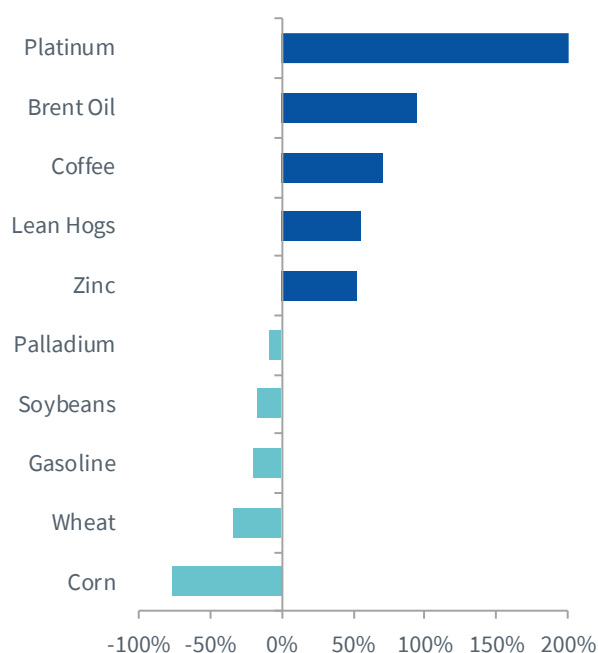
as of 22 September 2023

## Positioning

- + Investors are less pessimistic on platinum, with positioning becoming net positive on 19/09/23 after being net negative on 15/08/23. Positioning is still 40% below the 5-year average.
- + Investors have become even more pessimistic on palladium with positioning becoming the most negative in history and more than two standard deviations below 5-year historic average.
- + The decision by Saudi Arabia and Russia to extend production cuts has shaken out most of the net shorts in Brent oil (although some shorts remain). A lot of the price gain therefore could be linked to that short-covering rally.
- + Net positioning in gasoline fell 20% and remains below the 5-year average. It's a surprising outcome given that inventories are close to 1 standard deviation below the 5-year average.
- + Net speculative positioning in coffee rose 71% amidst a 15% unwind in short positions and a 21% increase in long positioning. Brazil's agriculture agency, CONAB lowered its Brazilian coffee production estimates slightly to 54.4mn bags this year versus the prior estimate of 54.7mn bags.
- + Sentiment towards lean hogs improved evident from the 55.2% increase in net speculative positioning largely on the back of 24% reduction in short positions.
- + Higher supply on the global soybean market has weakened sentiment evident from the 17.3% decline in net positioning in soybean.
- + Net speculative positioning in wheat declined 33.4% as short positioning rose 24% amidst an 18% rise in long positions. In its latest monthly report, the USDA estimated that after a 0.6% surplus in the 2022/23 season, the wheat market could turn into a big deficit, estimated at -0.9% in the 2023/24 season. Wheat continues to remain sensitive to the ongoing war between Russia and Ukraine and to the uncertainty about commodity shipments across the Black Sea.
- + In sharp contrast to wheat, the global corn market is likely to record a 2% surplus in 2023/24 according to USDA. This is causing sentiment to weaken in the corn market. Net speculative positioning declined 77.9% owing to a 19% build-up of short positions.

- + Net speculative positioning in zinc rose 52.3% owing to a 11% rise in long positioning amidst a 6% build up in short positions.

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



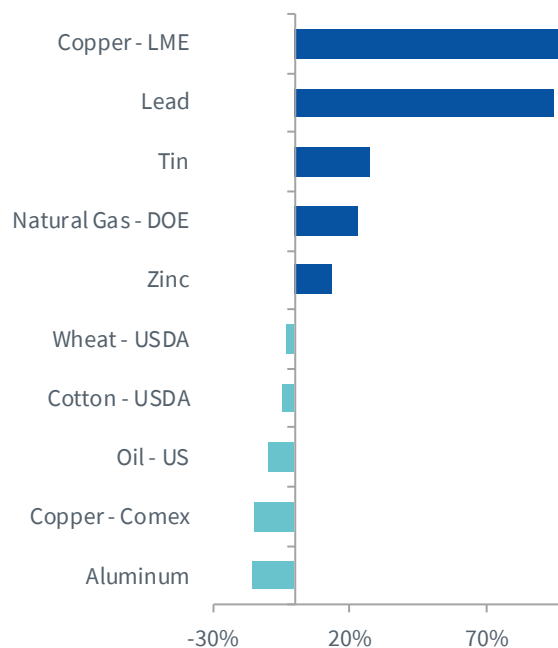
Source: Bloomberg

\*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

- + Copper stocks held on the LME have risen 102.6% over the prior 3 months. This shows clear signs of weakening demand. COMEX copper inventory is down around 15% compared to 3 months ago. And, although 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 29% below its 5-year average.
- + While copper stocks have been rising since mid-July, they do, however, remain low by historical standards with combined stocks in the LME, SHFE and COMEX exchange 29% lower versus its 5-year average.
- + LME zinc inventory had reached dangerously low levels in February 2023 (15,600 tonnes) but had rebuilt 154,000 tonnes by the beginning of September 2023) and caused the sharp price drop in zinc this year. However, in less than a month, LME zinc inventory has shed close to a third (to 105,000 tonnes on 22/9/2023) and been a catalyst for price gains.
- + Aluminium futures inventory is 15% lower than 3 months ago, mainly because of Shanghai Futures Exchange inventory declining over that time window.
- + US oil inventory declined 9.7% in the past 3 months as US productions shows signs of slowing.
- + Natural gas inventory rose close to 20% in the past 3 months, which is broadly in line with seasonal norms. Inventory withdrawal really starts in earnest in November.
- + Wheat inventories declined 3% over the prior 3 months. According to USDA's latest monthly report, the global wheat balance is expected to tighten owing to revisions lower in supply from Australia, Canada, Argentina and the European Union (EU).
- + Cotton inventories fell 4.8% over the prior 3 months. USDA lowered this year's US production estimates, owing to continued drought in Texas and damage to Georgia's crop from Hurricane Idalia. And while USDA did lower consumption by 1mn bales, this wasn't enough to keep the global ending stocks from dropping to 90mn bales.

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



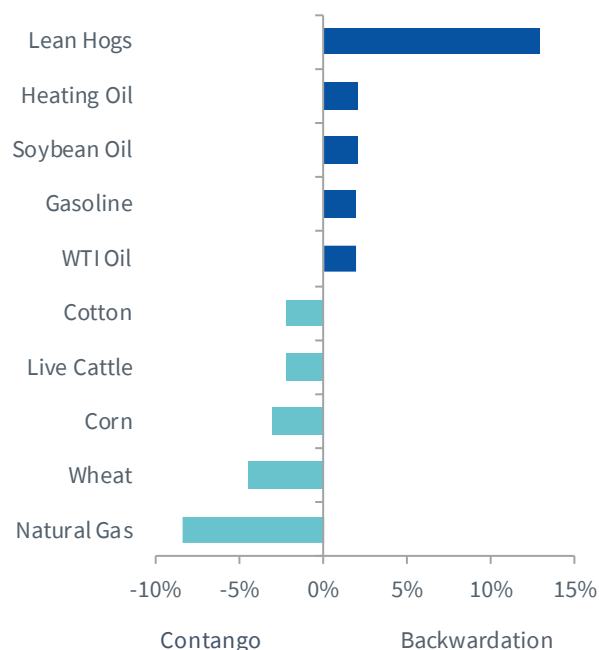
Source: Bloomberg

\*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

- + Lean hogs have the steepest backwardation, providing a roll yield of 13% driven by a slower expected pace of slaughter and lighter carcass weights for hogs.
- + The front end of the soybean oil futures curve has reduced its backwardation, now providing investors a 2.1% roll yield compared to 3.6% last month.
- + Cotton moved into contango from backwardation last month, lowering returns for long term investors by 2.2%.
- + Contango in the wheat and corn futures curve steepened to provide a negative roll yield of 4.5% and 3% from 4.2% and 2.7% respectively last month.
- + Heating oil, gasoline and WTI oil all have a front month positive roll yield of close to 2%. The Saudi-Russia alliance has been successful at keeping the WTI curve in backwardation, and that more than doubled from 0.7% last month.
- + Gasoline backwardation softened from 8.6% last month as the front (September) contract came to expiry. However, with a 2% roll yield, the curve remains broadly in line with season trends.
- + Natural gas futures fell deeper into contango, with a negative roll yield of 8.4%. That is higher than seasonal expectations. The curve tips back to backwardation after the December contract.

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



Source: Bloomberg

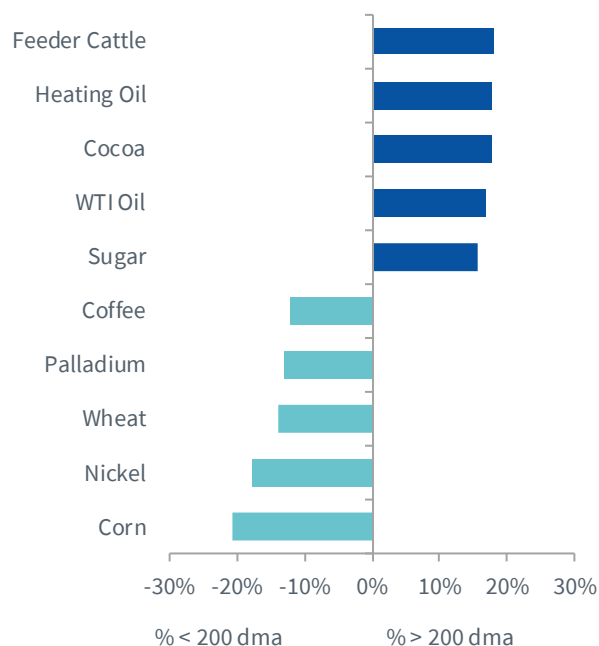
\*Roll yields calculated as percent change between front month futures price and next month futures price on Sep 22, 2023. **Historical performance is not an indication of future performance and any investments may go down in value.**



## Technicals

- + Cocoa is trading 17.6% above its 200-dma. Amidst the weaker supply dynamics owing to weather anomalies and pests, cocoa prices are likely to remain well-supported over the near term.
- + After making gains of 15.3% last month, sugar is trading 15.5% above its 200-dma. However, further price upside could be challenged by higher supply from Brazil.
- + Coffee is trading 12.2% below its 200-dma. Higher production by Brazil could revert the global coffee market back into a surplus.
- + Wheat prices continue to trend lower, trading at 13.3% below its 200-dma. Fundamentals continue to favour wheat with global ending stocks falling 3.2% in 2023/24 and the stocks to use ratio falling further to 32.5% according to USDA.
- + Corn is trading -20.6% below its 200-dma, we expect the downward trajectory to continue owing to ample supply on the market.
- + Palladium is trading 13.1% below its 200 day moving average reflecting the weakness in the market. Its price fell to the lowest level since November 2018, in September 2023.
- + Nickel is trading 17.6% below its 200-dmas. Market pessimism about the cyclical economic environment is continuing to weigh on nickel.

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 22 Sept, 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	90.0	USD/bbl.	11.5%	29.5%	27.0%	7.8%
Brent Oil	93.3	USD/bbl.	10.4%	25.8%	21.6%	3.1%
Natural Gas	2.64	USD/MMBtu	0.2%	1.1%	21.5%	-62.8%
Gasoline	2.56	USD/gal.	-7.6%	0.5%	-1.2%	1.8%
Heating Oil	3.31	USD/gal.	6.1%	34.1%	20.7%	-3.1%
Carbon	84.6	EUR/MT	-2.7%	-4.1%	-2.5%	20.7%
<b>Agriculture</b>						
Wheat	5.8	USD/bu.	-3.3%	-21.6%	-12.7%	-36.4%
Corn	4.8	USD/bu.	1.7%	-27.7%	-24.7%	-30.7%
Soybeans	13.0	USD/bu.	-5.4%	-13.6%	-10.5%	-11.0%
Sugar	0.27	USD/lb.	15.3%	8.2%	27.6%	45.9%
Cotton	0.84	USD/lb.	-0.5%	6.0%	7.4%	-13.2%
Coffee	1.51	USD/lb.	2.4%	-12.0%	-15.1%	-32.4%
Soybean Oil	0.61	USD/lb.	-10.5%	9.1%	11.4%	-12.4%
Cocoa	3,582	USD/MT	6.8%	14.1%	24.6%	54.3%
<b>Industrial Metals</b>						
Aluminum	2,215	USD/MT	5.0%	1.8%	-1.7%	-0.5%
Copper	3.67	USD/lb.	-1.4%	-5.8%	-9.9%	4.8%
Copper (LME)	8,199	USD/MT	-0.9%	-4.5%	-7.9%	5.8%
Zinc	2,551	USD/MT	10.5%	4.0%	-11.5%	-18.3%
Nickel	19,253	USD/MT	-3.4%	-8.6%	-13.6%	-21.4%
Lead	2,230	USD/MT	1.9%	3.0%	5.3%	20.7%
Tin	26,137	USD/MT	2.4%	-6.0%	11.9%	20.2%
<b>Precious Metals</b>						
Gold	1,927	USD/t oz.	1.8%	0.8%	-1.1%	15.3%
Silver	23.6	USD/t oz.	1.1%	5.0%	4.1%	20.7%
Platinum	934	USD/t oz.	2.3%	0.8%	-5.4%	3.1%
Palladium	1,245	USD/t oz.	0.5%	-1.3%	-13.1%	-42.4%
<b>Livestock</b>						
Live Cattle	1.87	USD/lb.	4.5%	5.3%	15.3%	29.2%
Lean Hogs	0.82	USD/lb.	1.1%	-11.2%	7.2%	-13.4%
Feeder Cattle	2.54	USD/lb.	3.0%	10.2%	35.0%	42.6%

Performance of front month futures from 22 Sep 22 (1 Year), 22 Mar 23 (6 Month), 22 Jun 23 (3 Month) and 21 Aug 23 (1 Month) to 22 Sep 23.  
**Historical performance is not an indication of future performance and any investments may go down in value.**

## Roll Yields\*

	Unit	Exchange	22-Sep	1 Week	1 Month	3 Month
<b>Energy</b>						
WTI Oil	USD/bbl.	NYMEX	1.9%	0.8%	0.7%	-0.2%
Brent Oil	USD/bbl.	ICE	1.4%	1.0%	0.4%	-0.2%
Natural Gas	USD/MMBtu	NYMEX	-8.4%	-9.8%	-4.0%	-4.0%
Gasoline	USD/gal.	NYMEX	2.0%	2.2%	8.6%	3.3%
Heating Oil	USD/gal.	NYMEX	2.1%	2.3%	0.8%	1.4%
Carbon	EUR/MT	ICE	-1.1%	-1.1%	-1.1%	-1.2%
<b>Agriculture</b>						
Wheat	USD/bu.	CBOT	-4.5%	-4.0%	-4.2%	-1.8%
Corn	USD/bu.	CBOT	-3.0%	-2.9%	-2.7%	7.9%
Soybeans	USD/bu.	CBOT	-1.3%	-1.1%	0.6%	6.4%
Sugar	USD/lb.	NYBOT	-1.1%	-0.9%	-1.3%	-0.5%
Cotton	USD/lb.	NYBOT	-2.2%	-1.2%	0.9%	-2.2%
Coffee	USD/lb.	NYBOT	-0.7%	-0.6%	-2.2%	1.9%
Soybean Oil	USD/lb.	CBOT	2.1%	2.1%	3.6%	2.4%
Cocoa	USD/MT	NYBOT	0.1%	0.0%	-2.7%	-2.5%
<b>Industrial Metals</b>						
Aluminum	USD/MT	LME	-0.6%	-0.7%	-0.8%	-0.7%
Copper	USD/lb.	COMEX	-0.8%	-1.0%	-1.0%	-0.3%
Copper (LME)	USD/MT	LME	-0.2%	-0.4%	0.0%	0.0%
Zinc	USD/MT	LME	-0.3%	-0.6%	-0.3%	-0.2%
Nickel	USD/MT	LME	-0.4%	-0.4%	-0.4%	-0.3%
Lead	USD/MT	LME	0.7%	0.8%	0.8%	0.0%
Tin	USD/MT	LME	-0.3%	-0.4%	-0.3%	1.3%
<b>Precious Metals</b>						
Gold	USD/t oz.	COMEX	-0.9%	-0.9%	-0.6%	-0.5%
Silver	USD/t oz.	COMEX	-1.0%	-1.1%	-1.3%	-0.9%
Platinum	USD/t oz.	NYMEX	-0.6%	-0.6%	-0.7%	-0.3%
Palladium	USD/t oz.	NYMEX	-0.9%	-0.7%	-0.3%	-0.9%
<b>Livestock</b>						
Live Cattle	USD/lb.	CME	-2.2%	-2.6%	-0.5%	3.9%
Lean Hogs	USD/lb.	CME	13.0%	10.7%	9.4%	1.8%
Feeder Cattle	USD/lb.	CME	-1.9%	-2.7%	-1.4%	-1.6%

\*Roll return non-annualised from front month futures into second month on the date shown. 23 Jun 23 (3 Month), 21 Aug 23 (1 Month), 15 Sep 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	371,081	423,208	268,986	183,345	287,520
Brent Oil <sup>2</sup>	-2,586	57,408	-49,653	-42,632	41,682
Natural Gas	-94,229	-97,607	-108,905	-146,323	-156,420
Gasoline	49,389	63,387	61,474	37,278	46,646
Heating Oil	43,514	8,869	41,627	10,019	14,035
<b>Agriculture</b>					
Wheat	-72,019	-3,237	-53,977	-64,125	-6,363
Corn	-123,149	166,210	-69,212	13,964	302,180
Soybeans	50,982	81,177	61,682	134,117	90,177
Sugar	230,310	120,460	151,992	201,924	19,321
Cotton	58,250	41,460	41,564	-13,367	39,977
Coffee	-7,552	11,716	-26,036	15,833	40,208
Soybean Oil	51,283	49,427	52,591	-4,203	55,121
Cocoa	86,695	21,348	71,044	28,054	-25,119
<b>Industrial Metals<sup>3</sup></b>					
Copper (COMEX)	-16,930	5,213	-24,825	-15,582	-17,959
Copper (LME)	52,563	44,631	51,961	50,503	31,496
Aluminum	118,340	162,749	110,497	138,464	141,274
Nickel	19,570	27,616	20,906	20,663	24,608
Zinc	37,247	48,476	24,459	31,119	21,439
Lead	75,137	51,947	56,313	48,917	29,663
Tin	9,458	8,086	9,664	7,845	6,692
<b>Precious Metals</b>					
Gold	136,752	200,305	98,748	174,382	60,786
Silver	13,276	29,834	11,420	4,617	-1,319
Platinum	10,895	18,558	928	9,982	2,917
Palladium	-10,305	2,340	-9,429	-6,989	-1,081
<b>Livestock</b>					
Live Cattle	129,791	84,764	109,061	87,275	93,658
Lean Hogs	40,561	45,665	26,128	-20,346	60,944
Feeder Cattle	15,546	2,933	11,299	10,029	-3,606

<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	416,287	-3.9%	-4%	-10%	-13%
Oil - OECD Europe**	354	0%	-0.3%	4.6%	5%
Natural Gas - DOE	3,359	1.5%	9%	23%	77%
Gasoline - DOE	220,503	-4%	1%	0%	-4%
Heating Oil - DOE	8,271	-12%	8%	7%	15%
<b>Industrial Metals</b>					
<b>Aluminium</b>	<b>572,593</b>	<b>-58%</b>	<b>-9%</b>	<b>-15%</b>	<b>-33%</b>
Aluminium - LME	482,300	-53%	-9%	-12%	-11%
Aluminium - SHFE	90,293	-73%	-6%	-31%	-71%
<b>Copper</b>	<b>242,427</b>	<b>-29%</b>	<b>40%</b>	<b>42%</b>	<b>-11%</b>
Copper - LME	162,900	8%	71%	103%	118%
Copper - SHFE	54,165	-58%	38%	-10%	-70%
Copper - COMEX	25,362	-57%	-35%	-15%	73%
<b>Nickel - LME</b>	<b>41,292</b>	<b>-72%</b>	<b>12%</b>	<b>6%</b>	<b>-6%</b>
<b>Zinc</b>	<b>151,504</b>	<b>-27%</b>	<b>-25%</b>	<b>14%</b>	<b>-1%</b>
Zinc - LME	105,400	-18%	-28%	34%	165%
Zinc - SHFE	46,104	-41%	-15%	-15%	-59%
<b>Lead</b>	<b>152,794</b>	<b>22%</b>	<b>39%</b>	<b>95%</b>	<b>101%</b>
Lead - LME	74,300	8%	33%	87%	189%
Lead - SHFE	78,494	41%	46%	103%	57%
<b>Tin</b>	<b>14,550</b>	<b>65%</b>	<b>1%</b>	<b>27%</b>	<b>28%</b>
Tin - LME	6,920	99%	14%	170%	191%
Tin - SHFE	7,630	42%	-9%	-14%	-15%
<b>Agriculture</b>					
Wheat - USDA	258,610	-9.4%	-2.6%	-3.0%	-4.5%
Corn - USDA	299,470	-5%	0.5%	1.1%	0.6%
Soybeans - USDA	119,250	17%	-0.1%	-1.4%	-3.3%
Sugar - USDA	39,465	-21%	-	-	-
Cotton - USDA	89,960	5%	-1.8%	-4.8%	-3.0%
Coffee - USDA	31,582	-8%	-	-	-3.0%
Soybean Oil - USDA	5,495	14%	2%	4%	5%

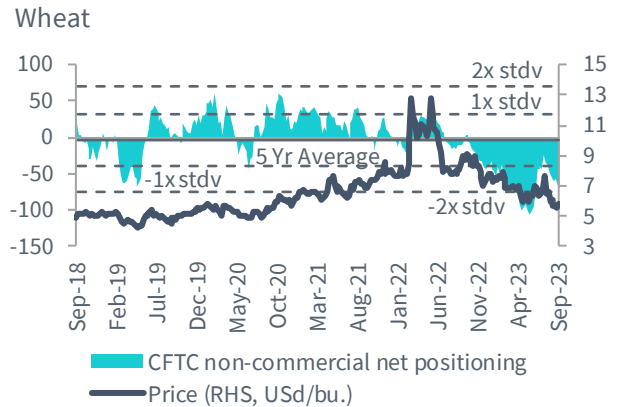
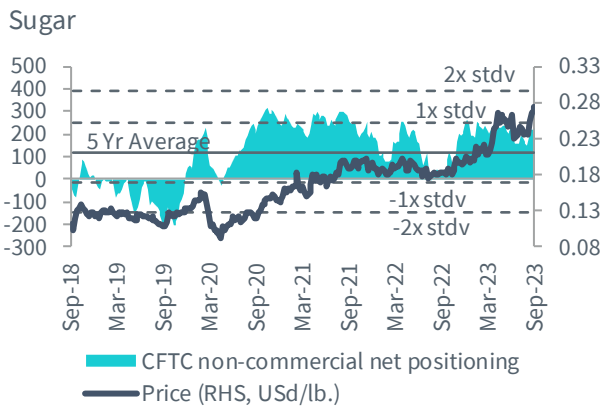
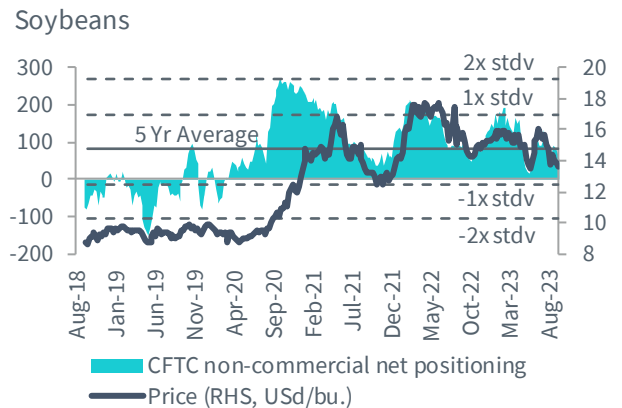
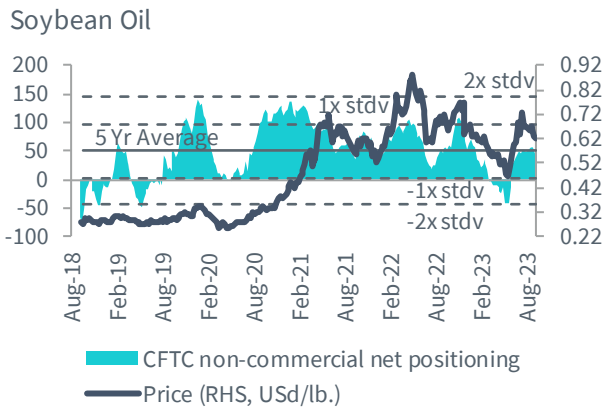
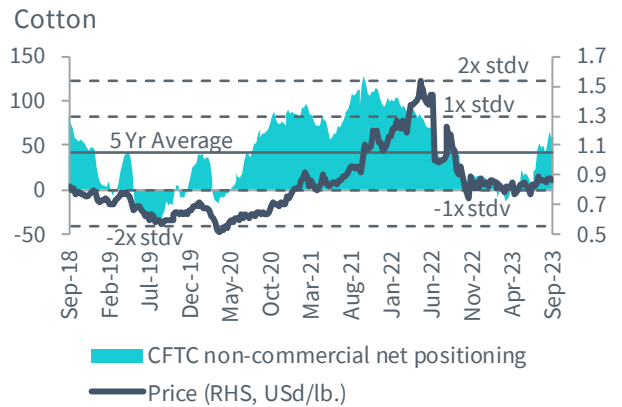
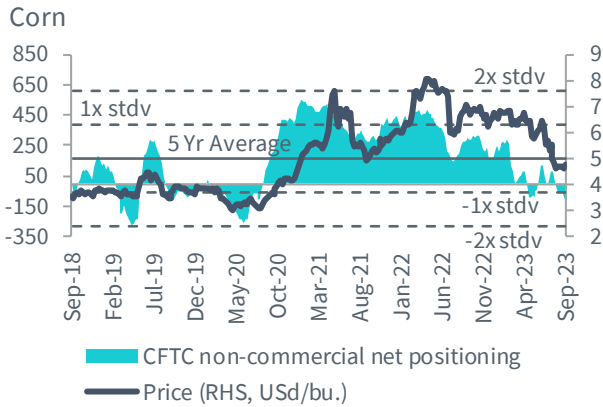
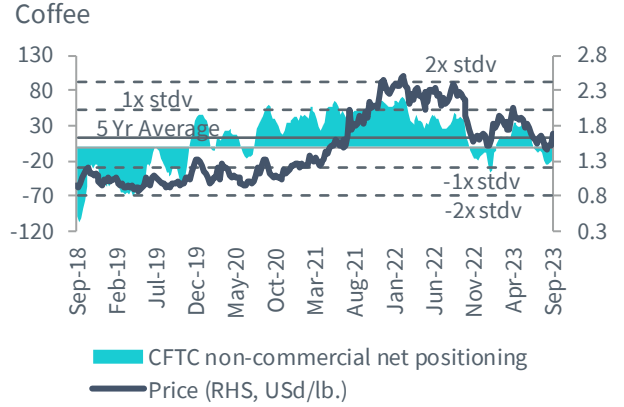
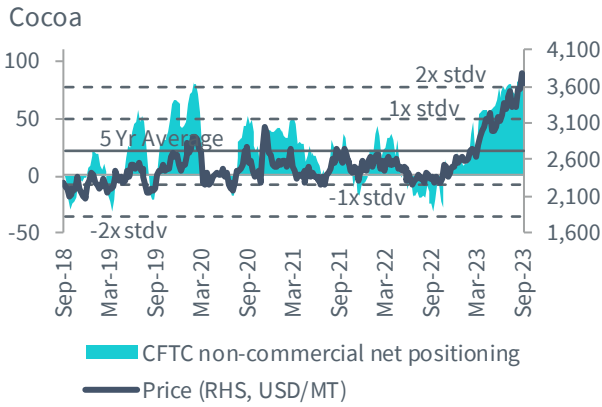
\*Current inventories relative 1, 3, 6 months ago. The column "5-yr average" is the current inventory level relative to 5 years average inventory. For energy, 5-yr average is the average of the same month as report month over the past 5 years. SHFE started reporting inventory data from April 2015. \*\*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

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# CFTC Net Positioning

# Agriculture

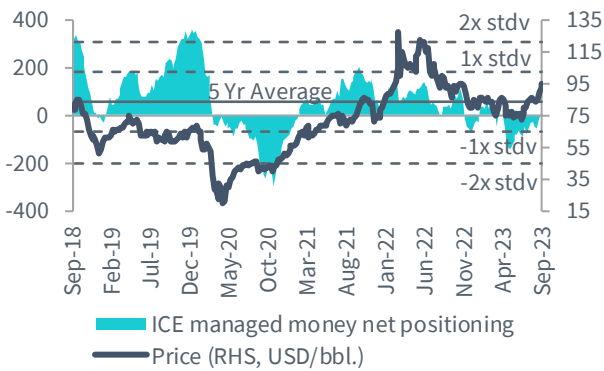


Source: Bloomberg, WisdomTree.

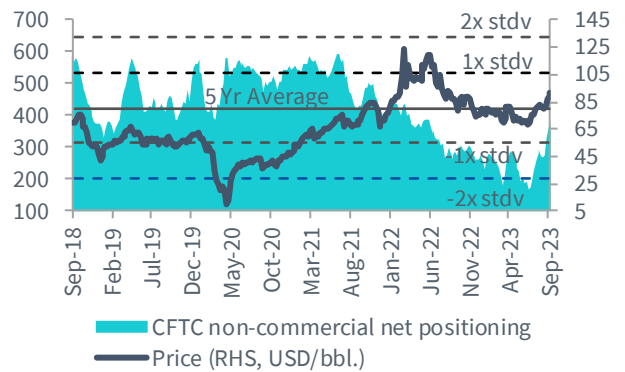
Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. All commodity futures price data is denominated in USD unless otherwise indicated. CFTC futures and LME COTR net positioning as at Sep 19, 2023. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Energy

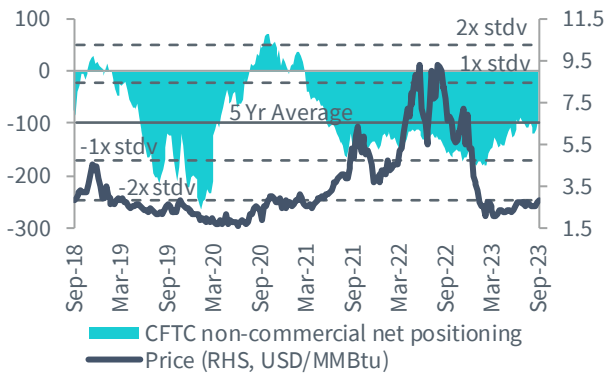
### Brent Oil



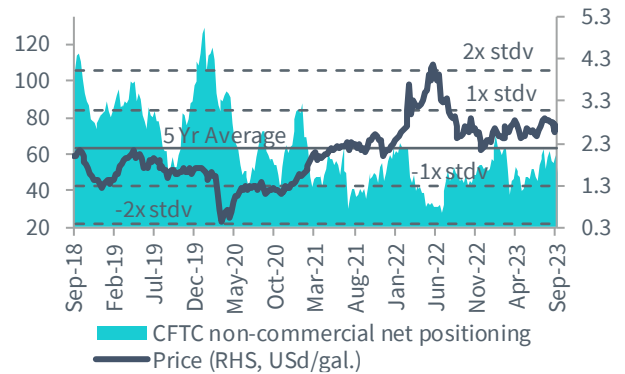
### WTI Oil



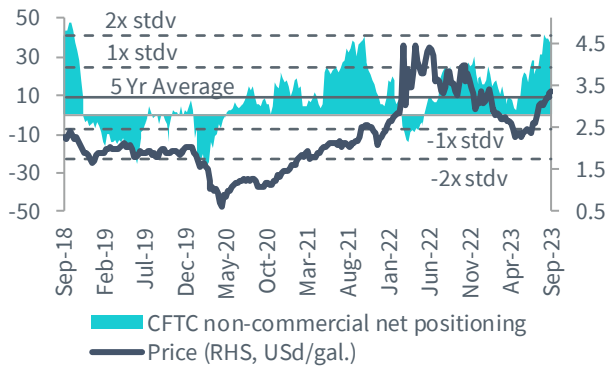
### Natural Gas



### Gasoline



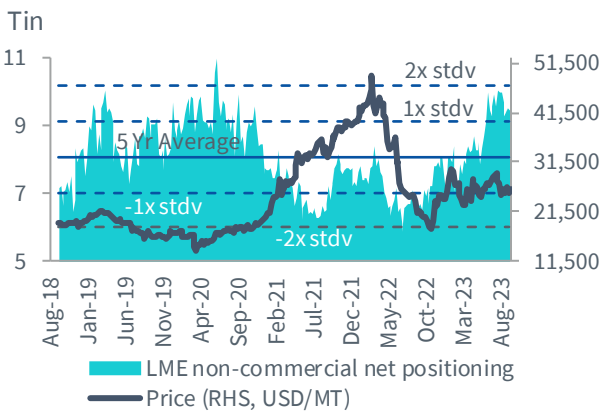
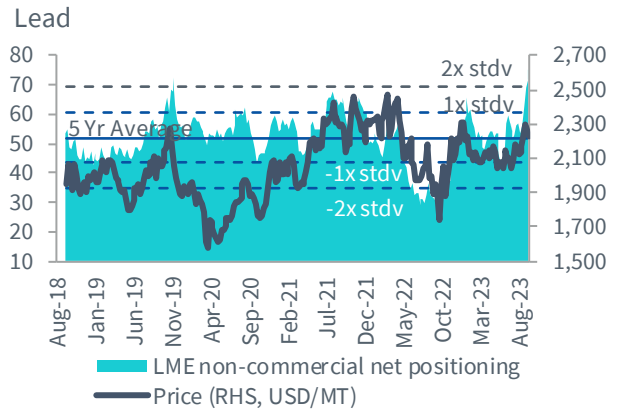
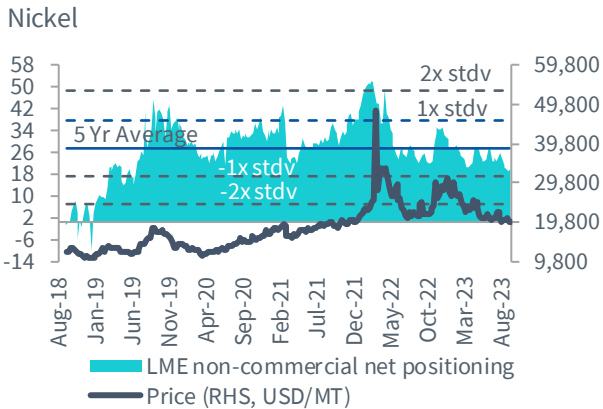
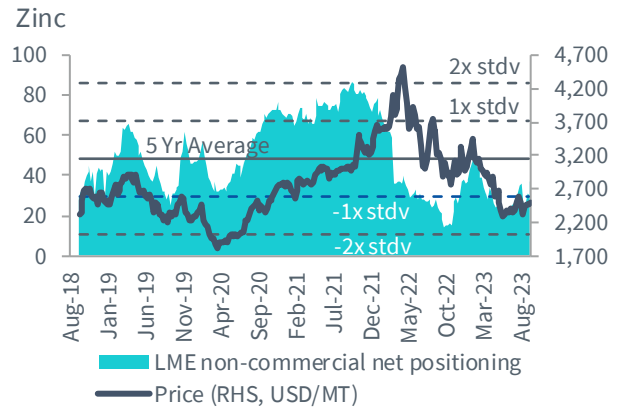
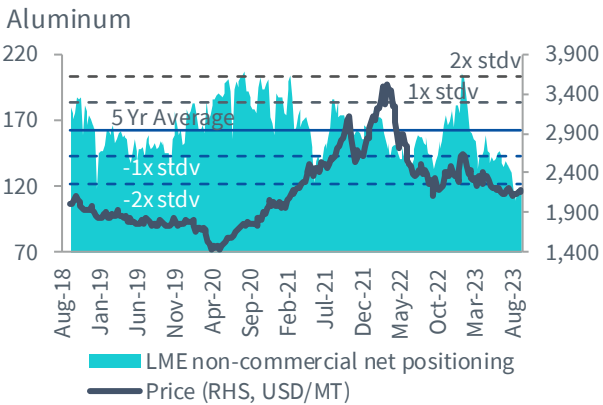
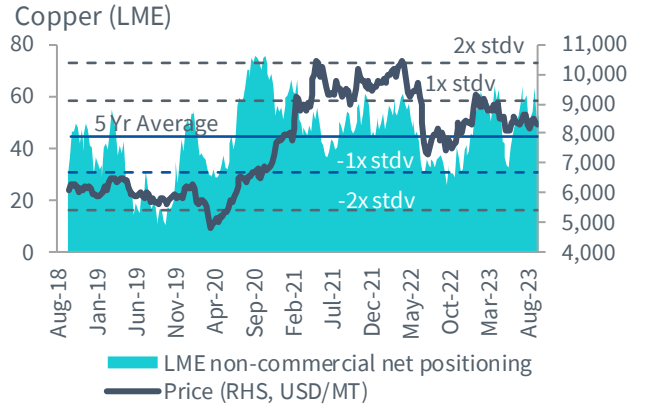
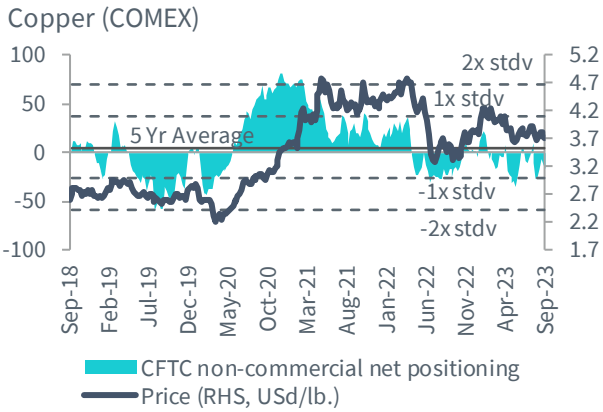
### Heating Oil



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

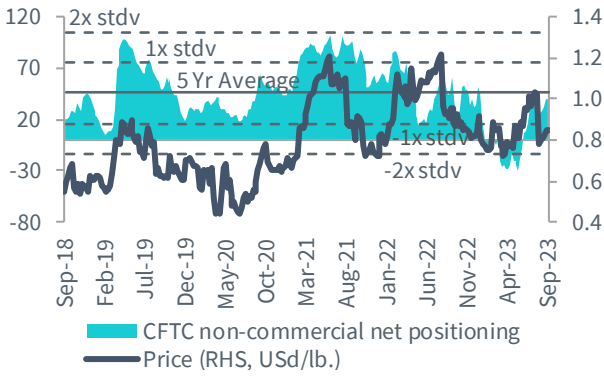


Source: Bloomberg, WisdomTree.

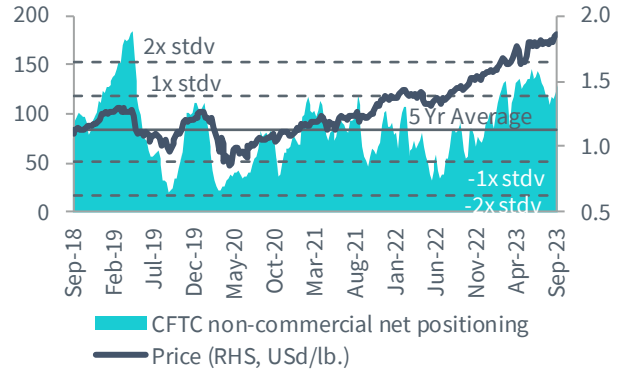
Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. LME non-commercial net positions from 30 January 2018 post MIFID II data and respective graphs represent daily data. All commodity futures price data is denominated in USD unless otherwise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

# Livestock

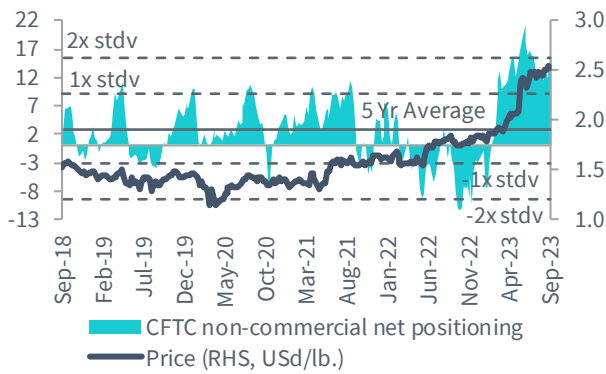
## Lean Hogs



## Live Cattle



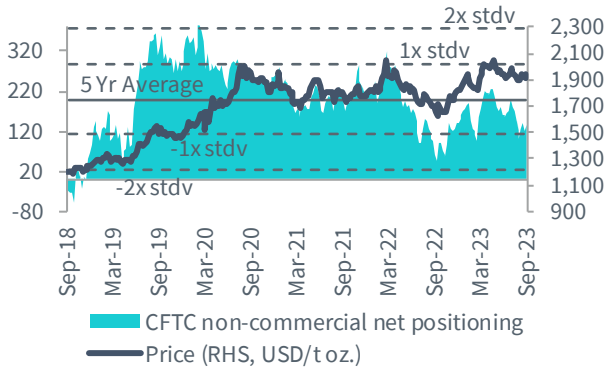
## Feeder Cattle



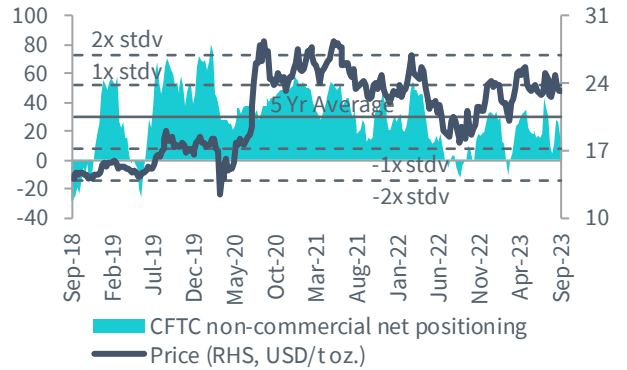
Source: Bloomberg, WisdomTree. Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. respective graphs represent daily data. All commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not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

# Precious Metals

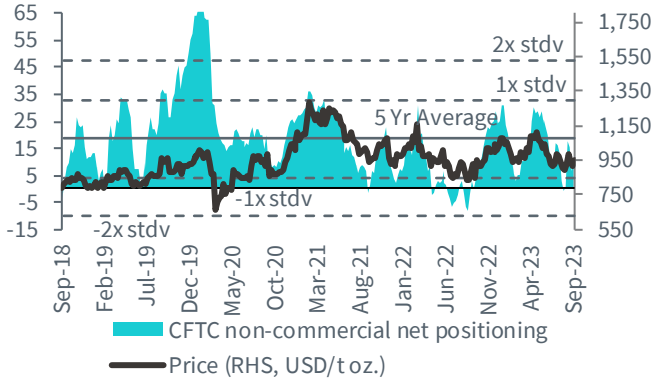
Gold



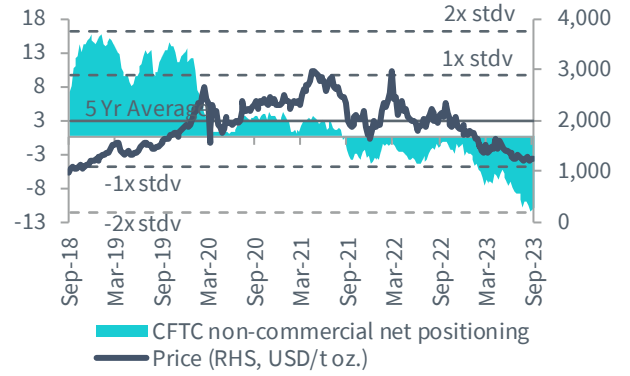
Silver



Platinum



Palladium



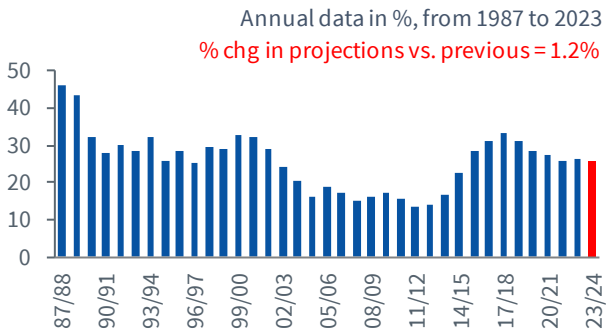
Source: Bloomberg, WisdomTree. Note: positioning in '000 contracts. Standard deviation based on 5-year average CFTC non-commercial net positioning. respective graphs represent daily data. All commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not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



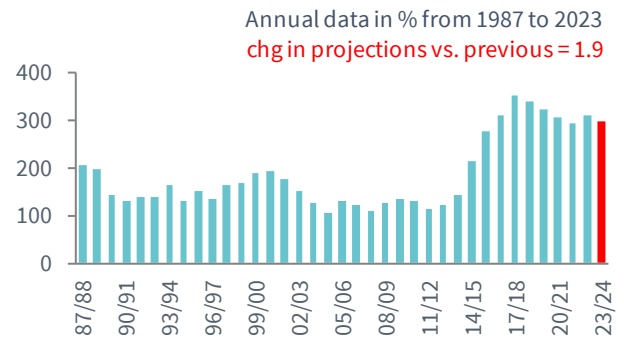
# Inventories

# Agriculture

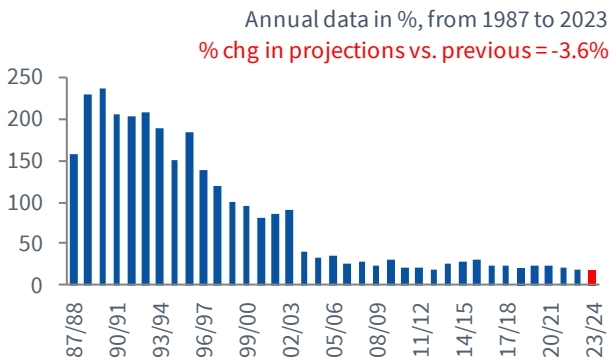
Corn - Stock to Use



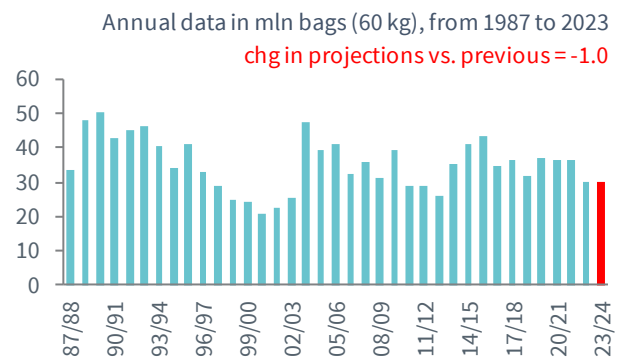
Corn - Ending Stocks



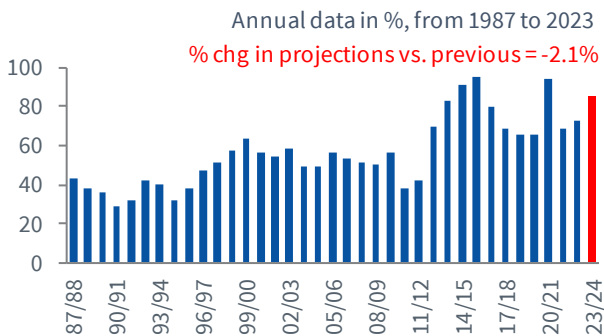
Coffee - Stock to Use



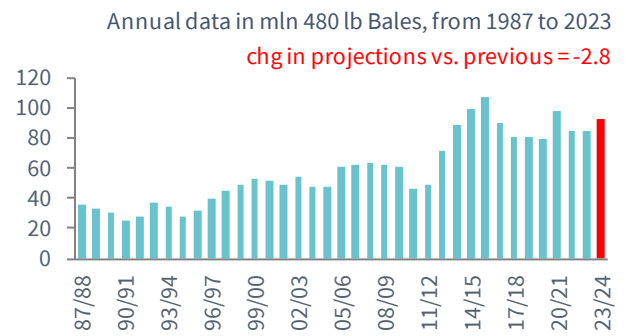
Coffee - Ending Stocks



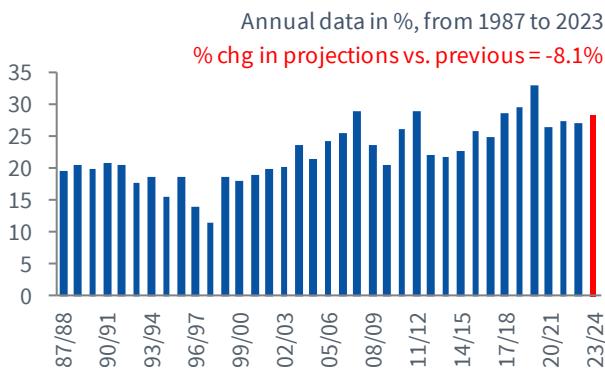
Cotton - Stock to Use



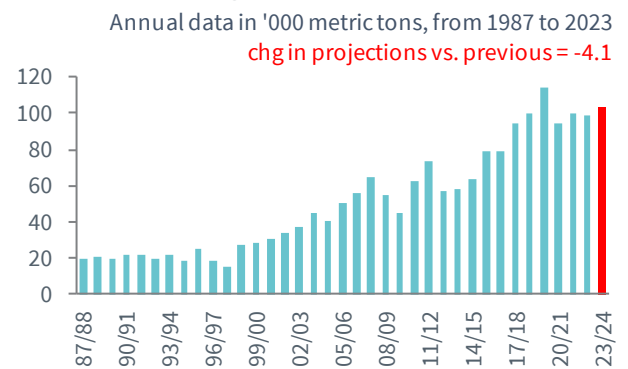
Cotton - Ending Stocks



Soybeans - Stock to Use



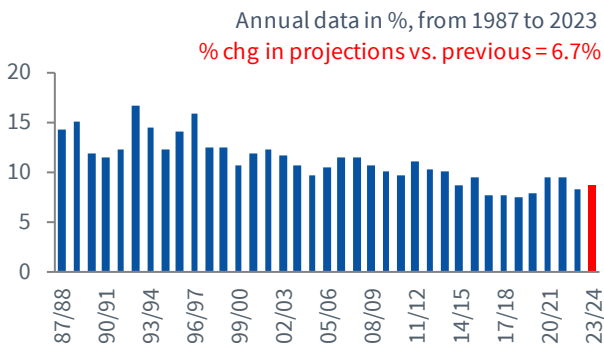
Soybeans - Ending Stocks



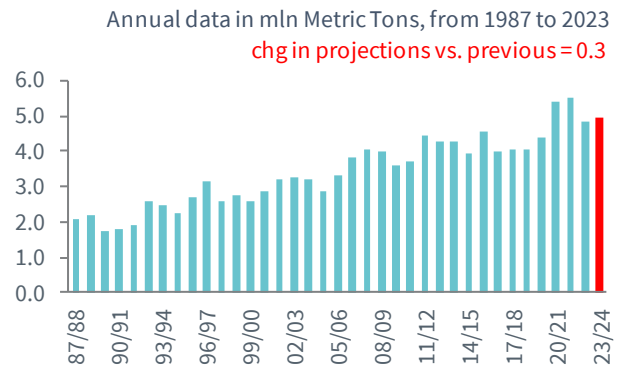
Source: USDA, Bloomberg, WisdomTree. Note: Ending stocks, inventories and stock to use data from the USDA are annual with monthly update of 2023/2024 estimates. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Agriculture

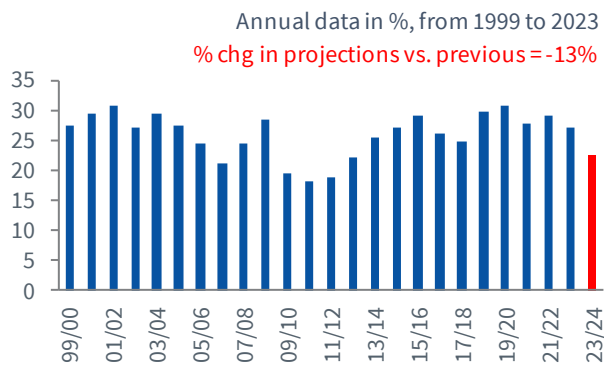
Soybean Oil - Stock to Use



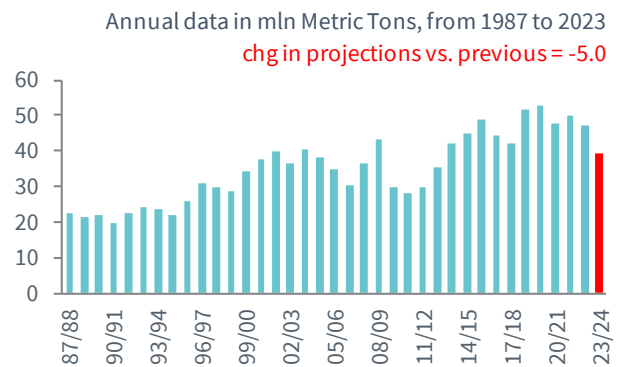
Soybean Oil - Ending Stocks



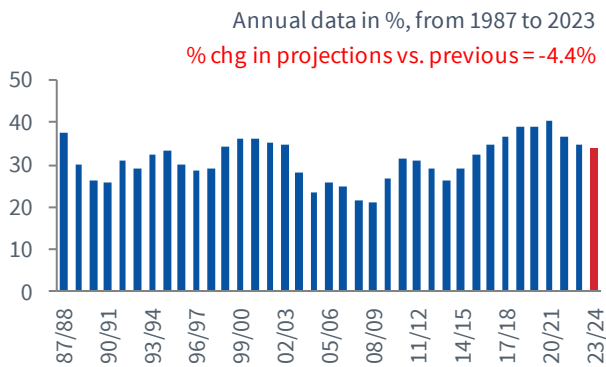
Sugar - Stock to Use



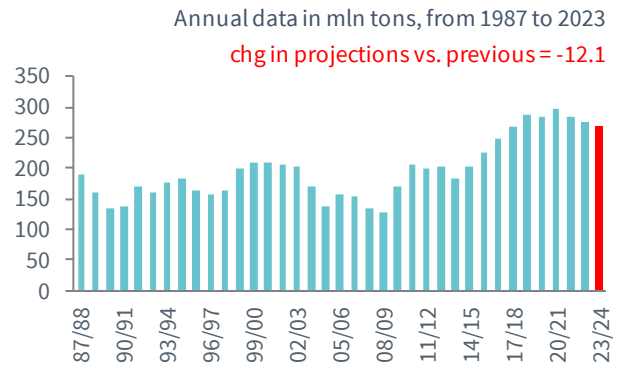
Sugar - Ending Stocks



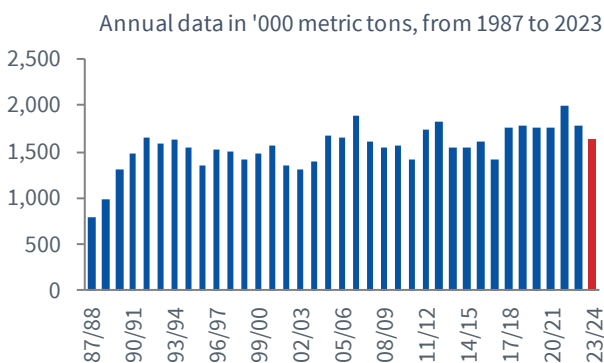
Wheat - Stock to Use



Wheat - Ending Stocks



Cocoa - Inventory

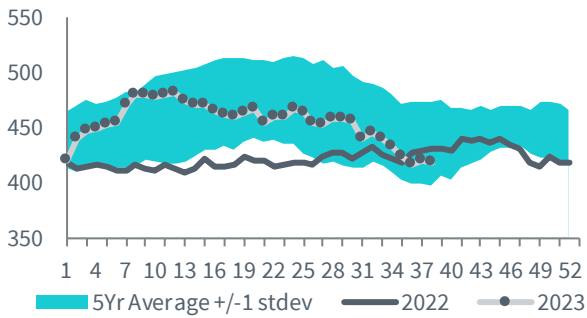


Source: USDA, Bloomberg, WisdomTree. Note: Ending stocks, inventories and stock to use data from the USDA are annual with monthly update of 2023/2024 estimates. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Energy

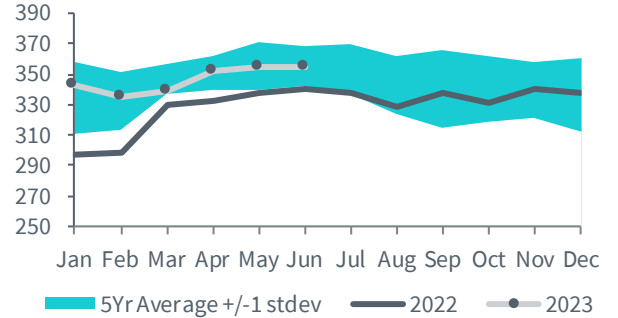
## US Oil Inventory

Weekly data in mln barrels, from Sep 18 to Sep 23



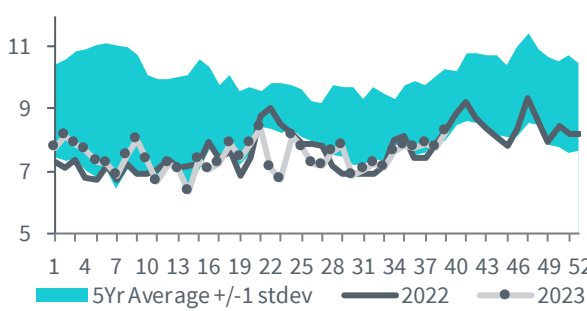
## OECD Europe Oil Industry Inventory

Monthly data in mln barrels, from Jun 18 to Jun 23



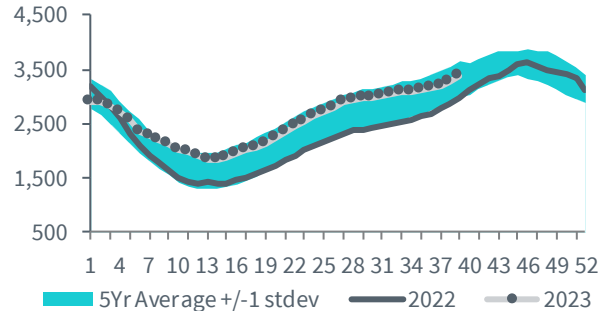
## Heating Oil Inventory

Weekly data in mln barrels, from Sep 18 to Sep 23



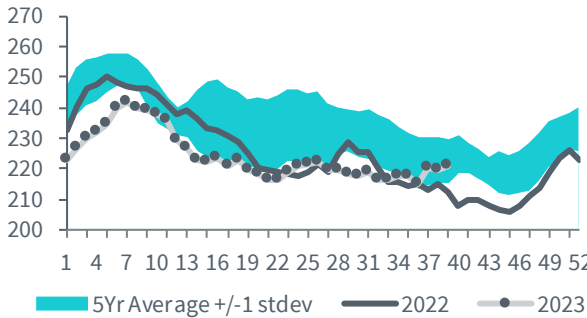
## Natural Gas Inventory

Weekly data in billion cubic feet, from Sep 18 to Sep 23



## Gasoline Inventory

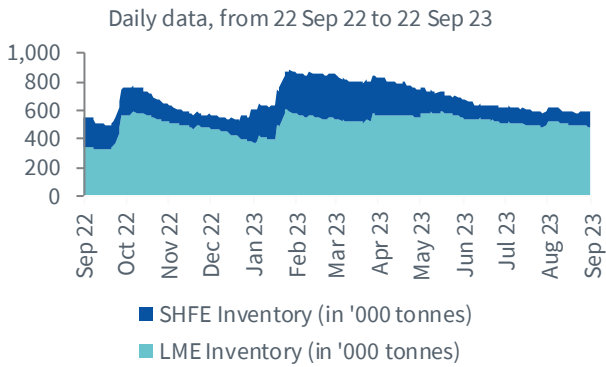
Weekly data in mln barrels, from Sep 18 to Sep 23



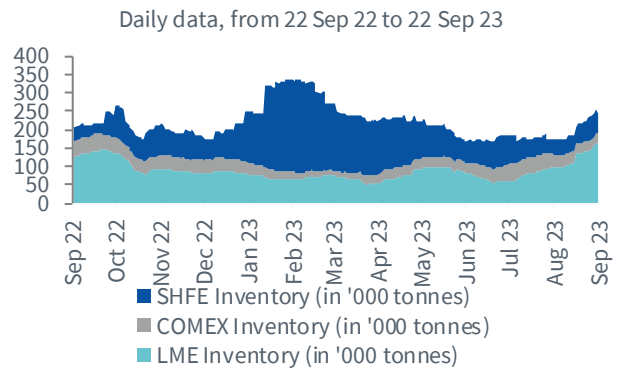
Source: Source: IEA / DOE, Bloomberg, WisdomTree. Note: "Oil - OECD Inventory" represents OECD industry stocks and is reported with a 3-month lag. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Industrial Metals

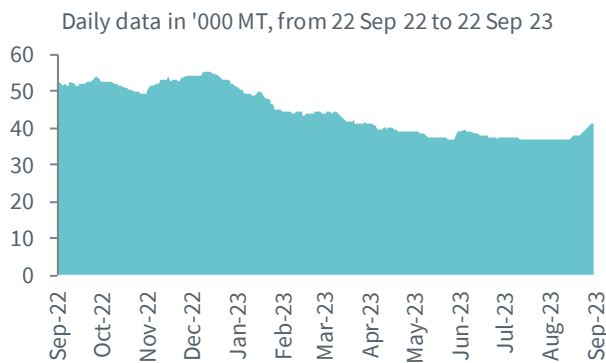
## Aluminum Inventory



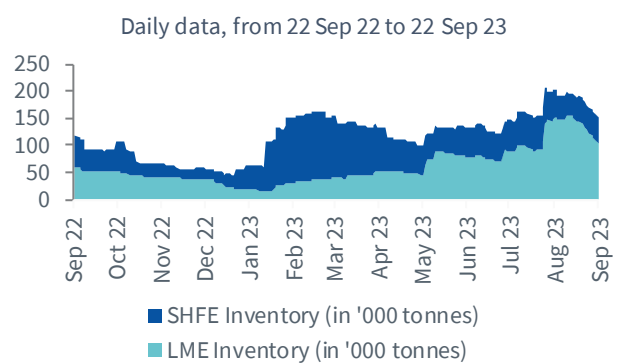
## Copper Inventory



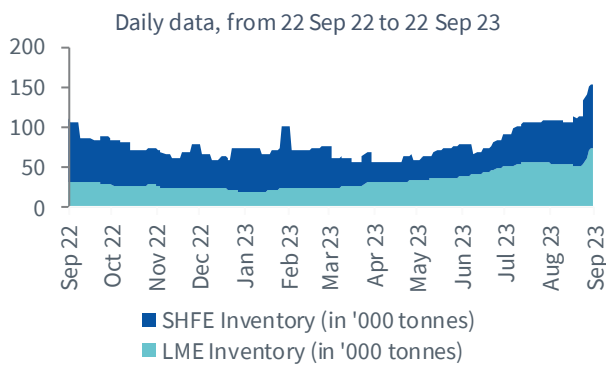
## Nickel Inventory



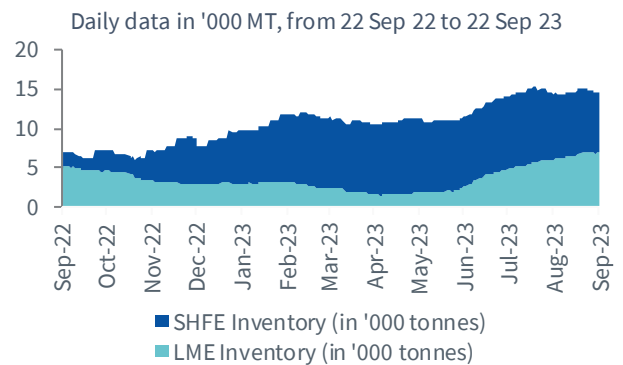
## Zinc Inventory



## Lead Inventory



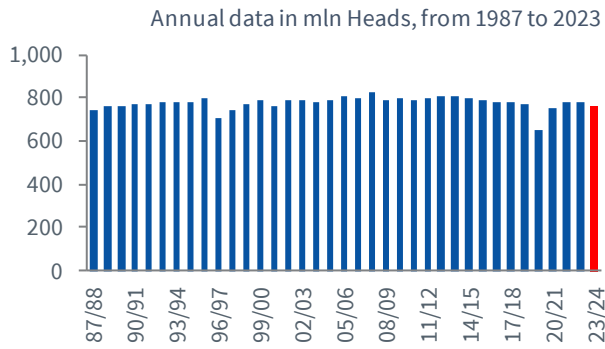
## Tin Inventory



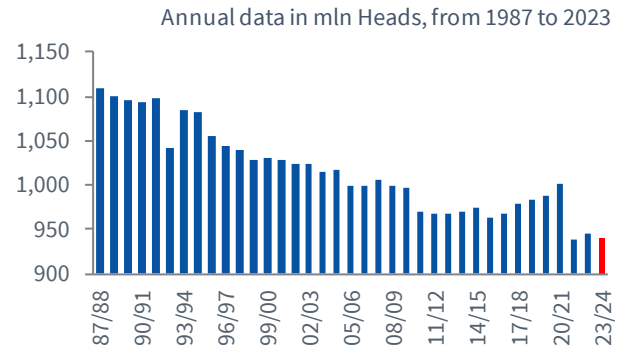
Source: Bloomberg, WisdomTree. Historical performance is not an indication of future performance and any investments may go down in value.

# Livestock

## Lean Hogs Inventory



## Live Cattle Inventory



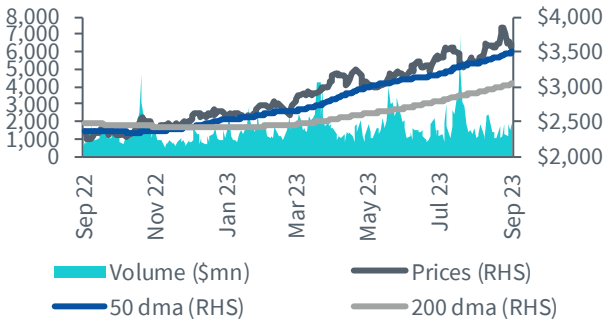
Source: USDA, Bloomberg, WisdomTree. Note: Ending stocks, inventories and stock to use data from the USDA are annual with monthly update of 2023/2024 estimates. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Moving Average and Volumes

# Agriculture

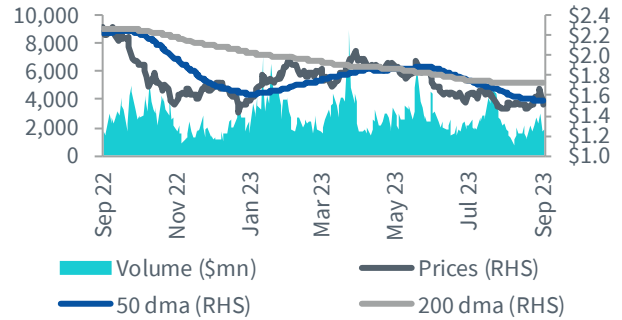
### Cocoa Front Month Futures Price

Daily data in USD/MT, from 22 Sep 22 to 22 Sep 23



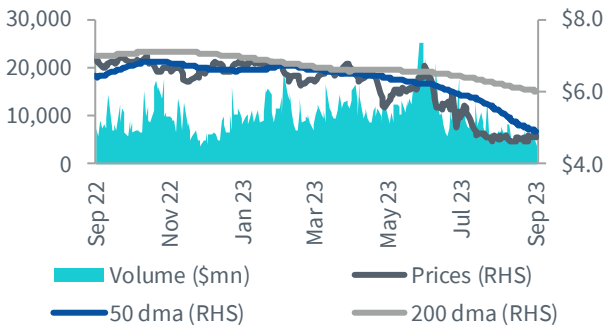
### Coffee Front Month Futures Price

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



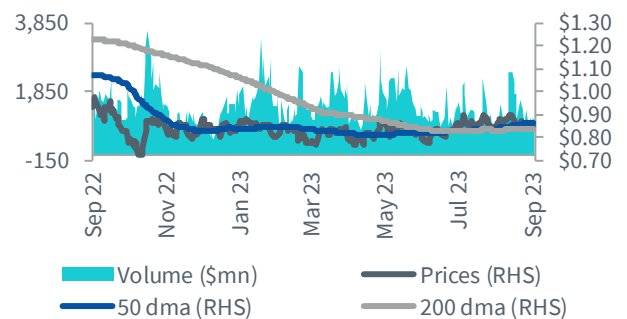
### Corn Front Month Futures Price

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



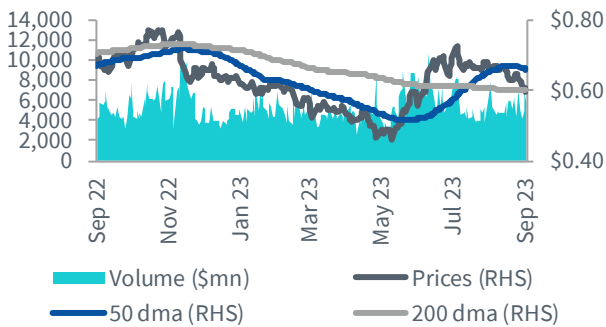
### Cotton Front Month Futures Price

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



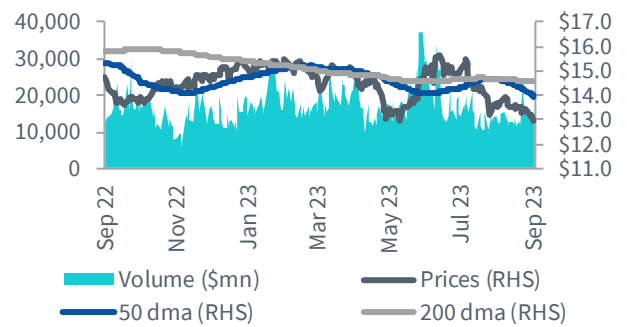
### Soybean Oil Front Month Futures Price

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



### Soybeans Front Month Futures Price

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



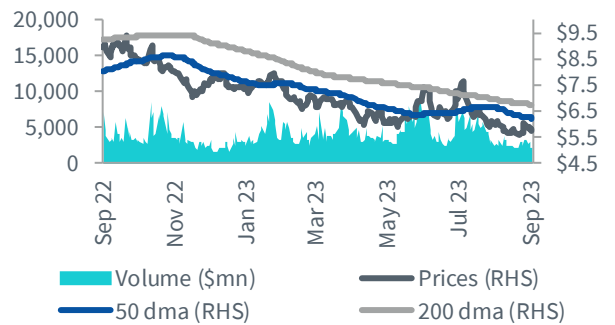
### Sugar Front Month Futures Price

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



### Wheat Front Month Futures Price

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



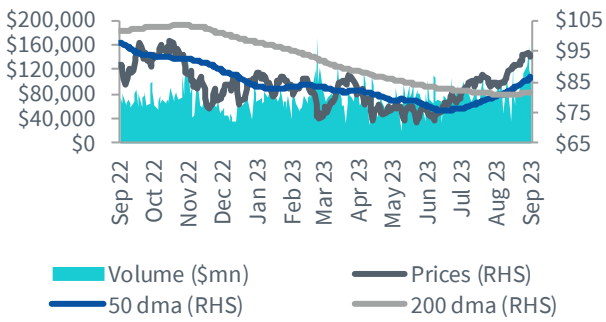
Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**



# Energy

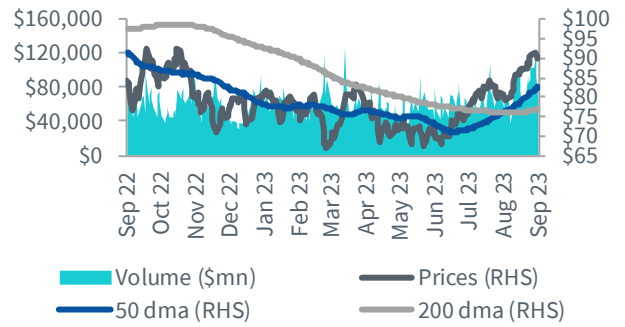
### Brent Oil Front Month Futures Price

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



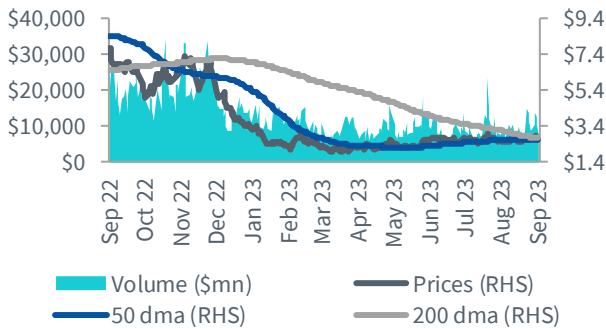
### WTI Oil Front Month Futures Price

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



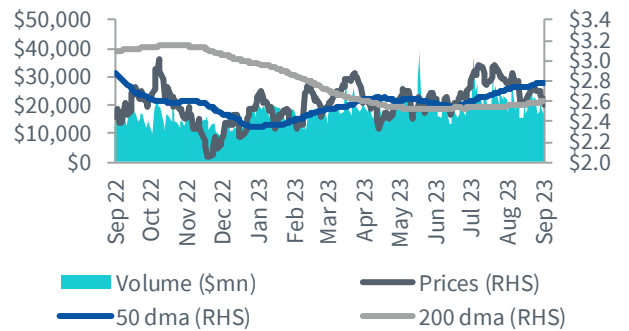
### Natural Gas Front Month Futures Price

Daily data in USD/MMBtu, from 22 Sep 22 to 22 Sep 23



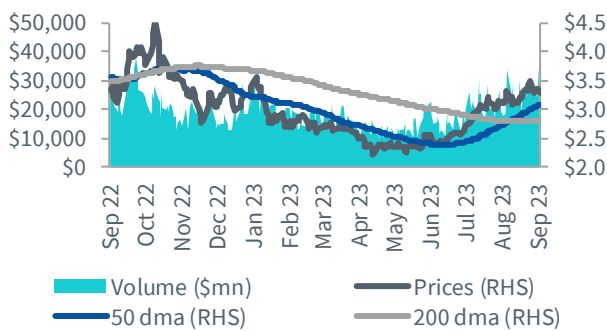
### Gasoline Front Month Futures Price

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



### Heating Oil Front Month Futures Price

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

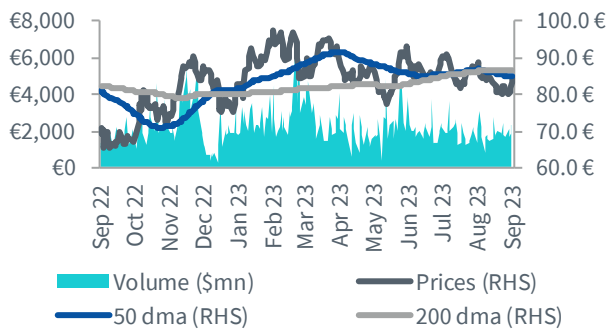


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Carbon

## Carbon Front Month Futures Price

Daily data in EUR/MT, from 22 Sep 22 to 22 Sep 23

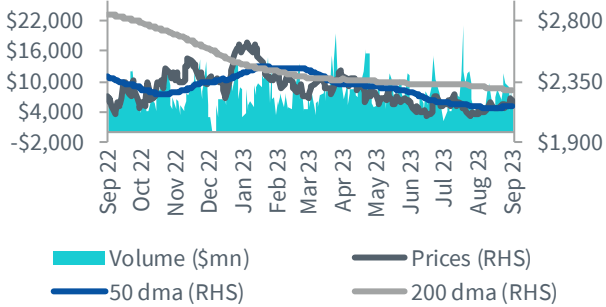


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Industrial Metals

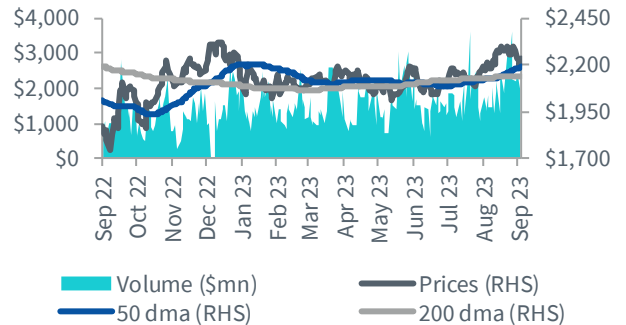
## Aluminum Front Month Futures Price

Daily data in USD/MT, from 22 Sep 22 to 22 Sep 23



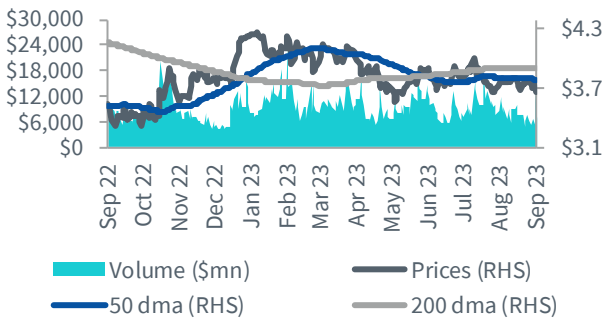
## Lead Front Month Futures Price

Daily data in USD/MT, from 22 Sep 22 to 22 Sep 23



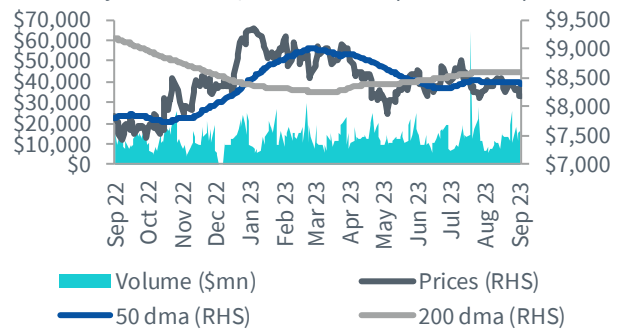
## Copper (COMEX) Front Month Futures Price

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



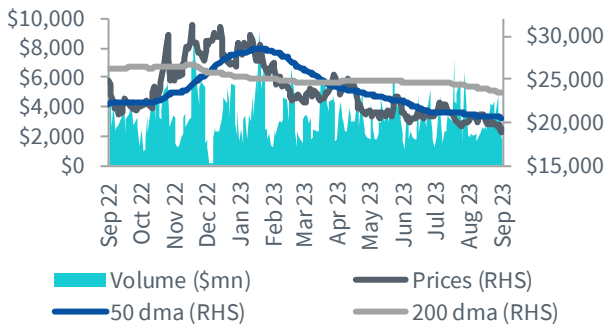
## Copper (LME) Front Month Futures Price

Daily data in USD/MT, from 22 Sep 22 to 22 Sep 23



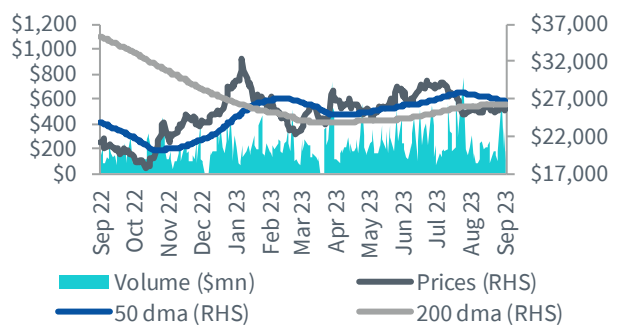
## Nickel Front Month Futures Price

Daily data in USD/MT, from 22 Sep 22 to 22 Sep 23



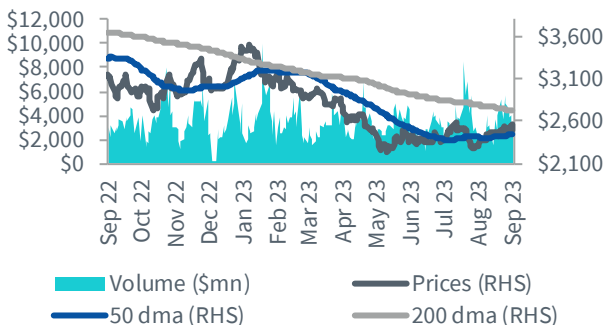
## Tin Front Month Futures Price

Daily data in USD/MT, from 22 Sep 22 to 22 Sep 23



## Zinc Front Month Futures Price

Daily data in USD/MT, from 22 Sep 22 to 22 Sep 23

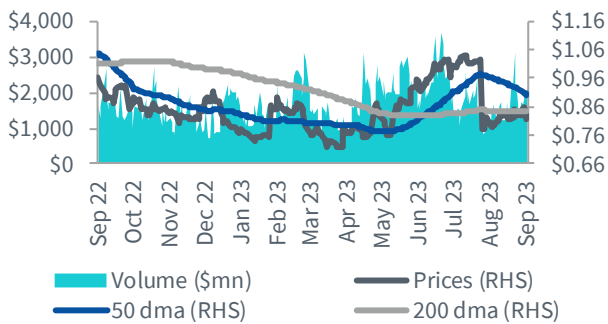


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Livestock

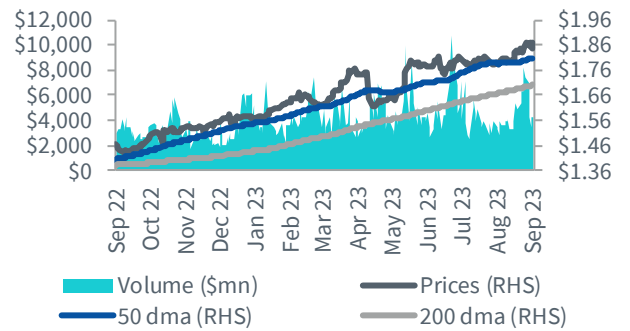
### Lean Hogs Front Month Futures Price

Daily data in USd/lb., from 22 Sep 22 to 22 Sep 23



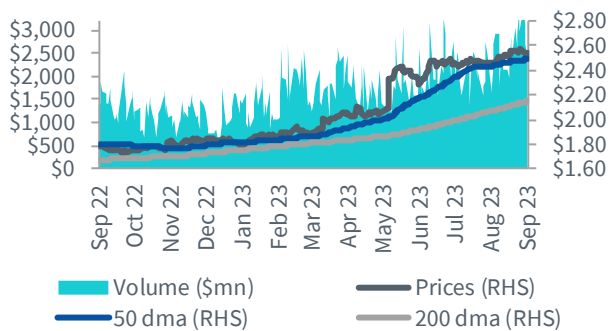
### Live Cattle Front Month Futures Price

Daily data in USd/lb., from 22 Sep 22 to 22 Sep 23



### Feeder Cattle Front Month Futures Price

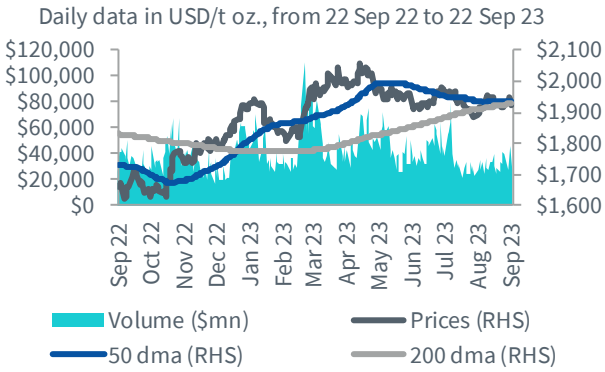
Daily data in USd/lb., from 22 Sep 22 to 22 Sep 23



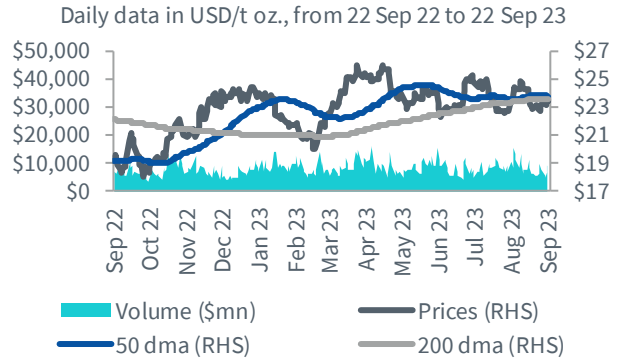
Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Precious Metal

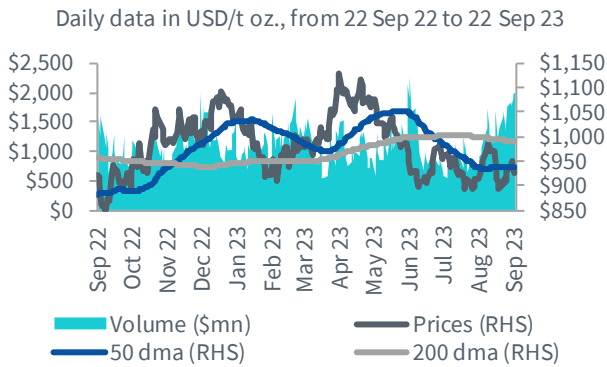
Gold Front Month Futures Price



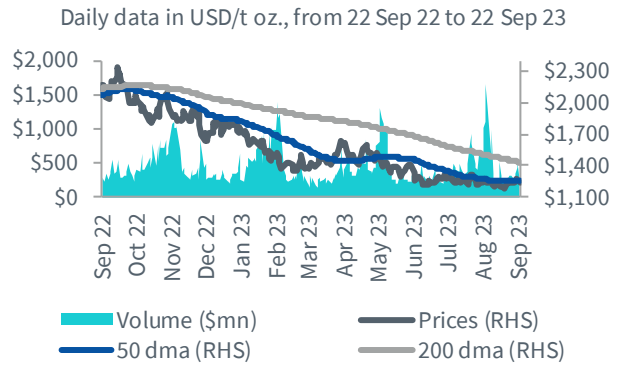
Silver Front Month Futures Price



Platinum Front Month Futures Price



Palladium Front Month Futures Price

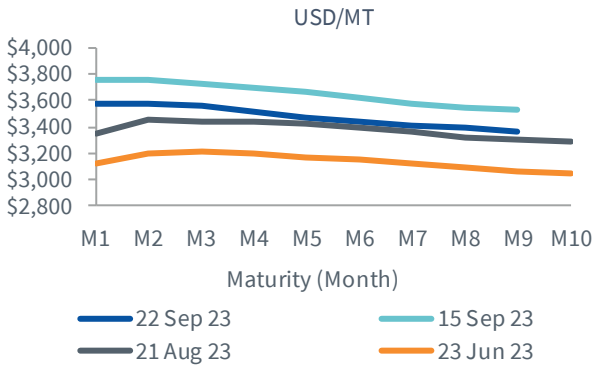


Source: Bloomberg, WisdomTree. Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

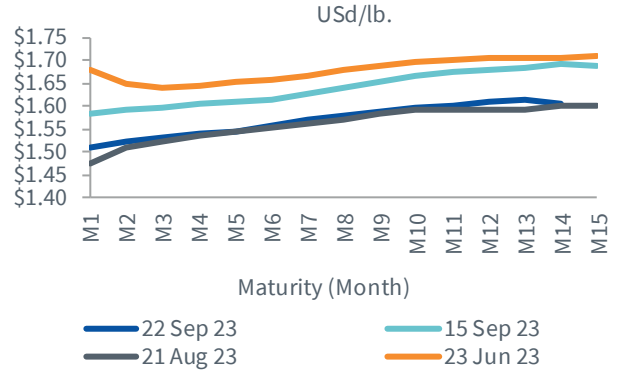
# Future Curves

# Agriculture

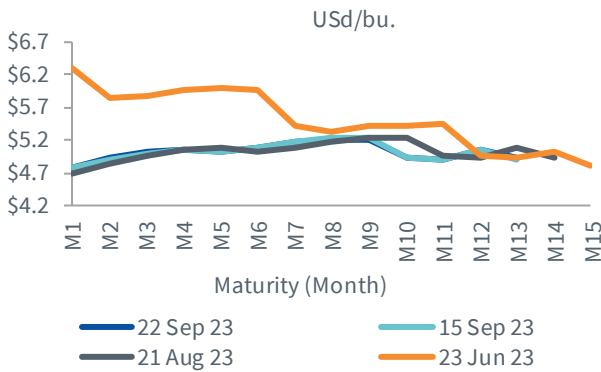
Cocoa Futures



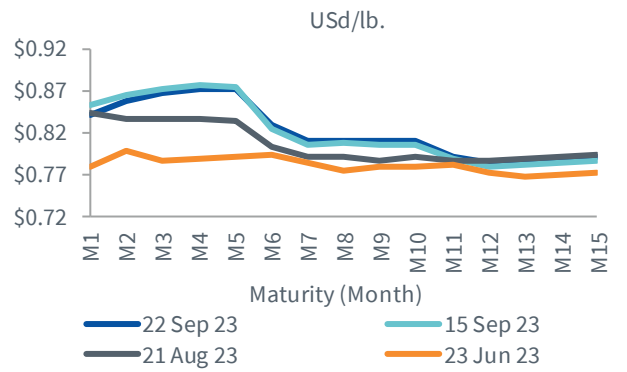
Coffee Futures



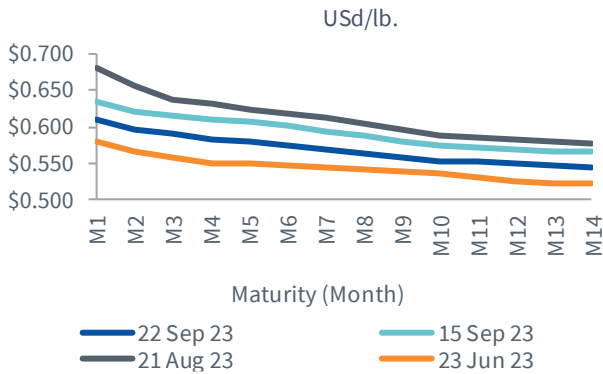
Corn Futures



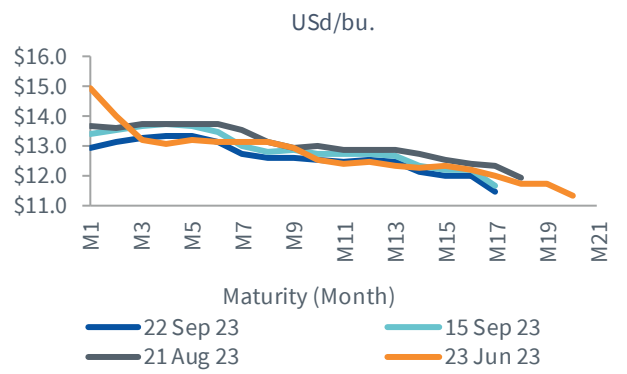
Cotton Futures



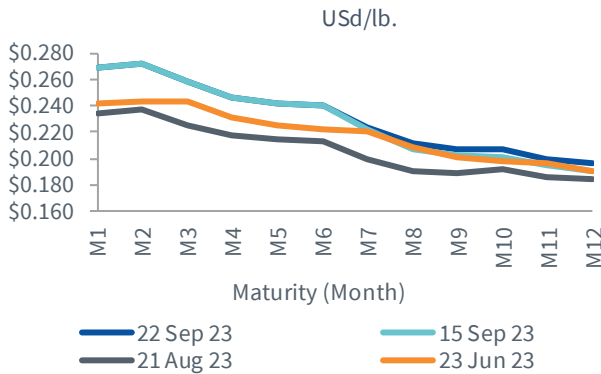
Soybean Oil Futures



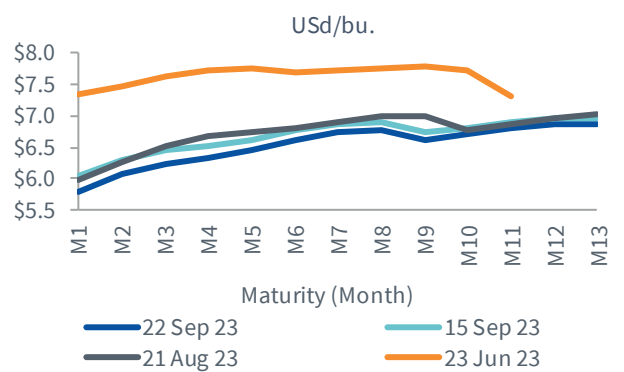
Soybeans Futures



Sugar Futures



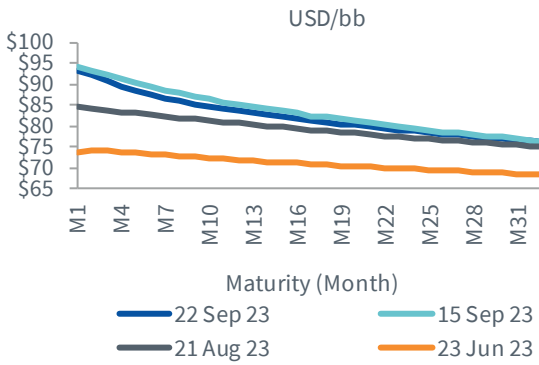
Wheat Futures



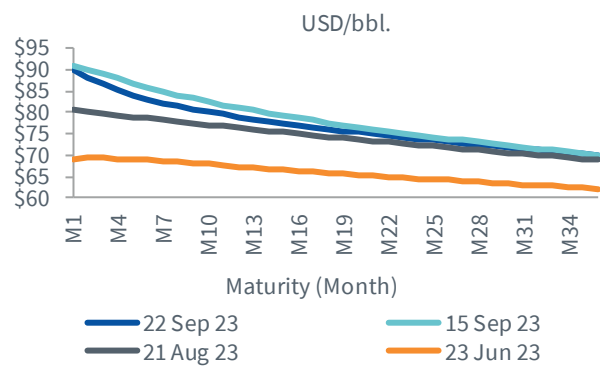
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Energy

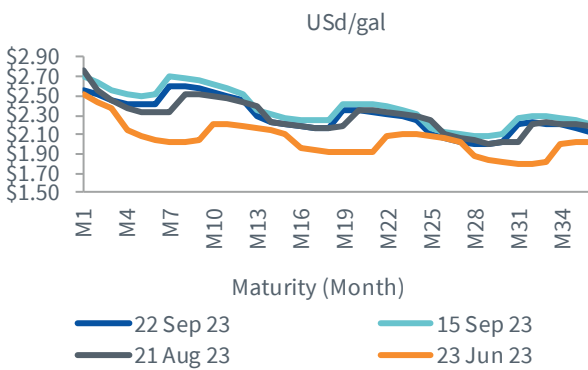
## Brent Oil Futures



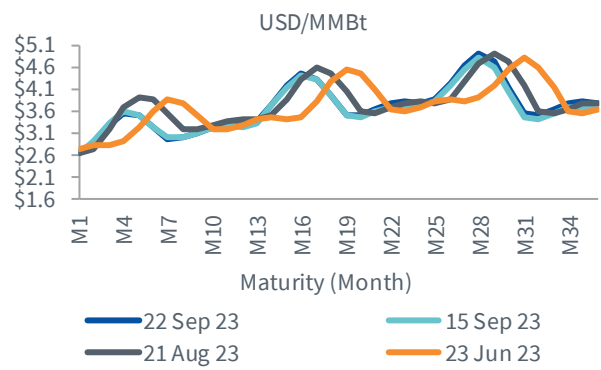
## WTI Oil Futures



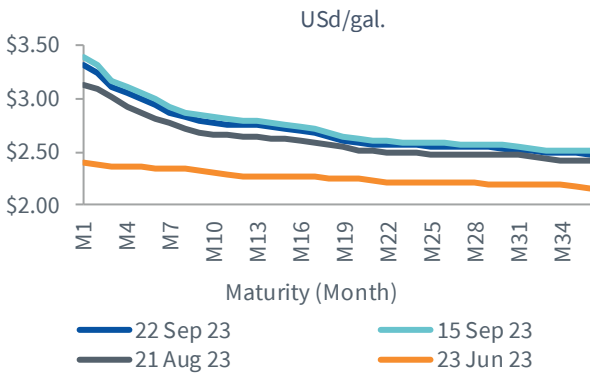
## Gasoline Futures



## Natural Gas Futures



## Heating Oil Futures

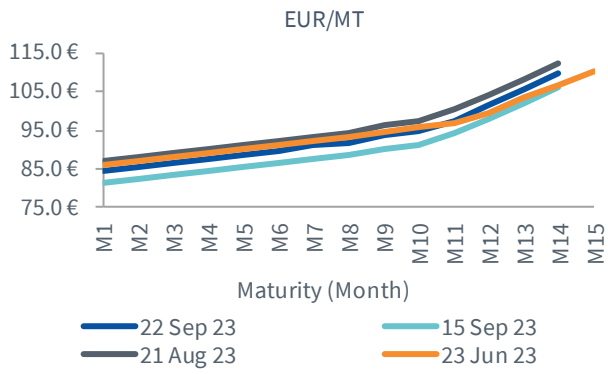


Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**



# Carbon

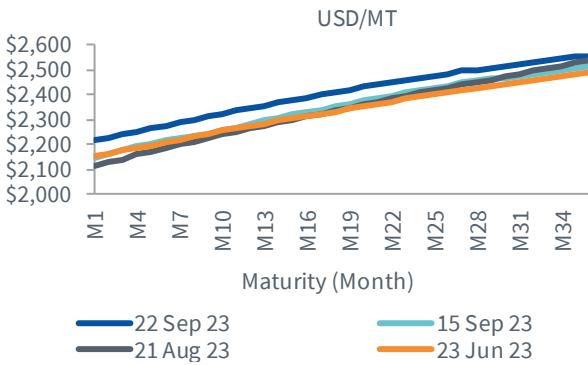
## Carbon Futures



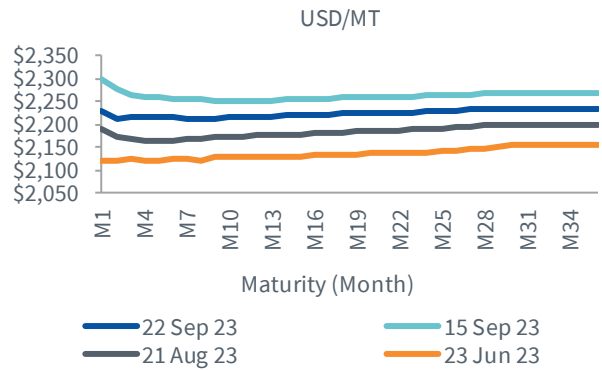
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Industrial Metals

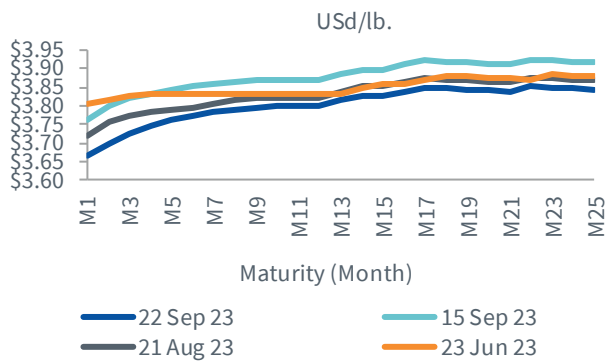
## Aluminum Futures



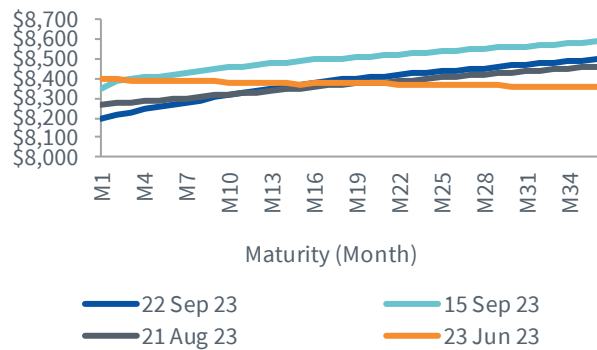
## Lead Futures



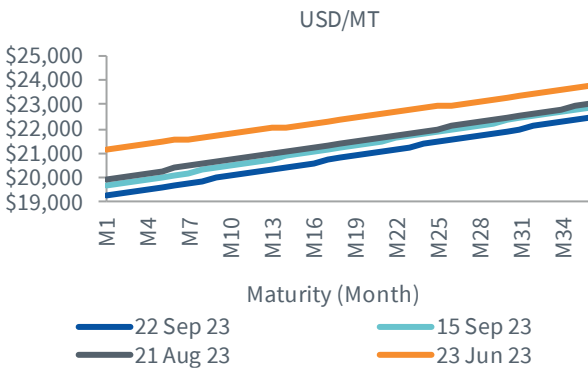
## Copper (COMEX) Futures



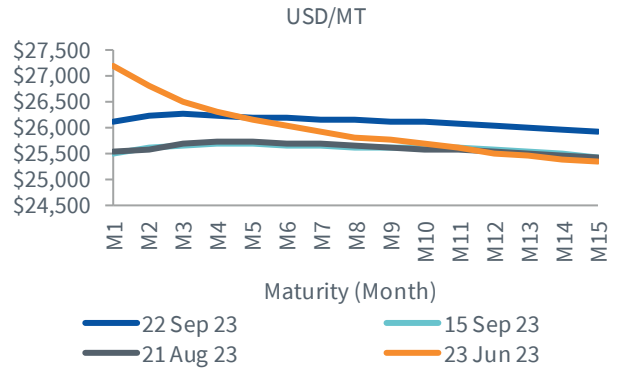
## Copper (LME) Futures



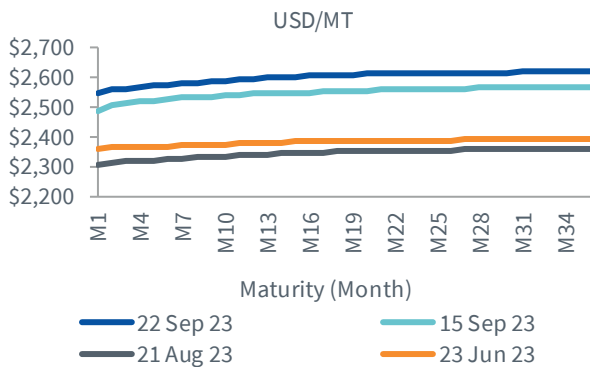
## Nickel Futures



## Tin Futures



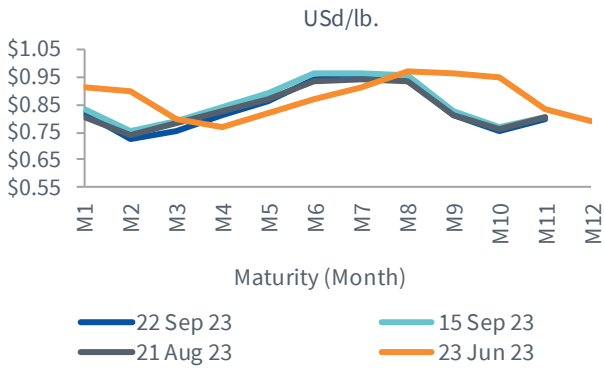
## Zinc Futures



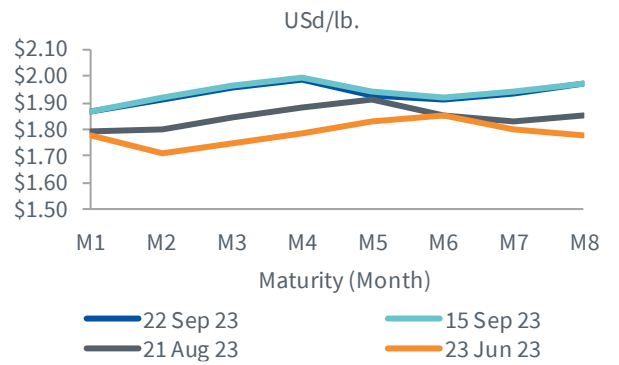
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Livestock

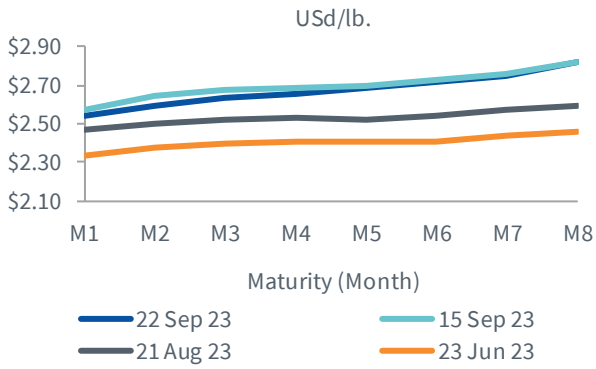
Lean Hogs Futures



Live Cattle Futures



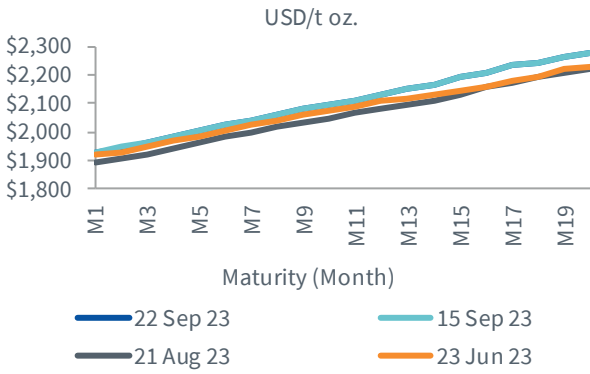
Feeder Cattle Futures



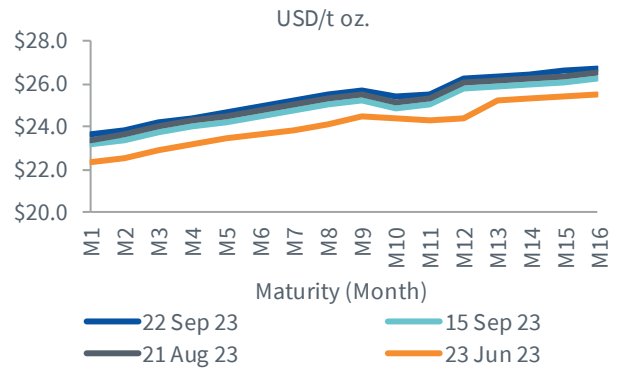
Source: Bloomberg, WisdomTree. Note: all commodity futures price data is denominated in USD unless otherwise indicated. **Historical performance is not an indication of future performance and any investments may go down in value.**

# Precious Metals

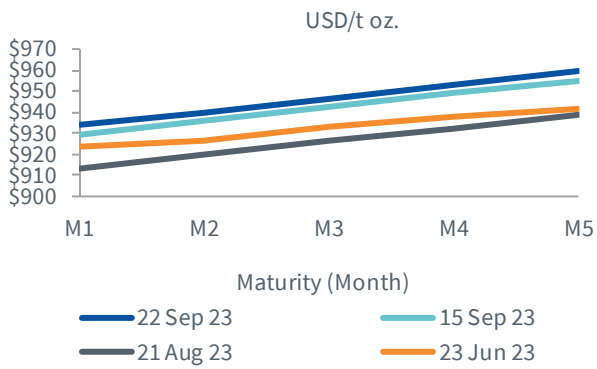
Gold Futures



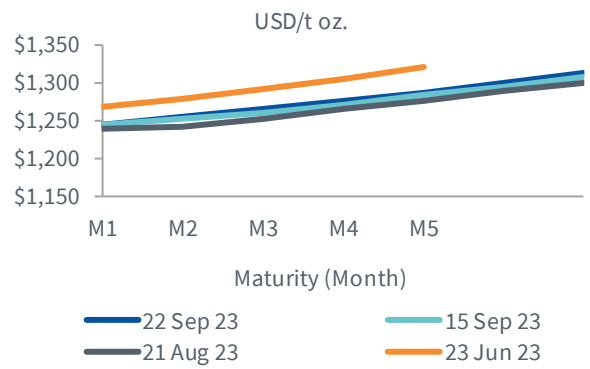
Silver Futures



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		
29-Sep-23	Nitesh Shah	<a href="#">Zinc rallies as inventory declines once again</a>
27-Sep-23	Mobeen Tahir	<a href="#">Your flying electric taxi has arrived. Are you ready for the ride?</a>
25-Sep-23	Pierre Debru	<a href="#">Why a diversified approach to thematic investments could boost performance</a>
25-Sep-23	Aneeka Gupta	<a href="#">Markets embrace the Higher-for-Longer theme</a>
22-Sep-23	Mobeen Tahir	<a href="#">Two technologies that enable renewable hydrogen energy</a>
20-Sep-23	Pierre Debru	<a href="#">Is 'price momentum' the answer to timing thematic investments?</a>
18-Sep-23	Ayush Babel	<a href="#">Why higher interest rates could be good news for CoCos</a>
15-Sep-23	Mobeen Tahir	<a href="#">What's Hot: Is Oil Headed for \$100 or returning to \$75?</a>
14-Sep-23	Pierre Debru	<a href="#">Thematic investing: look for the future Amazons or avoid the Yahoos?</a>
13-Sep-23	Pierre Debru	<a href="#">Myth-busting: top 6 misconceptions about commodities</a>
12-Sep-23	Chris Gannatti	<a href="#">Post Nvidias Q2 2023 earnings will the AI hype keep driving equity performance</a>
11-Sep-23	Mirva Anttila	<a href="#">Grayscale wins the Securities and Exchange Commission ("SEC") case – a spot bitcoin ETF just got a bit closer</a>
07-Sep-23	Jeremy Schwartz	<a href="#">What Cisco teaches us for today's 'AI star', Nvidia</a>

WisdomTree - Past Issues of Commodity Monthly Monitor		
Jul-Aug 2023	Research Team	<a href="#">Commodities a mixed bag as Chinese data weighs on sentiment</a>
Jun-Jul 2023	Research Team	<a href="#">Commodities past peak bearishness</a>
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>

The research notes are for qualified investors only.

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

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