

# Commodity Monthly Monitor

## Supply tightness aids cyclical commodities

31 Aug - 21 Sept 2018



### Summary

Commodity prices gained 1.3% last month, lifted higher by the cyclical sectors, energy and industrial metals. Meanwhile gold prices stabilised, removing a prior source of negative weight on the commodity complex. The US Dollar basket has depreciated by close to 1%, aiding the commodity rebound. As Federal Reserve rate hikes appear well anticipated, we could see a period of US Dollar stability, which will help commodity prices.

Although trade wars are ratcheting higher, with the US announcing a further US\$200bn of Chinese imports subject to tariffs, the market expressed relief that a less punitive 10% tariff was applied (instead of 25%). Industrial metal prices led a relief rally with the Bloomberg Commodity Industrial Metals Sub-index posting a 2.8% gain. We have long argued that trade wars will do more to damage supply chains than they will to destroy demand. We are likely seeing an upside correction take place. Palladium, one of the most industrial of the precious metals, posted a 17% increase over the month as prior pessimism was shaken off and markets paid heed to the metal's strong fundamentals. Most metals are in supply deficit and we expect inventories to continue to decline as a result.

We believe that gold and silver have reached extreme bearishness and are ripe for a short-covering rally. These defensive metals could join the rest of the metal complex in an upside correction.

- Polarised agricultural sector: livestock and soots rebound, while grains slump.** Sugar and coffee posted a relief rally as negative sentiment has been priced in for a while. The latest World Agricultural Supply and Demand Estimates (WASDE) report has once again upwardly revised its estimates on the grains market, driving prices lower.
- Industrial metal prices reflect tighter fundamentals.** The industrial metals complex was the second-best performing sector within commodities as investors shifted focus on tighter fundamentals across key industrial metals as opposed to trade war concerns. While the sector is likely to remain volatile, given the ongoing trade spat, we expect industrial metal prices to recover, owing to stronger fundamentals.
- Oil outlook remains positive.** Oil prices are continuing to stride higher as the Organization of Petroleum Exporting Countries refuses to expand the group's quota. With both Brent and WTI curves in backwardation, the near-term outlook for oil appears positive.
- Palladium led the recovery in the precious metals space, while silver remained a laggard.** We expect the long term negative positioning in gold and silver futures to rebound and drive a short-covering rally.

### Nitesh Shah

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

	Current Price <sup>2</sup>	Returns (-1 Mth)	Price vs 200 days MA	Inventories <sup>3</sup> (- 3 Mths)	Positioning <sup>4</sup> (- 1 Mth)	Roll Yield <sup>5</sup>	21 Sept Score	31 Aug Score
WTI Oil	71	5.1%	6.9%	-7.6%	-2%	0.6%	2	2
Brent Oil	79	8.5%	9.3%	3.4%	41%	0.7%	2	0
Natural Gas	3.0	-0.1%	4.9%	35.6%	-32%	0.1%	(1)	0
Gasoline	2.0	0.0%	1.1%	-2.5%	3%	0.7%	3	2
Heating Oil	2.2	4.8%	6.3%	6.9%	24%	-0.2%	0	0
Carbon	22.1	14.5%	59.2%	-	-	-0.2%	0	0
Wheat	5.2	-1.0%	7.4%	-1.8%	-94%	-3.5%	(1)	(1)
Corn	3.6	-0.7%	-2.6%	1.5%	-246%	-3.2%	(4)	(2)
Soybeans	8	-3.1%	-11.1%	24.4%	-149%	-1.6%	(4)	(4)
Sugar	0.1	6.6%	-11.4%	-	58%	-7.2%	0	(2)
Cotton	0.8	-5.1%	-5.1%	-6.7%	-16%	0.2%	0	0
Coffee	1.0	2.0%	-12.9%	-	-8%	-3.3%	(3)	(4)
Soybean Oil	0.3	-1.7%	-8.2%	-1.6%	-24%	-0.9%	(2)	(2)
Cocoa	2,167	-4.5%	-7.0%	-	777%	-1.3%	(1)	(1)
Aluminium	2,075	1.6%	-4.1%	-10.0%	5%	-0.8%	1	1
Copper (COMEX)	2.8	5.2%	-5.7%	-21.7%	53%	-0.7%	1	(2)
Copper (LME)	6,374	5.6%	-4.7%	-29.6%	26%	0.0%	3	(2)
Zinc	2,503	2.7%	-17.6%	-28.9%	-16%	-0.2%	(1)	0
Nickel	13,187	-2.3%	-3.1%	-16.2%	-97%	-0.3%	(2)	(2)
Lead	2,035	1.6%	-13.6%	-7.5%	1%	-0.3%	1	(2)
Tin	19,062	-0.1%	-6.8%	-14.7%	1%	0.1%	2	0
Gold	1,197	0.3%	-6.9%	-	-21%	-	(2)	(4)
Silver	14	-3.4%	-11.5%	-	-258%	-	(4)	(4)
Platinum	830	4.6%	-8.0%	-	86%	-	2	(4)
Palladium	1,067	17.2%	8.3%	-	584%	-	4	(2)
Live Cattle	1.1	3.5%	-1.0%	-	13%	-4.5%	0	(1)
Lean Hogs	0.6	7.2%	-10.7%	-	1852%	5.1%	3	(1)
Feeder Cattle	1.6	5.2%	7.8%	-	98%	-0.7%	1	1

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

<sup>1</sup> - "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 July 20, 2018. 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 18, 2018 and September 21, 2018 respectively. % change from previous month. <sup>5</sup> Calculated as % difference between front month and second month futures prices on report date.

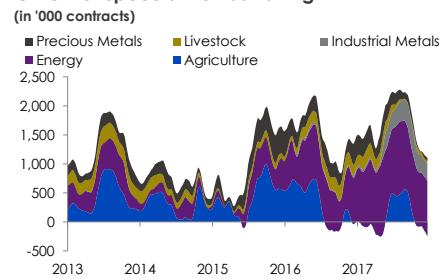
**Historical performance is not an indication of future performance and any investments may go down in value.**

Performance <sup>2</sup>	- 1 Mth	- 6 Mth	- 12 Mth
All Commodities	1.3%	-2.5%	1.2%
Energy	5.3%	12.2%	24.4%
Industrial Metals	2.8%	-6.3%	-2.2%
Precious Metals	-0.5%	-10.6%	-10.0%
Agriculture	-3.3%	-12.0%	-12.8%
MSCI World	2.2%	3.3%	10.7%
US Aggregate Bond	-0.8%	0.5%	-1.4%

Bloomberg TR Indexes for basket returns, data to Friday 21 September 2018.

Source: WisdomTree, Bloomberg

### CFTC Net Speculative Positioning



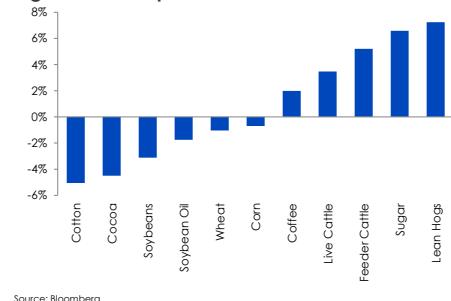
Source: WisdomTree, Commodity Futures Trading Commission (CFTC), Bloomberg

# Sector Overview

## Agriculture

- Coffee prices rose 2% over the period in part due to the reduction in record-high speculative net short positioning coupled with the recovery of the Brazilian Real. According to Conab, the state agricultural information agency of Brazil, the Brazilian coffee crop is likely to set a record at 59.9mn bags citing bountiful yields. This estimate is likely to be a third more than last year's disappointing crop. Favourable weather coupled with expectations of a large South American harvest have caused prices to hit their lowest level in 5 years. Net speculative positioning on coffee futures is more than 2-standard deviations below its 5-year average. While significant coffee price negativity already seems to be priced in, without an adverse weather event coffee prices could stay lower for longer.
- Sugar prices have long been under pressure by the ample supply situation on the world market. While sugar prices rose 6.6% over the period owing to optimism surrounding warmer weather in the world's largest growing region, Centre-South in Brazil. We expect the optimism to be short-lived owing to higher sugar production from India. The Indian government announced measures to reduce the country's high sugar stocks by paying mills a distance-based subsidy for transporting sugar to the ports. The Indian government is increasing the per-ton payments it makes directly to sugar cane producers. As the producers constitute an important section of the electorate we expect continued support from the government ahead of the Indian general elections in 2019.

## Agriculture - September Returns\*

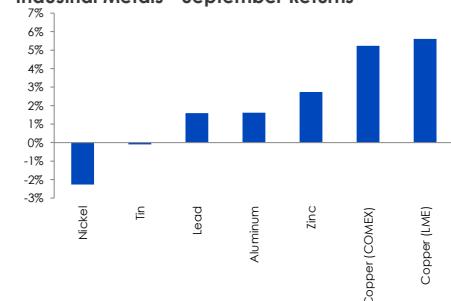


Source: Bloomberg

## Industrial Metals

- The industrial metals complex was the second-best performing sector within commodities over the period – led by copper, zinc and aluminium. Investors appear to be coming to terms with the fact that the bilateral trade negotiations between the world's largest developed economy (US) and the world's largest emerging economy (China) is likely to be a long drawn out process. Latest economic data also lent buoyancy to the demand story as initial jobless claims in the US declined to their lowest level since 1969. Most base metals continue to face tighter fundamentals which provide a more optimistic outlook for prices going forward.
- Copper is often viewed as a reliable barometer of economic health. According to the International Copper Study Group (ICSG), the global copper market showed a supply deficit in the first six months of the year, after demand for refined copper outpaced supply by 45,000 tons in June. Signs of copper demand are evident from the inventory decline of 29.6% and 21.7% on the London Metal Exchange (LME) and the Commodity Metals Exchange (CME). It could also suggest the widening of the deficit in the coming months.
- Zinc prices regained support from the optimistic fundamental outlook by the International Lead and Zinc Study Group (ILZSG). According to ILZSG, zinc supply lagged demand by around 42,000 tons in the first seven months of the year. Although the deficit on the zinc market is lower than last year, zinc's underperformance this year does not corroborate an undersupplied market.

## Industrial Metals - September Returns\*

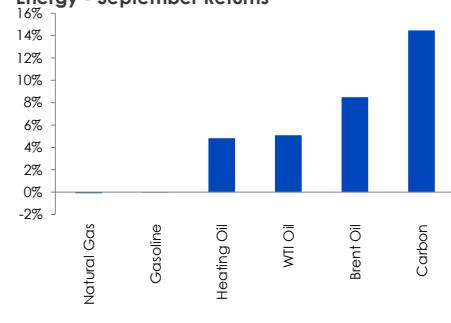


Source: Bloomberg

## Energy

- Energy was the strongest performing sub-sector in the commodity complex. Oil prices continue to rise higher as the Organization of Petroleum Exporting Countries (OPEC) refuses to expand the group's quota. However, individual countries in the group who have spare capacity, like Saudi Arabia, are raising production levels. Libyan production rose once again and countered the decline in Iranian and Venezuelan production in August. But Libyan production is very volatile, and we cannot rely on levels being sustained. US rig counts are no longer rising, possibly indicating limitations to production expansion.
- Brent continues to outperform WTI oil as most of the perceived tightness in oil supply is in non-US oil. Venezuela and Iran, both producers of heavy crudes, are showing the sharpest declines in production. Although Brent is not a heavy crude index, it represents a more international benchmark for prices than WTI.
- Carbon prices experienced strong volatility last month. Despite falling 18% on a single day (13th September 2018), carbon prices still ended up positive over the month. The sharp price fall on that day came after the Polish energy minister called on the EU to intervene in the carbon market following the price rise of the permits which have risen seven-fold in the space of five years. However, the price decline was short-lived as the market recognised that the prior prices were simply too low and reflected a period of chronic oversupply.

## Energy - September Returns\*



Source: Bloomberg

## Precious Metals

- Palladium was the standout performer, not only in the precious metals space, but the whole commodity complex, rising 17.2% last month. The metal has recouped almost all the losses it has sustained since the beginning of the year. Growing auto sales in Europe have helped the turn in sentiment towards both platinum and palladium. Gasoline cars are taking a greater share of the market in Europe at the cost of diesel cars. Gasoline cars have a higher palladium content compared to diesel cars (which have a higher platinum content). The fuel shift explains the outperformance of palladium vs. platinum (where the latter only gained 4.6%).
- Gold appeared to find a floor and rose 0.4% last month. A pause in the US Dollar appreciation has helped. Gold is still weighed down by extremely negative sentiment, which we believe should turn in due course. Speculative positioning in the futures market is at its lowest since 2001. The market is ripe for a short-covering rally as we believe that such negativity toward the metal is unwarranted. We believe that gold is still a hedge for event risks, but roaring developed market equities are supressing the call for an insurance product.
- Silver was the only precious metal not to post a positive return last month. Silver speculative positioning is at its lowest since the data series began in 1995. We believe that silver will ride gold's coattail higher. Silver has a high correlation with gold, but often moves with a lag.

## Precious Metals - September Returns\*



Source: Bloomberg

\*Note: all returns are based on front month futures prices in the month to Friday 21 September 2018.

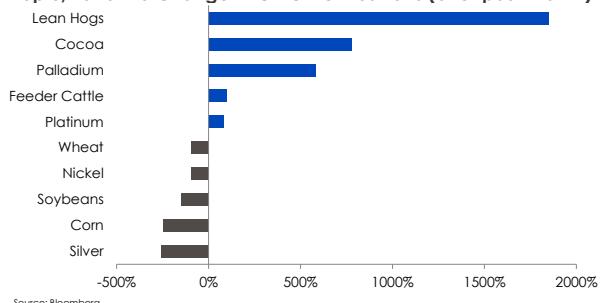
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# Technical Overview (as of Sep 21, 2018)

## Positioning

- Net speculative positioning on cocoa futures moved from being net short to net long. However speculative positioning remains below the 5-year average underscoring the pessimism towards the cocoa market.
- Investors turned bearish on soybean futures evident from the decline in net speculative positioning by 149% owing to a 29% rise in short positions over the period. The uncertainty surrounding the ongoing trade dispute coupled with record US crop and good weather for planting in Brazil is weighing on soybean prices.
- The latest World Agricultural Supply and Demand Estimates (WASDE) report has once again upwardly revised its estimates for the US corn crop and yield. Sentiment on the corn market remains weak as net shorts have increased 32% alongside a decline in net longs by 8% over the period.
- Net speculative positioning on nickel futures declined 96.5% as net shorts rose 7% over the period. While cyclical stainless-steel industry accounts for a major portion nickel demand for now, investors are discounting nickel's demand appetite from battery technology in the burgeoning electric vehicle market. As automakers favour greater nickel content in battery technology in order to reduce their dependence on cobalt, we expect nickel demand to rise.
- Speculative positioning in silver futures have fallen 258% over the month to the lowest level in the history of the data which stretches back to 1995. We believe the market is excessively bearish on the metal and we expect to see a short-covering rally to come.

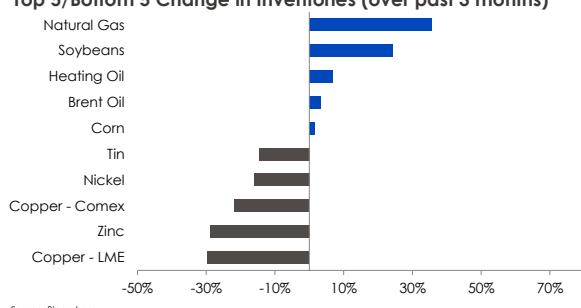
## Top 5/Bottom 5 Change in CFTC Net Positions (over past month)<sup>1</sup>



## Inventories

- Soybean inventories over the past 3 months have risen 24% owing to record high production in the US coupled with reduced trade owing to the ongoing trade dispute between the US and China.
- Tighter fundamentals across key industrial metals – tin, nickel, copper and zinc evident from the lower inventory data down 14.7%, 16.2%, 25.7% and 28.9% over the prior 3 months respectively illustrates the extent to which the trade war concerns have distorted prices and highlight the scope for recovery within the industrial metals sector when the uncertainty fades away.
- Natural gas inventories rose 36%, in line with seasonal trends for this time of the year. However, inventories are still more than a standard deviation below the five-year historic average.

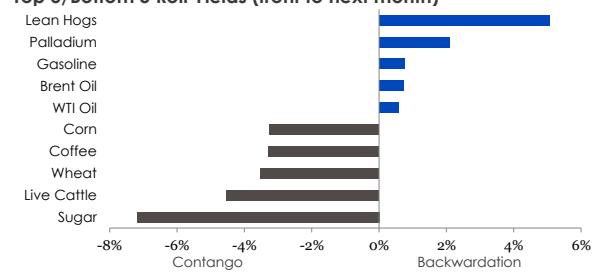
## Top 5/Bottom 5 Change in Inventories (over past 3 months)<sup>2</sup>



## Curve Dynamics

- Corn, coffee, wheat, live cattle and sugar are in contango at the short end of the curve. Negative roll yields run as high as 7.2% for sugar and 3.5% for wheat.
- The Brent futures curve regained backwardation throughout the curve. The front-month roll in Brent is now a positive 0.7%, in line with WTI's 0.6%. WTI's roll yield declined from 2.3% last month. Seasonal patterns led to the flattening of the front of gasoline curve, which now has a positive roll of 0.7% compared to a positive roll of 5.6% last month.
- Not only has palladium been the best spot price performer in the commodity complex, but it also has one of highest positive roll yields. With a positive roll yield of 2.1%, the metal is exhibiting signs of supply tightness. Johnson Matthey are expecting the metal to be in a supply deficit this year, marking the seventh consecutive year in which mine supply has not kept up with demand.

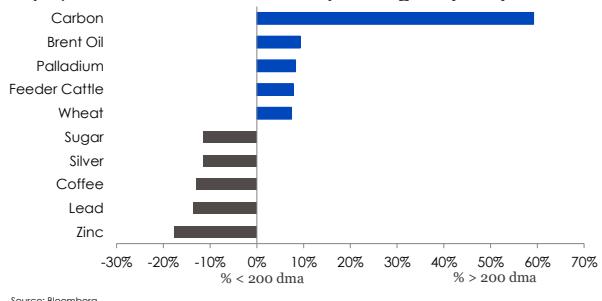
## Top 5/Bottom 5 Roll Yields (front to next month)<sup>3</sup>



## Technicals

- Wheat prices have come under considerable pressure since the WASDE report was released as it raised its estimate of global wheat production by 3mn tons owing to a higher crop estimates for Russia thereby reducing the expected deficit on the global wheat market to 13mn tons. Wheat prices are still hovering 7.4% above their 200-day moving average but have lost considerable momentum since the start of the year.
- Lead is trading 13.6% below its 200-day moving average. The supply of lead fell short of demand in the first seven months of the year. Lead prices could gain a tailwind if the ILZSG were to estimate a tighter market supply situation than before, in its autumn outlook in early October.
- Carbon continues to top the charts in terms of technicals. Carbon is trading 59% above its 200-day moving average. Structural efforts to tighten up carbon permits, following a period of oversupply have led to the sharp price gains.
- Brent oil is trading 9% above its 200-day moving average. The market remains bullish on oil as OPEC remains reluctant to push supply significantly further.
- Palladium is trading 8.3% above its 200-day moving average, highlighting the recent turn in sentiment toward the metal.

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



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

<sup>3</sup> Roll yields calculated as percent change between front month futures price and next month futures price on Sep 21, 2018.

<sup>4</sup> Percent difference between the front month futures price and its 200 day moving average on Sep 21, 2018.

# Summary Tables

PRICES <sup>1</sup>	Current	Unit	1 Month	3 Month	6 Month	1 Year	ROLL YIELDS <sup>2</sup>	Unit	Exchange	21-Sep	1 Week	1 Month	3 Month
<b>Energy</b>													
<b>WTI Oil</b>													
WTI Oil	71	USD/bbl.	5.1%	8.0%	8.6%	40.0%	WTI Oil	USD/bbl.	NYMEX	0.6%	0.3%	2.3%	1.0%
Brent Oil	79	USD/bbl.	8.5%	7.9%	13.4%	39.6%	Brent Oil	USD/bbl.	ICE	0.7%	0.6%	-0.4%	0.3%
Natural Gas	3.0	USD/MMBtu	-0.1%	0.1%	12.9%	1.1%	Natural Gas	USD/MMBtu	NYMEX	0.1%	0.6%	0.5%	0.1%
Gasoline	2.0	USD/gal.	0.0%	0.2%	0.2%	22.7%	Gasoline	USD/gal.	NYMEX	0.7%	0.6%	5.6%	0.8%
Heating Oil	2.2	USD/gal.	4.8%	7.5%	11.1%	22.6%	Heating Oil	USD/gal.	NYMEX	-0.2%	-0.2%	-0.2%	-0.2%
Carbon	22.1	EUR/MT	14.5%	49.4%	75.0%	237.1%	Carbon	EUR/MT	ICE	-0.2%	-0.2%	-0.1%	-0.1%
<b>Agriculture</b>													
<b>Wheat</b>													
Wheat	5.2	USd/bu.	-1.0%	5.4%	15.0%	15.3%	Wheat	USd/bu.	CBOT	-3.5%	-6.2%	-3.7%	-2.3%
Corn	3.6	USd/bu.	-0.7%	0.1%	-4.7%	2.0%	Corn	USd/bu.	CBOT	-3.2%	-4.2%	-3.9%	-2.6%
Soybeans	8.5	USd/bu.	-3.1%	-3.8%	-17.7%	-12.7%	Soybeans	USd/bu.	CBOT	-1.6%	-1.1%	-1.3%	-0.6%
Sugar	0.1	USd/lb.	6.6%	-8.7%	-14.4%	-22.8%	Sugar	USd/lb.	NYBOT	-7.2%	-7.2%	-8.0%	-2.8%
Cotton	0.8	USd/lb.	-5.1%	-4.7%	-4.0%	14.8%	Cotton	USd/lb.	NYBOT	0.2%	0.1%	0.3%	-2.5%
Coffee	1.0	USd/lb.	2.0%	-11.3%	-15.9%	-26.0%	Coffee	USd/lb.	NYBOT	-3.3%	-4.3%	-3.8%	-3.1%
Soybean Oil	0.3	USd/lb.	-1.7%	-3.8%	-13.2%	-17.6%	Soybean Oil	USd/lb.	CBOT	-0.9%	-0.2%	-0.5%	-0.3%
Cocoa	2,167	USD/MT	-4.5%	-13.6%	-14.1%	7.2%	Cocoa	USD/MT	NYBOT	-1.3%	-0.8%	0.4%	-0.2%
<b>Industrial Metals</b>													
<b>Aluminum</b>													
Aluminum	2,075	USD/MT	1.6%	-5.5%	0.2%	-3.6%	Aluminum	USD/MT	LME	-0.8%	-0.8%	-0.4%	0.9%
Copper	2.8	USd/lb.	5.2%	-6.1%	-7.0%	-2.7%	Copper	USd/lb.	COMEX	-0.7%	-0.7%	-0.6%	-0.7%
Copper (LME)	6,374	USD/MT	5.6%	-6.2%	-5.9%	-1.3%	Copper (LME)	USD/MT	LME	0.0%	-0.2%	-0.1%	0.1%
Zinc	2,503	USD/MT	2.7%	-14.7%	-23.0%	-19.4%	Zinc	USD/MT	LME	-0.2%	-0.5%	0.2%	0.5%
Nickel	13,187	USD/MT	-2.3%	-11.7%	-1.8%	20.4%	Nickel	USD/MT	LME	-0.3%	-0.2%	-0.2%	-0.2%
Lead	2,035	USD/MT	1.6%	-14.4%	-15.3%	-19.2%	Lead	USD/MT	LME	-0.3%	-0.3%	-0.3%	0.0%
Tin	19,062	USD/MT	-0.1%	-7.4%	-9.4%	-7.3%	Tin	USD/MT	LME	0.1%	-0.1%	0.1%	0.1%
<b>Precious Metals</b>													
<b>Gold</b>													
Gold	1,197	USD/t oz.	0.3%	-5.6%	-9.5%	-7.3%	Gold	USD/t oz.	COMEX	-0.4%	-0.4%	-0.2%	-0.3%
Silver	14.3	USD/t oz.	-3.4%	-12.6%	-12.8%	-15.8%	Silver	USD/t oz.	COMEX	-0.6%	-0.7%	-0.6%	-0.5%
Platinum	830	USD/t oz.	4.6%	-3.9%	-12.7%	-11.7%	Platinum	USD/t oz.	NYMEX	-0.4%	-0.3%	-0.4%	-0.4%
Palladium	1,067	USD/t oz.	17.2%	11.7%	7.7%	16.9%	Palladium	USD/t oz.	NYMEX	2.1%	2.9%	1.1%	1.0%
<b>Livestock</b>													
<b>Live Cattle</b>													
Live Cattle	1.1	USd/lb.	3.5%	4.1%	-3.9%	2.7%	Live Cattle	USd/lb.	CME	-4.5%	-3.6%	-1.1%	2.4%
Lean Hogs	0.6	USd/lb.	7.2%	-25.1%	-3.6%	5.2%	Lean Hogs	USd/lb.	CME	5.1%	-0.8%	4.3%	6.3%
Feeder Cattle	1.6	USd/lb.	5.2%	5.7%	14.8%	2.5%	Feeder Cattle	USd/lb.	CME	-0.7%	-0.9%	-1.2%	-0.5%
CFTC NET POSITIONING <sup>3</sup>	Current	5 Yr Average	1 Month	6 Month	1 Year		INVENTORY LEVELS <sup>4</sup>	Current	5 Yr Average	1 Month	3 Month	6 Month	
<b>Energy</b>													
<b>WTI Oil</b>													
WTI Oil	565,335	423,657	574,487	740,668	476,813		Oil - US		394,137	-3%	-3%	-8%	-8%
Brent Oil**	321,015	166,352	228,346	388,449	358,458		Oil - OECD Europe**		356	4%	0%	3%	8%
Natural Gas	-83,329	-124,345	-63,302	-101,248	-25,585		Natural Gas - DOE		2,722	-17%	12%	36%	88%
Gasoline	105,330	66,042	102,288	79,826	81,277		Gasoline - DOE		234,150	10%	0%	-2%	-4%
Heating Oil	43,565	10,385	35,119	13,540	47,540		Heating Oil - DOE		8,979	-34%	4%	7%	-17%
<b>Agriculture</b>													
<b>Wheat</b>													
Wheat	3,468	-45,086	56,607	-24,365	-48,976		<b>Aluminum</b>	<b>1,865,080</b>	<b>-44%</b>	<b>-7%</b>	<b>-10%</b>	<b>-16%</b>	
Corn	-86,219	77,299	59,107	324,223	-53,995		Aluminum - LME	1,022,450	-66%	-8%	-10%	-20%	
Soybeans	-82,487	65,737	-33,061	196,087	21,211		Aluminium - SHFE	842,630	120%	-6%	-11%	-10%	
Sugar	-49,167	80,222	-117,067	-112,911	-23,568		<b>Copper</b>	<b>505,023</b>	<b>-6%</b>	<b>-17%</b>	<b>-36%</b>	<b>-41%</b>	
Cotton	73,930	59,496	88,196	97,415	77,115		Copper - LME	216,600	-20%	-17%	-30%	-33%	
Coffee	-106,651	364	-99,208	-47,308	-10,059		Copper - SHFE	111,029	-37%	-28%	-57%	-63%	
Soybean Oil	-77,774	33,221	-62,488	24,006	108,202		Copper - COMEX	177,394	94%	-9%	-22%	-24%	
Cocoa	2,376	34,544	-351	43,506	-29,294		<b>Nickel - LME</b>	<b>231,024</b>	<b>-36%</b>	<b>-6%</b>	<b>-16%</b>	<b>-29%</b>	<b>-34%</b>
<b>Industrial Metals</b>													
<b>Copper (COMEX)</b>													
Copper (LME)	29,889	38,608	23,751	30,773			<b>Zinc</b>	<b>243,919</b>	<b>-63%</b>	<b>-14%</b>	<b>-29%</b>	<b>-34%</b>	
Aluminum	175,089	153,301	166,972	130,972			Zinc - LME	210,100	-57%	-16%	-15%	-1%	
Nickel	262	17,500	7,521	18,460			Zinc - SHFE	33,819	-79%	-3%	-65%	-79%	
Zinc	31,691	44,969	37,589	35,223			<b>Lead</b>	<b>131,580</b>	<b>-42%</b>	<b>-9%</b>	<b>-7%</b>	<b>-20%</b>	
Lead	54,867	55,782	54,503	54,948			Lead - LME	117,025	-35%	-7%	-12%	-11%	
Tin	7,215	7,452	7,175	9,196			Lead - SHFE	14,555	-67%	-22%	50%	-57%	
<b>Precious Metals</b>													
<b>Gold</b>													
Gold	-28,919	137,516	-23,964	153,316	252,776		<b>Tin</b>	<b>9,151</b>	<b>-8%</b>	<b>-4%</b>	<b>-15%</b>	<b>31%</b>	
Silver	-26,749	36,202	-7,480	-14,021	67,070		Tin - LME	2,745	-56%	-6%	6%	41%	
Platinum	-1,500	27,509	-10,586	28,509	31,855		Tin - SHFE	6,406	69%	-3%	-21%	27%	
Palladium	7,549	15,953	1,104	12,317	20,610		<b>Agriculture</b>						
<b>Livestock</b>													
<b>Live Cattle</b>													
Live Cattle	92,324	87,146	81,539	87,786	110,513		Wheat - USDA	261,290	34.1%	0.9%	-1.8%	-2.8%	
Lean Hogs	21,117	50,343	1,082	12,193	46,847		Corn - USDA	157,030	13%	1.0%	1.5%	-21.2%	
Feeder Cattle	6,378	8,821	3,217	4,684	17,959		Soybeans - USDA	108,260	79%	2.2%	24.4%	15%	
							Sugar - USDA	49,155	37%	-	-	-1%	
							Cotton - USDA	77,460	5%	0.5%	-6.7%	-12.8%	
							Coffee - USDA	32,812	-9%	-	-	12%	
							Soybean Oil - USDA	3,610	-11%	5.9%	-2%	15%	

<sup>1</sup>Performance of front month futures from 21 Sep 18 (1 Year), 21 Mar 18 (6 Month), 21 Jun 18 (3 Month) and 21 Aug 18 (1 Month) to 21 Sep 18.

<sup>2</sup>Roll return non-annualised from front month futures into second month on 21 Jun 18 (3 Month), 21 Aug 18 (1 Month), 14 Sep 18 (1 Week), 21 Sep 18.

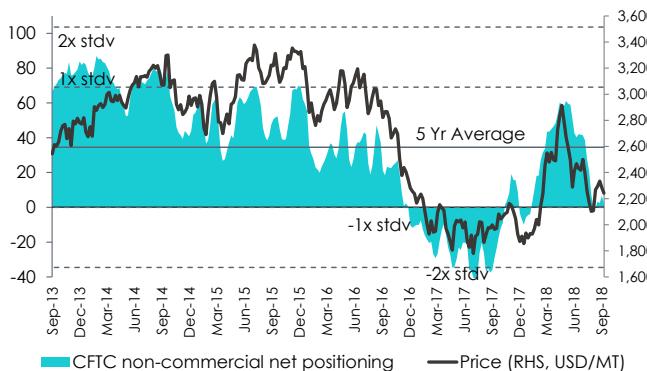
<sup>3</sup>Net positions in number of contracts. <sup>4</sup>Current inventories relative to 1, 3, 6 months ago. Under the column "5 yr average" is the current inventory level relative to 5 year average inventory. For energy, 5 yr average is the average of the same month as report month over the past 5 years. SHFE started reporting inventory data from April 2015. 5 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. \*\*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 = Jun 2018.

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

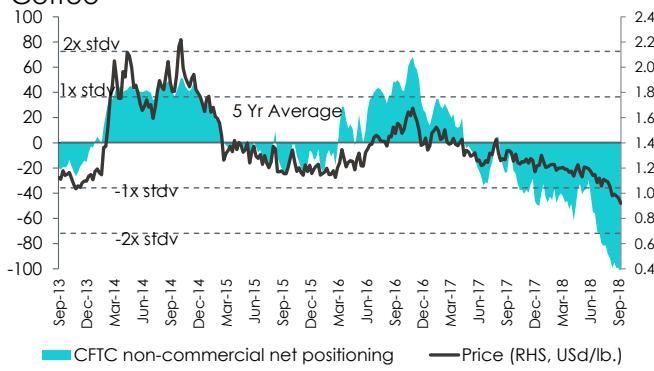
# CFTC Speculative Net Long Futures Positions

## Agriculture

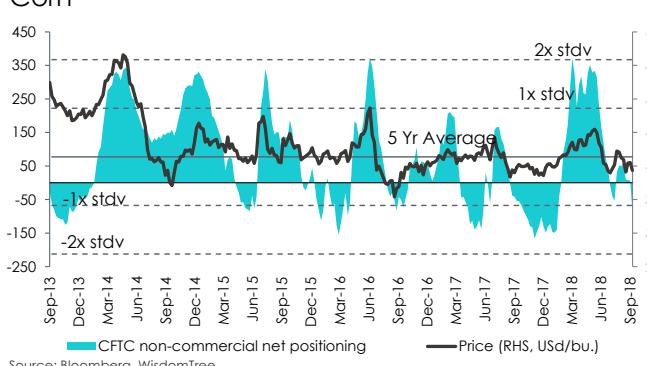
### Cocoa



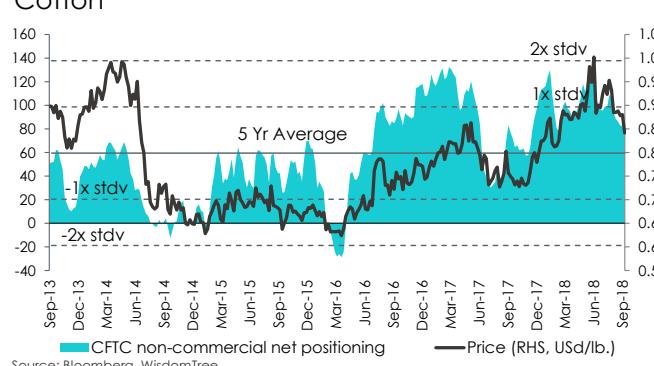
### Coffee



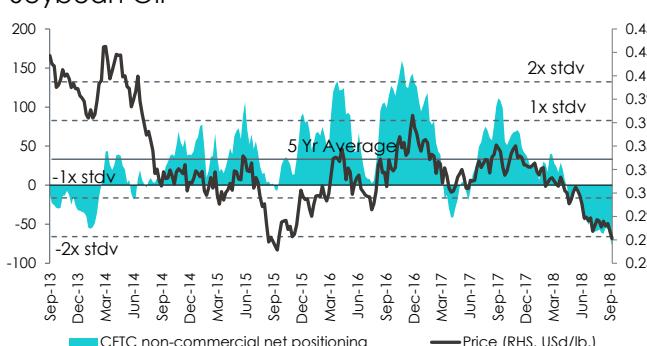
### Corn



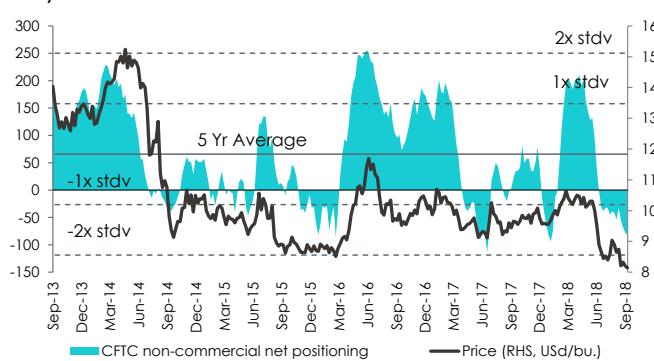
### Cotton



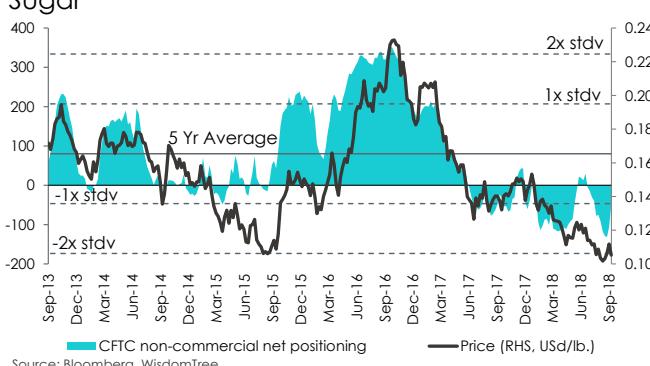
### Soybean Oil



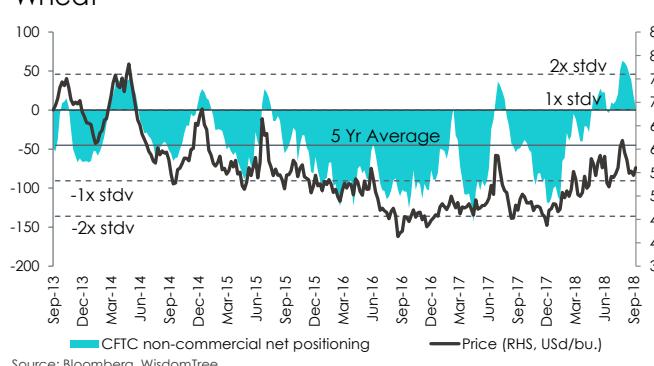
### Soybeans



### Sugar



### Wheat

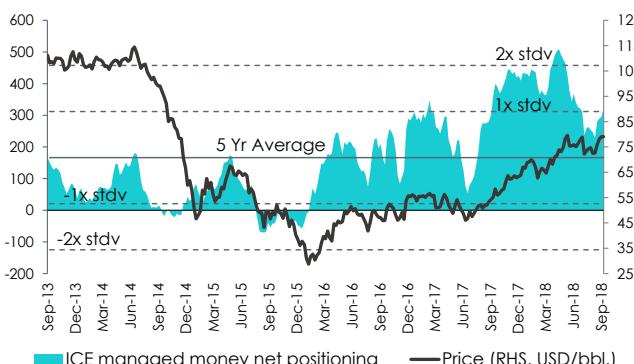


Note: positioning in '000 contracts. Standard deviation based on 5 year average CFTC non-commercial net positioning  
All commodity futures price data is denominated in USD unless otherwise indicated.

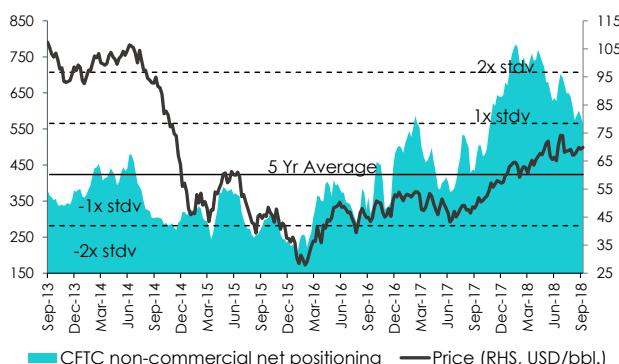
Historical performance is not an indication of future performance and any investments may go down in value.

## Energy

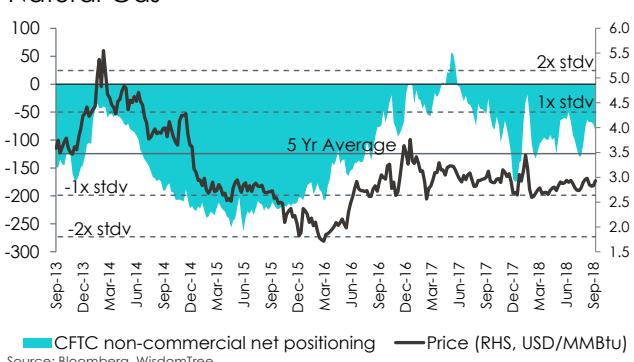
### Brent Oil



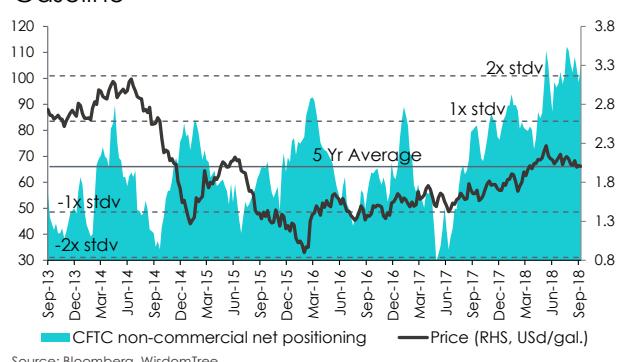
### WTI Oil



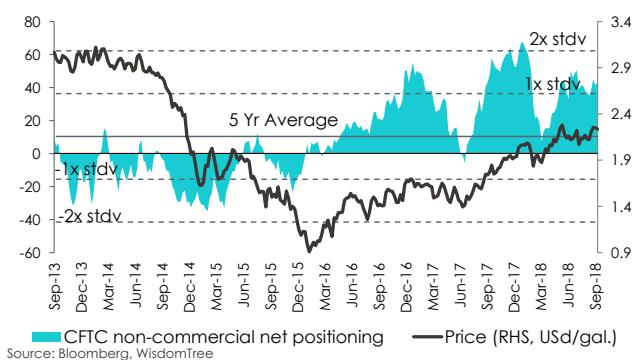
### Natural Gas



### Gasoline

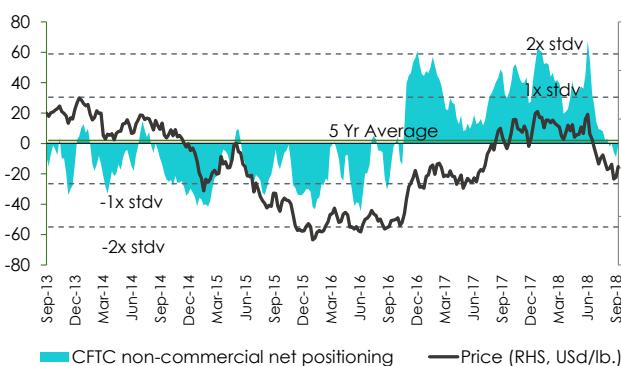


### Heating Oil

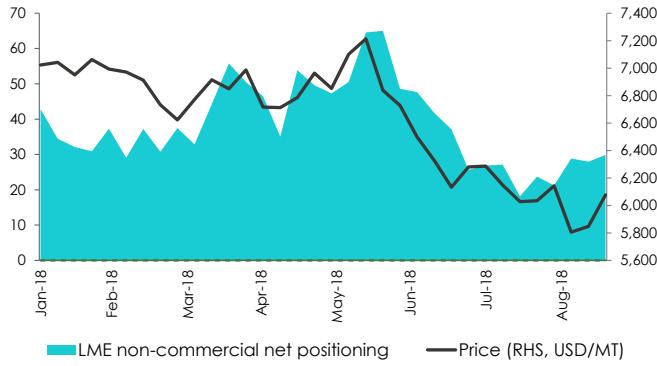


## Industrial Metals

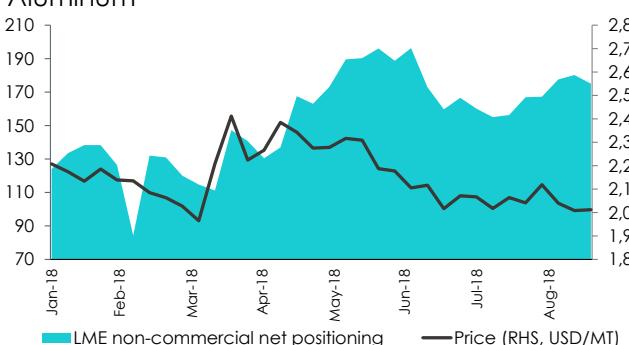
### Copper (COMEX)



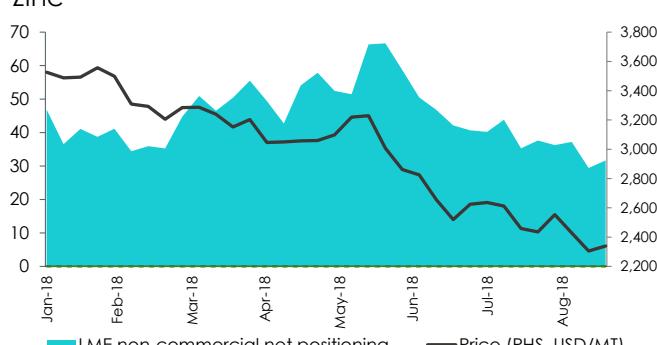
### Copper (LME)



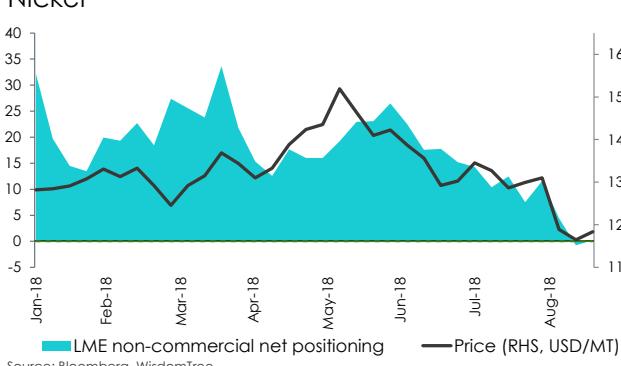
### Aluminum



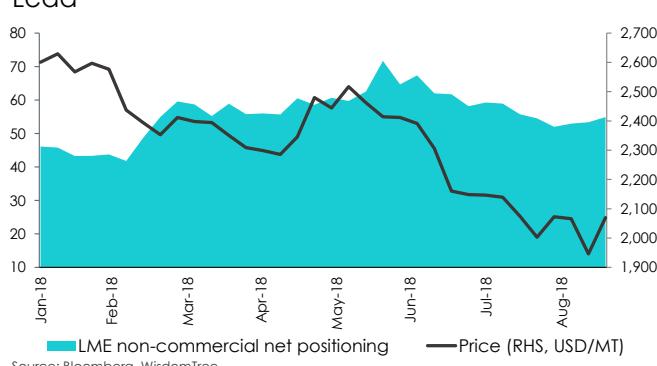
### Zinc



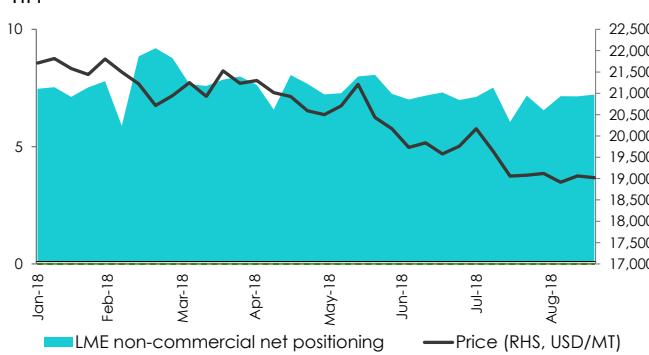
### Nickel



### Lead

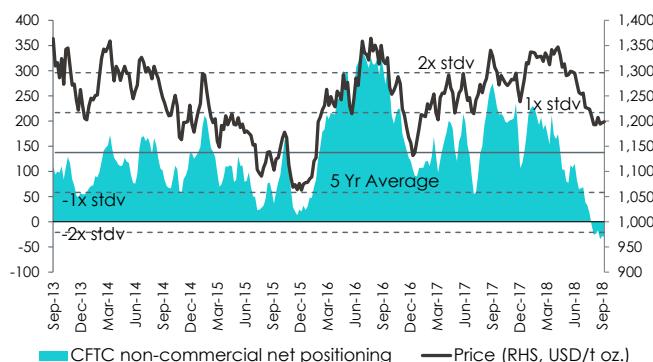


### Tin

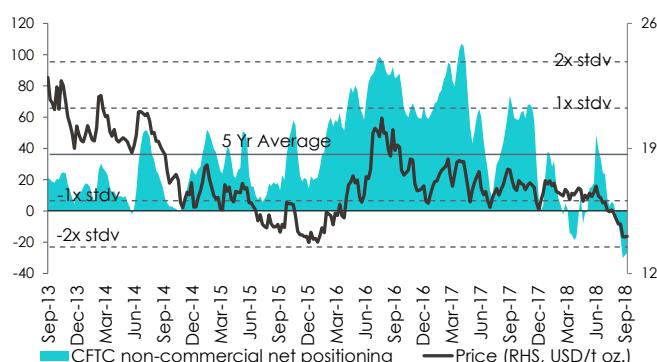


## Precious Metals

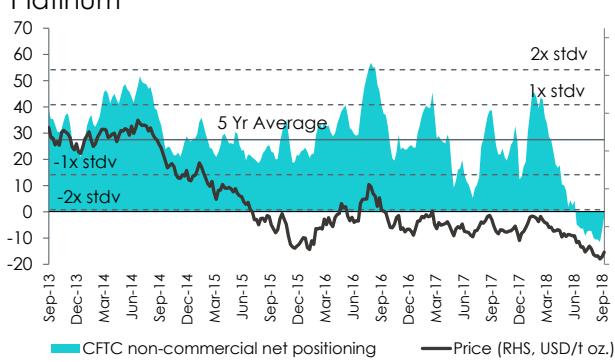
### Gold



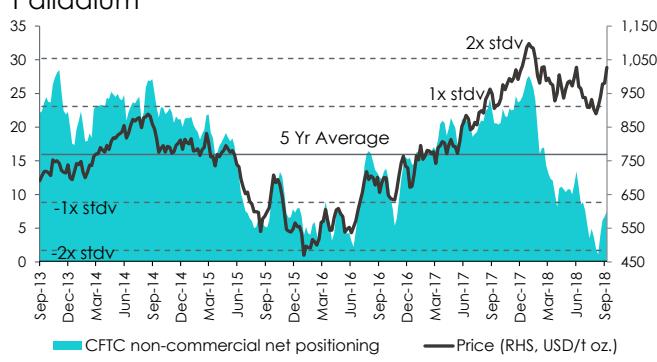
### Silver



### Platinum

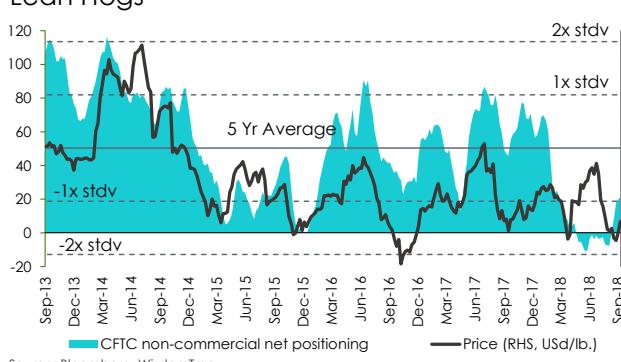


### Palladium

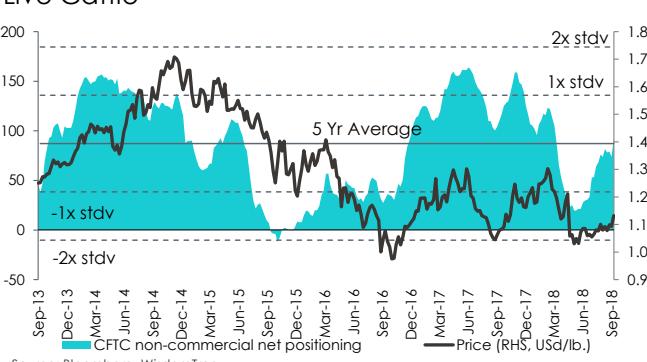


## Livestock

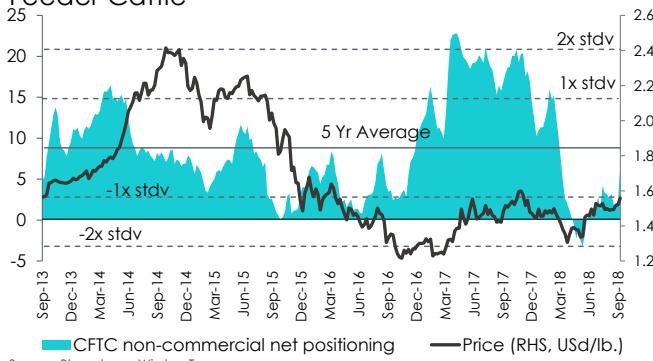
### Lean Hogs



### Live Cattle



### Feeder Cattle

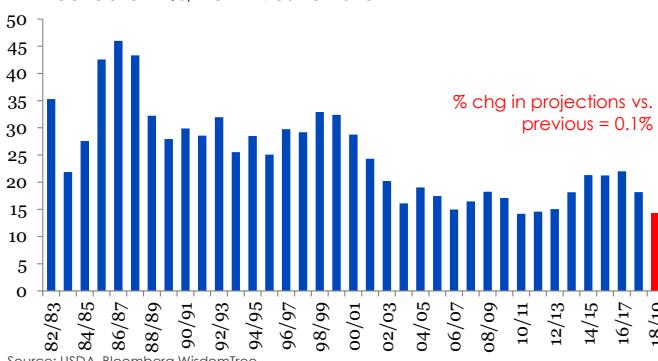


# Inventories

## Agriculture

### Corn - Stock to Use

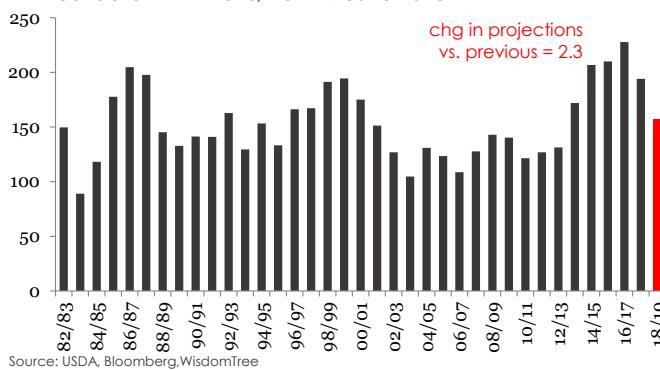
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

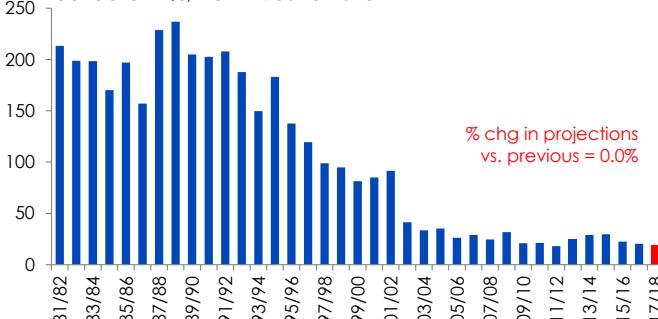
### Corn - Ending Stocks

Annual data in mln tons, from 1980 to 2018



### Coffee - Stock to Use

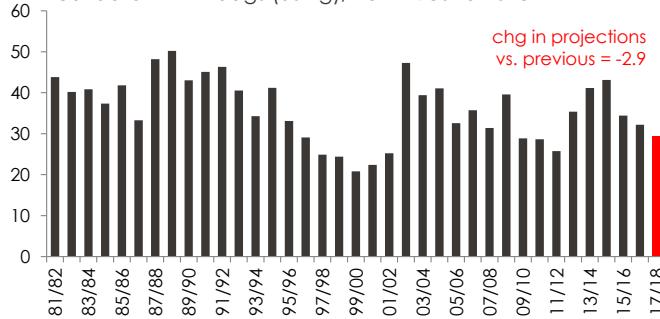
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

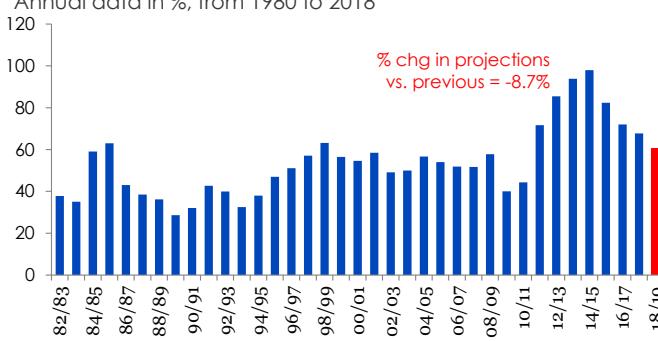
### Coffee - Ending Stocks

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



### Cotton - Stock to Use

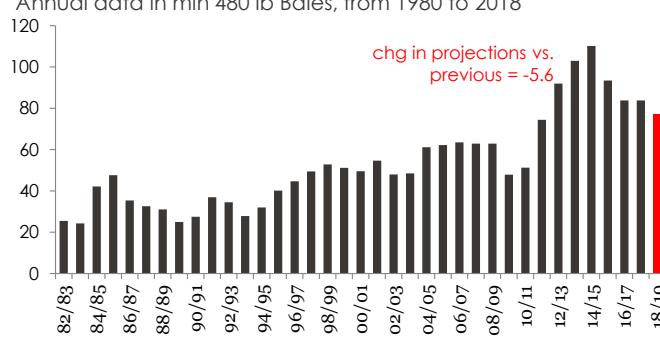
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

### Cotton - Ending Stocks

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



### Soybeans - Stock to Use

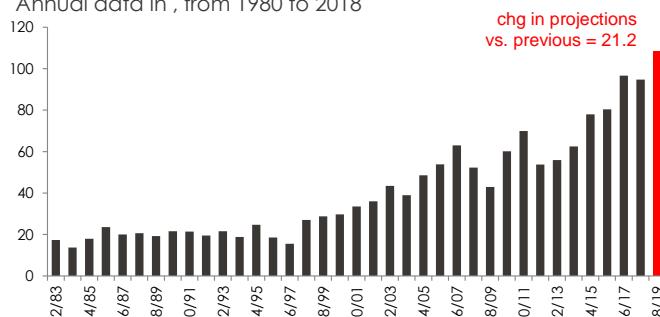
Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

### Soybeans - Ending Stocks

Annual data in , from 1980 to 2018



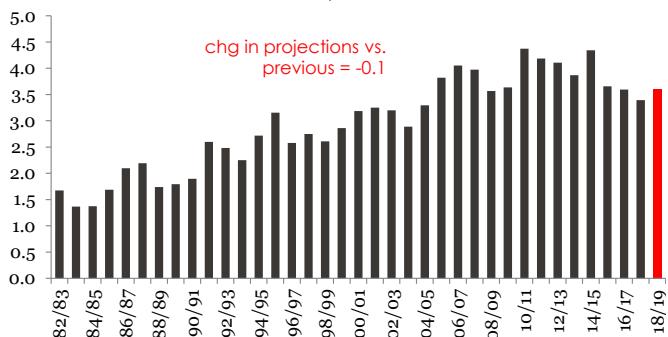
### Soybean Oil - Stock to Use

Annual data in %, from 1980 to 2018



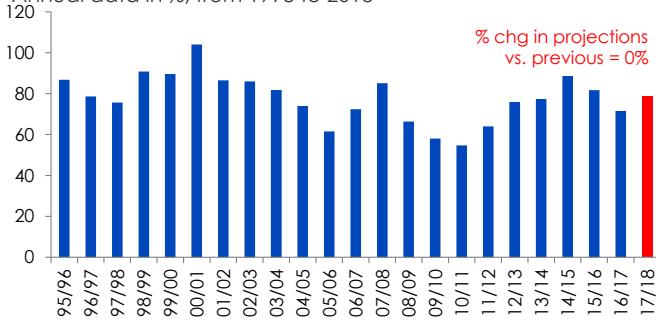
### Soybean Oil - Ending Stocks

Annual data in mln Metric Tons, from 1980 to 2018



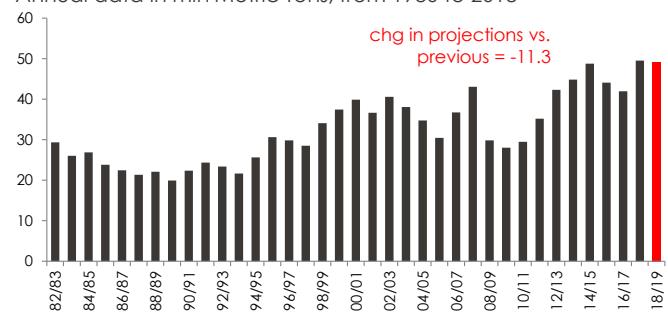
### Sugar - Stock to Use

Annual data in %, from 1998 to 2018



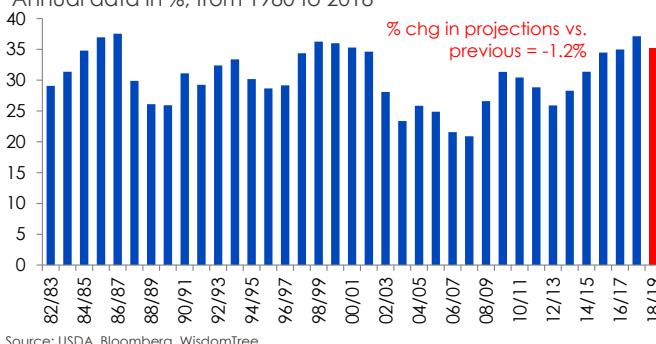
### Sugar - Ending Stocks

Annual data in mln Metric Tons, from 1980 to 2018



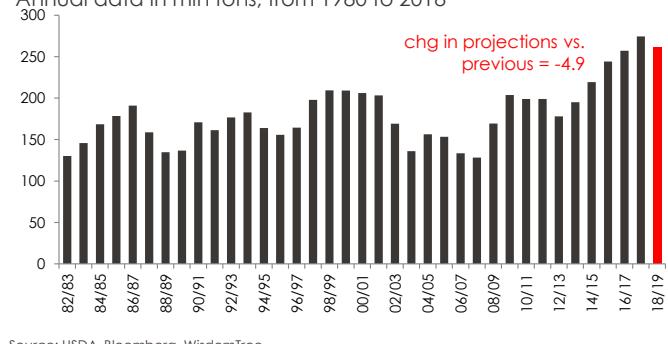
### Wheat - Stock to Use

Annual data in %, from 1980 to 2018



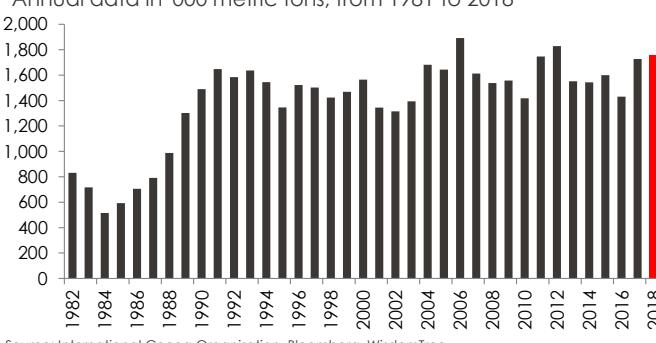
### Wheat - Ending Stocks

Annual data in mln tons, from 1980 to 2018



### Cocoa - Inventory

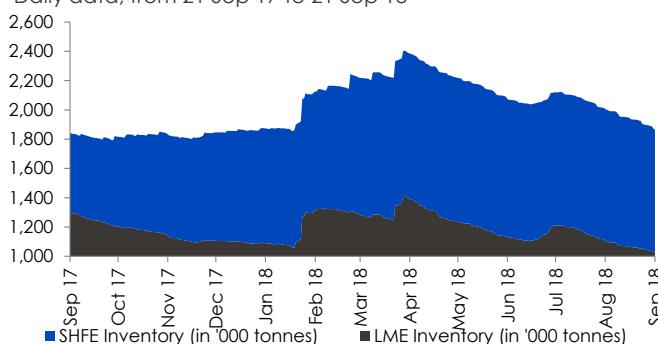
Annual data in '000 metric tons, from 1981 to 2018



## Industrial Metals

### Aluminum Inventory

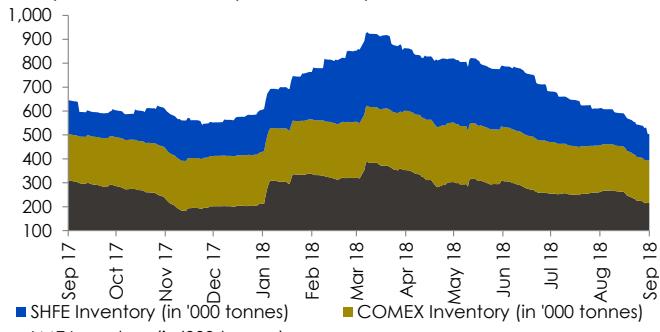
Daily data, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Copper Inventory

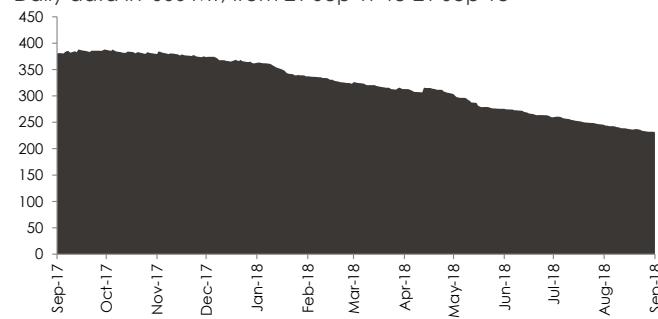
Daily data, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Nickel Inventory

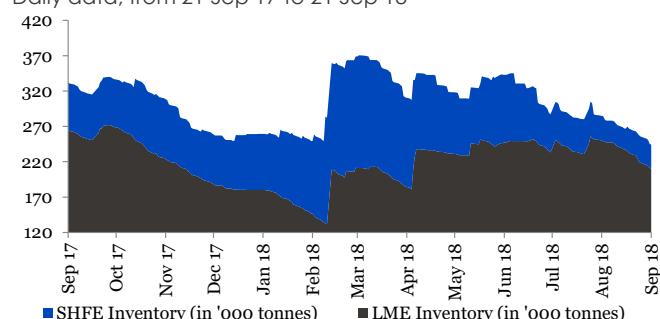
Daily data in '000 MT, from 21 Sep 17 to 21 Sep 18



Source: LME, Bloomberg, WisdomTree

### Zinc Inventory

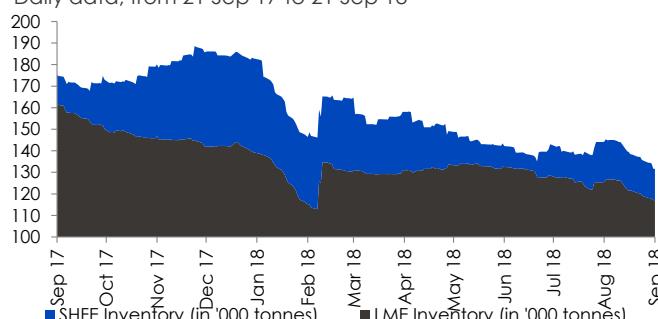
Daily data, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Lead Inventory

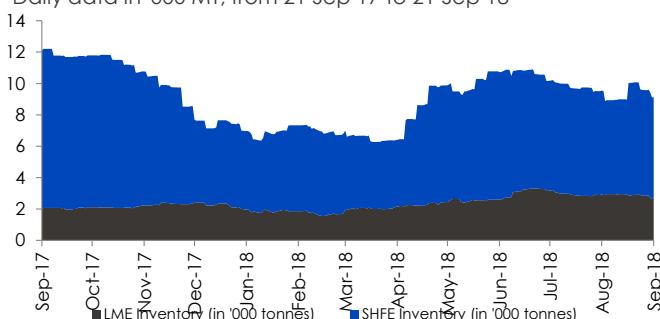
Daily data, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Tin Inventory

Daily data in '000 MT, from 21 Sep 17 to 21 Sep 18

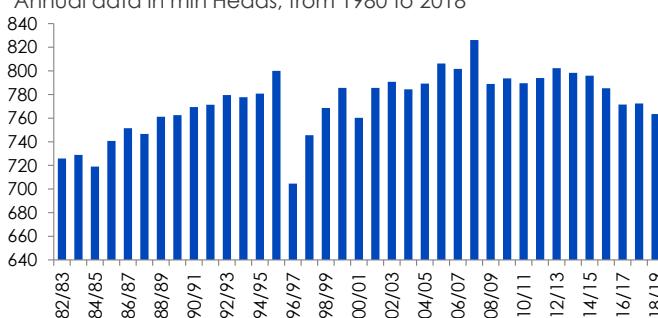


Source: LME, Bloomberg, WisdomTree

## Livestock

### Lean Hogs Inventory

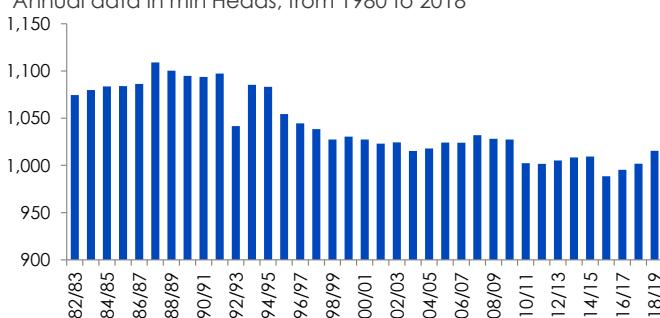
Annual data in mln Heads, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree

### Live Cattle Inventory

Annual data in mln Heads, from 1980 to 2018



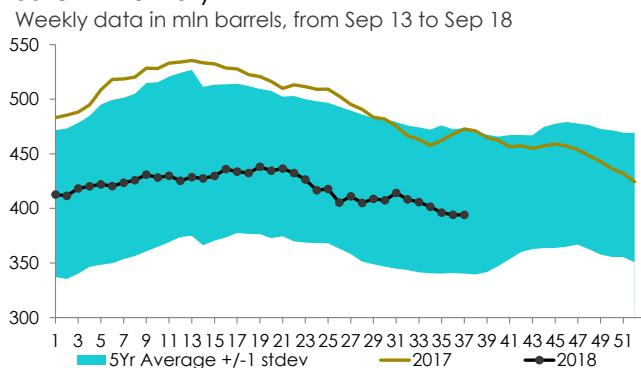
Source: USDA, Bloomberg, WisdomTree

Note: Ending stocks, inventories and stock to use data from the USDA are annual with monthly update of 2017/2018 estimates.

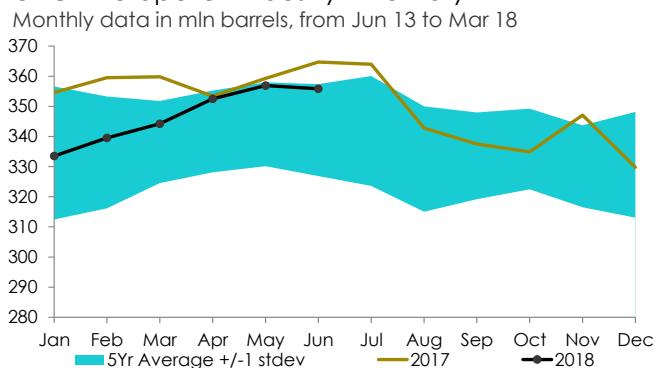
Historical performance is not an indication of future performance and any investments may go down in value.

## Energy

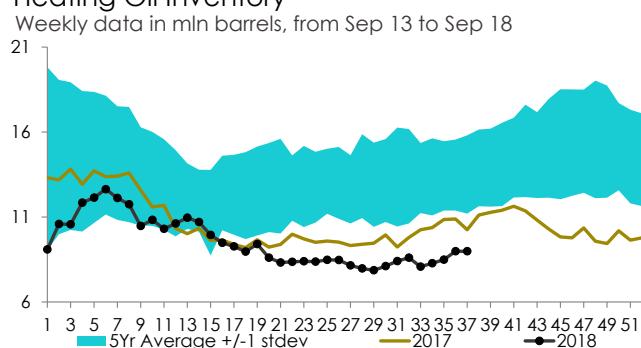
### US Oil Inventory



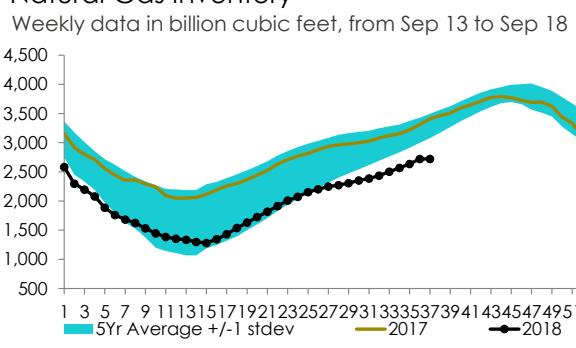
### OECD Europe Oil Industry Inventory



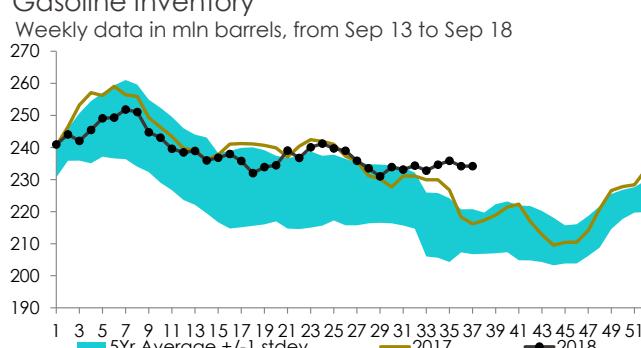
### Heating Oil Inventory



### Natural Gas Inventory



### Gasoline Inventory

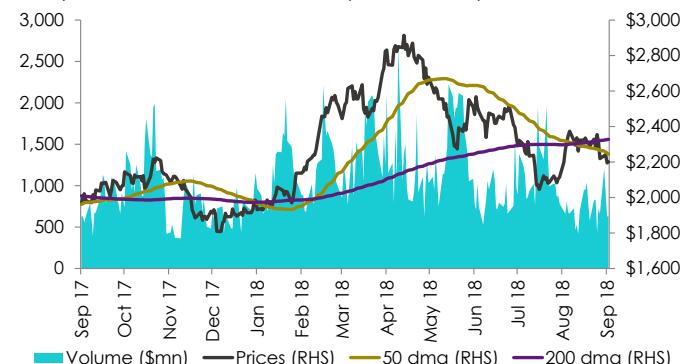


# Commodities Front Month Futures and Trading Volumes

## Agriculture

### Cocoa Front Month Futures Price

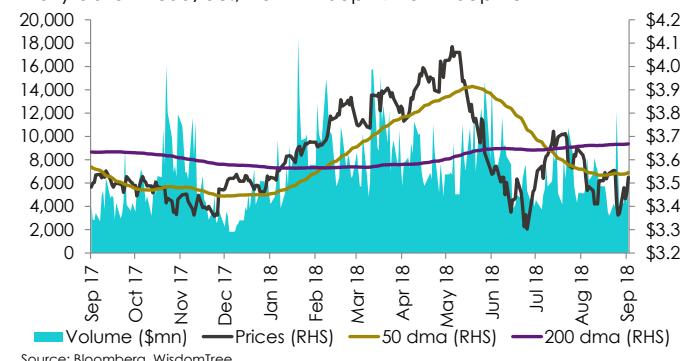
Daily data in USD/MT, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Corn Front Month Futures Price

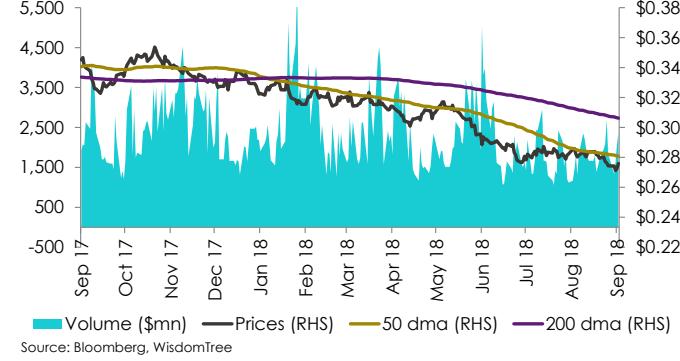
Daily data in USd/bu., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Soybean Oil Front Month Futures Price

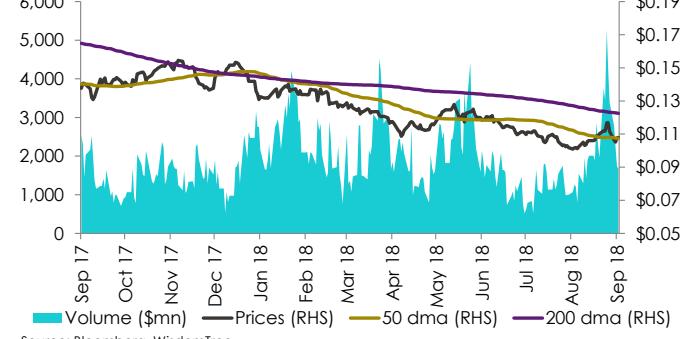
Daily data in USd/lb., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Sugar Front Month Futures Price

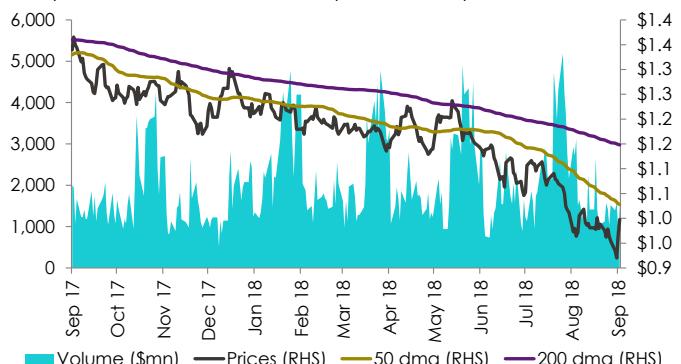
Daily data in USd/lb., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Coffee Front Month Futures Price

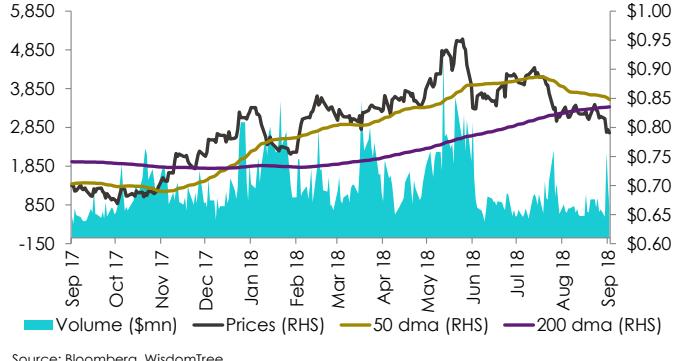
Daily data in USd/lb., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Cotton Front Month Futures Price

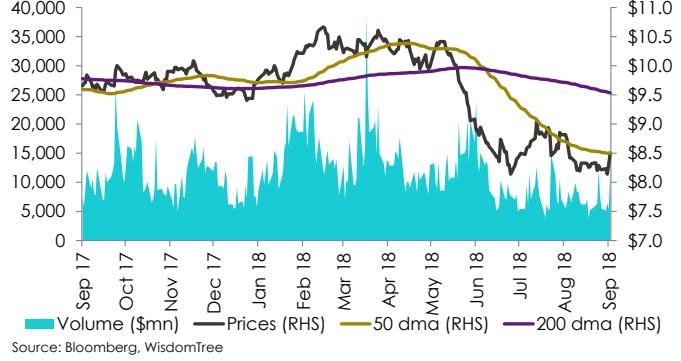
Daily data in USd/lb., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Soybeans Front Month Futures Price

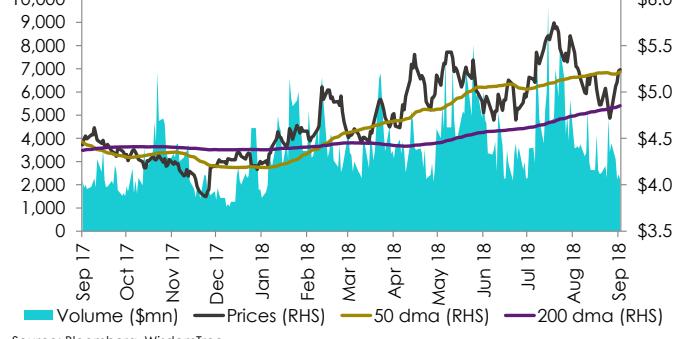
Daily data in USd/bu., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Wheat Front Month Futures Price

Daily data in USd/bu., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

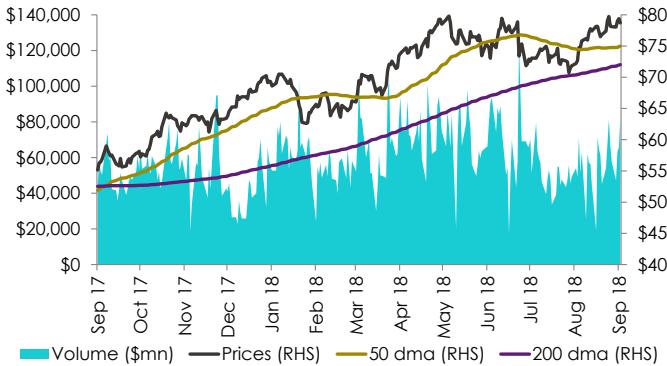
Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated.

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

## Energy

### Brent Oil Front Month Futures Price

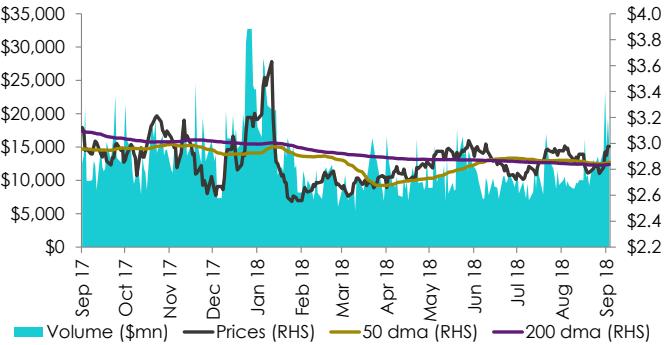
Daily data in USD/bbl., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Natural Gas Front Month Futures Price

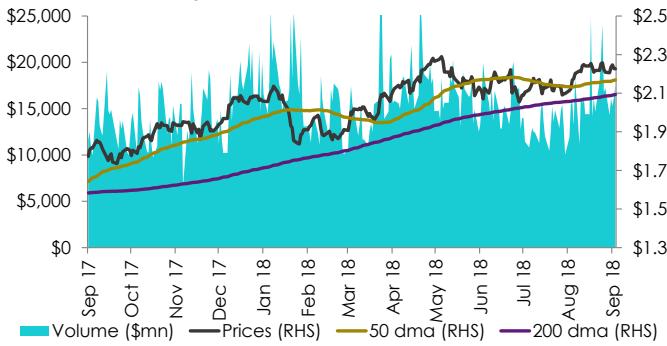
Daily data in USD/MMBtu, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Heating Oil Front Month Futures Price

Daily data in USD/gal., from 21 Sep 17 to 21 Sep 18

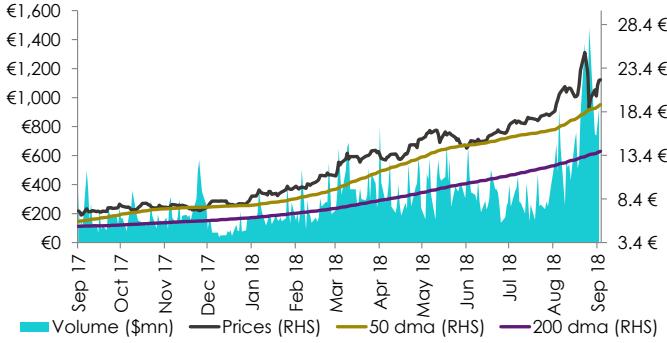


Source: Bloomberg, WisdomTree

## Carbon

### Carbon Front Month Futures Price

Daily data in EUR/MT, from 21 Sep 17 to 21 Sep 18



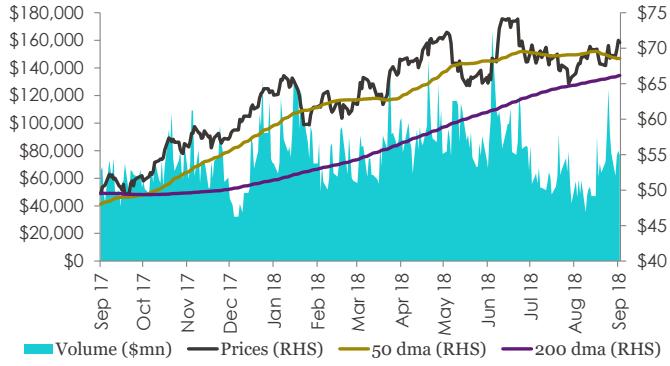
Source: Bloomberg, WisdomTree

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

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### WTI Oil Front Month Futures Price

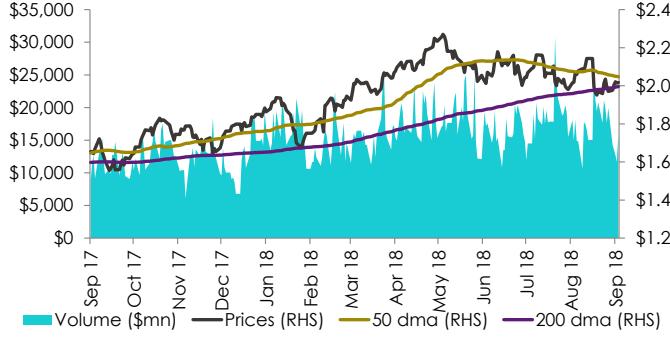
Daily data in USD/bbl., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Gasoline Front Month Futures Price

Daily data in USD/gal., from 21 Sep 17 to 21 Sep 18

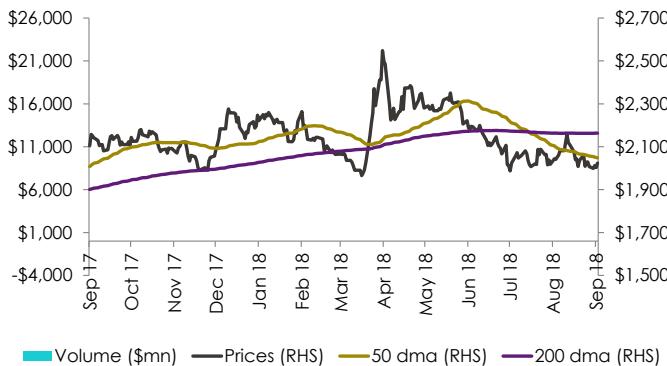


Source: Bloomberg, WisdomTree

## Industrial Metals

### Aluminum Front Month Futures Price

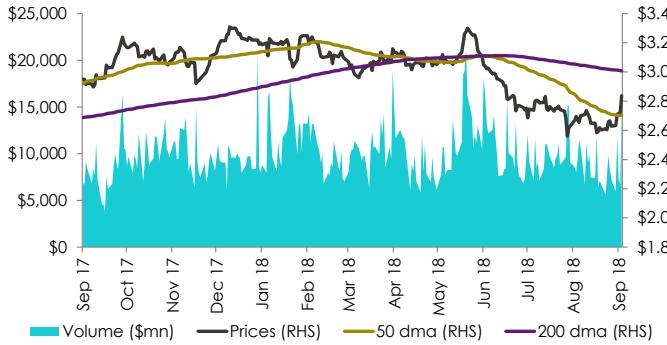
Daily data in USD/MT, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Copper (COMEX) Front Month Futures Price

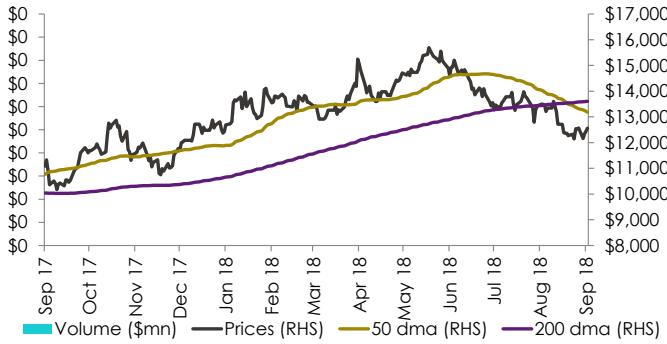
Daily data in USd/lb., from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Nickel Front Month Futures Price

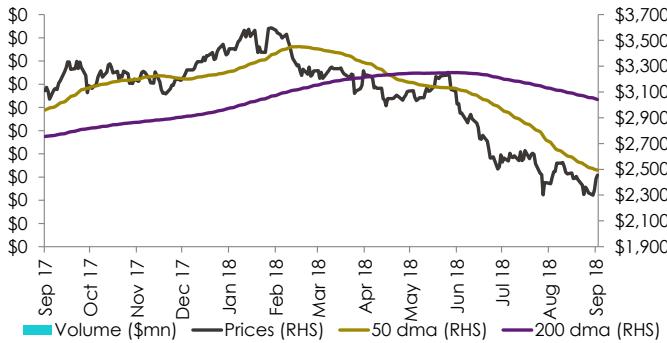
Daily data in USD/MT, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Zinc Front Month Futures Price

Daily data in USD/MT, from 21 Sep 17 to 21 Sep 18



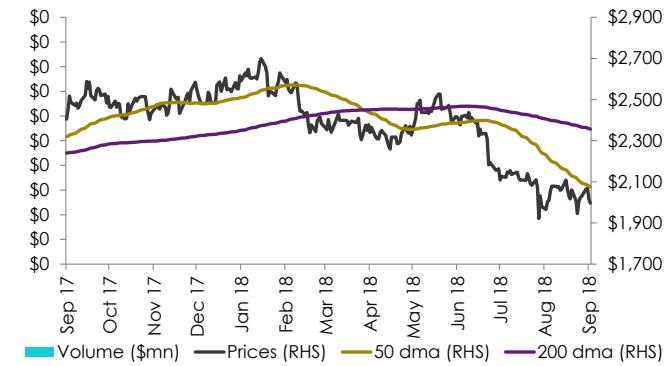
Source: Bloomberg, WisdomTree

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

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### Lead Front Month Futures Price

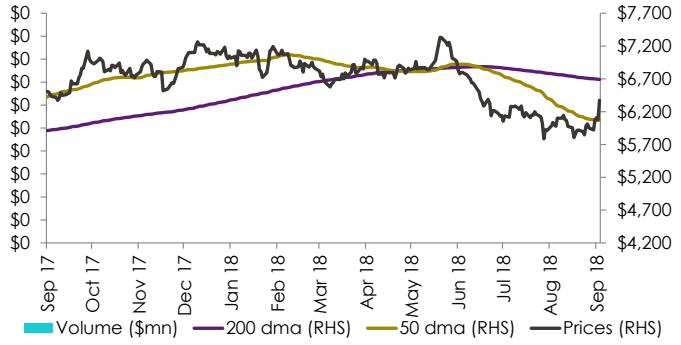
Daily data in USD/MT, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Copper (LME) Front Month Futures Price

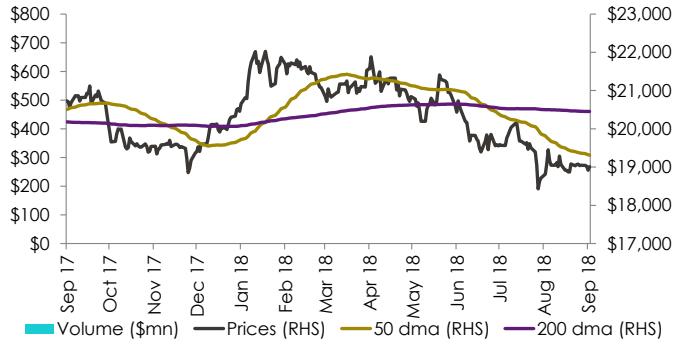
Daily data in USD/MT, from 21 Sep 17 to 21 Sep 18



Source: Bloomberg, WisdomTree

### Tin Front Month Futures Price

Daily data in USD/MT, from 21 Sep 17 to 21 Sep 18

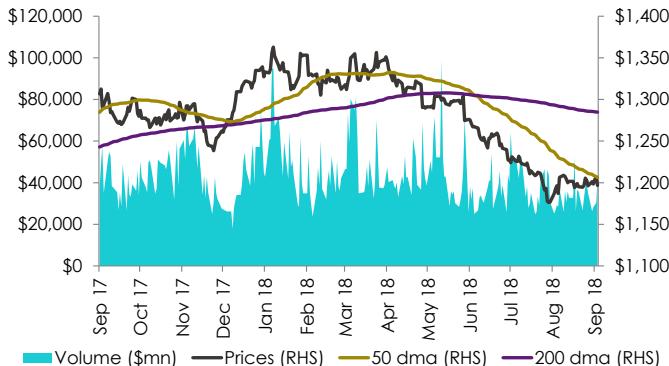


Source: Bloomberg, WisdomTree

## Precious Metals

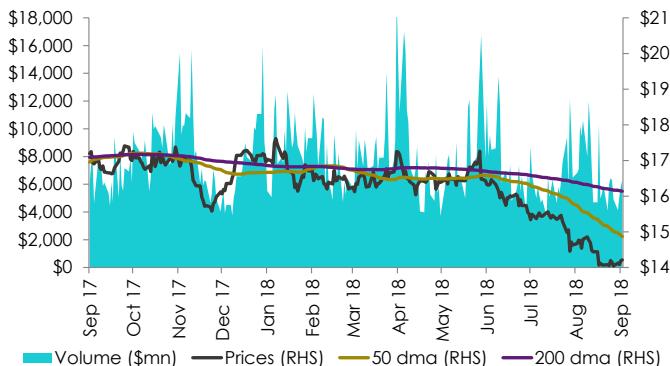
### Gold Front Month Futures Price

Daily data in USD/t oz., from 21 Sep 17 to 21 Sep 18



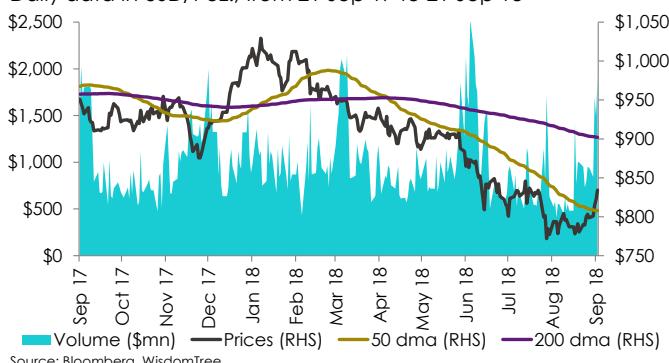
### Silver Front Month Futures Price

Daily data in USD/t oz., from 21 Sep 17 to 21 Sep 18



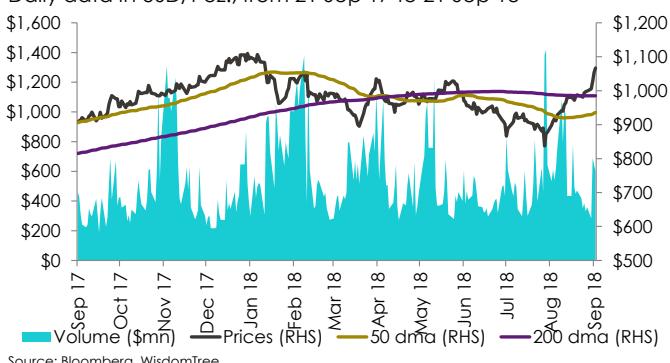
### Platinum Front Month Futures Price

Daily data in USD/t oz., from 21 Sep 17 to 21 Sep 18



### Palladium Front Month Futures Price

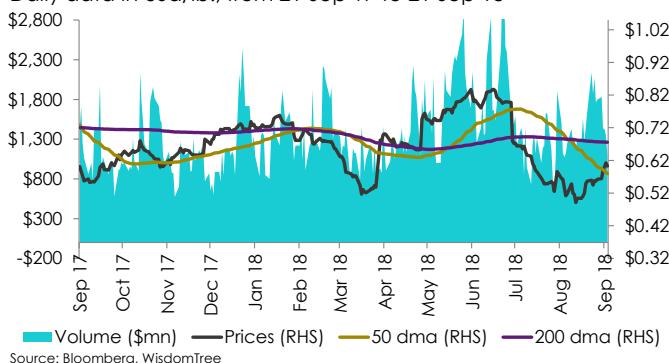
Daily data in USD/t oz., from 21 Sep 17 to 21 Sep 18



## Livestock

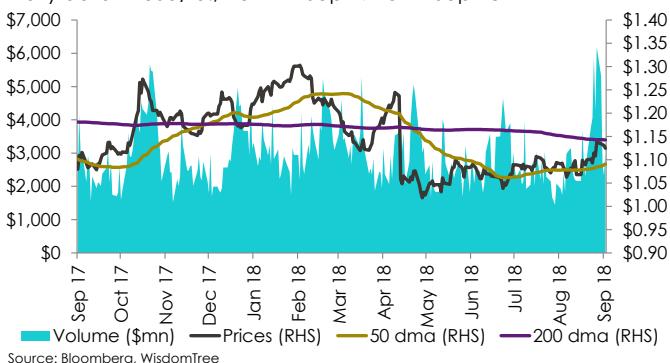
### Lean Hogs Front Month Futures Price

Daily data in USD/lb., from 21 Sep 17 to 21 Sep 18



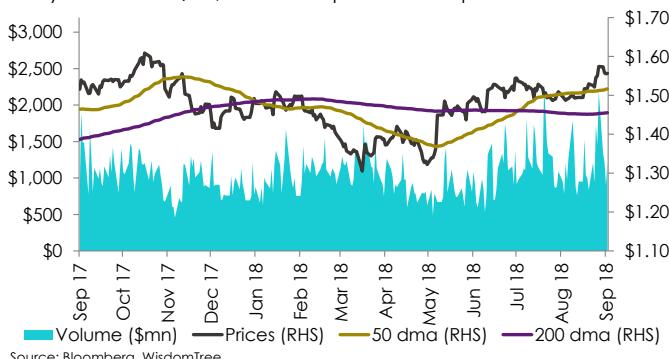
### Live Cattle Front Month Futures Price

Daily data in USD/lb., from 21 Sep 17 to 21 Sep 18



### Feeder Cattle Front Month Futures Price

Daily data in USD/lb., from 21 Sep 17 to 21 Sep 18



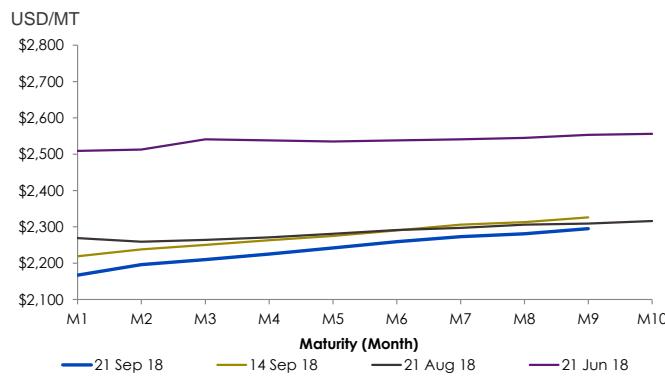
Note: all commodity futures trading volume and price data is denominated in USD unless otherwise indicated.

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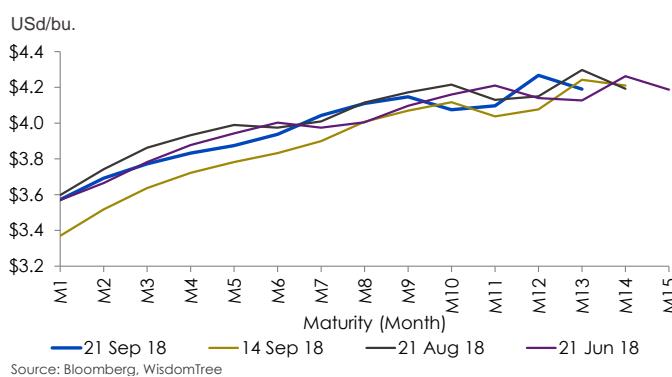
# Futures Curves

## Agriculture

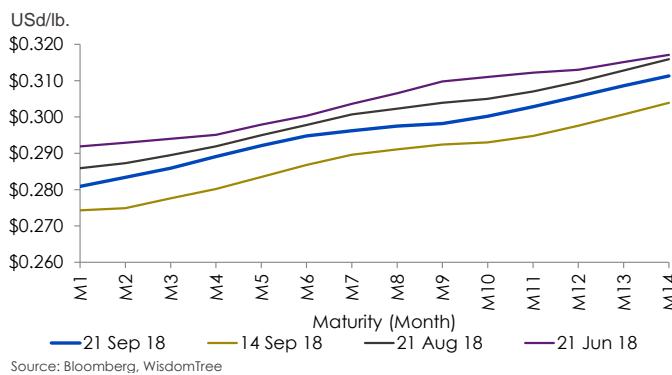
### Cocoa Futures



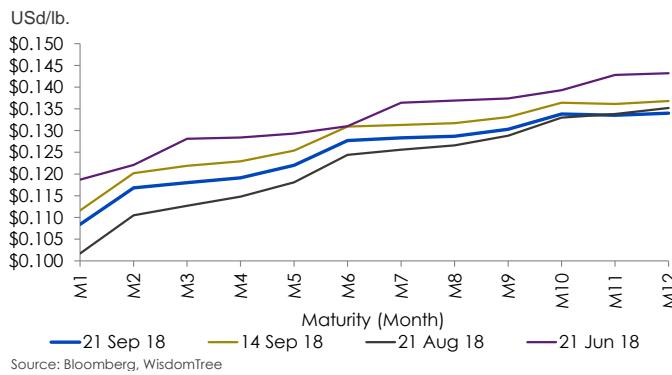
### Corn Futures



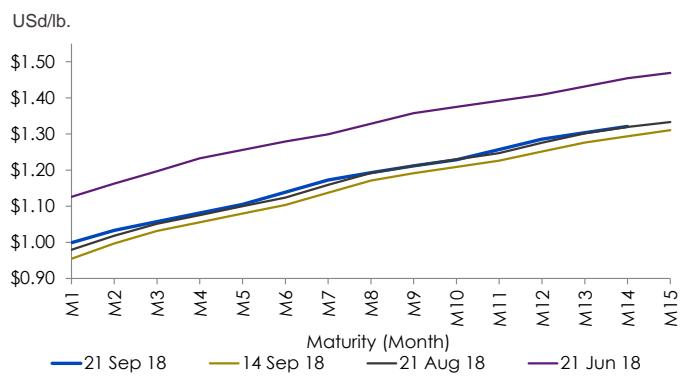
### Soybean Oil Futures



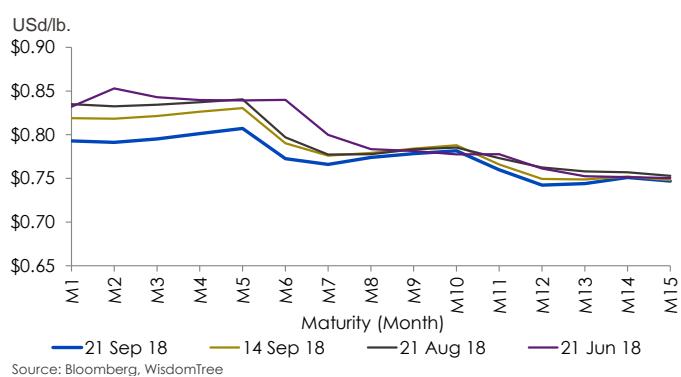
### Sugar Futures



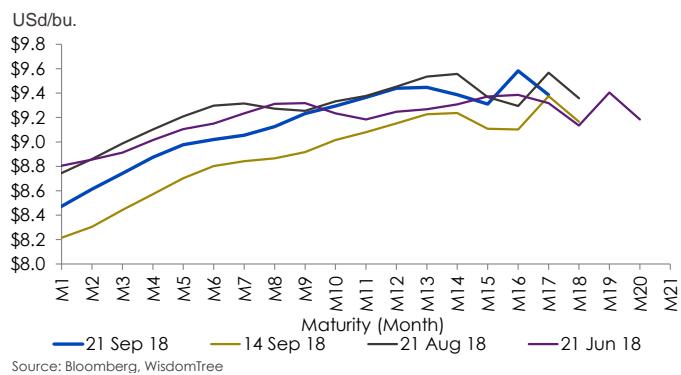
### Coffee Futures



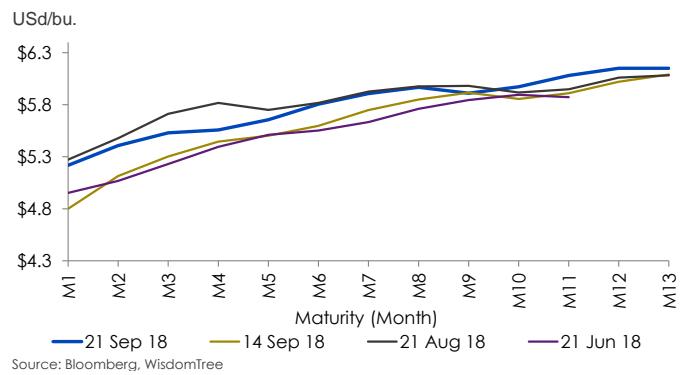
### Cotton Futures



### Soybeans Futures



### Wheat Futures

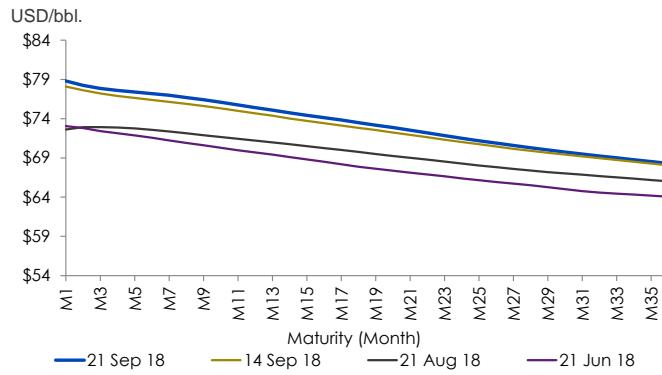


Note: all commodity futures price data is denominated in USD unless otherwise indicated.

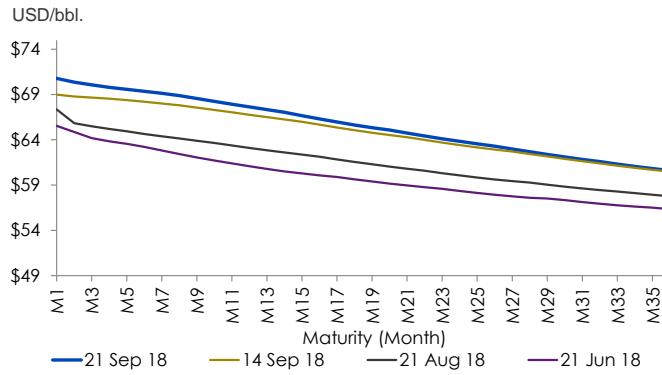
**Historical performance is not an indication of future performance and any investments may go down in value.**

## Energy

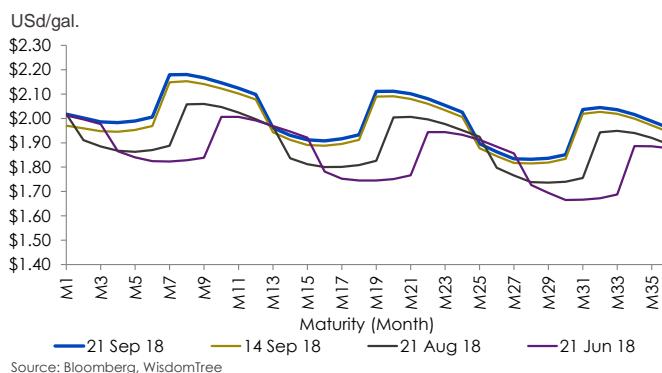
### Brent Oil Futures



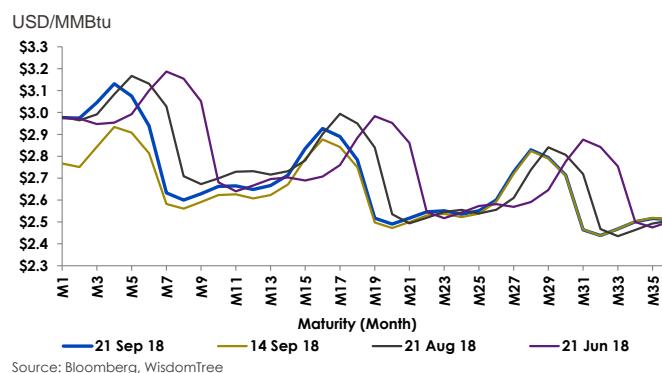
### WTI Oil Futures



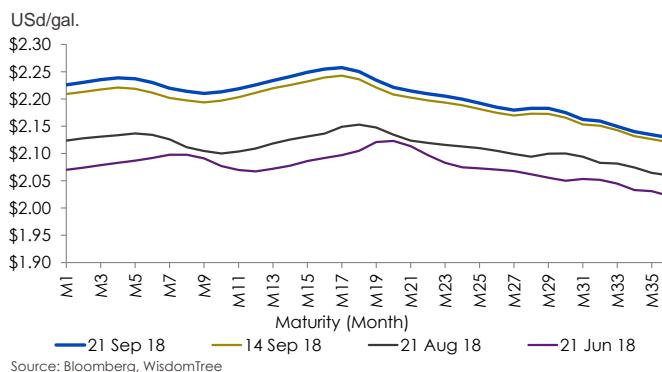
### Gasoline Futures



### Natural Gas Futures

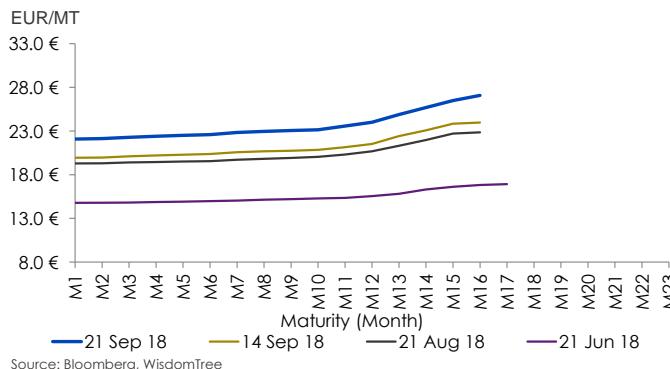


### Heating Oil Futures



## Carbon

### Carbon Futures

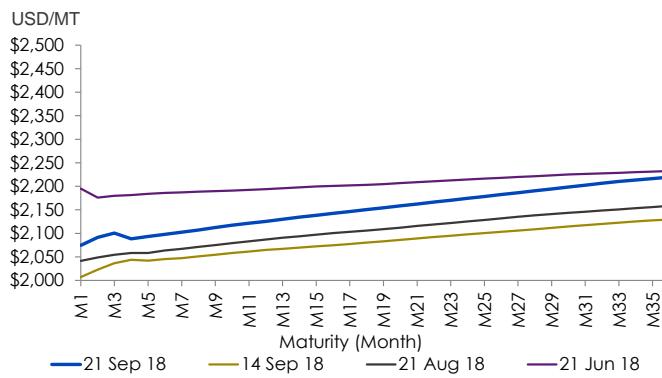


Note: all commodity futures price data is denominated in USD unless otherwise indicated.

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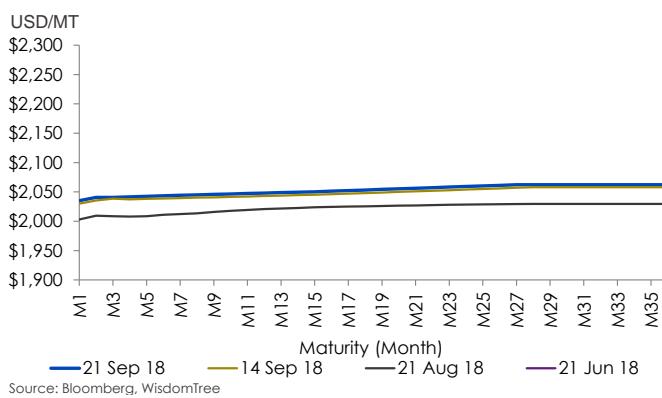
## Industrial Metals

### Aluminum Futures



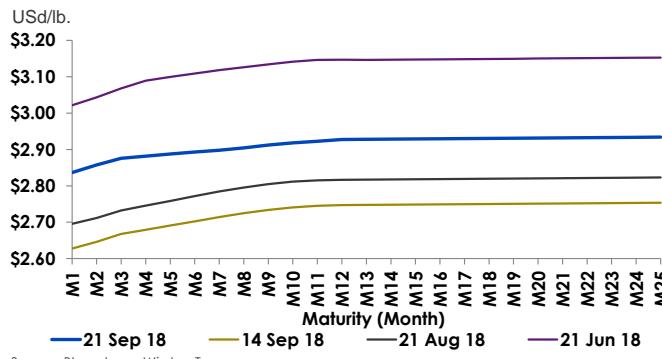
Source: Bloomberg, WisdomTree

### Lead Futures



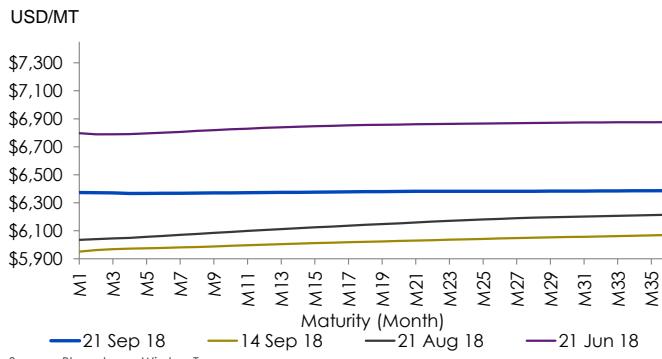
Source: Bloomberg, WisdomTree

### Copper (COMEX) Futures



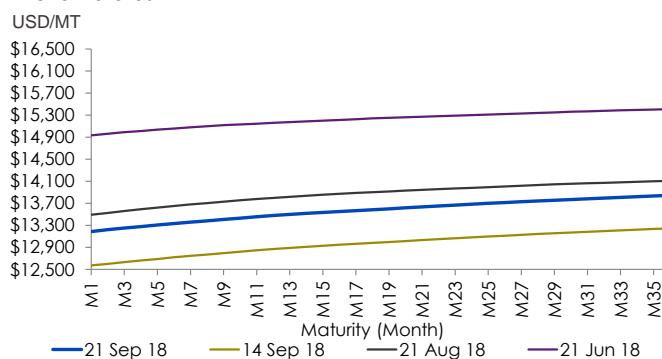
Source: Bloomberg, WisdomTree

### Copper (LME) Futures



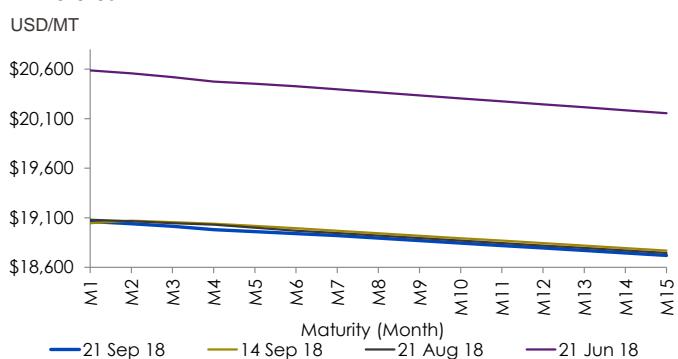
Source: Bloomberg, WisdomTree

### Nickel Futures



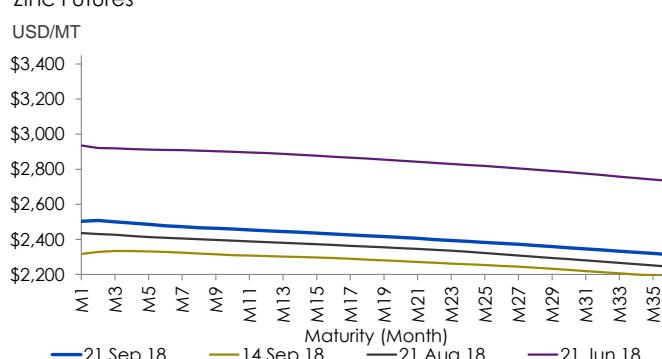
Source: Bloomberg, WisdomTree

### Tin Futures



Source: Bloomberg, WisdomTree

### Zinc Futures



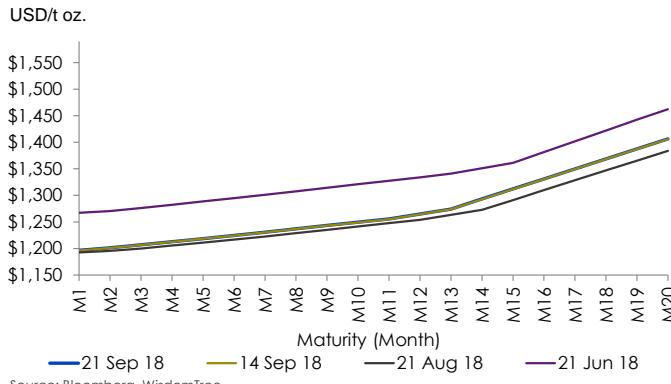
Source: Bloomberg, WisdomTree

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

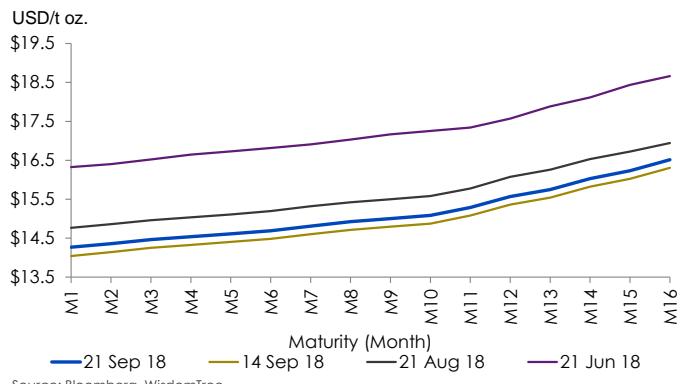
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## Precious Metals

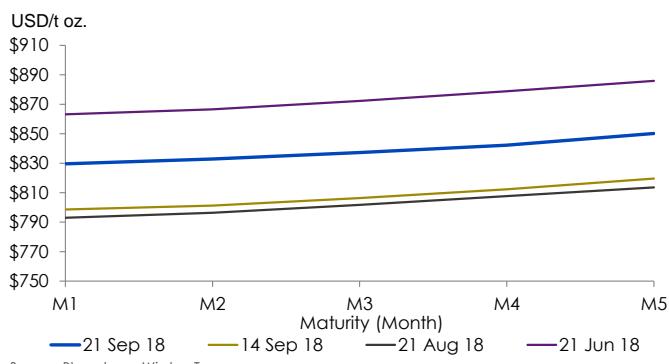
### Gold Futures



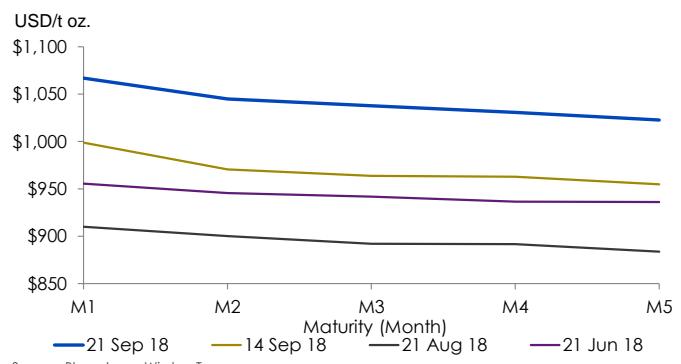
### Silver Futures



### Platinum Futures

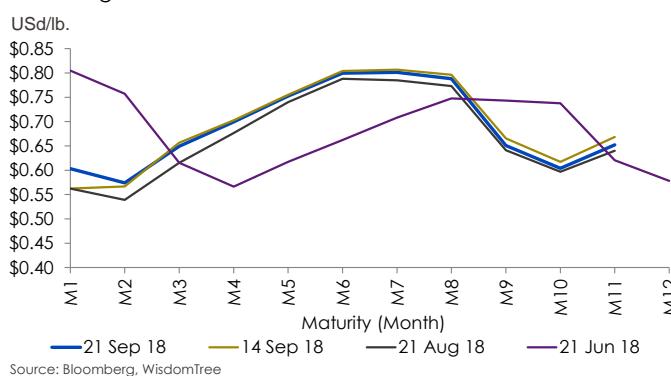


### Palladium Futures

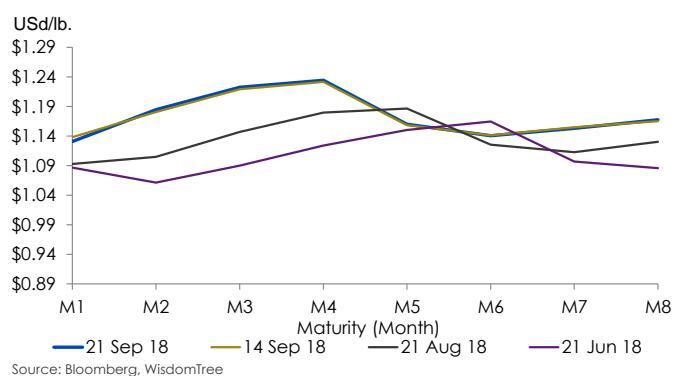


## Livestock

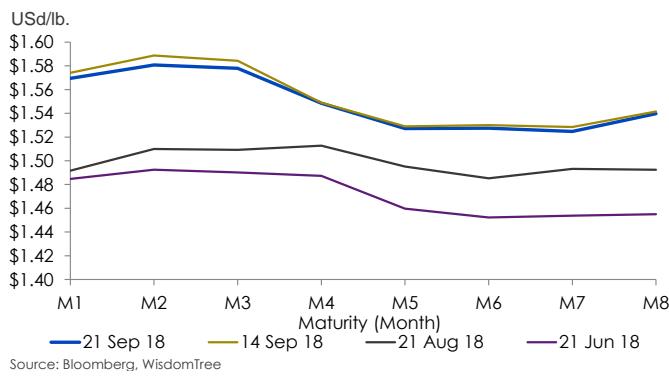
### Lean Hogs Futures



### Live Cattle Futures



### Feeder Cattle Futures



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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

25-Jul-18	Christopher Gannatti	<a href="#">What makes WisdomTree different? A Eurozone case study</a>
30-Jul-18	Aneeka Gupta	<a href="#">Global ETP Flows: Fishing for signals in unchartered territory</a>
31-Jul-18	Christopher Gannatti	<a href="#">Why allocating to cash may not be the best strategy</a>
02-Aug-18	Jesper Koll	<a href="#">Bank of Japan officially commits to de-couple from the Fed</a>
06-Aug-18	Christopher Gannatti	<a href="#">US Equities throw down the challenge in 2H18: could multifactor be the answer?</a>
07-Aug-18	Christopher Gannatti	<a href="#">Contrarian alert: European exporters as trade war rhetoric ramps up</a>
10-Aug-18	Aneeka Gupta	<a href="#">Is Turkey ripe for change after the "perfect storm"?</a>
13-Aug-18	Jack Jiang	<a href="#">Chinese government steps up the effort to support growth</a>
15-Aug-18	Nitesh Shah	<a href="#">Gold's initial lacklustre response to Turkey likely to be a red herring</a>
20-Aug-18	Nitesh Shah	<a href="#">Broad commodities: Does an optimised strategy still make sense?</a>
22-Aug-18	Nitesh Shah	<a href="#">Limited oil and gas investment could be shoring up tightness in the future</a>
29-Aug-18	Aneeka Gupta	<a href="#">Platinum Group Metals: automotive market continues to shape demand</a>
03-Sep-18	Christopher Gannatti	<a href="#">WisdomTree US Multifactor Index: Taking on the competition</a>

### WisdomTree - Past Issues of Commodity Monthly Monitor

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

The research notes are for qualified investors only.

### Key Reports

Current	Next release		
12-Sep-18	11-Oct-18	USDA	<a href="#">World Agricultural Supply and Demand Estimates</a>
11-Sep-18	10-Oct-18	EIA	<a href="#">Short-Term Energy Outlook</a>
12-Sep-18	11-Oct-18	OPEC	<a href="#">OPEC Oil Market Report</a>
13-Sep-18	12-Oct-18	IEA	<a href="#">IEA Oil Market Report</a>

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**F** +44 20 7448 4366

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