

Summary

Commodity prices decidedly fell last month. The commodity rally from 21 Sept to 22 Oct 2018 was short-lived. The short-covering that was driving the rally in precious metals and softs in during that period (21 Sept to 22 Oct 2018) fizzled out. Meanwhile oil prices tumbled in an eerily similar fashion to 2014.

However, as this document goes out to print, commodities are rallying. The upside corrections come after the G-20 summit that concluded this past weekend. The US softened its stance on trade with China, offering a 90-day truce on higher tariffs that were supposed to come into effect on US\$200bn of imports into the US. China also said it will reduce tariffs on US cars and will commit to importing an undisclosed amount of US agriculture, industrial and energy products. Russia and Saudi Arabia agreed to continue their cooperation on managing oil supply through 2019, which we believe will be a precursor to the Organization for the Petroleum Producing Countries (OPEC) coming together to cut supply at its meeting later this week. Qatar's exit from the OPEC group in January (announced this past weekend) is likely to have little impact if Saudi Arabia (largest OPEC member) and Russia (largest OPEC partner) push for supply cuts. The Canadian province of Alberta has also announced it will cut oil production in an unorthodox move for a non-OPEC associated country, which will also counter any negative effects of Qatar's exit.

While the US Dollar has appreciated most of the past month, the currency began to depreciate in response to a somewhat dovish tone from the Federal Reserve Chairman, Jerome Powell. Likewise, US Treasuries were yielding more than 3.2% earlier in the month but are now down to 3.0% (as on 29 Nov 2018). So, factors that appeared to have a negative weight on gold are now easing. Indeed, if Powell is bowing to criticism from President Trump, we could see the central bank allow the economy to run a little hot and generate upside surprises in inflation. That is likely to benefit gold prices. There are a plethora of risks that seemed to be ignored by gold futures markets and we believe that an upside correction is due. A key event in the European calendar is the Parliamentary vote on the Brexit proposal on December 11th. Investors should recall when the UK first voted to leave the EU, speculative positioning in gold futures hit an all-time high.

- Raised uncertainty across agricultural commodities ahead of the G-20 summit.** As we approached the G-20 summit, net speculative positioning across agricultural commodities (except for wheat and coffee) turned bearish owing to rising uncertainty around trade negotiations between US and China. The sharp slump in crude oil prices have also dampened sentiment across key agricultural commodities used in ethanol production such as corn and sugar.
- Tighter fundamentals to support industrial metals higher.** While industrial metals came under pressure last month due to the ongoing trade wars, we believe prices are ripe for a correction as stronger fundamentals are likely to eventually dominate investor sentiment.
- Natural gas and oil diverged significantly last month.** Natural gas gained 34% while oil fell more than 23%. We believe both are likely to be transitory. Natural gas rose only because of a cold snap in the US. That will pass. Oil fell as US inventories have risen 9%. We believe OPEC will act later this week to stem production and hence the price slide.
- The short-covering rally in gold and silver has ended prematurely and shorts are being built up again.** That remains baffling given the plethora of risks that should be supporting the two defensive assets. We believe that a covering rally will resume as the futures market acknowledges the risks that ETP investors and central banks have been expressing through their purchases.

Nitesh Shah
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Contents

Commodities market overview	1
Summary tables	4
CFTC net positioning	5
Inventories	9
Moving average and volumes	13
Futures curves	17
Recent publications	21

Commodity Monthly Matrix¹

	Current Price ²	Returns (-1 Mth)	Price vs 200 days MA	Inventories ³ (-3 Mths)	Positioning ⁴ (-1 Mth)	Roll Yield ⁵	23 Nov Score	22 Oct Score
WTI Oil	50	-24.1%	-24.9%	10.3%	-15%	-0.3%	(4)	(3)
Brent Oil	59	-23.1%	-20.6%	-5.7%	-61%	-0.4%	(2)	0
Natural Gas	4.3	34.1%	45.4%	25.4%	275%	-1.1%	0	0
Gasoline	1.4	-24.3%	-30.5%	-4.2%	-17%	1.1%	0	(2)
Heating Oil	1.9	-16.6%	-12.5%	26.9%	-77%	0.3%	(2)	0
Carbon	20.2	5.1%	23.6%	-	-	-0.5%	0	(2)
Wheat	5.0	-1.8%	-0.5%	3.0%	-57%	-1.5%	(4)	(1)
Corn	3.6	-3.0%	-2.8%	97.8%	-45%	-3.1%	(4)	0
Soybeans	9	2.7%	-5.1%	5.8%	-45%	-1.5%	(3)	(1)
Sugar	0.1	-9.7%	4.5%	7.5%	-63%	-0.9%	(3)	1
Cotton	0.7	-5.2%	-10.1%	-5.8%	-18%	-3.0%	(2)	(1)
Coffee	1.1	-11.5%	-4.6%	-	32%	-3.4%	(1)	1
Soybean Oil	0.3	-3.9%	-6.7%	6.7%	-1483%	-0.7%	(4)	(1)
Cocoa	2,061	-5.8%	-13.3%	-	83%	-2.9%	(1)	(3)
Aluminium	1,951	-2.3%	-8.0%	-8.9%	-11%	0.7%	0	0
Copper (COMEX)	2.8	0.3%	-4.9%	-27.3%	38%	-0.7%	1	0
Copper (LME)	6,227	0.5%	-4.2%	-47.7%	-6%	0.1%	1	0
Zinc	2,570	-5.4%	-10.2%	-43.8%	-10%	1.1%	0	3
Nickel	10,864	-11.8%	-19.1%	-12.1%	-30%	-0.2%	(2)	0
Lead	1,956	-2.7%	-11.9%	-18.9%	6%	-0.5%	0	(2)
Tin	18,835	-2.7%	-6.3%	30.9%	18%	0.1%	0	3
Gold	1,223	-0.8%	-3.0%	-	-84%	-	(4)	2
Silver	14	-3.7%	-8.7%	-	-100%	-	(4)	2
Platinum	845	1.5%	-3.0%	-	79%	-	2	0
Palladium	1,115	-0.7%	12.2%	-	5%	-	2	4
Live Cattle	1.2	3.8%	4.3%	-	-14%	-3.2%	(1)	(1)
Lean Hogs	0.6	8.3%	-8.9%	-	55%	-12.9%	0	(1)
Feeder Cattle	1.5	-3.7%	1.6%	-	-15%	2.4%	0	(3)

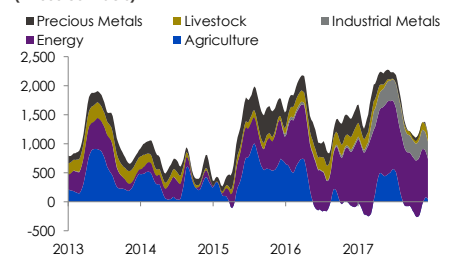
The score matrix is designed to highlight significant changes in key variables but should not be viewed as predictor of performance. Source: Wisdomtree, Bloomberg

Performance ²	- 1 Mth	- 6 Mth	- 12 Mth
All Commodities	-4.1%	-10.1%	-4.6%
Energy	-7.4%	-7.8%	7.5%
Industrial Metals	-3.4%	-14.2%	-11.1%
Precious Metals	-1.5%	-7.2%	-8.7%
Agriculture	-3.7%	-15.0%	-11.8%
MSCI World	-2.3%	-7.0%	-3.4%
US Aggregate Bond	0.4%	0.5%	-1.9%

Bloomberg TR Indexes for basket returns, data to Friday 23 November 2018. Source: Wisdomtree, Bloomberg

CFTC Net Speculative Positioning

(in '000 contracts)



Source: Wisdomtree, Commodity Futures Trading Commission (CFTC), Bloomberg

" - Information not available. Green = returns positive, inventories falling, positioning rising, roll yield positive. Red = the opposite. Black = neutral. ¹ Detailed explanation of the matrix calculations can be found at the end of this report. ² All prices are futures prices to July 20, 2018. Broad sector returns based on Bloomberg Commodity Index family. ³ % 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. ⁴ CFTC futures and LME COIR net positioning as at November 20, 2018 and November 23, 2018 respectively. ⁵ Calculated as % difference between front month and second month futures prices on report date.

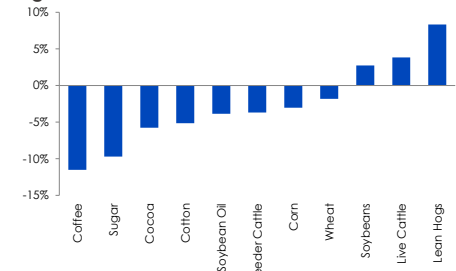
Historical performance is not an indication of future performance and any investments may go down in value.

Sector Overview

Agriculture

- Upward revisions to Chinese corn stocks over the past 10 years was the highlight of the United States Department of Agriculture (USDA) November World Agricultural Supply and Demand Estimate (WASDE) report. According to revised figures from the National Bureau of Statistics, Chinese corn supplies have been underreported by 149mn tons since 2007. The 2017 corn crop is now quoted at 259mn tons, 20% higher than the previous figure. As a result, USDA increased its projected 2018/19 Chinese corn ending stocks to 207mn, with the global corn stocks in 2018/19 nearly doubling versus its previous October estimate to 307mn tons. USDA's assessment situation of corn supply outside of China remains unchanged. China is now less likely to become an importer of corn over the next year unless demand increases significantly.
- The short covering rally in coffee and sugar futures lost momentum last month as prices declined 11.5% and 9.7% respectively. The sharp decline in crude oil prices over the prior month weighed on sugar prices as less sugarcane would be needed to produce ethanol. On the contrary, we expect oil prices to recover from current levels and ethanol to remain a competitive alternative source of energy. In addition, the outlook on the sugar market has improved considerably evident from the latest estimates from USDA and the International Sugar Organisation (ISO). Both agencies have lowered their forecasts of sugar production in 2018/19. India, Thailand and the EU are likely to produce less sugar.

Agriculture - November Returns*

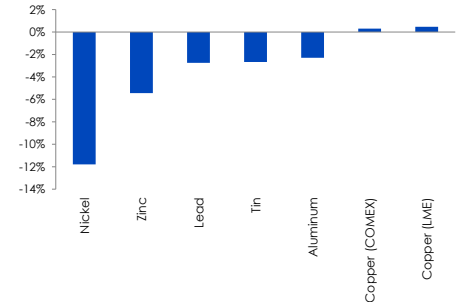


Source: Bloomberg

Industrial Metals

- Copper was the only exception in the industrial metals complex to end the period with a positive performance. The International Copper Study Group (ICSG) confirmed an unexpectedly higher deficit on the global copper market to the tune of 259,000 tons in the first 8 months of this year, owing to higher demand from China. In addition, concerns about supply disruptions owing to strikes and maintenance work – at the Spence copper mine in Chile, Codelco in Chile and Tuticorin copper smelter in India, is lending buoyancy to copper prices.
- Nickel prices declined below US\$11,000 per ton for the first time since December 2017. Concerns that more supply will be available next year are being reflected in the price decline. In addition, macro trade fears have risen, and electric vehicle exuberance has subsided. Following a 2-year environmental audit period for Philippines mines, the Department of Environment and Natural Resources confirmed that nine of the twelve mines that were shut over a year ago will be allowed to resume operations provided they resolve their shortcomings. If the mines in the world's second largest nickel producer, do re-open, it would allow the supply situation for nickel to stabilise. While International Nickel Study Group (INSG) has raised the prospect of an 8.4% production growth next year, the nickel market will continue to show a supply deficit of 33,000 tons next year. We remain of the view that investors are discounting the incremental demand opportunity from battery technology used in electric vehicles. We also believe the sharp decline in availability of nickel stocks should lend a tailwind to prices.

Industrial Metals - November Returns*

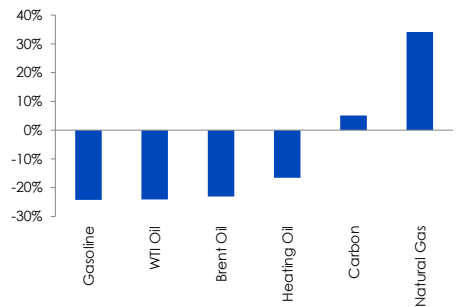


Source: Bloomberg

Energy

- Last month we saw the worst decline in oil prices since 2014. However, the events over the past weekend should plant the seeds for the Organization for the Petroleum Producing Countries (OPEC) to collaborate with their external partners to cut production at their meeting later this week. The G-20 meeting over the weekend provided fertile ground for fire-side discussion among policy makers from topics ranging from international trade (US President Trump and Chinese President Xi) to oil market policies (Saudi Arabian Energy Minister, Khalid A. Al-Falih and Russian Energy Minister, Alexander Novak). In the past meeting between Al-Falih and Novak have foreshadowed deals within OPEC and as we argued in our recent blog post OPEC: Déjà vu – No thank you! it is in both countries' interest to see higher oil prices.
- A continued glut in US oil, underscored by inventories surprising to the upside in every week in the past month, has led to the WTI benchmark widening against the Brent benchmark. At over an \$8 spread we are a long way from the \$4 average spread we became accustomed to in July 2018. We expect international crude markets to remain tighter than the US until the US builds out the necessary infrastructure to export at higher volumes. Until we see the infrastructure, we expect Brent to continue to trade at a premium to WTI.
- Natural gas was the star performer in the commodity space in the past month, rallying 34% following a cold snap in the US. Approximately half of US natural gas is used for heating purposes. Inventories for the commodity are more than 1 standard deviation below the 5-year average, highlighting the tightness in the market.

Energy - November Returns*

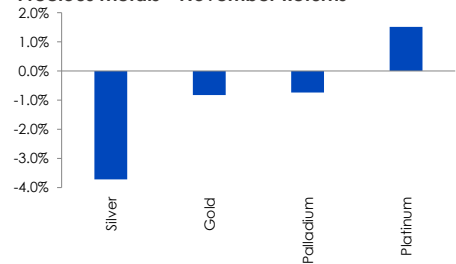


Source: Bloomberg

Precious Metals

- The short-covering rally that assisted gold prices in the prior month fizzled out and gold shorts are being re-built. Gold's failure to acknowledge a plethora of risks is baffling. Over the period that our data covered, there was very little certainty about the events that would take place over the past weekend at the G-20 meeting, Saudi Arabia's Crown Prince risked becoming ostracized by the international community, sanctions were re-imposed on Iran (which could have led to a retaliation by the nuclear nation), Russia exerted aggression towards Ukraine, Italy insisted on sticking to its budget that has been rejected by the European Commission. Gold futures market speculative positioning and price seem to have ignored all of these risks. A key event in the European calendar is the Parliamentary vote on the Brexit proposal on December 11th. Investors should recall when the UK first voted to leave the EU, speculative positioning in gold futures hit an all-time high. Central banks and exchange traded product (ETP) investors on the other hand have been buying gold. In October there were close to US\$100mn (16.6 tonnes) of inflows into gold ETPs according to World Gold Council data. The central banks of Hungary and Russia added substantially to their gold reserves in the month of October. We believe it is only a matter of time before the futures market sees what others are expressing through their purchases. Another short-covering rally could drive gold prices higher.
- Silver followed gold prices lower. In its usual demeanour, it moved further in the same direction. Shorts are also rising in silver. The gold to silver ratio is close to a 10-year high, indicating that silver is relatively cheap today. We believe a short-covering rally will also benefit silver. Any respite in trade protectionism could also help silver alongside industrial metals as the market has punished the complex due to their fears of demand destruction from higher prices.
- With European car sales having been front-loaded in the summer as consumers tried to avoid the introduction of new emission tests, we expect car sales to remain slow, potentially dampening demand for the platinum group metals.

Precious Metals - November Returns*



Source: Bloomberg

*Note: all returns are based on front month futures prices in the month to Friday 23 November 2018. Historical performance is not an indication of future performance and any investments may go down in value.

Technical Overview (as of Nov 23, 2018)

Positioning

- Net speculative positioning in cocoa increased 85.8% as short positions in cocoa were trimmed by 29% over the prior month. Despite all the concerns of higher supply from two of the world's largest producers in Ivory coast and Ghana, investors turned less bearish on the outlook for cocoa.
- Soybean oil saw the largest bearish positioning move. Net short positioning rose to 35,789 contracts over the prior month, more than 1-standard deviation below its 5-year average. Rising uncertainty ahead of the G-20 summit coupled with the slump in crude oil prices weighed on sentiment. Not only has USDA lowered its forecast for Chinese soybean imports in 2018/19, it has raised its estimate of global oilseed stocks by 2.4mn tons mainly on higher stocks of soybeans.
- Speculative positioning in natural gas futures rose as the cold weather snap enticed investors to the asset. That's the first-time positioning has been net long in since May 2017. With inventories remaining more than 1 standard deviation below the 5-year average, the supply of gas remains tight. However, as the cold snap passes, we expect positioning will head back to net short.
- The short-covering rally in gold and silver proved to be transitory. Both gold and silver futures markets are back to net short again. The futures market is contradicting the ETP market, where there have positive inflows into long gold products.

Inventories

- Corn inventories have shown the most pronounced increase, up 97.8% over the past 3 months. This was largely due to the significant upward revision of Chinese corn crops over the last ten years reported by the National Bureau of Statistics. In accordance with the new figures from China, USDA increased its projected 2018/19 Chinese corn ending stocks to 207mn, with the global corn stocks in 2018/19 nearly doubling versus its previous October estimate to 307mn tons.
- The trend of declining inventory levels remains in place across most of the industrial metals. Only tin inventory levels rose over the past month. Backwardation in the London Metals Exchange (LME) copper curve continues to drive an inventory drawdown to a greater extent than COMEX copper which is now in contango.
- Natural gas inventories rose by 9.4%, due to seasonal injections, but that still left inventories at more than 1 standard deviation below the 5-year average. Supplies are tight and are likely have gotten tighter after the cold snap.

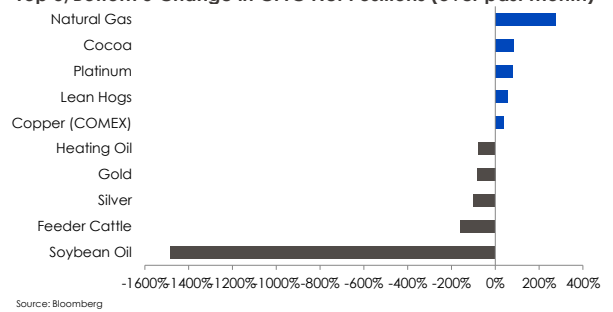
Curve Dynamics

- All agricultural commodities, except for feeder cattle are in contango. Negative roll yields run as high as 3.4% for coffee and 3.1% for corn.
- The front end of the zinc futures curve is now in steep backwardation with a roll yield of 1.1% signifying tight supply. The deficit on the zinc market was revised significantly upwards last month by the International Lead and Zinc Study Group (ILZSG) and a renewed deficit is expected next year which should keep prices higher.
- Gasoline is the only energy commodity currently sporting front month backwardation (with a positive roll yield of 1.1%). That is in line with seasonal trends. As the season progresses, we are likely to go back to contango markets by next month. The backwardation in Brent and WTI oil gave way to contango over a month ago and now provide more than a 0.3% roll yield drag. While front month natural gas is in contango, between month 3 and month 5 there is very steep backwardation owing to the sudden price surge in near month contracts.

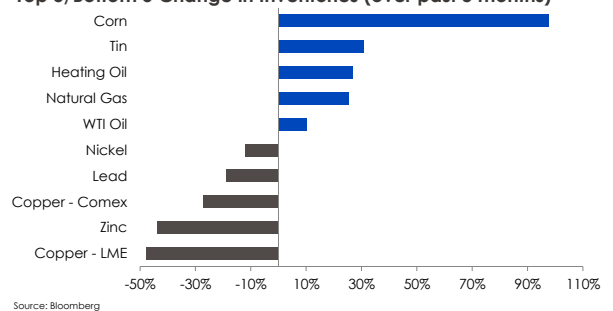
Technicals

- Sugar is trading 4.5% above its 200- daily moving average (dma), we expect prices to recover as supply on the global sugar market is expected to tighten next year.
- Cocoa prices are trading 13.3% below their 200-dma. While short positions in cocoa futures have been unwound over the past month, cocoa prices are likely to remain under pressure owing to higher supply from the world's largest cocoa producers.
- Nickel is trading 19.1% below its 200-dma. Sentiment has turned bearish over fears of higher supply from the Philippines. We believe investors are discounting the impact of higher demand from battery technology used in electric vehicles and prices should recover.
- The energy sector dominated both the top and bottom of the chart to our right. At the top, natural gas and carbon are trading 45% and 24% above their respective 200 day moving averages. The surge in natural gas prices was due to weather and likely to be transitory. At the bottom of the chart are gasoline, Brent and WTI oil trading 31%, 25%, 21% below their respective 200 day moving averages.
- Although palladium prices pared back last month, they are still trading 12% above its 200 day-moving average and 3% above its 50 day-moving average.

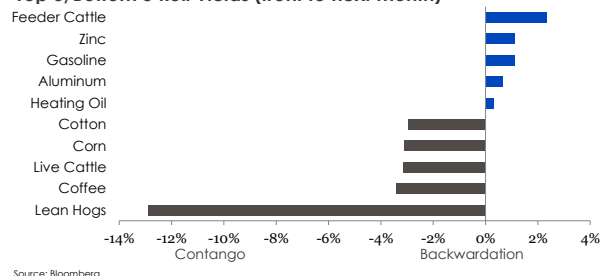
Top 5/Bottom 5 Change in CFTC Net Positions (over past month)¹



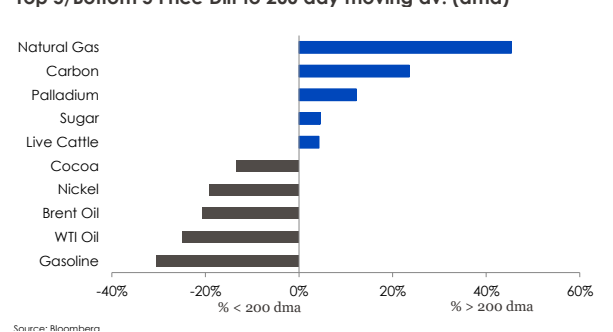
Top 5/Bottom 5 Change in Inventories (over past 3 months)²



Top 5/Bottom 5 Roll Yields (front to next month)³



Top 5/Bottom 5 Price Diff to 200 day moving av. (dma)⁴



¹ CFTC futures net positioning as of report date, percent change from previous month. ² Percent change in inventory based on 3 month change (in %).

³ Roll yields calculated as percent change between front month futures price and next month futures price on Nov 23, 2018.

⁴ Percent difference between the front month futures price and its 200 day moving average on Nov 23, 2018.

Summary Tables



PRICES ¹	Current	Unit	1 Month	3 Month	6 Month	1 Year	ROLL YIELDS ²	Unit	Exchange	23-Nov	1 Week	1 Month	3 Month
Energy							Energy						
WTI Oil	50	USD/bbl.	-24.1%	-25.7%	-29.8%	-13.1%	WTI Oil	USD/bbl.	NYMEX	-0.3%	-0.4%	-0.3%	0.4%
Brent Oil	59	USD/bbl.	-23.1%	-21.3%	-26.3%	-7.5%	Brent Oil	USD/bbl.	ICE	-0.4%	-0.4%	0.4%	-0.5%
Natural Gas	4.3	USD/MMBtu	34.1%	45.3%	47.8%	45.1%	Natural Gas	USD/MMBtu	NYMEX	-1.1%	-0.4%	-2.2%	0.4%
Gasoline	1.4	Usd/gal.	-24.3%	-32.4%	-38.4%	-21.3%	Gasoline	Usd/gal.	NYMEX	1.1%	0.6%	0.1%	5.3%
Heating Oil	1.9	USD/gal.	-16.6%	-13.8%	-18.1%	-2.9%	Heating Oil	USD/gal.	NYMEX	0.3%	0.3%	-0.1%	-0.2%
Carbon	20.2	EUR/MT	5.1%	-0.7%	26.5%	163.8%	Carbon	EUR/MT	ICE	-0.5%	-0.6%	-0.7%	-0.1%
Agriculture							Agriculture						
Wheat	5.0	Usd/bu.	-1.8%	-4.3%	-5.9%	18.2%	Wheat	Usd/bu.	CBOT	-1.5%	-1.6%	-3.8%	-3.6%
Corn	3.6	Usd/bu.	-3.0%	3.5%	-12.1%	4.0%	Corn	Usd/bu.	CBOT	-3.1%	-2.9%	-3.2%	-3.9%
Soybeans	8.8	Usd/bu.	2.7%	4.6%	-15.2%	-11.7%	Soybeans	Usd/bu.	CBOT	-1.5%	-1.5%	-1.5%	-1.4%
Sugar	0.1	Usd/lb.	-9.7%	23.2%	1.0%	-18.4%	Sugar	Usd/lb.	NYBOT	-0.9%	-1.2%	-0.9%	-8.0%
Cotton	0.7	Usd/lb.	-5.2%	-8.3%	-13.8%	5.9%	Cotton	Usd/lb.	NYBOT	-3.0%	-2.8%	-2.1%	0.3%
Coffee	1.1	Usd/lb.	-11.5%	10.2%	-10.2%	-14.0%	Coffee	Usd/lb.	NYBOT	-3.4%	-3.2%	-3.0%	-4.2%
Soybean Oil	0.3	Usd/lb.	-3.9%	-1.4%	-12.8%	-18.8%	Soybean Oil	Usd/lb.	CBOT	-0.7%	-0.7%	-0.8%	-0.5%
Cocoa	2,061	USD/MT	-5.8%	-12.3%	-21.3%	-2.7%	Cocoa	USD/MT	NYBOT	-2.9%	-1.8%	-1.0%	0.5%
Industrial Metals							Industrial Metals						
Aluminum	1,951	USD/MT	-2.3%	-5.4%	-14.3%	-7.1%	Aluminum	USD/MT	LME	0.7%	-0.8%	-0.6%	-0.4%
Copper	2.8	Usd/lb.	0.3%	4.2%	-9.6%	-11.8%	Copper	Usd/lb.	COMEX	-0.7%	-0.4%	-0.8%	-0.9%
Copper (LME)	6,227	USD/MT	0.5%	4.2%	-9.1%	-10.3%	Copper (LME)	USD/MT	LME	0.1%	0.1%	0.0%	-0.1%
Zinc	2,570	USD/MT	-5.4%	3.5%	-15.3%	-21.2%	Zinc	USD/MT	LME	1.1%	1.8%	1.0%	0.2%
Nickel	10,864	USD/MT	-11.8%	-17.8%	-25.6%	-8.6%	Nickel	USD/MT	LME	-0.2%	-0.2%	-0.2%	-0.2%
Lead	1,956	USD/MT	-2.7%	-4.7%	-21.1%	-20.3%	Lead	USD/MT	LME	-0.5%	-0.6%	-0.2%	-0.2%
Tin	18,835	USD/MT	-2.7%	-1.7%	-8.9%	-3.4%	Tin	USD/MT	LME	0.1%	-0.1%	0.1%	0.2%
Precious Metals							Precious Metals						
Gold	1,223	USD/t oz.	-0.8%	3.0%	-5.1%	-5.3%	Gold	USD/t oz.	COMEX	-0.5%	-0.5%	-0.3%	-0.2%
Silver	14.2	USD/t oz.	-3.7%	-2.1%	-12.8%	-16.8%	Silver	USD/t oz.	COMEX	-0.9%	-0.9%	-0.8%	-0.7%
Platinum	845	USD/t oz.	1.5%	8.6%	-6.2%	-10.2%	Platinum	USD/t oz.	NYMEX	-0.5%	-0.5%	-0.4%	-0.4%
Palladium	1,115	USD/t oz.	-0.7%	22.3%	14.8%	11.2%	Palladium	USD/t oz.	NYMEX	0.3%	0.5%	0.8%	1.1%
Livestock							Livestock						
Live Cattle	1.2	Usd/lb.	3.8%	8.5%	11.0%	-1.6%	Live Cattle	Usd/lb.	CME	-3.2%	-3.7%	-3.7%	-0.7%
Lean Hogs	0.6	Usd/lb.	8.3%	15.4%	-20.8%	-6.0%	Lean Hogs	Usd/lb.	CME	-12.9%	-10.0%	-11.2%	0.6%
Feeder Cattle	1.5	Usd/lb.	-3.7%	0.2%	10.7%	-2.2%	Feeder Cattle	Usd/lb.	CME	2.4%	1.8%	-0.5%	-0.1%
CFTC NET POSITIONING ³	Current	5 Yr Average	1 Month	6 Month	1 Year	INVENTORY LEVELS ⁴	Current	5 Yr Average	1 Month	3 Month	6 Month		
Energy						Energy							
WTI Oil	411,794	428,588	482,706	680,342	613,976	Oil - US	450,485	7%	7%	10%	3%		
Brent Oil**	97,447	170,411	246,947	425,985	430,863	Oil - OECD Europe**	340	5%	-4%	-6%	0%		
Natural Gas	25,925	-119,660	-14,801	-64,455	-79,072	Natural Gas - DOE	3,054	-17%	-1%	25%	87%		
Gasoline	77,496	67,910	93,673	110,651	84,140	Gasoline - DOE	224,551	4%	-2%	-4%	-4%		
Heating Oil	8,844	11,917	37,935	43,232	60,410	Heating Oil - DOE	10,921	-21%	2%	27%	16%		
Agriculture						Industrial Metals							
Wheat	-24,158	-45,068	-15,418	17,996	-81,034	Aluminum	1,817,229	-44%	-3%	-9%	-18%		
Corn	48,308	82,339	87,295	334,162	-148,288	Aluminum - LME	1,067,000	-62%	1%	-3%	-13%		
Soybeans	-48,525	60,057	-33,353	127,823	34,027	Aluminum - SHFE	750,229	86%	-9%	-16%	-24%		
Sugar	25,316	74,117	67,901	-44,286	34,270	Copper	414,234	-22%	-9%	-32%	-49%		
Cotton	46,280	59,957	56,116	121,308	64,229	Copper - LME	139,550	-46%	-8%	-48%	-53%		
Coffee	-25,889	-740	-38,341	-37,808	-39,673	Copper - SHFE	133,163	-24%	-5%	-9%	-50%		
Soybean Oil	-45,022	33,022	-2,844	-2,912	65,793	Copper - COMEX	141,521	47%	-13%	-27%	-43%		
Cocoa	-3,950	31,328	-22,679	59,443	15,844	Nickel - LME	214,188	-41%	-2%	-12%	-28%		
Industrial Metals⁵						Zinc							
Copper (COMEX)	11,940	2,494	8,648	37,324	40,125	Zinc	157,002	-74%	-28%	-44%	-50%		
Copper (LME)	45,346	39,840	48,070	49,606		Zinc - LME	121,550	-74%	-26%	-51%	-47%		
Aluminum	165,839	158,143	187,331	163,062		Zinc - SHFE	35,452	-77%	-34%	15%	-59%		
Nickel	2,611	14,264	3,709	16,022		Lead	117,470	-46%	-6%	-19%	-21%		
Zinc	40,807	43,558	45,153	57,847		Lead - LME	108,175	-39%	-5%	-15%	-19%		
Lead	48,516	54,025	45,946	58,545		Lead - SHFE	9,295	-78%	-16%	-49%	-40%		
Tin	8,333	7,386	7,035	7,675		Tin	11,621	19%	15%	31%	16%		
Precious Metals						Tin - LME							
Gold	4,618	133,680	28,404	77,410	205,747	Tin - LME	2,905	-50%	-2%	1%	13%		
Silver	-11,291	35,002	-5,651	14,508	66,215	Tin - SHFE	8,716	121%	22%	46%	17%		
Platinum	22,973	26,864	12,840	1,919	26,979	Agriculture							
Palladium	14,268	15,510	13,600	10,801	22,639	Wheat - USDA	266,710	36.2%	2.5%	3.0%	0.9%		
Livestock						Corn - USDA							
Live Cattle	83,548	87,501	97,625	19,776	148,895	Soybeans - USDA	112,080	84%	1.9%	5.8%	29%		
Lean Hogs	41,596	47,706	26,838	-8,377	68,183	Sugar - USDA	52,850	47%	7.5%	7.5%	8%		
Feeder Cattle	-1,496	8,568	2,527	-3,192	17,535	Cotton - USDA	72,610	2%	-2.5%	-5.8%	-13.3%		
						Coffee - USDA	32,812	-9%	-	-	12%		
						Soybean Oil - USDA	3,640	-12%	-	7%	13%		

¹Performance of front month futures from 23 Nov 17 (1 Year), 23 May 18 (6 Month), 23 Aug 18 (3 Month) and 23 Oct 18 (1 Month) to 23 Nov 18.
²Roll return non-annualised from front month futures into second "1" month on 23 Aug 18 (3 Month), 23 Oct 18 (1 Month), 16 Nov 18 (1 Week), 23 Nov 18.

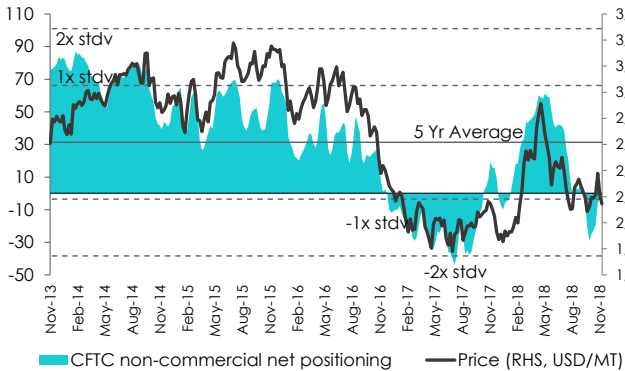
³Net positions in number of contracts. ⁴Current inventories relative to 1, 3, 6 months ago. Under the column "5 yr average" is the current inventory level relative to 5 year average inventory. For energy, 5 yr average is the average of the same month as report month over the past 5 years. SHFE started reporting inventory data from April 2015. ⁵All industrial metals positioning data (excluding copper) is sourced from LME COIR data in Bloomberg from 30 January 2018 (first available date) under post-MIFID rules. **Brent 5 Yr average of net positions from January 2011 as positions were not reported by CFTC before then and inventory data (OECD) reported with 3 month lag with current = Aug 2018.

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

CFTC Speculative Net Long Futures Positions

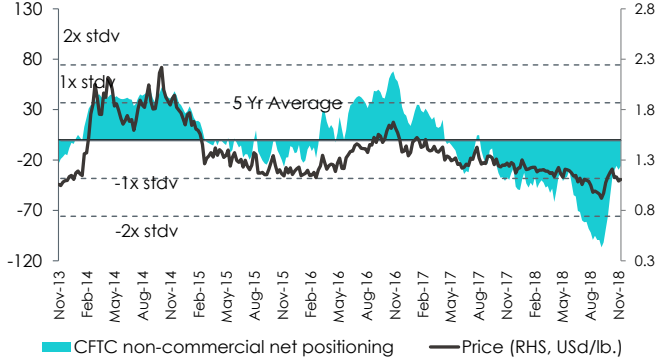
Agriculture

Cocoa



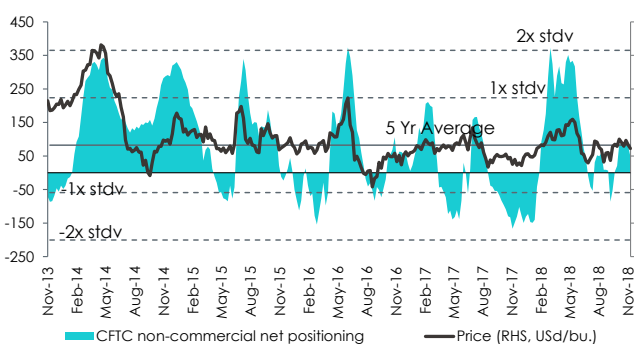
Source: Bloomberg, WisdomTree

Coffee



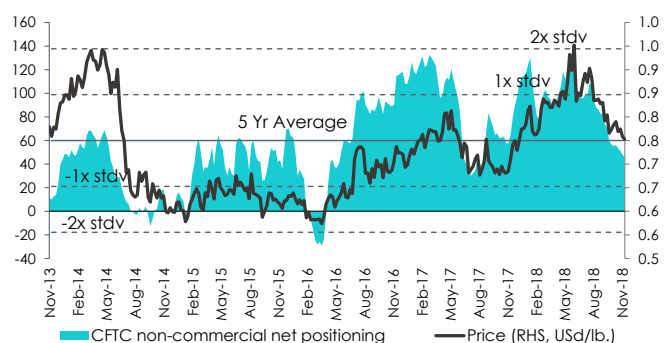
Source: Bloomberg, WisdomTree

Corn



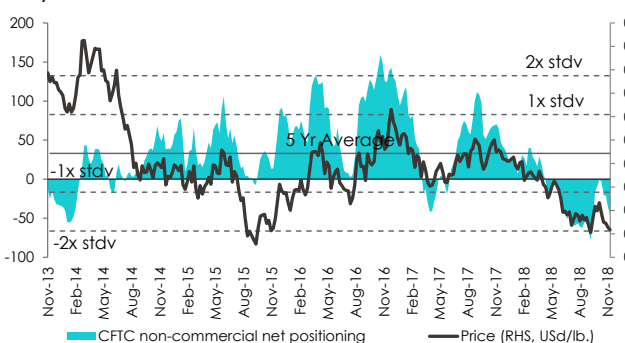
Source: Bloomberg, WisdomTree

Cotton



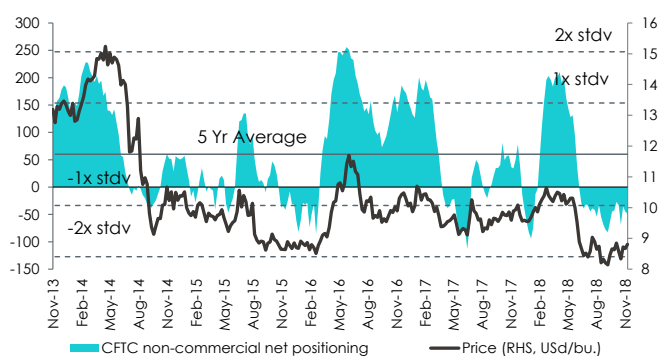
Source: Bloomberg, WisdomTree

Soybean Oil



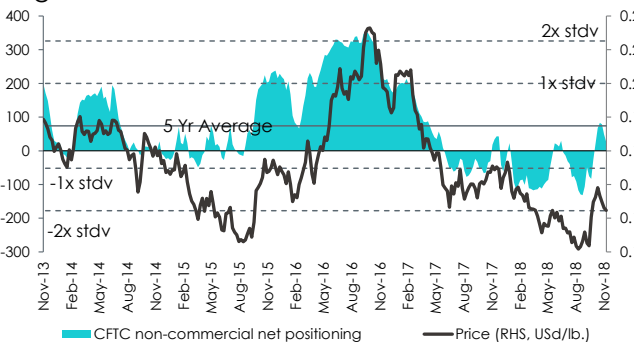
Source: Bloomberg, WisdomTree

Soybeans



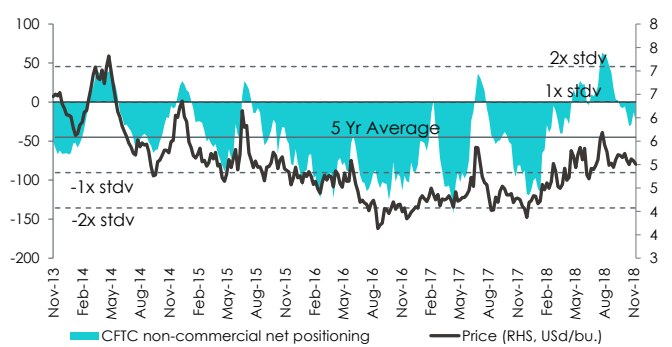
Source: Bloomberg, WisdomTree

Sugar



Source: Bloomberg, WisdomTree

Wheat

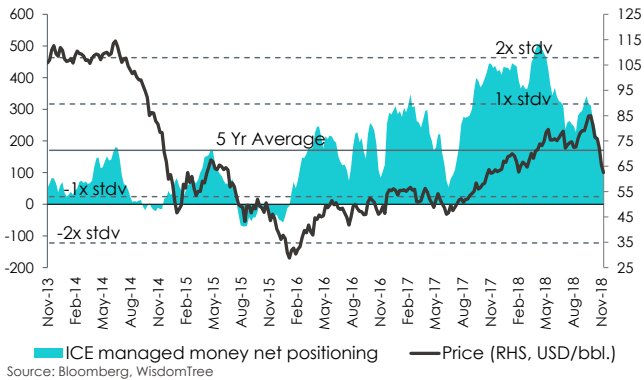


Source: Bloomberg, WisdomTree

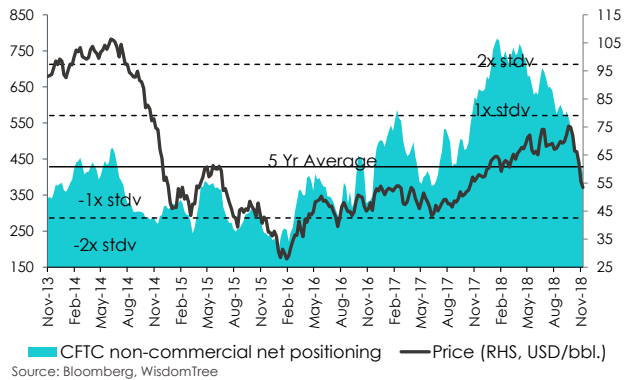
Note: positioning in '000 contracts. Standard deviation based on 5 year average CFTC non-commercial net positioning
 All commodity futures price data is denominated in USD unless otherwise indicated.
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Energy

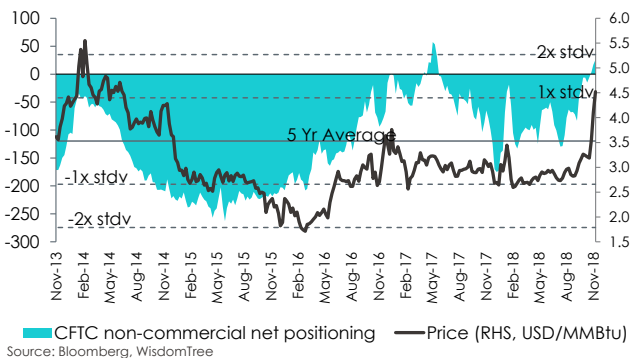
Brent Oil



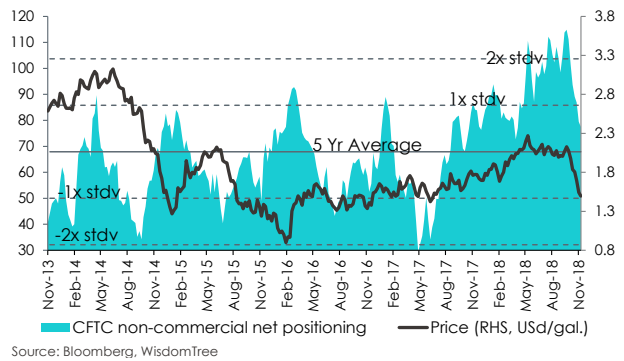
WTI Oil



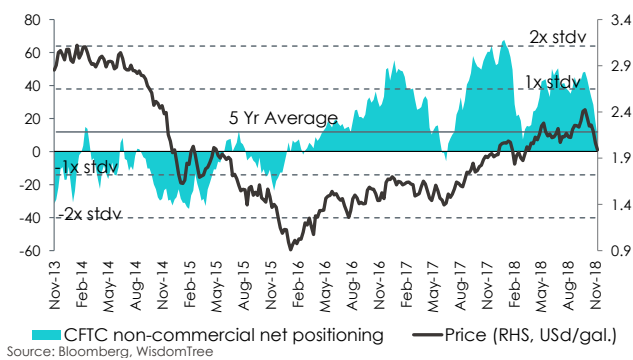
Natural Gas



Gasoline

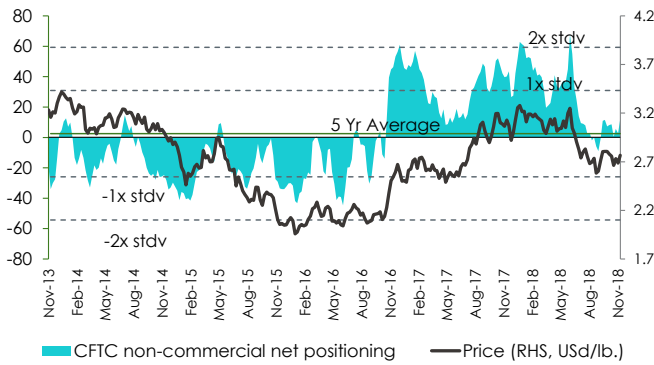


Heating Oil



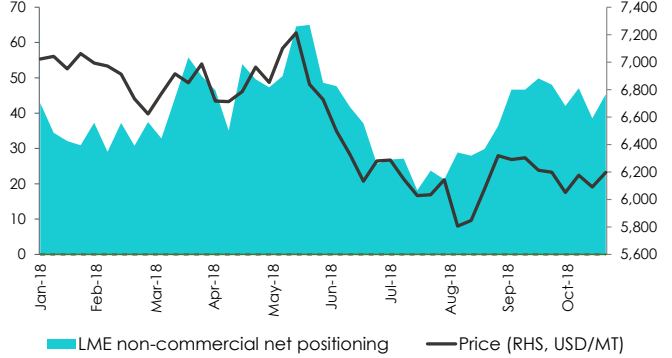
Industrial Metals

Copper (COMEX)



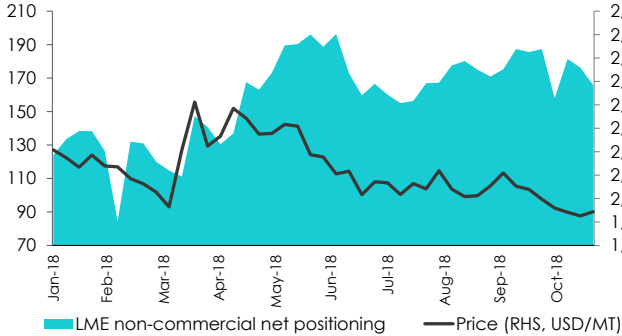
Source: Bloomberg, WisdomTree

Copper (LME)



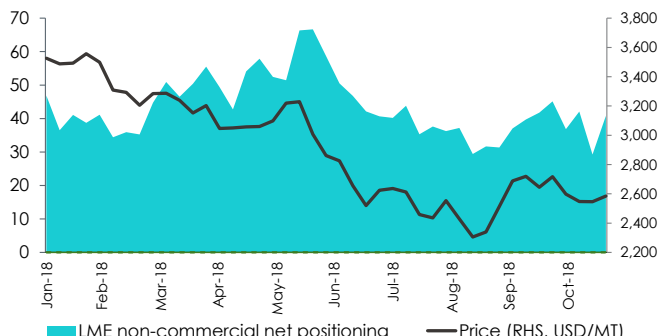
Source: Bloomberg, WisdomTree

Aluminum



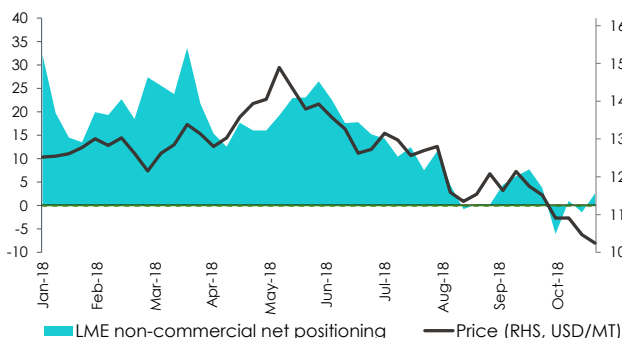
Source: Bloomberg, WisdomTree

Zinc



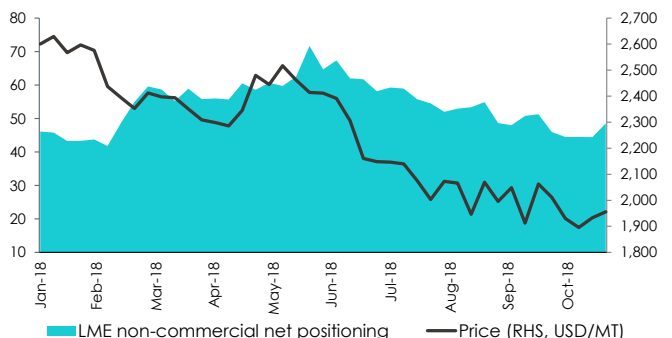
Source: Bloomberg, WisdomTree

Nickel



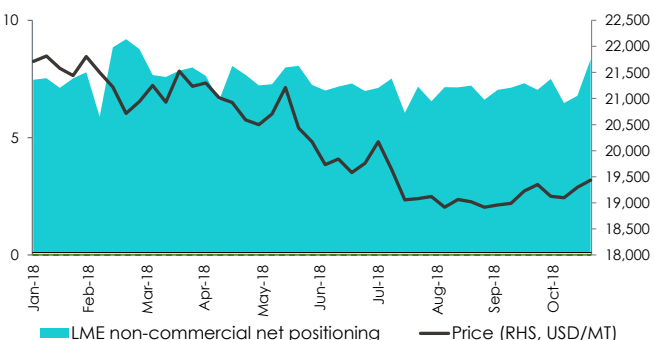
Source: Bloomberg, WisdomTree

Lead



Source: Bloomberg, WisdomTree

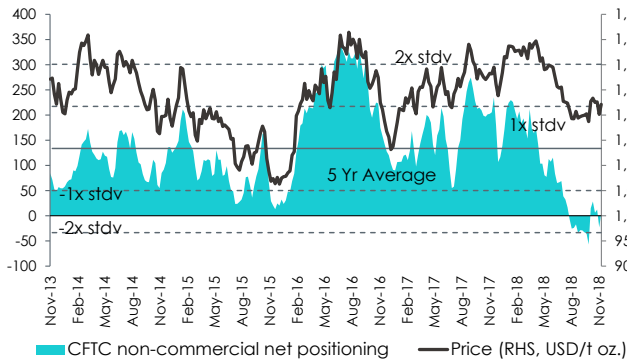
Tin



Source: Bloomberg, WisdomTree

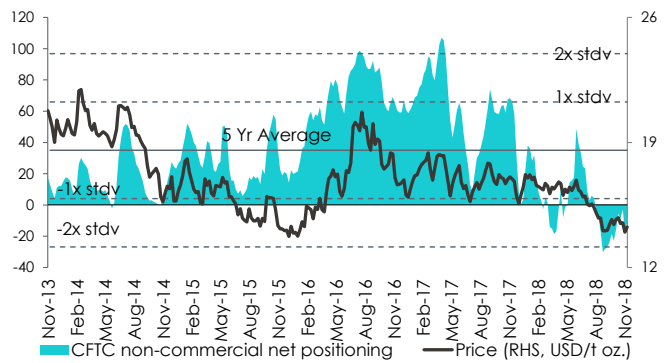
Precious Metals

Gold



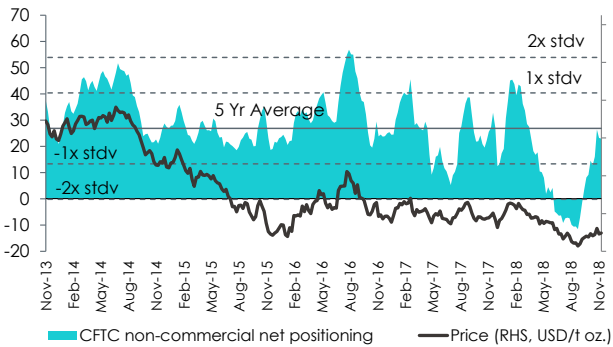
Source: Bloomberg, WisdomTree

Silver



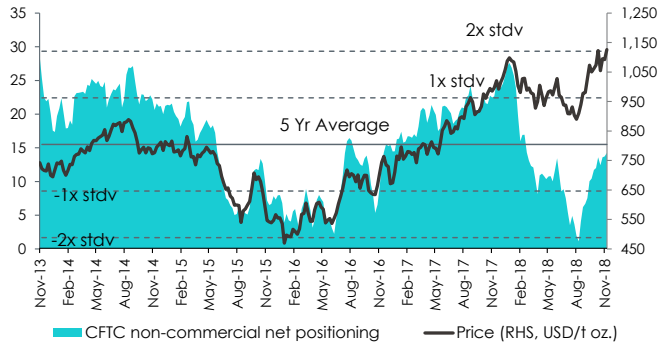
Source: Bloomberg, WisdomTree

Platinum



Source: Bloomberg, WisdomTree

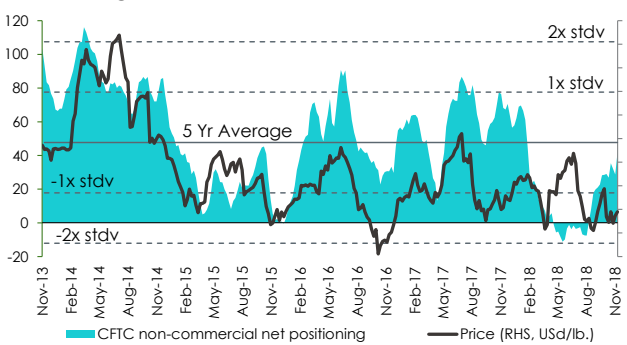
Palladium



Source: Bloomberg, WisdomTree

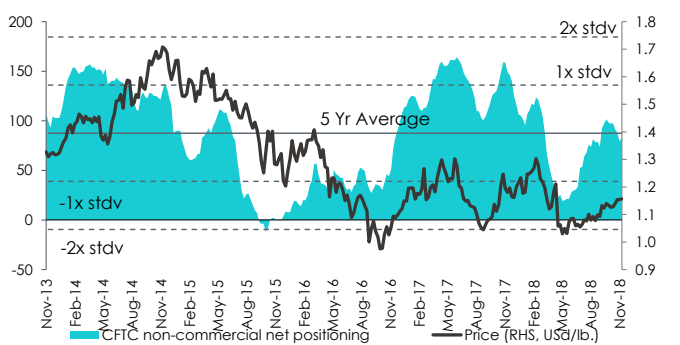
Livestock

Lean Hogs



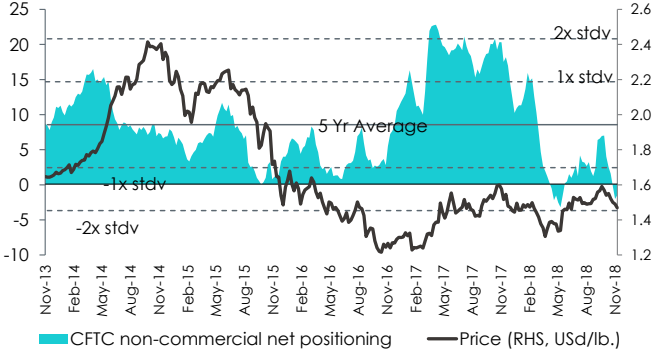
Source: Bloomberg, WisdomTree

Live Cattle



Source: Bloomberg, WisdomTree

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.

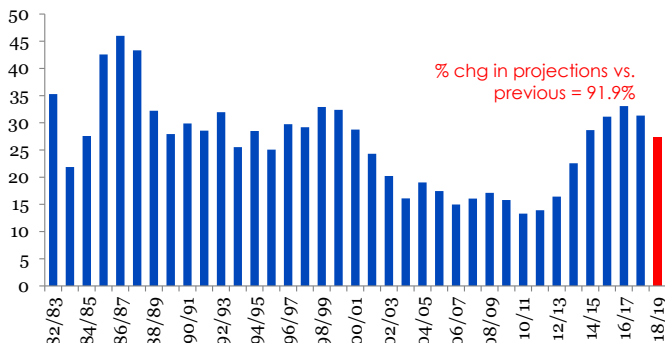
Historical performance is not an indication of future performance and any investments may go down in value.

Inventories

Agriculture

Corn - Stock to Use

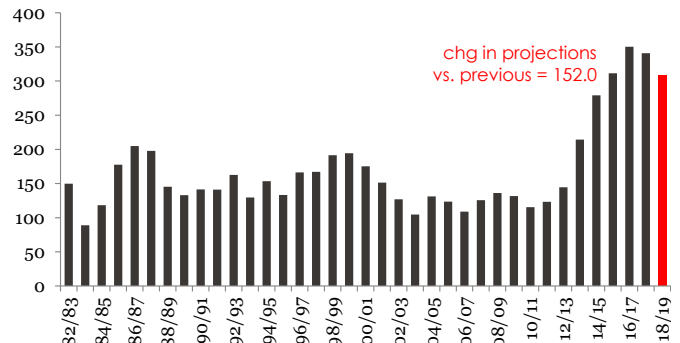
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Corn - Ending Stocks

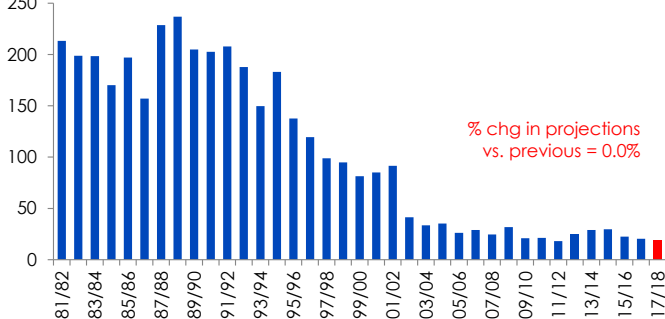
Annual data in mln tons, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Coffee - Stock to Use

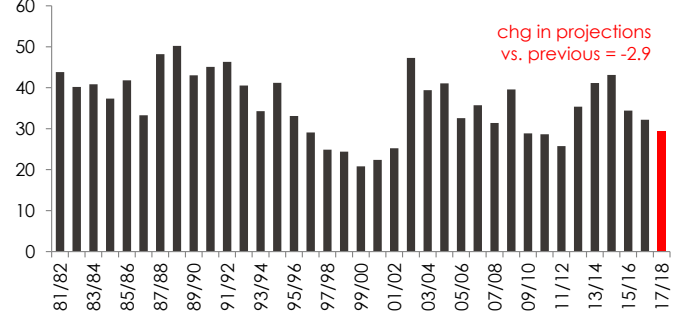
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Coffee - Ending Stocks

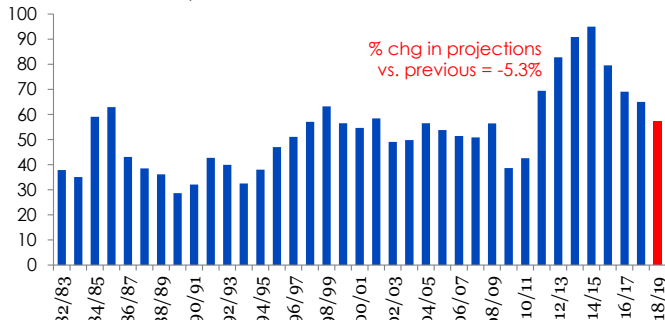
Annual data in mln bags (60 kg), from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Cotton - Stock to Use

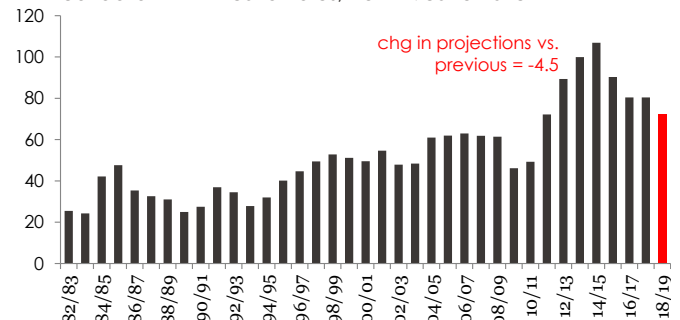
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Cotton - Ending Stocks

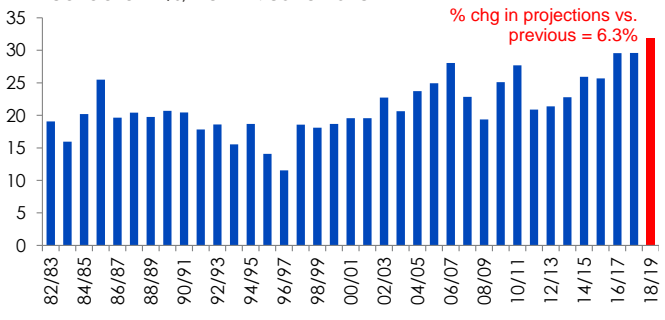
Annual data in mln 480 lb Bales, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Soybeans - Stock to Use

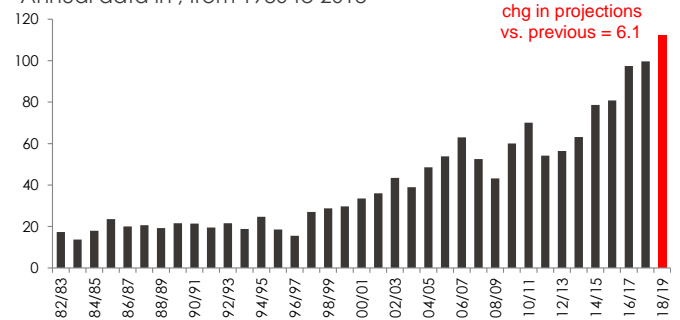
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Soybeans - Ending Stocks

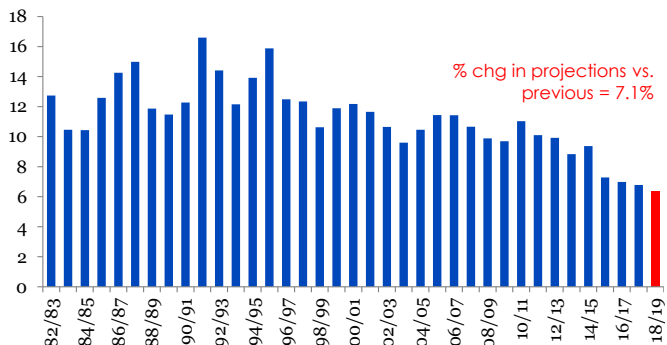
Annual data in , from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Soybean Oil - Stock to Use

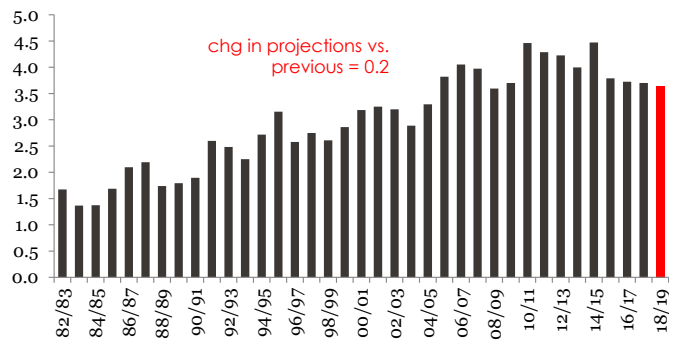
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Soybean Oil - Ending Stocks

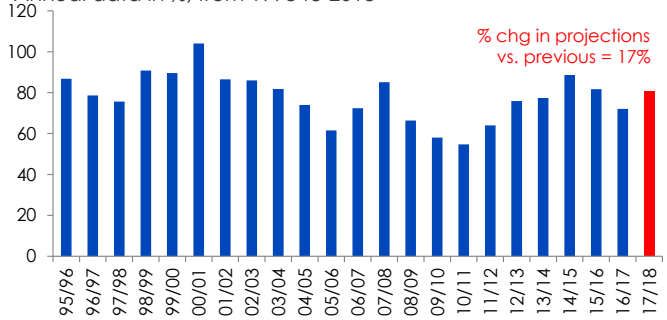
Annual data in mln Metric Tons, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Sugar - Stock to Use

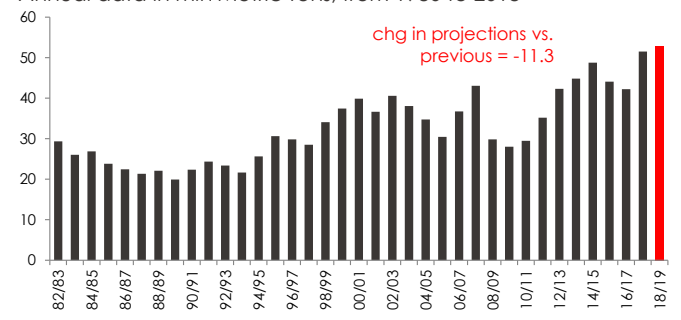
Annual data in %, from 1998 to 2018



Source: USDA, Bloomberg, WisdomTree

Sugar - Ending Stocks

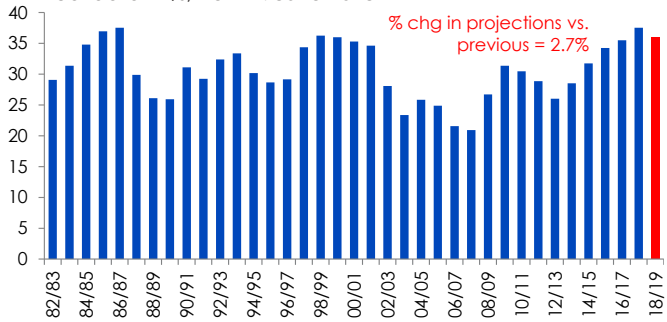
Annual data in mln Metric Tons, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Wheat - Stock to Use

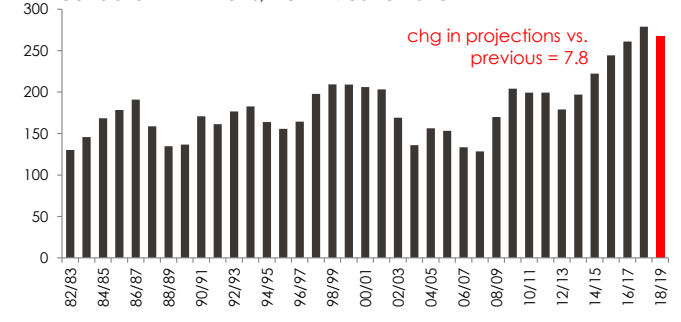
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Wheat - Ending Stocks

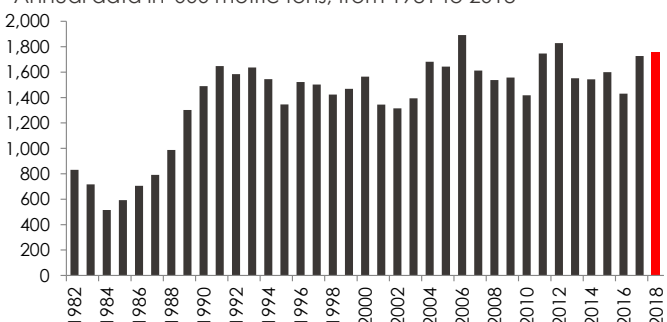
Annual data in mln tons, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Cocoa - Inventory

Annual data in '000 metric tons, from 1981 to 2018

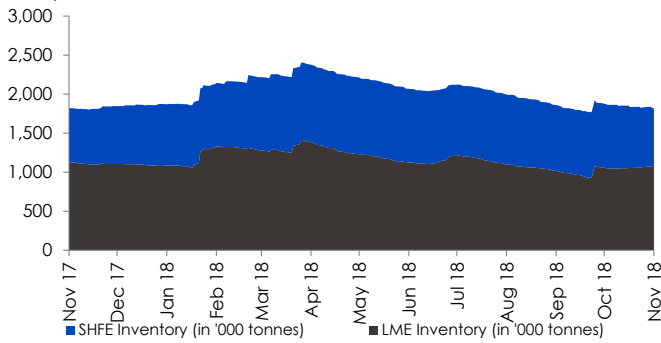


Source: International Cocoa Organisation, Bloomberg, WisdomTree

Industrial Metals

Aluminum Inventory

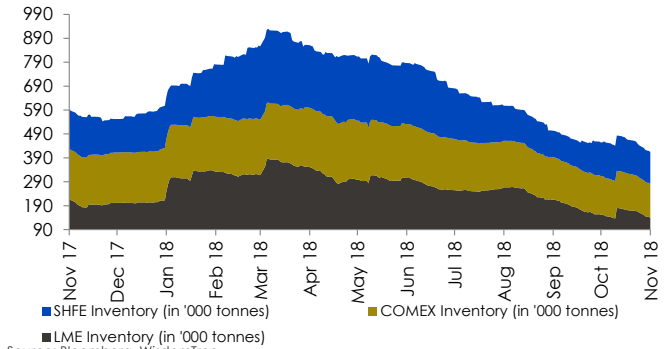
Daily data, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Copper Inventory

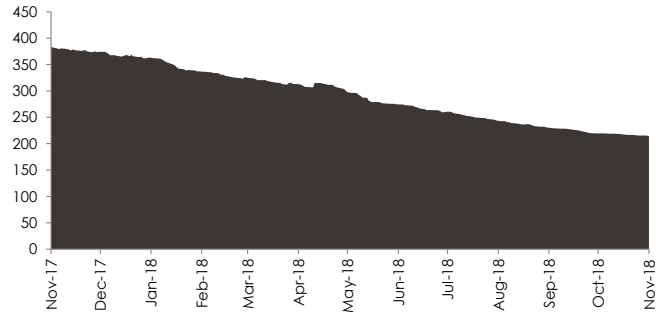
Daily data, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Nickel Inventory

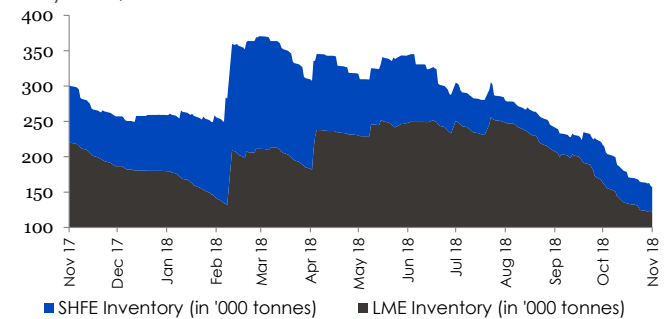
Daily data in '000 MT, from 23 Nov 17 to 23 Nov 18



Source: LME, Bloomberg, WisdomTree

Zinc Inventory

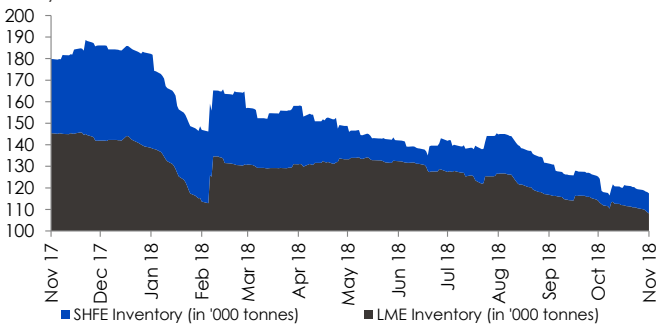
Daily data, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Lead Inventory

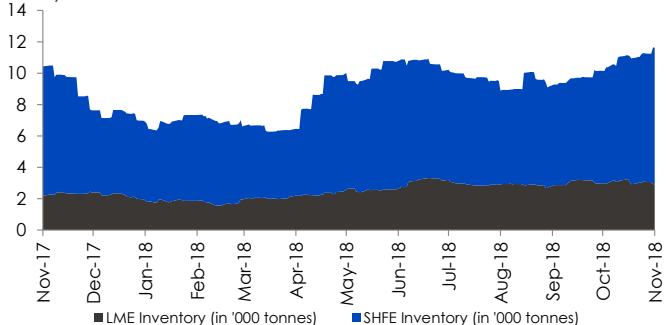
Daily data, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Tin Inventory

Daily data in '000 MT, from 23 Nov 17 to 23 Nov 18

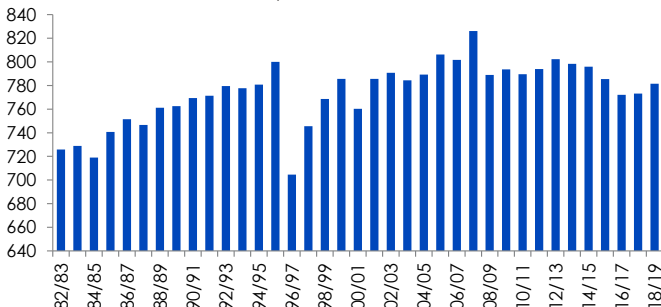


Source: LME, Bloomberg, WisdomTree

Livestock

Lean Hogs Inventory

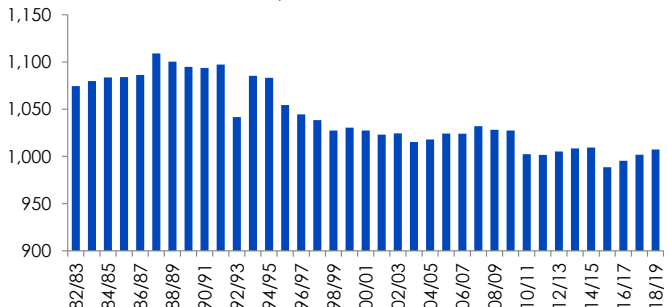
Annual data in mln Heads, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

Live Cattle Inventory

Annual data in mln Heads, from 1980 to 2018

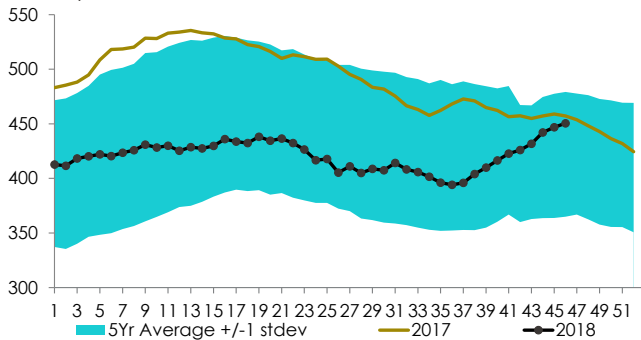


Source: USDA, Bloomberg, WisdomTree

Energy

US Oil Inventory

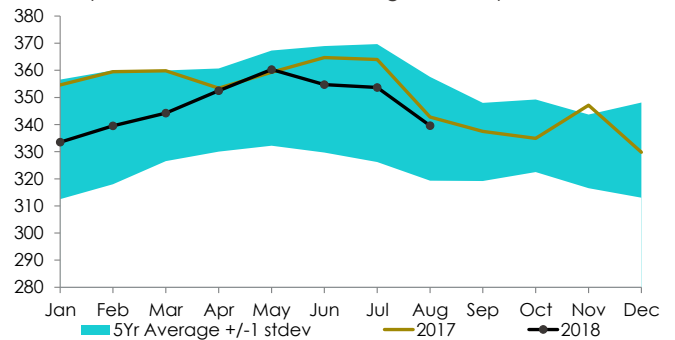
Weekly data in mln barrels, from Nov 13 to Nov 18



Source: DOE, Bloomberg, WisdomTree

OECD Europe Oil Industry Inventory

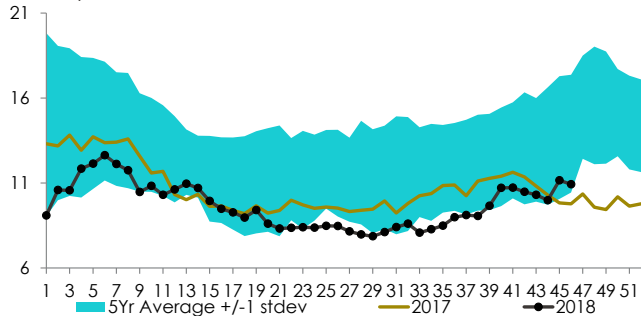
Monthly data in mln barrels, from Aug 13 to May 18



Source: DOE, Bloomberg, WisdomTree

Heating Oil Inventory

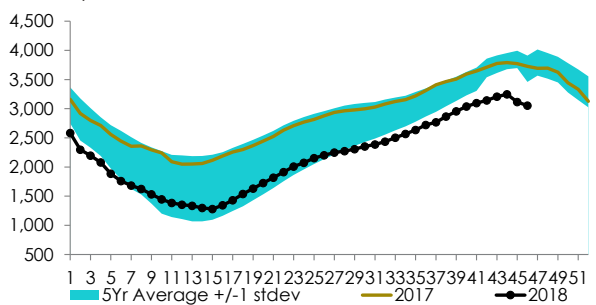
Weekly data in mln barrels, from Nov 13 to Nov 18



Source: DOE, Bloomberg, WisdomTree

Natural Gas Inventory

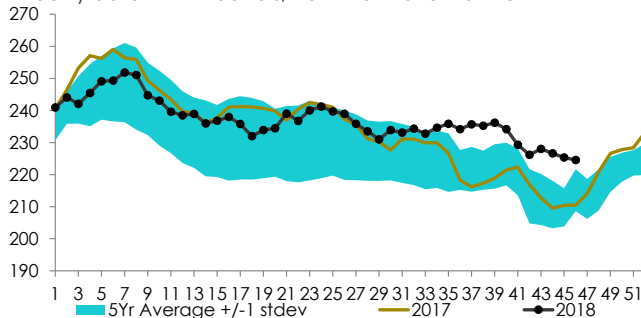
Weekly data in billion cubic feet, from Nov 13 to Nov 18



Source: DOE, Bloomberg, WisdomTree

Gasoline Inventory

Weekly data in mln barrels, from Nov 13 to Nov 18



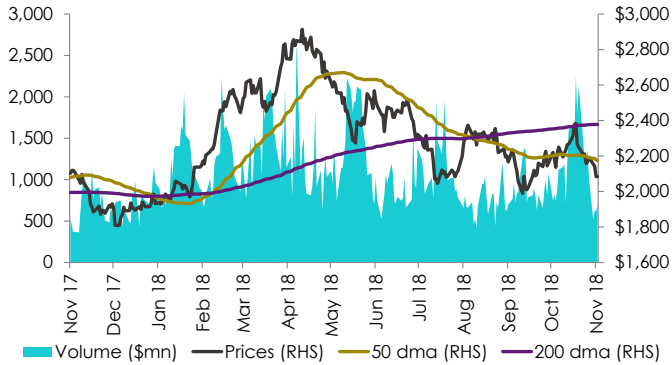
Source: DOE, Bloomberg, WisdomTree

Commodities Front Month Futures and Trading Volumes

Agriculture

Cocoa Front Month Futures Price

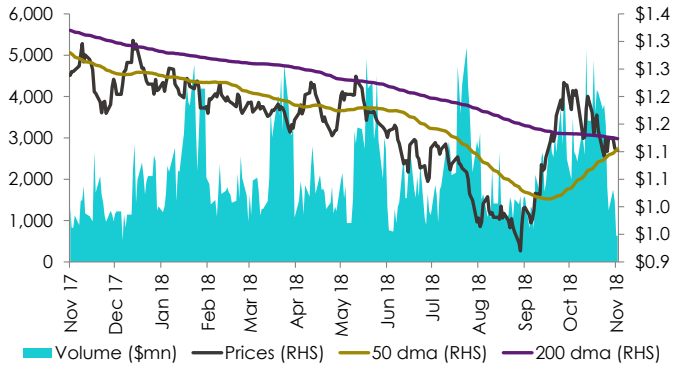
Daily data in USD/MT, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Coffee Front Month Futures Price

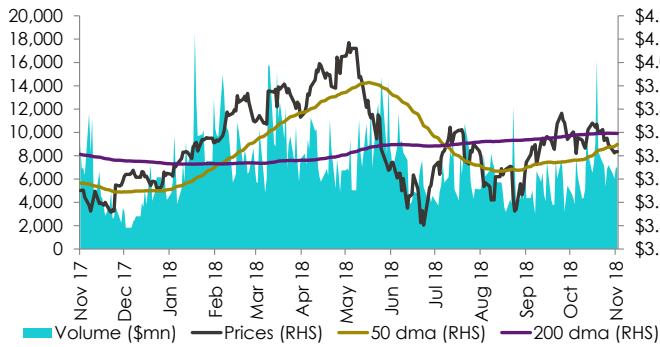
Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Corn Front Month Futures Price

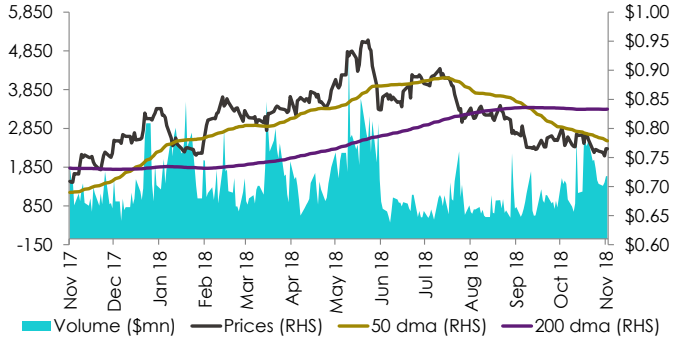
Daily data in USD/bu., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Cotton Front Month Futures Price

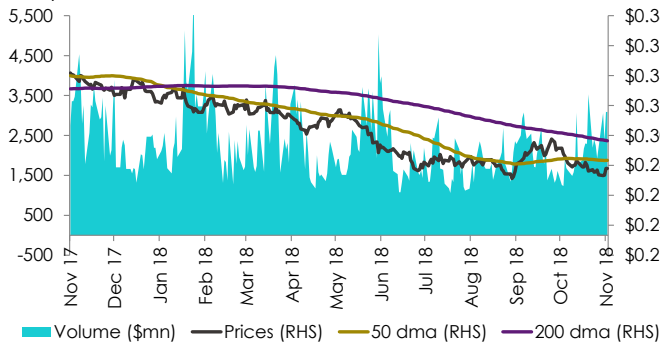
Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Soybean Oil Front Month Futures Price

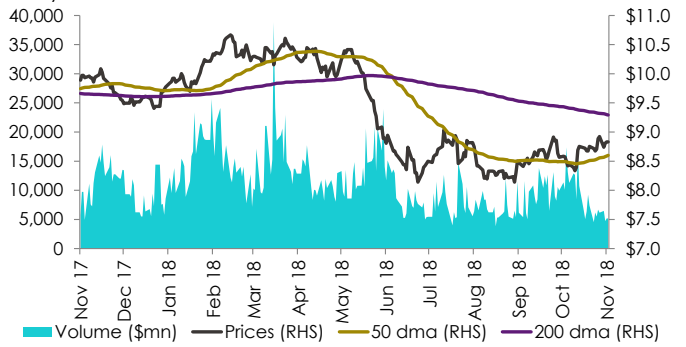
Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Soybeans Front Month Futures Price

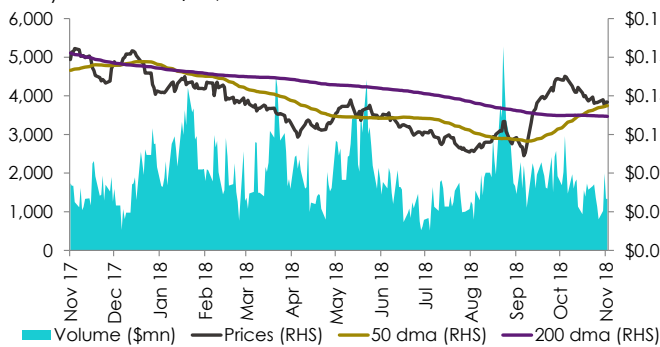
Daily data in USD/bu., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Sugar Front Month Futures Price

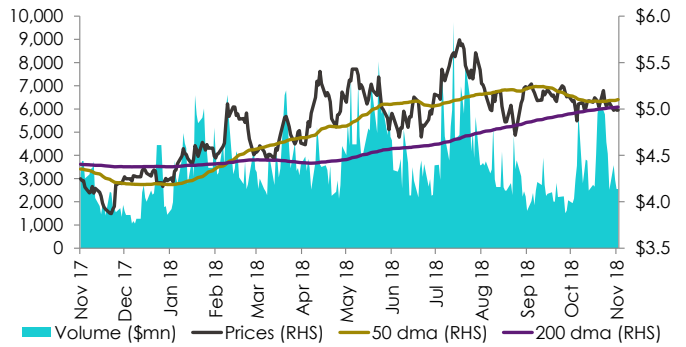
Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Wheat Front Month Futures Price

Daily data in USD/bu., from 23 Nov 17 to 23 Nov 18



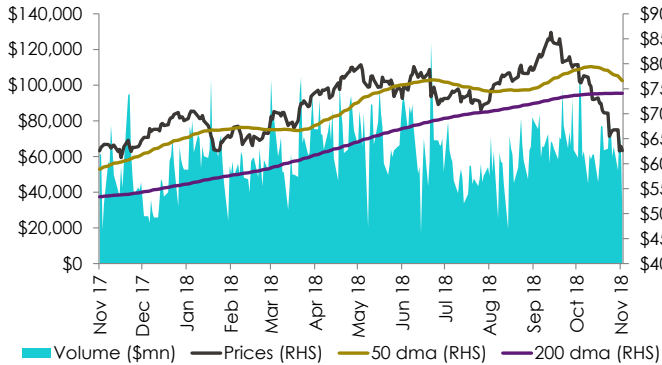
Source: Bloomberg, WisdomTree

Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated.
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Energy

Brent Oil Front Month Futures Price

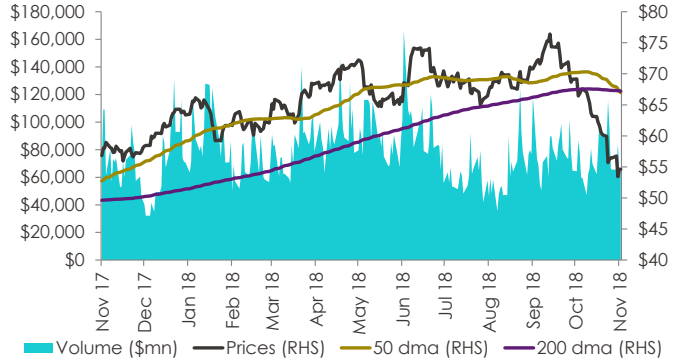
Daily data in USD/bbl., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

WTI Oil Front Month Futures Price

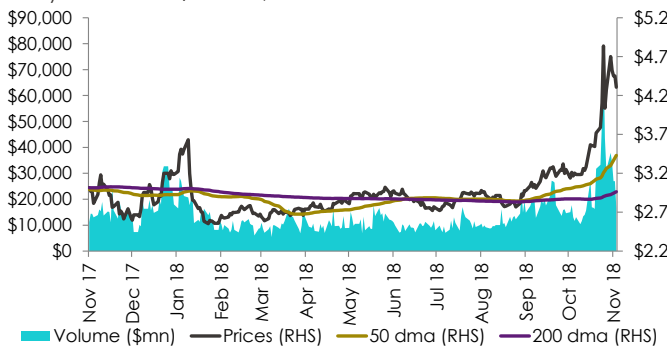
Daily data in USD/bbl., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Natural Gas Front Month Futures Price

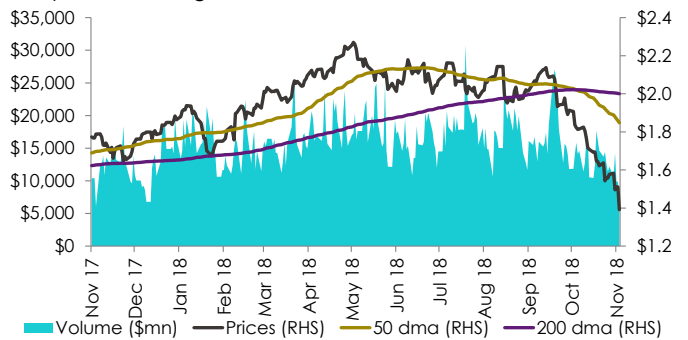
Daily data in USD/MMBtu, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Gasoline Front Month Futures Price

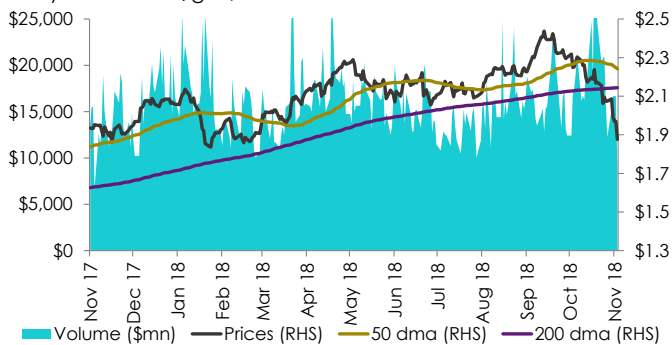
Daily data in USD/gal., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Heating Oil Front Month Futures Price

Daily data in USD/gal., from 23 Nov 17 to 23 Nov 18

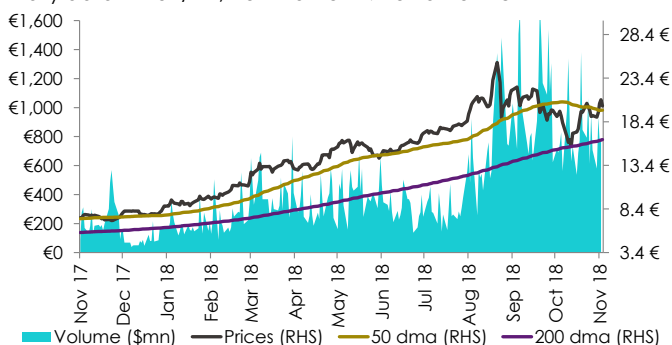


Source: Bloomberg, WisdomTree

Carbon

Carbon Front Month Futures Price

Daily data in EUR/MT, from 23 Nov 17 to 23 Nov 18



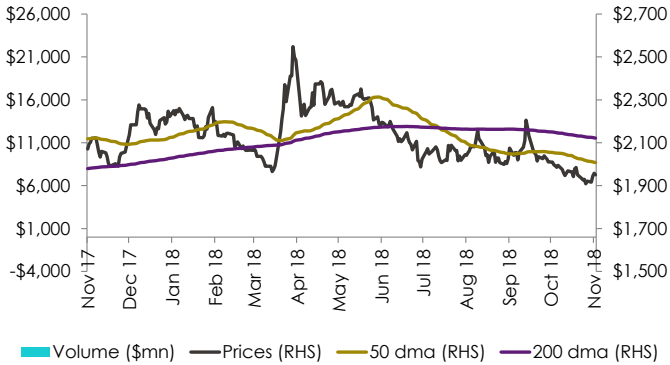
Source: Bloomberg, WisdomTree

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Industrial Metals

Aluminum Front Month Futures Price

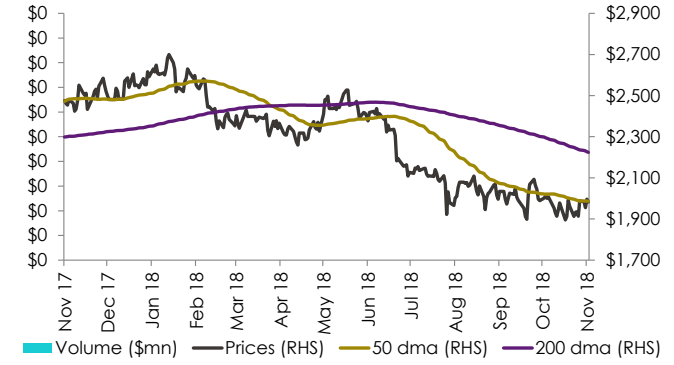
Daily data in USD/MT, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Lead Front Month Futures Price

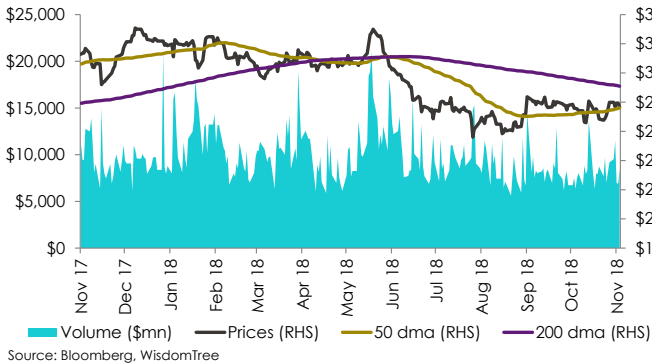
Daily data in USD/MT, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Copper (COMEX) Front Month Futures Price

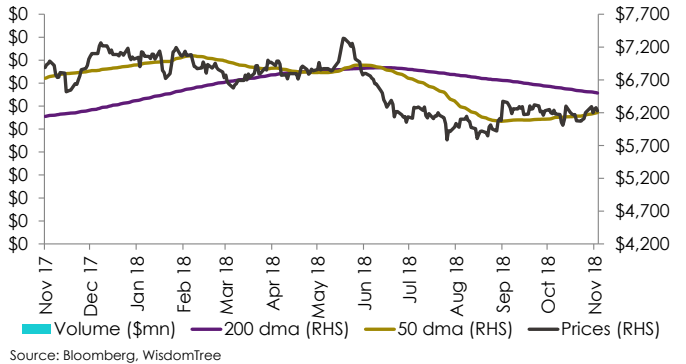
Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Copper (LME) Front Month Futures Price

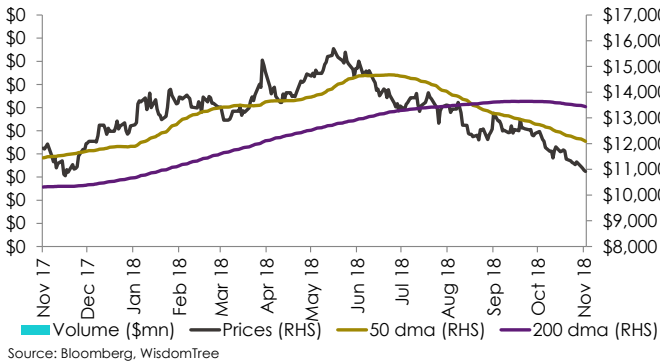
Daily data in USD/MT, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Nickel Front Month Futures Price

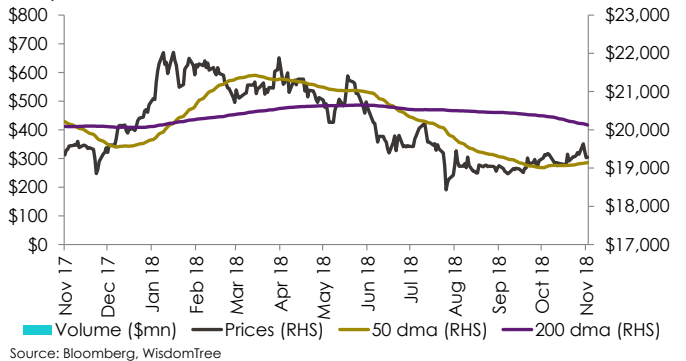
Daily data in USD/MT, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Tin Front Month Futures Price

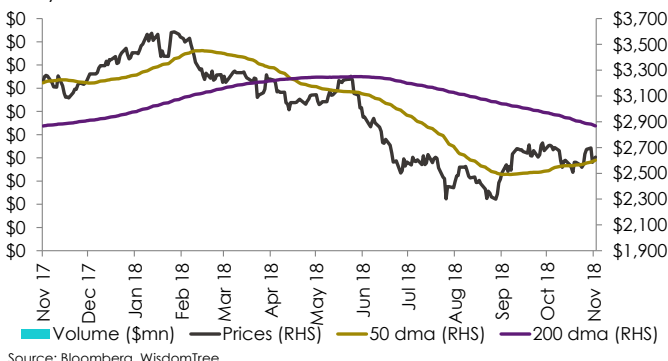
Daily data in USD/MT, from 23 Nov 17 to 23 Nov 18



Source: Bloomberg, WisdomTree

Zinc Front Month Futures Price

Daily data in USD/MT, from 23 Nov 17 to 23 Nov 18



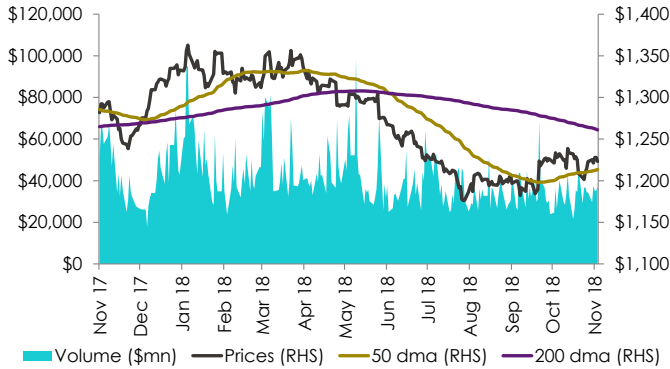
Source: Bloomberg, WisdomTree

Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated.
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Precious Metals

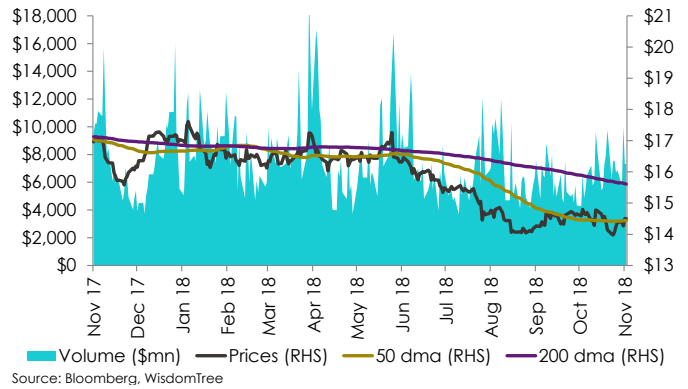
Gold Front Month Futures Price

Daily data in USD/t oz., from 23 Nov 17 to 23 Nov 18



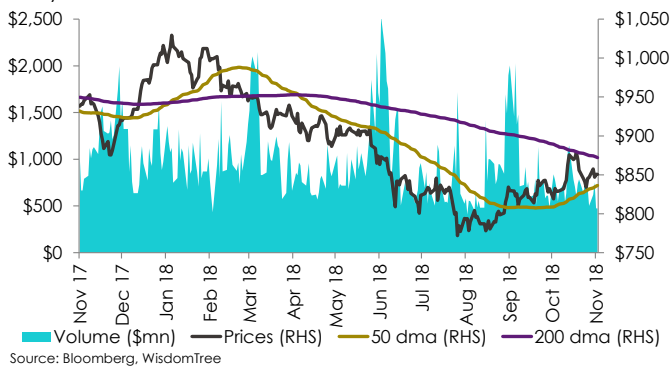
Silver Front Month Futures Price

Daily data in USD/t oz., from 23 Nov 17 to 23 Nov 18



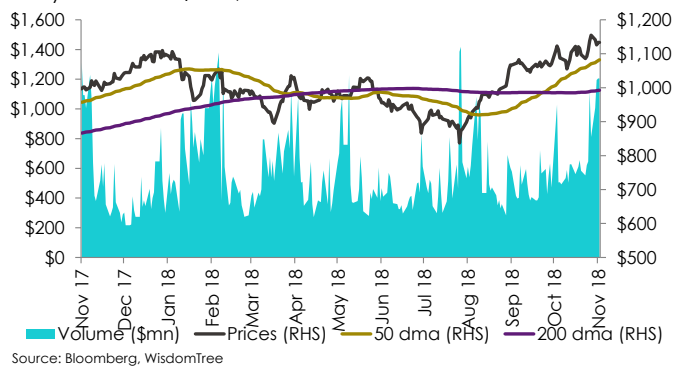
Platinum Front Month Futures Price

Daily data in USD/t oz., from 23 Nov 17 to 23 Nov 18



Palladium Front Month Futures Price

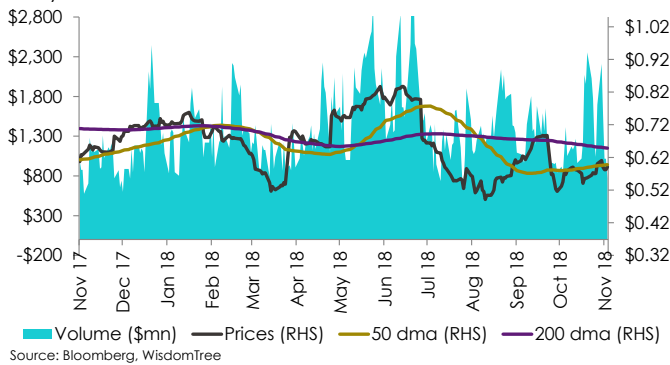
Daily data in USD/t oz., from 23 Nov 17 to 23 Nov 18



Livestock

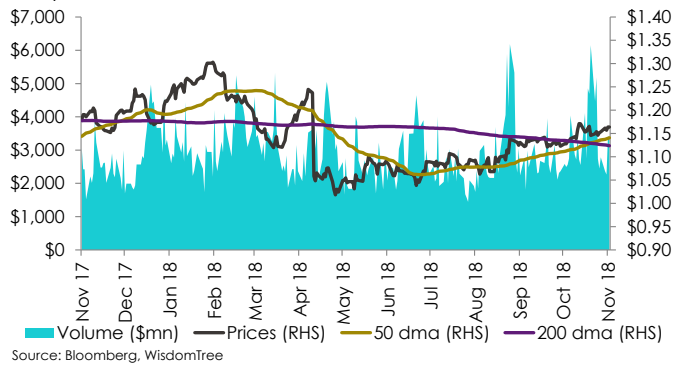
Lean Hogs Front Month Futures Price

Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18



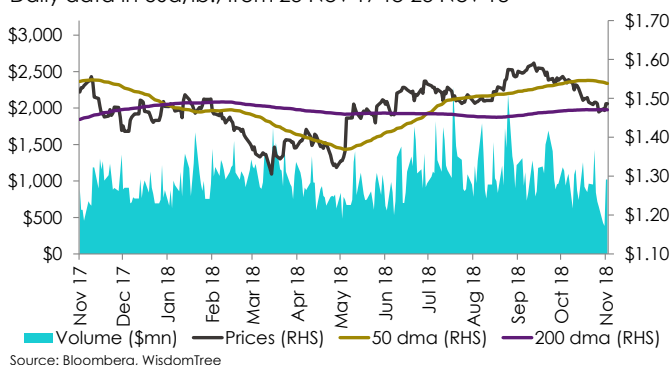
Live Cattle Front Month Futures Price

Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18



Feeder Cattle Front Month Futures Price

Daily data in USD/lb., from 23 Nov 17 to 23 Nov 18

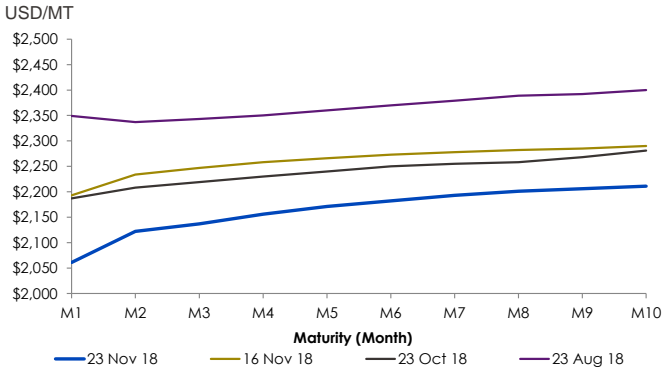


Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated.
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Futures Curves

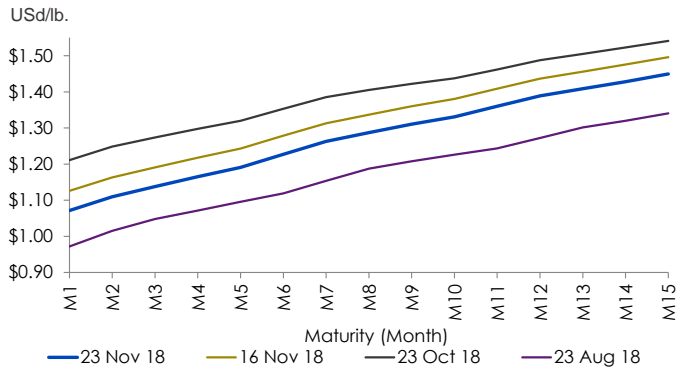
Agriculture

Cocoa Futures



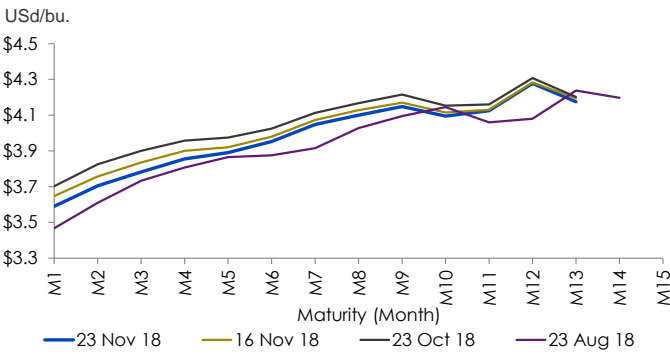
Source: Bloomberg, WisdomTree

Coffee Futures



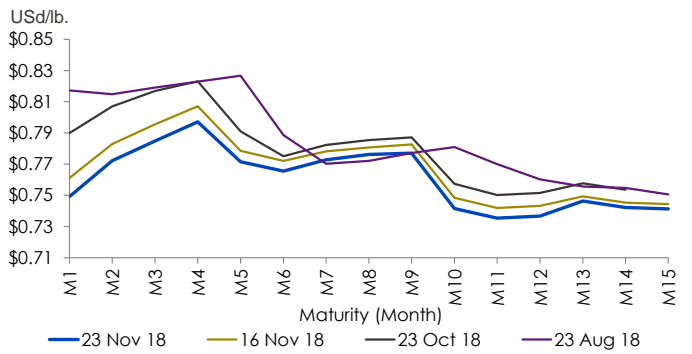
Source: Bloomberg, WisdomTree

Corn Futures



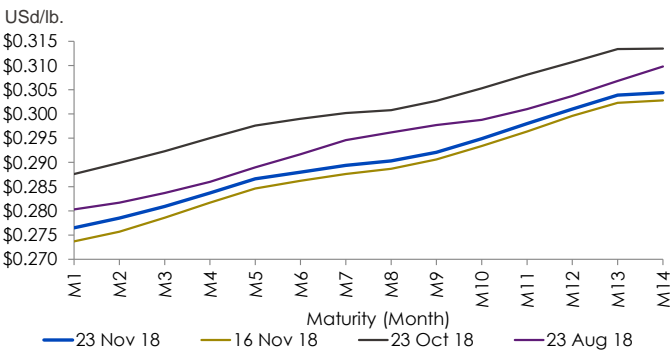
Source: Bloomberg, WisdomTree

Cotton Futures



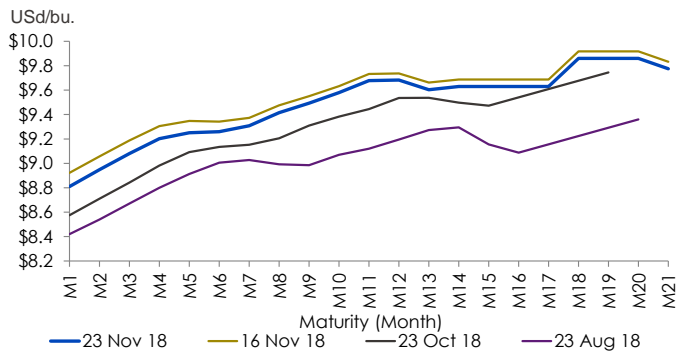
Source: Bloomberg, WisdomTree

Soybean Oil Futures



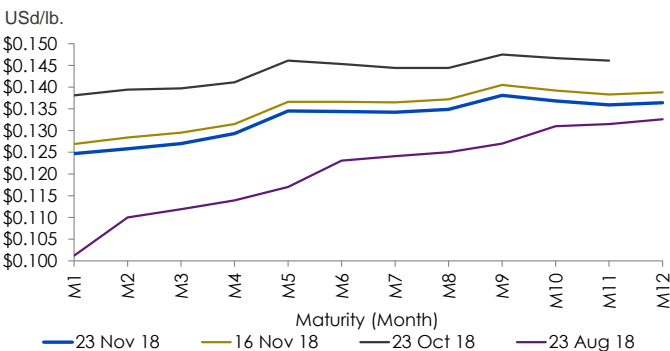
Source: Bloomberg, WisdomTree

Soybeans Futures



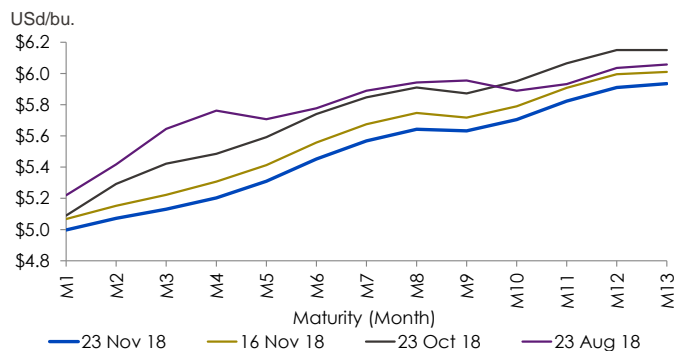
Source: Bloomberg, WisdomTree

Sugar Futures



Source: Bloomberg, WisdomTree

Wheat Futures



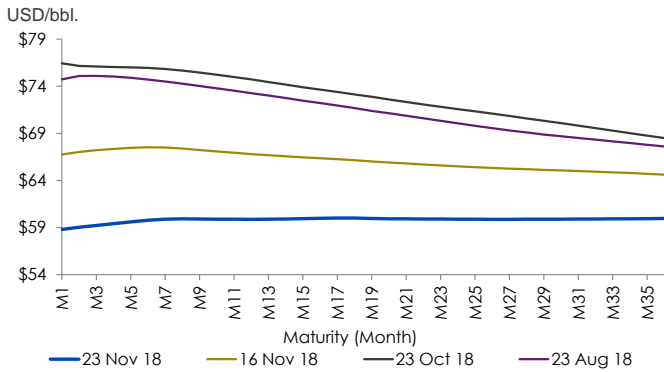
Source: Bloomberg, WisdomTree

Note: all commodity futures price data is denominated in USD unless otherwise indicated.

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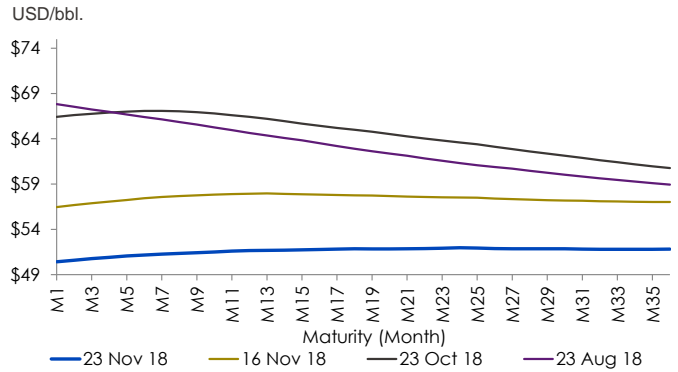
Energy

Brent Oil Futures



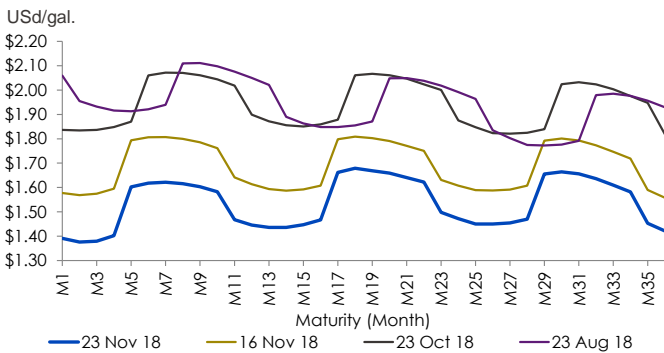
Source: Bloomberg, WisdomTree

WTI Oil Futures



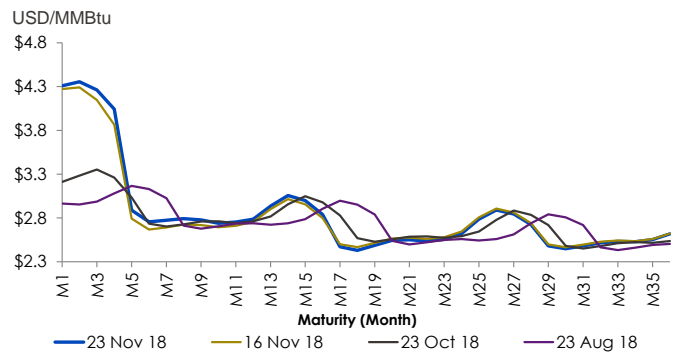
Source: Bloomberg, WisdomTree

Gasoline Futures



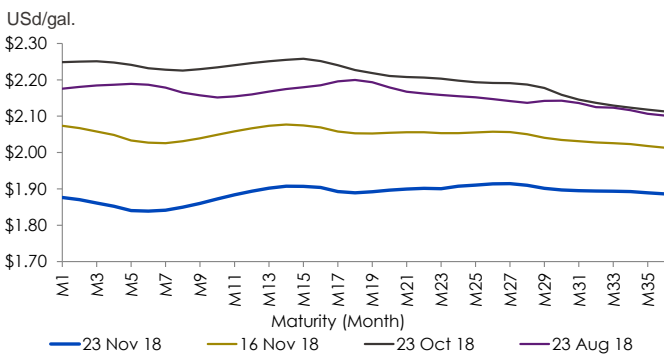
Source: Bloomberg, WisdomTree

Natural Gas Futures



Source: Bloomberg, WisdomTree

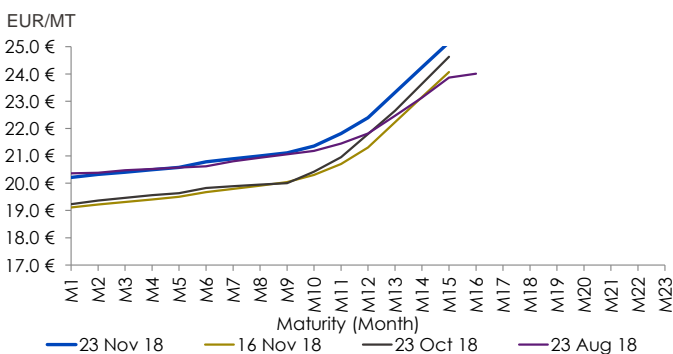
Heating Oil Futures



Source: Bloomberg, WisdomTree

Carbon

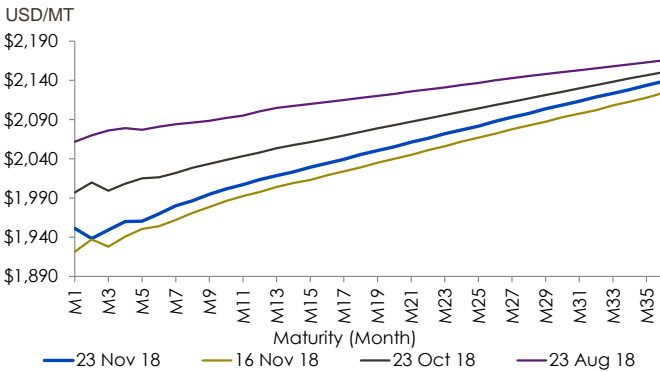
Carbon Futures



Source: Bloomberg, WisdomTree

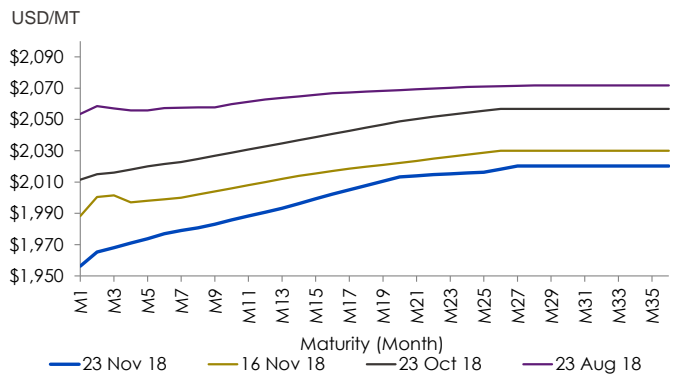
Industrial Metals

Aluminum Futures



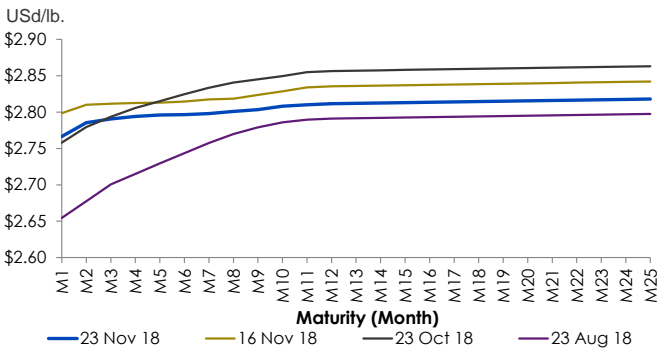
Source: Bloomberg, WisdomTree

Lead Futures



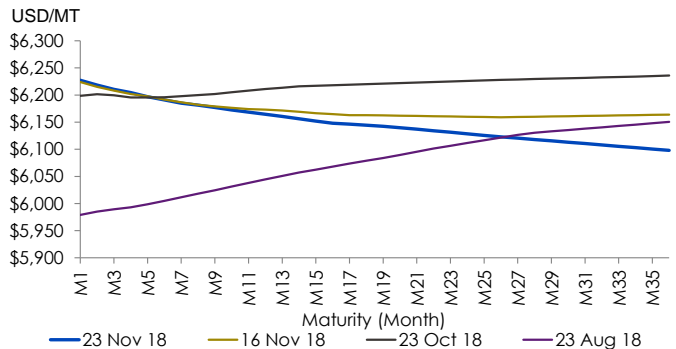
Source: Bloomberg, WisdomTree

Copper (COMEX) Futures



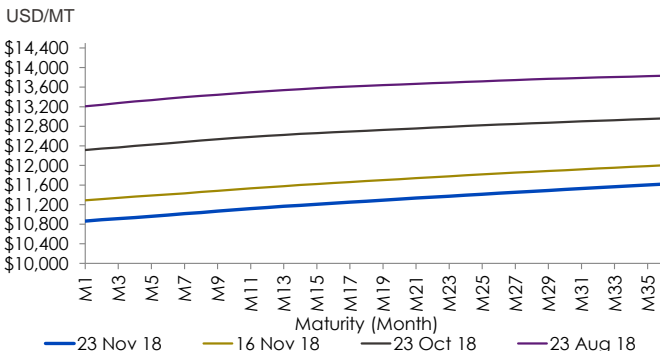
Source: Bloomberg, WisdomTree

Copper (LME) Futures



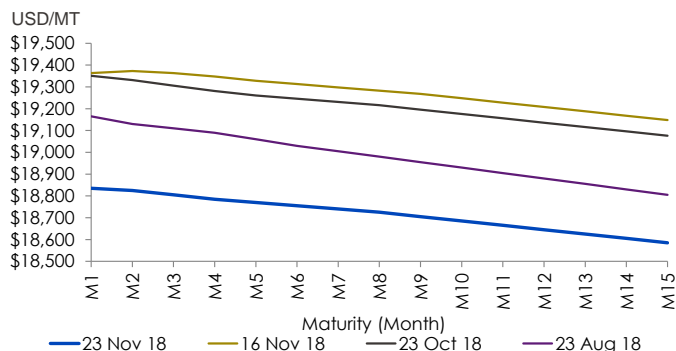
Source: Bloomberg, WisdomTree

Nickel Futures



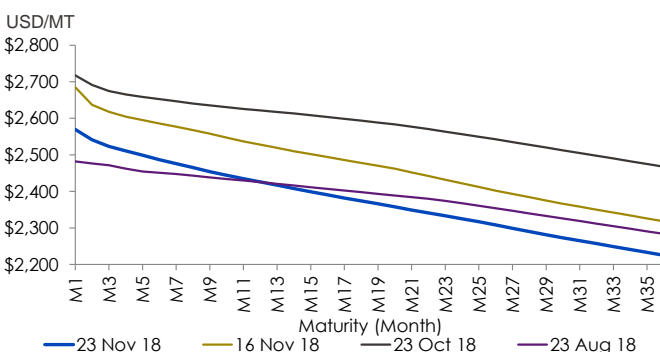
Source: Bloomberg, WisdomTree

Tin Futures



Source: Bloomberg, WisdomTree

Zinc Futures

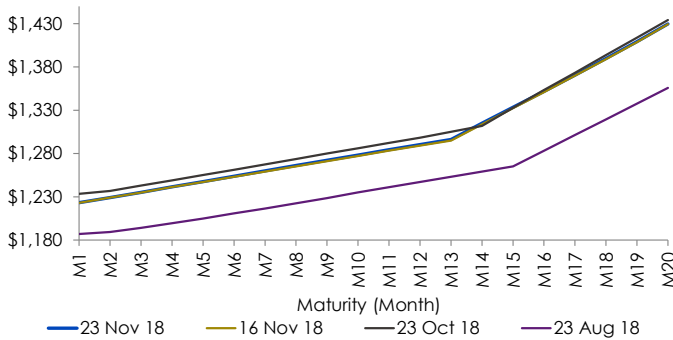


Source: Bloomberg, WisdomTree

Precious Metals

Gold Futures

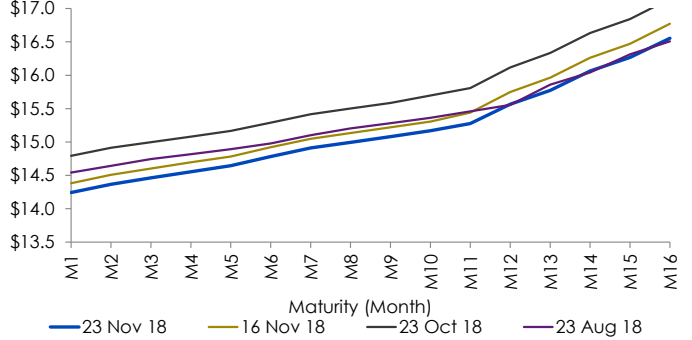
USD/t oz.



Source: Bloomberg, WisdomTree

Silver Futures

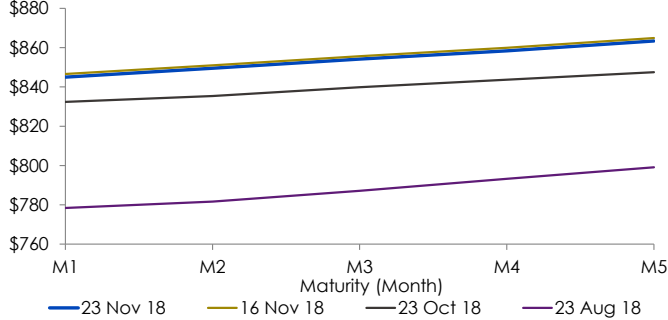
USD/t oz.



Source: Bloomberg, WisdomTree

Platinum Futures

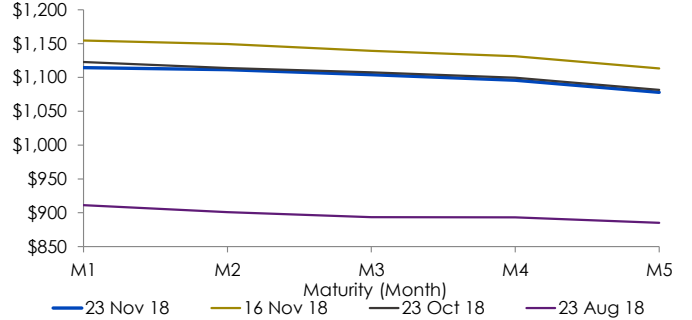
USD/t oz.



Source: Bloomberg, WisdomTree

Palladium Futures

USD/t oz.

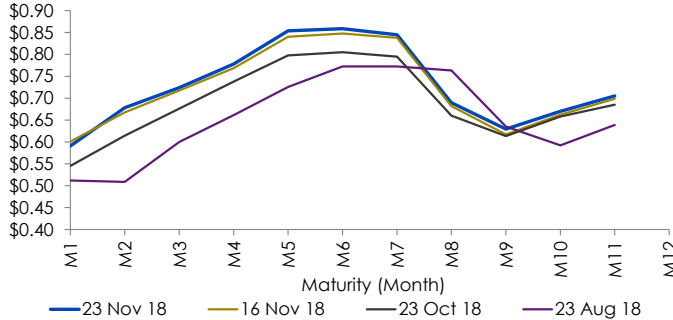


Source: Bloomberg, WisdomTree

Livestock

Lean Hogs Futures

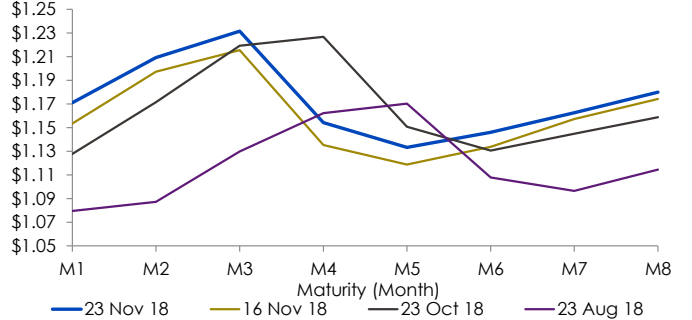
USD/lb.



Source: Bloomberg, WisdomTree

Live Cattle Futures

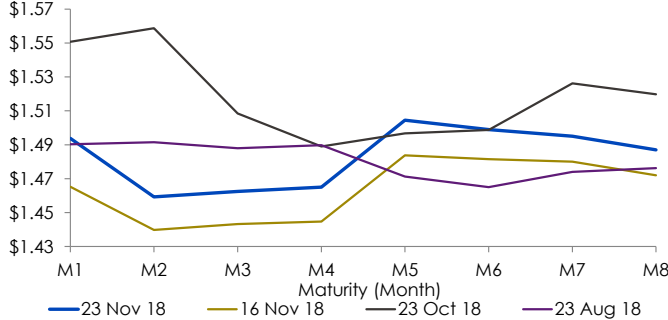
USD/lb.



Source: Bloomberg, WisdomTree

Feeder Cattle Futures

USD/lb.



Source: Bloomberg, WisdomTree

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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

03-Dec-18	Nitesh Shah	OPEC: Déjà vu – No thank you!
28-Nov-18	WisdomTree	Global Dividend Stream: Where we saw growth in 2018
26-Nov-18	Aneeka Gupta	Beyond the US Midterm Elections
21-Nov-18	Aneeka Gupta	In charge with Electric Vehicles
19-Nov-18	Kevin Flanagan	Is US wage growth finally stepping out?
16-Nov-18	Aneeka Gupta	Oil lords battle it out
14-Nov-18	Christopher Gannatti	Tackling the income challenge
12-Nov-18	Nitesh Shah	Oil: Backwardation to the future
07-Nov-18	Christopher Gannatti	How to multifactor: Diversifying exposure across all factors at all times
06-Nov-18	WisdomTree	Will Eurozone bonds go 'back to the future'?
30-Oct-18	Christopher Gannatti	WisdomTree US Multifactor: Not the low volatility you're used to
29-Oct-18	Nitesh Shah	Silver: set for a rebound?
29-Oct-18	Nitesh Shah	Managing commodity risks

WisdomTree - Past Issues of Commodity Monthly Monitor

Jan - Feb 2018	Research Team	US dollar gives transitory boost to commodities
Feb - Mar 2018	Research Team	Commodities buck cyclical shakedown
Mar - Apr 2018	Research Team	Commodities see-saw amidst geopolitics and rising yields
Apr - May 2018	Research Team	Will the dichotomy of geopolitical risk in oil and gold last?
May - Jun 2018	Research Team	Oil falls on OPEC but trade wars trip everything else

The research notes are for qualified investors only.

Key Reports

Current	Next release		
08-Nov-18	11-Dec-18	USDA	World Agricultural Supply and Demand Estimates
06-Nov-18	11-Dec-18	EIA	Short-Term Energy Outlook
13-Nov-18	12-Dec-18	OPEC	OPEC Oil Market Report
14-Nov-18	13-Dec-18	IEA	IEA Oil Market Report

DISCLAIMER

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