Commodity Monthly Monitor

Dovish Fed counters a delayed trade deal

13 Feb - 18 Mar 2019

Summary

Commodities as a group rose by 1.3% in the past month, led by Industrial Metals (4.2%) and Energy (3.8%). These two cyclically-driven sectors have benefited most from the indications that the US and China are nearing a trade pact, which will alleviate concerns about demand dropping off. That the actual deal between the countries is likely to be delayed by several months should not be a concern unless the risk of a deal falling apart rises. The fundamentals for the two subsectors remain good.

Within the Energy sector, oil is likely to continue to benefit from tightening supply from the Organization of Petroleum Exporting Countries (OPEC). The cartel has cancelled its April 2019 policy meeting, thereby extending current policy of cutting production to June 2019 at least. Delaying the meeting will also give the group a chance to assess the impacts of sanctions on Iran and Venezuela (and any changes in waivers for consumers of Iranian ail).

The Federal Open Market Committee (FOMC) meeting this week, confirmed that the US Federal Reserve Bank (Fed) has reached the end of its rate tightening cycle for 2019. By striking a significantly more dovish tone, the US Dollar is likely to remain favourable for commodity performance. The People's Bank of China has been easing policy, while the National People's Congress has opened the doors for fiscal expansion to meet the 6-6.5% economic growth target for this year. So, despite Global Manufacturing Purchasing Manager Indices falling to a 32-month low, a less tight policy setting could help demand for cyclical commodities including industrial metals and energy.

At the same, a more dovish Fed is likely to be gold-price supportive as the upward pressure on Treasury yields and the US Dollar abates. The recent pull-back in precious metals therefore could reverse as gold and silver prices rise. With Brexit uncertainty, trade uncertainty and periodic equity market corrections both gold and silver are likely to benefit from their traditional safe-haven traits.

- Supply dynamics in the oil market could potentially widen the Brent-WTI spread. As OPEC continues with its supply cuts and sanctions are imposed by the US on Iran and Venezuela, Brent prices may find further support in the near term. Meanwhile, US production continues to rise, driving a wedge between WTI and Brent prices.
- Base metals continued to benefit from a relief rally, as the US and China engage in constructive trade discussions. If a deal is delayed by several months, it could take some of the momentum away. However, with supply deficits and tight inventories on the London Metal Exchange (LME), we expect prices to rise once again when a deal is struck.
- A more dovish Fed is expected to offer further support to the gold price this year. Speculative
 positioning in gold has increased despite the rally in equity markets as investors remain aware of
 financial and geopolitical risks.
- Investors sharply turned bearish on agricultural commodities as their outlook hangs on the fruition of a trade deal. Price performance across agricultural commodities was weak except for cotton and livestock. Short positioning was built up considerably over the prior month. The supply side for most agricultural commodities, except for sugar, remains loose. So, the fruition of a US-China trade deal could serve as a turning point for further price appreciation as it bolsters the demand side.

	Current	Returns	Price vs 200	Inventories ³	Positioning ⁴	Roll Yield ⁵	18 Mar	13 Fe
	Price ²	(-1 Mth)	days MA	(- 3 Mths)	(- 1 Mth)	KOII HEIG	Score	Score
WTI Oil	59	6.2%	-4.3%	1.7%	13%	-0.5%	(1)	(4)
Brent Oil	67	1.4%	-3.4%	-0.4%	86%	0.3%	3	0
Natural Gas	2.8	8.3%	-10.2%	-57.2%	-36%	-0.2%	(1)	(2)
Gasoline	1.9	19.7%	6.0%	6.9%	-1%	0.9%	0	(2)
Heating Oil	2.0	-2.6%	-4.9%	4.1%	13%	-0.2%	(2)	(2)
Carbon	21.7	9.1%	8.2%	-	-	-0.2%	0	0
Wheat	4.6	-9.4%	-10.0%	0.9%	-1540%	-1.5%	(4)	0
Corn	3.7	-0.9%	1.9%	-0.1%	-557%	-2.4%	(1)	0
Soybeans	9	-0.2%	3.2%	-7.1%	-1237%	-1.5%	(1)	2
Sugar	0.1	-2.3%	6.3%	-	-569%	-1.3%	(2)	1
Cotton	0.8	7.2%	-4.7%	4.0%	-871%	-1.5%	(3)	(4)
Coffee	0.9	-4.4%	-10.9%	-	-43%	-3.3%	(4)	(4)
Soybean Oil	0.3	-1.7%	2.7%	-0.5%	-25%	-1.1%	(1)	0
Сосоа	2,196	-4.8%	-2.5%	-	-421%	-0.7%	(4)	0
Aluminium	1,875	2.8%	-5.5%	0.3%	-5%	-0.6%	(3)	(4)
Copper (COMEX)	2.9	3.8%	4.6%	-58.8%	1287%	-0.2%	2	(1)
Copper (LME)	6,447	1.8%	3.8%	52.8%	21%	0.5%	2	1
Zinc	2,829	6.5%	7.6%	19.6%	25%	0.3%	2	1
Nickel	12,845	3.8%	2.5%	-8.8%	115%	-0.3%	2	1
Lead	2,046	1.5%	-1.0%	-11.5%	9%	-0.6%	1	1
Tin	21,118	-0.3%	6.7%	-15.2%	19%	0.0%	3	4
Gold	1,303	-1.1%	4.5%	-	-22%	-	(2)	4
Silver	15	-3.1%	1.0%	-	-52%	-	(2)	4
Platinum	837	3.7%	1.7%	-	1649%	-	4	(4)
Palladium	1,557	10.6%	37.7%	-	-6%	-	0	0
Live Cattle	1.3	1.3%	10.4%	-	12%	4.7%	4	1
Lean Hogs	0.7	19.3%	15.3%	-	146%	-10.9%	1	(4)
Feeder Cattle	1.4	-0.7%	-4.9%	-	224%	-3.2%	(1)	(1)



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Performance ²	- 1 Mth	- 6 Mth	- 12 Mth
All Commodities	1.3%	0.1%	-4.2%
Energy	3.8%	-8.8%	4.0%
Industrial Metals	4.2%	5.6%	-6.6%
Precious Metals	-1.8%	8.2%	-2.7%
Agriculture	-2.8%	1.3%	-14.9%
MSCI World	2.0%	-1.4%	-0.7%
US Aggregate Bond	0.6%	3.6%	3.8%
Bloomberg TR Indexes for basket WisdomTree, Bloomberg	returns, data to N	Nonday 18 Marc	h 2019. Source:

CFTC Net Speculative Positioning (in '000 contracts)



"-" 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 March 18, 2019. 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 CFIC futures and LME COTR net positioning as at March 12, 2019 and March 15, 2019 respectively, % change from previous month. ³ Calculated as % difference between front month and second month futures prices on report date.

Sector Overview



Agriculture

- Cotton rose 7.2% last month gaining a tailwind from a positive export outlook from the National Cotton Council (NCC) based on the strong likelihood of a trade deal between US and China. NCC is also forecasting a 2019/20 crop volume in the order of 22.7mn bales, 23% higher versus the last season and the biggest crop since 2005. Meanwhile, the Cotton Association of India reduced its estimate for Indian production in 2018/19 in response to insufficient soil moisture levels and expects a 10% decline versus the prior season. The lower than expected US acreage estimate of 14.3mn for cotton also lent buoyancy to cotton.
- Wheat was the worst performer across agricultural commodities, sliding 9.4%. A confluence of factors –
 lacklustre US export data, fierce competition for physical transactions and technical selling aggravated its price drop. The Russian Agricultural Ministry also revised its wheat crop forecast higher
 by 12% for the 2019/20 wheat crop. In its latest monthly outlook, US Department of Agriculture (USDA),
 lowered its estimates for US wheat exports in 2018/19 by around 1% owing to stronger competition.
 USDA expects global ending stocks to be only 3% lower from last year's record.
- Cocoa declined 4.8%, weighed down by expectations of a supply surplus of 39,000 tons in the 2018/19
 crop year according to the International Cocoa Organisation (ICCO). Despite a lower crop in Ghana,
 global cocoa production is set to grow by 3.2% in 2018/19 owing to a larger crop in Ivory Coast, the
 world's biggest cocoa producer. While demand is also expected to grow by 2.6% it is at a much slower
 pace than supply.

Industrial Metals

- Industrial Metals were the best performing commodity subsector in the past month. The complex of industrial metals continued the relief rally that started in January, as it looks like the US and China are making strides towards a trade deal. The industrial metals complex was weighed down excessively last year as the market feared demand destruction from the trade friction between the two nations. The rally has been on pause in recent weeks, despite prices up for the month. It appears that a trade deal will not be signed this month as was originally hoped and we may have to wait until June if press reports from China are to be believed. Metal prices could hover around current levels or decline until this uncertainty is lifted. However, the fundamentals for most base metals remain very strong and we expect prices to continue to rise once a deal is struck. Most metals are in a supply deficit, which is unlikely to turn around any time soon.
- London Metal Exchange inventory looks very tight for zinc, copper and nickel. That indicates the supply
 deficit in these metals is being met by drawing down on inventories. Shanghai Futures Exchange
 inventory however, has been rising. That may be a result of seasonally low demand, which may turn
 around. Otherwise, there is a strong incentive for Shanghai to export metals to London. In the final
 week of the reporting period LME copper inventory rose, alleviating some of the tightness. LME zinc
 inventory remains tight and the backwardation of the entire zinc futures curve is a reflection of this.
- Given the monetary and fiscal easing in China, we are starting to see credit impulse turning positive in
 China. Historically, stimulus in China has been directed at infrastructure projects. If we see history repeat itself, we could experience strong growth in commodity-intensive construction, adding another tailwind to the industrial metal complex this year.

Energy

- Brent oil had a slightly positive month as it added to its gains since the Organization of the Petroleum Exporting Countries (OPEC) announced supply cuts in December 2018. The group and its allies (collectively referred to as OPEC+) also cancelled their April meeting virtually extending supply cuts until the next planned meeting in June helping maintain the bullish sentiment and keeping the Brent curve in backwardation. Further support is expected to come from US sanctions on exports from Iran and Venezuela keeping supply tight in the next rem.
- WTI oil, despite its strong performance in the last month, remains in contango going into 2020 as US oil
 supply continues to grow gradually. US export capacity is however hitting its limits capping the price
 growth potential for WTI and keeping the Brent WTI Spread at an elevated level.
- A combination of cold temperatures in the US (which has driven up demand) and supply constraints have resulted in a sharp decline in natural gas inventory levels. This has supported the price of natural gas in the last month.
- Gasoline exhibited strong returns in the month highlighting the commodity's seasonality as winter blend inventories are wound down causing the front end of the curve to become backwardated- broadly in line with seasonal trends.

Precious Metals

- Gold prices have rallied since October 2018 with speculative positioning- a measure of sentiment towards the metal, recovering from a net negative position then to around 100,000 contracts net long now (around the long-term average). Financial market volatility as well as geopolitical risks have helped the rally as investors have turned to gold which is traditionally seen as a safe haven asset.
- The recent rally in equity markets and increasing expectations of a trade agreement between the US
 and China have taken some shine away from gold in recent weeks. Nevertheless, market participants remain aware that financial market volatility can return very quickly especially given macroeconomic and geopolitical risks still remain. US-China trade negotiations have yet to be resolved and Brexit uncertainty remains high.
- Further support to gold is expected from the US Fed which has become much more dovish since December 2018. While the Federal Reserve's Open Market Committee was expecting to increase rates twice in 2019 when they met in December 2018, the expectation now is for no rate hikes this year. This has taken off some of the upward pressure on the US dollar and Treasury yields and is positive for gold. Based on a proprietary WisdomTree forecast model, we expect gold to rise to around US\$1410/oz by the end of the year.
- Palladium continued its bull rally with strong performance in the last month. A combination of strong
 demand from the automobile industry and limited supply continues to support palladium prices. We
 expect these market dynamics to remain supportive of prices until car manufacturers find a way to
 substitute some of palladium's use with a different metal.

Agriculture - March Returns*



Industrial Metals - March Returns*



Energy - March Returns*



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Source: Bloomberg

Precious Metals - March Returns*



Source: Bloomberg

Technical Overview (as of Mar 18, 2019)



Positionina

- Speculative net positioning in COMEX copper has swung from net-short just over month ago to net-long, as investor bullishness in LME copper appears to be infectious. Net positioning in COMEX copper is now close to 1 standard deviation above the 5-year average. Speculative Positioning in most base metals (with the exception of aluminium) has increased in length.
- Positioning across some key agricultural commodities has turned bearish evident from the build-up of short positioning for corn, soybeans, wheat, sugar, cocoa and coffee by 78%, 56%, 39%, 38%, 30% and 27% respectively over the period.
- Brent has recovered from a net negative position in January but remains well below the levels in 2017 and 2018. WTI's net positioning also started to increase last month following months of sharp decline.
- Platinum's net speculative positioning recovered from slightly negative in February to positive in March, somewhat stemming the bearish sentiment on the commodity.

Inventories

- Base metal inventories trends are bifurcated across the exchanges. On the London Metals Exchange, zinc, copper, tin and nickel look very tight (although in the last week of reporting, LME copper inventories rose). On the Shanghai Futures Exchange inventories of these metals are looking more plentiful. If demand for these metals rise in China (either for seasonal or cyclical reasons, bearing in mind the governmentled stimulus), then these metals could become tight globally. Otherwise we expect inventory to shift from Shanghai to London to alleviate shortages.
- Inventories have been flat to declining in recent weeks within the energy sector. Most notably, natural gas inventories have witnessed the sharpest decline, owing to supply constraints, with inventories close to 1 standard deviation below its 5 year average.
- Cotton inventories rose 4% over the prior three months, clearly indicating trade friction between US and China is having an impact. In its latest monthly outlook USDA's 2018/19 world cotton estimates show higher production and ending stocks and slightly lower trade.

Curve Dynamics

- LME zinc futures are in backwardation⁵ through the full length of the curve reflecting tightness in the metal. LME copper is also in front-month backwardation, providing a positive 0.5% roll yield, indicating near-term tightness. However, the rest of the LME copper curve is extremely flat, which may indicate that metal availability could be a short-term concern.
- Brent and WTI Curves continue to look different with Brent becoming backwardated from being contangoed⁶ in December on account of OPEC supply cuts. WII, on the other hand, remains contangoed up to 2020 which is when markets expect US export capacity to start improving and to support WTI prices.
- Winter blend gasoline inventories are being wound down causing the front end of the curve to become backwardated- broadly in line with seasonal trends.
- Among the four precious metals, palladium is the only one in backwardation highlighting the tight supply of the commodity relative to its demand.
- All agricultural commodities, except for live cattle are in contango. Negative roll yields run as high as 10.9% for lean hogs and 3.3% for coffee.

Technicals

- Palladium leads the precious metal pack with its current price around 38% above its 200-Day Moving Average (dma) signifying the strong rally in the metal in recent months.
- With the exception of aluminium and lead, all base metals are trading above their 50 and 200- dma's. Zinc is trading 7.6% above its 200-dma as declining metal availability on the LME has driven a 6.5% gain in prices in the past month.
- Coffee prices are trading 10.9% below their 200-dma and we expect the overhang of high supply from Brazil coupled with the weaker Brazilian real to weigh on future prices.
- Natural gas was trading around 19% below its 200-dma last month. Following the price rally over the last month, it is now trading at around 10% below its 200-dma, which is still however among the commodities at the bottom of the chart on the right.

- CFIC futures net positioning as at report date, percent change from previous month. Percent change in inventory based on 3 month change [in %]. Roll yields calculated as percent change between from month futures price and next month futures price on Mar 18, 2019. Percent difference between the front month futures price and its 200 day moving average on Mar 18, 2019.
- s Backwardation: The market state whereby the price at which an earlier expiring futures contract can be sold is higher than the cost of buying a futures contract which expires at a later date
- 6 Contanao: The market state whereby the price at which an earlier expiring futures contract price can be sold is lower than the cost of buying a futures contract which expires at a later date

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



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







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



Summary Tables



PRICES ¹	Current	Unit	1 Month	3 Month	6 Month	1 Year	ROLL YIELDS ²	Unit	Exchange	18-Mar	1 Week	1 Month	3 Mont
Energy							Energy						
WTI Oil	59	USD/bbl.	6.2%	27.6%	-15.5%	-5.3%	WTI Oil	USD/bbl.	NYMEX	-0.5%	-0.6%	-0.6%	-0.8%
Brent Oil	67	USD/bbl.	1.4%	19.9%	-14.7%	1.9%	Brent Oil	USD/bbl.	ICE	0.3%	0.2%	0.0%	0.1%
Natural Gas	2.8 1.9	USD/MMBtu		-26.0%	-3.1%	5.7% -3.3%	Natural Gas		NYMEX	-0.2% 0.9%	-0.5%	-1.3% -9.9%	2.6%
Gasoline Heating Oil	2.0	USd/gal. USd/gal.	19.7% -2.6%	39.4% 12.2%	-6.1% -12.0%	-3.3% 2.9%	Gasoline Heating Oil	USd/gal. USd/gal.	NYMEX NYMEX	-0.2%	0.3% 0.1%	-9.9%	0.4% 0.4%
Carbon	21.7	EUR/MT	-2.0% 9.1%	-9.9%	7.5%	94.7%	Carbon	EUR/MT	ICE	-0.2%	-0.1%	-0.1%	-0.3%
Agriculture	21.7	LORIAN	7.170	-7.770	7.370	74.770	Agriculture	LORYNNI	ICE	-0.2/0	-0.178	-0.2/0	-0.578
Wheat	4.6	USd/bu.	-9.4%	-14.3%	-10.5%	-2.4%	Wheat	USd/bu.	CBOT	-1.5%	-1.5%	-0.5%	-1.2%
Corn	3.7	USd/bu.	-0.9%	-3.6%	8.2%	-2.9%	Corn	USd/bu.	CBOT	-2.4%	-2.6%	-2.2%	-2.0%
Soybeans	9.1	USd/bu.	-0.2%	-0.2%	11.3%	-13.7%	Soybeans	USd/bu.	CBOT	-1.5%	-1.4%	-1.5%	-1.4%
Sugar	0.1	USd/lb.	-2.3%	4.4%	22.1%	1.5%	Sugar	USd/lb.	NYBOT	-1.3%	-1.7%	0.9%	-0.6%
Cotton	0.8	USd/lb.	7.2%	-3.3%	-4.9%	-9.1%	Cotton	USd/lb.	NYBOT	-1.5%	-1.7%	-2.5%	-1.5%
Coffee	0.9	USd/lb.	-4.4%	-0.7%	1.8%	-19.9%	Coffee	USd/lb.	NYBOT	-3.3%	-3.3%	-3.6%	-5.1%
Soybean Oil	0.3	USd/lb.	-1.7%	3.6%	8.6%	-7.9%	Soybean Oil	USd/lb.	CBOT	-1.1%	-0.8%	-1.1%	-0.9%
Сосоа	2,196	USD/MT	-4.8%	-3.3%	-2.1%	-12.9%	Сосоа	USD/MT	NYBOT	-0.7%	-0.6%	-0.4%	-0.7%
Industrial Metals							Industrial Me	tals					
Aluminum	1,875	USD/MT	2.8%	-1.3%	-6.8%	-9.2%	Aluminum	USD/MT	LME	-0.6%	-0.7%	-0.4%	-0.7%
Copper	2.9	USd/lb.	3.8%	8.7%	7.1%	-6.1%	Copper	USd/lb.	COMEX	-0.2%	0.0%	-0.1%	0.2%
Copper (LME)	6,447	USD/MT	1.8%	8.2%	6.1%	-6.0%	Copper (LME		LME	0.5%	0.3%	0.1%	-0.1%
Zinc	2,829	USD/MT	6.5%	11.7%	20.9%	-13.3%	Zinc	USD/MT	LME	0.3%	0.4%	0.2%	0.3%
Nickel	12,845	USD/MT	3.8%	19.2%	4.1%	-5.3%	Nickel	USD/MT	LME	-0.3%	-0.2%	-0.2%	-0.3%
Lead	2,046	USD/MT	1.5%	3.7%	-1.2%	-14.2%	Lead	USD/MT	LME	-0.6%	-0.3%	-0.2%	-0.1%
Tin	21,118	USD/MT	-0.3%	9.7%	11.0%	0.2%	Tin	USD/MT	LME	0.0%	0.0%	0.1%	0.1%
Precious Metals	1 202		1 107	4.007	0.707	0.707	Precious Met		CONEX	0.5%	0.5%	0.007	0.497
Gold	1,303	USD/t oz.	-1.1%	4.3%	8.7%	-0.7%	Gold	USD/t oz.	COMEX	-0.5%	-0.5%	-0.3%	-0.4%
Silver	15.3	USD/t oz.	-3.1%	4.6%	8.3%	-5.9%	Silver	USD/t oz.	COMEX	-0.5%	-0.5%	-0.6%	-0.8%
Platinum	837	USD/t oz.	3.7%	5.3%	2.7%	-11.9%	Platinum	USD/t oz.	NYMEX	-0.6%	-0.6%	-0.6%	-0.7%
Palladium	1,557	USD/† oz.	10.6%	27.8%	51.5%	56.9%	Palladium	USD/t oz.	NYMEX	1.1%	1.5%	0.5%	3.3%
Livestock Live Cattle	1.3	USd/lb.	1.3%	7.1%	13.3%	5.8%	Livestock Live Cattle	USd/lb.	CME	4.7%	7.3%	-0.4%	-2.3%
Lean Hogs	0.7	USd/lb.	1.3%	13.4%	20.0%	3.8 <i>%</i> 8.5%	Lean Hogs	USd/lb.	CME	-10.9%	-11.5%	-0.4%	-2.3%
Feeder Cattle	1.4	USd/lb.	-0.7%	-3.1%	-9.1%	1.2%	Feeder Cattl		CME	-3.2%	-2.5%	-1.5%	1.3%
	1.4	030/10.		-0.176	-7.170	1.270	recaer cam	030/10.	CIME		-2.576	-1.576	1.576
FTC NET POSITIONI	NG ³	Current	5 Yr Average	1 Month	6 Month	1 Year	INVENTOR'	Y LE∨ELS ⁴	Current	5 Yr Average	1 Month	3 Month	6 Mont
	NG ³	Current		1 Month	6 Month	1 Year	INVENTOR	Y LEVELS ⁴	Current		1 Month	3 Month	6 Mon
nergy	NG ³		Average				Energy	Y LEVELS ⁴		Average			
	NG ³	385,938		341,465	6 Month 565,335 321,015	710,895	Energy Oil - US		Current 449,072 325	Average -3.5%	1 Month -1% -1%	3 Month 2% 0%	14%
nergy WTI Oil	NG ³	385,938 88,886	Average 427,483 168,810	341,465 47,760	565,335 321,015	710,895 363,786	Energy Oil - US Oil - OECD Eur	ope**	449,072 325	Average -3.5% -2%	-1%	2% 0%	14% -8%
nergy WTI Oil Brent Oil** Natural Gas	NG ³	385,938 88,886 -24,229	Average 427,483 168,810 -114,419	341,465 47,760 -17,784	565,335 321,015 -83,329	710,895 363,786 -106,867	Energy Oil - US Oil - OECD Eur Natural Gas -	rope** DOE	449,072 325 1,186	Average -3.5% -2% -34%	-1% -1% -30%	2% 0% -57%	14% -8% -56%
nergy WTI Oil Brent Oil** Natural Gas Gasoline	NG ³	385,938 88,886 -24,229 86,548	Average 427,483 168,810 -114,419 69,878	341,465 47,760 -17,784 87,331	565,335 321,015 -83,329 105,330	710,895 363,786 -106,867 80,249	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO	rope** DOE E	449,072 325 1,186 246,090	Average -3.5% -2% -34% 1%	-1% -1% -30% -4%	2% 0% -57% 7%	14% -8% -56% 5%
hergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil	NG ³	385,938 88,886 -24,229	Average 427,483 168,810 -114,419	341,465 47,760 -17,784	565,335 321,015 -83,329	710,895 363,786 -106,867	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E	rope** DOE IE DOE	449,072 325 1,186	Average -3.5% -2% -34%	-1% -1% -30%	2% 0% -57%	14% -8% -56%
hergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil yriculture	NG ³	385,938 88,886 -24,229 86,548 -14,154	Average 427,483 168,810 -114,419 69,878 12,093	341,465 47,760 -17,784 87,331 -16,225	565,335 321,015 -83,329 105,330 43,565	710,895 363,786 -106,867 80,249 7,326	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO	rope** DOE IE DOE	449,072 325 1,186 246,090 10,890	Average -3.5% -2% -34% 1% -11%	-1% -1% -30% -4% -3%	2% 0% -57% 7% 4%	14% -8% -56% 5% 21%
lergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil yriculture Wheat	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074	Average 427,483 168,810 -114,419 69,878 12,093 -43,056	341,465 47,760 -17,784 87,331 -16,225 -3,846	565,335 321,015 -83,329 105,330 43,565 3,468	710,895 363,786 -106,867 80,249 7,326 -11,206	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum	rope** DOE E DOE als	449,072 325 1,186 246,090 10,890 1,921,908	Average	-1% -1% -30% -4% -3%	2% 0% -57% 7% 4% 0%	14% -8% -56% 21% 2 %
hergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil griculture Wheat Corn	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum - LM	rope** DOE IE DOE als	449,072 325 1,186 246,090 10,890 1,921,908 1,182,850	Average	-1% -1% -30% -4% -3% - 4% -6%	2% 0% -57% 7% 4% 0% -4%	14% -8% -56% 5% 21% 2% 14%
hergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil griculture Wheat Corn Soybeans	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080	Average 427,483 168,810 -114,419 69,878 12,093 12,093 -43,056 85,276 48,916	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum Aluminum - LN Aluminium - St	rope** DOE IE DOE als	449,072 325 1,186 246,090 10,890 1,921,908 1,182,850 739,058	Average	-1% -1% -30% -4% -3% -4% -6% 0%	2% 0% -57% 7% 4% 0% -4% 7%	14% -8% -56% 21% 2% 14% -13%
Nergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil griculture Wheat Corn Soybeans Sugar	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682	Average 427,483 168,810 -114,419 69,878 12,093 12,093 -43,056 85,276 48,916 70,415	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum - LM	rope** DOE DOE DOE dis ME HFE	449,072 325 1,186 246,090 10,890 1,890 1,182,850 739,058 499,548	Average	-1% -1% -30% -4% -3% -4% -6% 0% 20%	2% 0% -57% 7% 4% 0% -4% 7% 38%	14% -8% -56% 21% 21% 14% -13% - 6%
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil yficulture Wheat Corn Soybeans Sugar Cotton	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080	Average 427,483 168,810 -114,419 69,878 12,093 12,093 -43,056 85,276 48,916	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048	Coll - US Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum Aluminum - LM Aluminium - SH Copper	rope** DOE DOE DOE DIS AE HFE	449,072 325 1,186 246,090 10,890 1,921,908 1,182,850 739,058	Average	-1% -1% -30% -4% -3% -4% -6% 0%	2% 0% -57% 7% 4% 0% -4% 7%	14% -8% -56% 21% 2% 14% -13% -6% -13%
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Heating Oil Wheat Corn Soybeans Sugar Cotton Coffee	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115	Average 427,483 168,810 -114,419 69,878 12,093 42,093 -43,056 85,276 48,916 70,415 58,381 -4,115	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminum - SH Copper Copper - LME Copper - SHFE	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,82,850 739,058 499,548 186,425 264,601	Average	-1% -1% -30% -4% -3% -6% 0% 20% 33% 28%	2% 0% -57% 7% 4% 0% -4% 7% 38% 53% 116%	14% -8% -56% 21% 2% 14% -13% -6% -13% 97%
Vergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil griculture Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703	Average 427,483 168,810 -114,419 69,878 12,093 4 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminium - SH Copper Copper - LME Copper - SHFE Copper - COV	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,82,850 739,058 499,548 186,425 264,601 48,522	Average	-1% -1% -30% -4% -3% -6% 0% 20% 33% 28% -31%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59%	14% -8% -56% 21% 21% 21% -13% -13% -13% 97% -73%
Vergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil yriculture Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115	Average 427,483 168,810 -114,419 69,878 12,093 42,093 -43,056 85,276 48,916 70,415 58,381 -4,115	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminum - SH Copper Copper - LME Copper - SHFE	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,82,850 739,058 499,548 186,425 264,601	Average	-1% -1% -30% -4% -3% -6% 0% 20% 33% 28%	2% 0% -57% 7% 4% 0% -4% 7% 38% 53% 116%	14% -8% -56% 5% 21% 2% 14% -13% -13% 97% -73% -73%
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703	Average 427,483 168,810 -114,419 69,878 12,093 4 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum - LN Aluminum - SH Copper - LME Copper - SHFE Copper - COP Nickel - LME	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,921,908 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340	Average	-1% -1% -30% -4% -3% -4% -6% 0% 20% 33% 28% -31% -4%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% -9%	14% -8% -56% 21% 21% -13% -13% -13% 97% -73% -73% -78% -28%
lergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Cosper (COMEX)	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774 2,376	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum - LM Aluminium - SH Copper - LME Copper - CON Nickel - LME Zinc	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688	Average	-1% -1% -30% -4% -3% -4% -6% 0% 20% 33% 28% -31% -4% 3%	2% 0% -57% 7% 4% -4% -4% 7% 38% 53% 116% -59% -59% -9% 20%	14% -8% -56% 21% 21% 14% -13% -13% 97% -73% -73% -73% -28% -73%
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil riculture Wheat Corn Soybeans Sugar Cotton Cotfee Soybean Oil Cocca Suybrial Metals ⁵ Copper (COMEX) Copper (LME)	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774 2,376	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Mete Aluminum Aluminium - LN Aluminium - SH Copper - LME Copper - LME Copper - CO/ Nickel - LME Zinc Zinc - LME	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650	Average	-1% -1% -30% -4% -3% -4% -6% 0% 20% 33% 28% -31% -4% 3% -31% -4% 3% -35%	2% 0% -57% 7% 4% -4% -4% 7% 38% 53% 116% -59% -59% -9% 20% -54%	14% -8% -56% 21% 21% 2% 14% -13% 97% -73% -73% -73% -73% 28% -73% 233%
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil riculture Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Sustrial Metals ⁵ Copper (COMEX) Copper (LME) Aluminum	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -17,530	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047	565,335 321,015 -83,329 105,330 43,565 - 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774 2,376 - -892 29,889	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Mete Aluminum - LN Aluminium - SH Copper - LME Copper - LME Copper - CO/ Nickel - LME Zinc - LME Zinc - SHFE	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038	Average	-1% -1% -30% -4% -3% -6% -6% 0% 20% 33% 28% -31% -31% -31% -4% 3% -35% 43%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% -9% 20% -54% 399%	14% -8% -56% 21% 21% 2% 14% -13% -13% 97% -73% -73% -73% -73% 233% -73% -73% -73% -73% -73% -73% -73% -
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil riculture Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Sustrial Metals ⁵ Copper (COMEX) Copper (LME) Aluminum	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -25,018 50,979 152,304	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 35,924 2,896 40,009 157,379	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885	565,335 321,015 -83,329 105,330 43,565 - - - - - - - - - - - - - - - - - -	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Mete Aluminum Aluminum - LN Aluminium - SH Copper - LME Copper - LME Copper - SHFE Zinc Zinc - LME Zinc - SHFE Lead	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217	Average	-1% -1% -30% -4% -3% -6% -6% 0% 20% 33% 28% -31% -4% 3% -35% 43% 10%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% -9% 20% -54% 399% -11%	14% -8% -56% 21% 2% 14% -13% -13% -73% -73% -73% 233% -73% 233% -73% 233% -73% 233%
lergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Vheat Com Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Suybrial Metals ⁵ Copper (COMEX) Copper (LME) Aluminum Nickel Zinc	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -25,018 50,979 152,304 20,393	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 2,896 40,009 157,379 12,664	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484	565,335 321,015 -83,329 105,330 43,565 - 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774 2,376 - - - - 892 29,889 175,089 262	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Mete Aluminum Aluminum - LN Aluminium - SH Copper - LME Copper - LME Copper - CO/ Nickel - LME Zinc - LME Zinc - SHFE Lead Lead - LME	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775	Average	-1% -1% -30% -4% -3% -6% 0% 20% 33% 28% -31% -4% 3% -35% 43% 10% 12%	2% 0% -57% 7% 4% 0% -4% 7% 38% 53% 116% -59% -9% 20% -54% 399% -54%	14% -8% -56% 21% 2% 14% -13% -13% -73% -73% -73% 233% -73% 233% -73% 233% -73% 233%
lergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Heating Oil Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Justrial Metals ⁵ Copper (COMEX) Copper (LME) Aluminum Nickel Zinc Lead	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 25,018 50,979 152,304 20,393 62,904	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340	565,335 321,015 -83,329 105,330 43,565 - 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774 2,376 - 892 29,889 175,089 262 31,691	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 42,56 435,502 39,667 37,225 132,067 22,694 35,945	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Mete Aluminum Aluminum - LN Aluminium - SH Copper - LME Copper - LME Copper - LME Copper - CO/ Nickel - LME Zinc - LME Zinc - SHFE Lead Lead - LME Lead - SHFE	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442	Average	-1% -1% -30% -4% -3% -6% -6% 0% 20% 33% 28% -31% -4% 3% -35% 43% 10% 12% 6%	2% 0% -57% 7% 4% 0% -4% 7% 38% 53% 116% -59% 9% 20% -54% 399% -54% 399% -11% -28% 99%	14% -8% -56% 21% 2% 14% -13% -13% -13% -73% -73% -73% -73% -73% -73% -28% -73% 233% -17% -34% 104% 0%
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Heating Oil Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Ustrial Metals ⁵ Copper (COMEX) Copper (LME) Aluminum Nickel Zinc Lead	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -7,530 -7,530 -25,018 50,979 152,304 20,393 62,904 48,911	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509 51,697	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774 2,376 -29,889 175,089 262 31,691 54,867	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694 35,945 48,742	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminum - SH Copper - CM Copper - CM Copper - CM Copper - CM Copper - CM Copper - CM Copper - CM Lead - LME Lead - LME Lead - LME Lead - SHFE Lead - SHFE	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,82,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603	Average	-1% -1% -30% -4% -6% -6% 0% 20% 33% 28% -31% -4% 3% -31% -4% 3% 10% 12% 6% -1%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% -9% 20% -9% 399% -11% -28% 99% -15%	14% -8% -56% 21% 21% 14% -13% -13% -13% -73% -73% -73% -73% 233% -73% 233% -17% -34% 104% 0% -58%
ergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Heating Oil Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Ustrial Metals ⁵ Copper (COMEX) Copper (LME) Aluminum Nickel Zinc Lead	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -7,530 -7,530 -25,018 50,979 152,304 20,393 62,904 48,911	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509 51,697	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931	565,335 321,015 -83,329 105,330 43,565 3,468 -86,219 -82,487 -49,167 73,930 -106,651 -77,774 2,376 -29,889 175,089 262 31,691 54,867	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694 35,945 48,742	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminum - SH Copper - LME Copper - CO/ Nickel - LME Zinc - SHFE Lead - LME Lead - SHFE Tin - LME	rope** DOE E DOE DOE als 4E 4FE	449,072 325 1,186 246,090 10,890 1,82,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603 1,215	Average	-1% -1% -30% -4% -3% -6% 0% 20% 33% 28% -31% -4% 3% -35% 43% 10% 12% 6% -1% -16%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% -9% 20% -54% 399% -11% -28% 99% -11% -28%	14% -8% -56% 21% 2% 14% -13% -13% -73% -73% -73% -73% -73% -73% -34% 104% 0% -58%
lergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Wheat Corn Corn Corn Coffee Soybean Oil Cocoa Sustrial Metals ⁵ Copper (LME) Aluminum Nickel Zinc Lead Tin Gold	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -25,018 50,979 152,304 20,393 62,904 48,911 9,720	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509 51,697 7,719	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931 8,174	565,335 321,015 -83,329 105,330 43,565 - - - - - - - - - - - - - - - - - -	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminium - SH Copper - LME Copper - LME Copper - CO/ Nickel - LME Zinc - SHFE Lead - LME Lead - LME Lead - SHFE Tin Tin - LME Tin - SHFE	rope** DOE E DOE DOE DIS AE HFE E MEX	449,072 325 1,186 246,090 10,890 1,82,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603 1,215	Average	-1% -1% -30% -4% -3% -6% 0% 20% 33% 28% -31% -4% 3% -35% 43% 10% 12% 6% -1% -16%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% -9% 20% -54% 399% -11% -28% 99% -11% -28%	14% -8% -56% 21% 21% -13% -13% -13% -73% -73% -73% -73% -73% 233% -73% 233% -17% -34% 104% -58% 25%
lergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Wheat Corn Corn Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Sustrial Metals ⁵ Copper (LME) Aluminum Nickel Zinc Lead Tin Gold Silver	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -25,018 50,979 152,304 20,393 62,904 48,911 9,720	Average 427,483 168,810 -114,419 69,878 12,093 40,005 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 157,379 12,664 40,009 157,379 12,664 44,509 51,697 7,719 135,323	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931 8,174	565,335 321,015 -83,329 105,330 43,565 	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694 35,945 48,742 8,846	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminum - SH Copper - LME Copper - LME Copper - LME Copper - CO/ Nickel - LME Zinc - SHFE Lead - LME Lead - LME Lead - SHFE Tin - LME Tin - SHFE Agriculture	rope** DOE E DOE DOE DIS AE HFE E MEX	449,072 325 1,186 246,090 10,890 1,82,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603 1,215 8,388	Average	-1% -1% -30% -4% -6% -6% 0% 20% 33% 28% -31% -4% 3% -35% 43% 10% 12% 6% -16% 2%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% -9% -11% -28% 99% -11% -28% 99% -15% -59% 1%	14% -8% -56% 21% 21% -13% -13% -13% -73% -73% -73% -73% 233% -17% -34% 104% -58% 25%
bergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil yriculture Wheat Corn Corn Corn Coffee Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Dustrial Metals ⁵ Copper (LME) Aluminum Nickel Zinc Lead Tin Gold Silver	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 -25,018 50,979 152,304 20,393 62,904 48,911 9,720	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509 51,697 7,719 135,323 36,285	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931 8,174 126,552 54,141	565,335 321,015 -83,329 105,330 43,565 - - - - - - - - - - - - - - - - - -	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694 35,945 48,742 8,846 174,563 1,417	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum - IN Aluminum - SH Copper - COP Nickel - LME Zinc - LME Zinc - LME Zinc - SHFE Lead - LME Lead - LME Lead - SHFE Tin - SHFE Tin - SHFE Meta - SHFE Meta - SUP	rope** DOE E DOE dis ME HFE E MEX	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603 1,215 8,388	Average	-1% -1% -30% -4% -3% -4% -6% 20% 33% 20% 33% 28% -31% -4% 3% -35% 43% 10% 12% 6% -1% -16% 2%	2% 0% -57% 7% 4% 0% -4% 7% 38% 53% 116% -59% 20% -54% 399% -11% -28% 99% -11% -28% 99% -15% -59% 1%	14% -8% -56% 21% 21% 2% 14% -13% -13% 97% -73% -73% -73% -73% 233% -17% -34% 104% 0% -58% 25%
hergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Priculture Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Cottron Coffee Soybean Oil Cocoa Cottron Coffee Soybean Oil Cocoa Cottron Copper (CMEX) Copper (CMEX) Copper (LME) Aluminum Nickel Zinc Lead Lead Tin ecious Metals Gold Silver Platinum Palladium	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 25,018 50,979 152,304 20,393 62,904 48,911 98,852 26,090 17,864	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509 51,697 71,719 135,323 36,285 25,714	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931 8,174 126,552 54,141 -1,153	565,335 321,015 -83,329 105,330 43,565 -82,487 -49,167 73,930 -106,651 -77,774 2,376 -892 29,889 175,089 262 31,691 54,867 7,215 -28,919 -26,749 -1,500	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694 35,945 48,742 48,742 48,742 48,742 48,742 48,742 48,742	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - D Industrial Meta Aluminum - LN Aluminium - SH Copper - LME Copper - LME Copper - LME Copper - CON Nickel - LME Zinc - LME Zinc - SHFE Lead Lead - LME Lead - LME Lead - SHFE Tin - LME Tin - SHFE Meat - USDA Corn - USDA	rope** DOE E DOE dis ME HFE E MEX	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603 1,215 8,388	Average	-1% -1% -30% -4% -3% -4% -6% 0% 20% 33% 28% -31% -4% 3% -31% -4% 3% -16% 2% 2%	2% 0% -57% 7% 4% 0% -4% 7% 38% 53% 116% -59% 20% -54% 399% -11% -28% 99% -15% -28% 99% -15% -28% 99% -15% -59% 1%	14% -8% -56% 21% 21% 2% 14% -13% -13% 97% -73% -73% -73% -73% 233% -17% -34% 104% 0% -58% 25%
hergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil yficulture Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Cottral Metals ⁵ Copper (LME) Aluminum Nickel Lead Tin Coclas Gold Silver Platinum	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 25,018 50,979 152,304 20,393 62,904 48,911 98,852 26,090 17,864	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509 51,697 71,719 135,323 36,285 25,714	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931 8,174 126,552 54,141 -1,153	565,335 321,015 -83,329 105,330 43,565 -82,487 -49,167 73,930 -106,651 -77,774 2,376 -892 29,889 175,089 262 31,691 54,867 7,215 -28,919 -26,749 -1,500	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694 35,945 48,742 48,742 48,742 48,742 48,742 48,742 48,742	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Meta Aluminum - LM Aluminium - LM Aluminium - SH Copper - LME Copper - LME Copper - LME Copper - CON Nickel - LME Zinc - SHFE Lead Lead - LME Lead - LME Lead - LME Lead - SHFE Tin Tin - LME Tin - SHFE Wheat - USDA Corn - USDA Soybeans - US	rope** E DOE DOE DOE DIS ME HFE E MEX	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603 1,215 8,388 2270,530 308,530 107,170	Average	-1% -1% -30% -4% -3% -4% -6% 0% 20% 33% 28% -31% -4% 3% -31% -4% 3% -35% 43% 10% 12% 6% -1% -16% 2%	2% 0% -57% 7% 4% 0% -4% 7% 38% 53% 116% -59% 20% -54% 399% -11% -28% 99% -15% -59% 1% 0.9% -0.1% -7.1%	14% -8% -56% 21% 21% -13% -13% -13% -13% -73% -73% -73% -28% -73% 233% -17% -34% 104% 0% -58% 25% 3.5% 96.5% -1%
lergy WTI Oil Brent Oil** Natural Gas Gasoline Heating Oil Heating Oil Wheat Corn Soybeans Sugar Cotton Coffee Soybean Oil Cocoa Cotfee Soybean Oil Cocoa Gustrial Metals ⁵ Copper (COMEX) Copper (LME) Aluminum Nickel Zinc Lead Copper (LME) Aluminum Nickel Zinc Sold Silver Platinum Palladium	NG ³	385,938 88,886 -24,229 86,548 -14,154 -63,074 -192,475 -68,080 -81,682 -1,700 -69,115 48,703 -17,530 25,018 50,979 152,304 20,393 62,904 48,911 9,720 98,852 26,090 17,864 13,091	Average 427,483 168,810 -114,419 69,878 12,093 -43,056 85,276 48,916 70,415 58,381 -4,115 35,924 26,801 2,896 40,009 157,379 12,664 44,509 51,697 7,719 135,323 36,285 25,714 15,128	341,465 47,760 -17,784 87,331 -16,225 -3,846 42,085 5,986 -12,214 -175 -48,276 64,532 5,468 1,804 42,047 160,885 9,484 50,340 44,931 8,174 126,552 54,141 -1,153 13,878	565,335 321,015 -83,329 105,330 43,565 - - - - - - - - - - - - - - - - - -	710,895 363,786 -106,867 80,249 7,326 -11,206 372,754 203,048 -110,752 102,911 -42,401 28,256 43,502 39,667 37,225 132,067 22,694 35,945 48,742 8,846 174,563 1,417 33,668 13,113	Energy Oil - US Oil - OECD Eur Natural Gas - Gasoline - DO Heating Oil - E Industrial Mete Aluminum - LN Aluminium - SH Copper - LME Copper - LME Copper - LME Copper - LME Copper - CO/ Nickel - LME Zinc - SHFE Lead Lead - LME Lead - LME Lead - LME Lead - SHFE Tin Tin - LME Tin - SHFE Mheat - USDA Corn - USDA Soybeans - US	rope** DOE DOE JIS AE HFE E MEX	449,072 325 1,186 246,090 10,890 1,182,850 739,058 499,548 186,425 264,601 48,522 191,340 182,688 58,650 124,038 111,217 77,775 33,442 9,603 1,215 8,388 270,530 308,530 107,170 52,850	Average	-1% -1% -30% -4% -3% -4% -6% 0% 20% 33% 28% -31% -4% 33% -31% -4% 3% -1% -1% -1% -1% -0.4% 0.4% 0.4%	2% 0% -57% 7% 4% -4% 7% 38% 53% 116% -59% 9% 20% -54% 399% -11% -28% 99% -15% -59% 1% 0.9% -0.1% -7.1%	14% -8% -56% 21% 21% -13% -13% -13% -13% -73% -73% -73% -73% -73% -73% -73% -7

1Performance of front month futures from 18 Mar 18 (1 Year), 18 Sep 18 (6 Month), 18 Dec 18 (3 Month) and 18 Feb 19 (1 Month) to 18 Mar 19. 2Roll return non-annualised from front month futures into second " month on 18 Dec 18 (3 Month), 19 Feb 19 (1 Month), 11 Mar 19 (1 Week), 18 Mar 19.

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. SAll 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 = Dec 2018. Historical performance is not an indication of future performance and any investments may go down in value.



Agriculture Cocoa Coffee 110 3,600 130 2.8 2x stdv 3,400 90 2x stdv 80 3.200 23 70 3,000 1x stdv 50 30 1.8 2 800 30 2,600 -20 1.3 2,400 10 2,200 -1x stdv -10 -70 0.8 2 0 0 0 -30 1,800 -2x stdv -120 0.3 1,600 -50 -2x stdv 8 Jun-14 Sep-14 Dec-14 5 Jun-15 Jun-16 Mar-17 Jun-17 Sep-17 Dec-17 8 61 Sep-15 Dec-15 Mar-16 Jun-18 Dec-15 Jun-18 Sep-18 Dec-16 Jun-16 Dec-16 ő 6[Mar-17 Sep-17 œ Sep-1 Dec-Dec-1 Agr-Mar-Mar-Sep-Mar-Mar-'n Mar-Aar--unr Sep-Dec-Mar--un Sep-Sep-Dec-Mar-CFTC non-commercial net positioning Price (RHS, USd/lb.) CFTC non-commercial net positioning Price (RHS, USD/MT) Source: Bloomberg, WisdomTree Source: Bloomberg, WisdomTree Corn Cotton 450 6 160 1.0 2x stdv 2x stdv 140 10 5 350 120 0.9 stdv 250 5 100 0.9 80 0.8 150 60 0.8 50 40 0.7 -50 -1x stdv 20 0.7 3 0 0.6 -150 3 -2x stdv -20 0.6 -2x stdv -250 2 -40 0.5 4 Jun-14 Dec-16 Mar-17 7 l-nul Sep-17 Jun-18 Sep-18 Dec-18 Mar-19 Mar-19 Sep-16 œ 4 Jun-15 Jun-18 Sep-17 Jun-17 Sep-1 Sep-1 Dec-1 Aar-Dec-I l-nul Decl-nul Mar-Sep-1 Sep-1 l-nul Sep-l Dec-1 Dec-1 Mar-Marl-nn Dec-Mar-] Dec-Mar-] Mar-Mar-] Sep-1 Dec-Agr-CFTC non-commercial net positioning Price (RHS, USd/bu.) CFTC non-commercial net positioning Price (RHS, USd/lb.) Source: Bloomberg, WisdomTree Source: Bloomb Soybeans Soybean Oil 300 16 2x stdv 200 0.45 250 15 0.43 200 150 2x stdv 1x stdv 14 0.41 150 0.39 13 100 1x stdv 100 0.37 12 50 50 0.35 Average Λ 0.33 11 -50 0 0.31 10 -100 0.29 -50 -150 0.27 -2x stdv -200 8 -100 0.25 Jun-15 Jun-17 Jun-18 Jun-14 Jun-14 15 15 15 Mar-16 Sep-16 91. Dec-17 20 20 7 20 6 Sep-16 61 4 Jun-16 4 4 12 2 15 9 Dec-17 20 20 20 ß ۲I Jun-17 Jun-16 Sep-Dec-Mar-Sep. Dec-Dec-Aar-Sep-Marep. Mar-Dec-Dec-Sep-Sep--unr Mar-Sep-Mar--unr Dec-Mar-Dec-Mar-Mar-Sep-Dec-Mar-Price (RHS, USd/bu.) CFTC non-commercial net positioning Price (RHS, USd/lb.) CFTC non-commercial net positioning Source: Bloomberg, WisdomTree Source: Bloomberg, WisdomTree Wheat Sugar 400 0.24 100 2x stdv 2x stdv 300 0.22 50 0.20 200 1x-stdv stdv 0 100 5 Yr Average 0.18 Average -50 0.16 0 -100 -100 0.14 -1x stdv -150 -2x stdv 0.12 -200 -2x stdv -300 0.10 -200 3 Jun-18 4 Þ Ľ, 15 20 20 20 6 Dec-16 Sep-17 S Ľ, Mar-17 Jun-17 4 4 LC, \leq \leq œ α œ 00 6 Dec-1 l-nul Dec-1 Mar-Dec-1 -hul Sep-Dec-Mar--hul Sep-Dec-Mar-Sep-Mar--un Mar-Sep-Dec-Sep-1 Sep-1 l-nu Sep-1 Dec-1 Sep-1 Marl-nul Agr--un Dec-'n Dec-Mar-Sep-Mar-Mar-CFTC non-commercial net positioning Price (RHS, USd/lb.) CFIC non-commercial net positioning Price (RHS, USd/bu.) Source: Bloomberg, WisdomTree Source: Bloomberg, WisdomTree

CFTC Speculative Net Long Futures Positions

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.



Energy Brent Oil 600 125 115 500 2x stdv 105 400 95 1x stdv 300 85 5 Yr Average 200 75 65 100 55 0 45 -2x stdv -100 35 -200 25 Dec-18 Jun-14 Mar-15 Jun-15 Sep-15 Sep-16 Dec-16 7 l-nul Sep-17 Dec-17 Jun-18 61 4 4 Jun-16 Mar-17 Mar-18 20 Dec-1 Dec-1 Sep-1 Marep-Mar-Mar-ICE managed money net positioning Source: Bloomberg, WisdomTree -Price (RHS, USD/bbl.)









Heating Oil





Industrial Metals





Copper (LME) 70 7,400 7.200 60 7,000 50 6,800 40 6,600 6,400 30 6,200 20 6.000 10 5.800 0 5,600 8 ő 8 Jun-18 Jul-18 8 8 6 ĝ 20 ď ¢ 10 6 Feb. Mar-Apr-May--bu¢ Sep. -voN Feb. Jan-÷0 Decď Price (RHS, USD/MT) LME non-commercial net positioning



Source: Bloomberg, WisdomTree









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

7



Precious Metals









5 Yr A

eraa

Mar-17 7 l-nul Sep-17

Livestock





Live Cattle

-1x stdv

-2x stdv

50

0

-50

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.

1.8

1.7

1.6

1.5

1.4

1.3

12

1.1

1.0

0.9

Mar-19

2x stdv

1x stdv

(KH2' C-18 (KH2' C-18) (KH

⊒Dec-17 Mar-18



Inventories

Agriculture



Coffee - Stock to Use Annual data in %, from 1980 to 2018



Cotton - Stock to Use

Annual data in %, from 1980 to 2018



Soybeans - Stock to Use Annual data in %, from 1980 to 2018



Source: USDA, Bloomberg, WisdomTree



98/99

00/01 02/03 04/05 06/07

76/96

08/09

11/01 12/13 14/15 6/17 8/19



90/91

Wisdo

92/93 94/95

50

0

84/85 86/87 88/89

82/83

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



Cotton - Ending Stocks

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



Soybeans - Ending Stocks



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













Cocoa - Inventory

Source: Inte



Organisation

Bloc









Source: USDA, Bloomberg, WisdomTree

Wheat - Ending Stocks

Annual data in mln tons, from 1980 to 2018 $_{300}$



rg, WisdomTree



0

٨ar

Feb

Feb 19 -

Jan

é

Mar

Industrial Metals



Source: Bloomberg, WisdomTree

Nickel Inventory

Daily data in '000 MT, from 18 Mar 18 to 18 Mar 19



Source: LME, Bloomberg, WisdomTree

Lead Inventory



Livestock



Copper Inventory Daily data, from 18 Mar 18 to 18 Mar 19 980 880 780 680 580 480 380 280 180 80 Ω 20 20 20 20 20 20 ω ω ß 0 0

Aug Sep



Aug 18 -

20

Sep

Oct 18 -

20 ğ 6

Nov Dec

■ LME Inventory (in '000 tonnes)

Apr SHFE Inventory (in '000 tonnes) Source: Bloomberg, WisdomTree

May η

Tin Inventory

40

ω 20 ∞ œ

Mar

٨ar Apr ٨ay n Ę

SHFE Inventory (in '000 tonnes)

Daily data in '000 MT, from 18 Mar 18 to 18 Mar 19

8

3



Live Cattle Inventory

Annual data in mln Heads, from 1980 to 2018



Source: USDA, Bloomberg,

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



Energy

US Oil Inventory Weekly data in mln barrels, from Mar 14 to Mar 19 50 400 400 500 1 3 5 7 9 111315171921232527293133353739414345474951 59r Average +/-1 stdev Source: DOE, Bloomberg, Wisdomīree

Heating Oil Inventory



Source: DOE, Bloomberg, WisdomTree

Gasoline Inventory

Weekly data in mln barrels, from Mar 14 to Mar 19



OECD Europe Oil Industry Inventory





Natural Gas Inventory

Weekly data in billion cubic feet, from Mar 14 to Mar 19



Source: DOE, Bloomberg, WisdomTree



Commodities Front Month Futures and Trading Volumes

<u>Agriculture</u>



Corn Front Month Futures Price





Soybean Oil Front Month Futures Price

Daily data in USd/lb., from 18 Mar 18 to 18 Mar 19



Sugar Front Month Futures Price

Source: Bloomberg, WisdomTree







Cotton Front Month Futures Price

Daily data in USd/lb., from 18 Mar 18 to 18 Mar 19



Source: Bloomberg, WisdomTree

Source: Bloomberg, WisdomTree

Soybeans Front Month Futures Price

Daily data in USd/bu., from 18 Mar 18 to 18 Mar 19



Wheat Front Month Futures Price

Source: Bloomberg, WisdomTree

Daily data in USd/bu., from 18 Mar 18 to 18 Mar 19



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



Energy



Natural Gas Front Month Futures Price

Daily data in USD/MMBtu, from 18 Mar 18 to 18 Mar 19



Heating Oil Front Month Futures Price

Daily data in USd/gal., from 18 Mar 18 to 18 Mar 19





Source: Bloomberg, WisdomTree



WTI Oil Front Month Futures Price



Gasoline Front Month Futures Price

Daily data in USd/gal., from 18 Mar 18 to 18 Mar 19



Source: Bloomberg, WisdomTree

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



Industrial Metals



Volume (\$mn) – Prices (RHS) — 50 dma (RHS) — 200 dma (RHS) Source: Bloomberg, WisdomTree

Copper (COMEX) Front Month Futures Price

Daily data in USd/lb., from 18 Mar 18 to 18 Mar 19 \$25,000



Nickel Front Month Futures Price

Daily data in USD/MT, from 18 Mar 18 to 18 Mar 19



Zinc Front Month Futures Price

Source: Bloomberg, WisdomTree







Source: Bloomberg, WisdomTree

Copper (LME) Front Month Futures Price



Tin Front Month Futures Price

Daily data in USD/MT, from 18 Mar 18 to 18 Mar 19



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



Precious Metals



Platinum Front Month Futures Price

Daily data in USD/t oz., from 18 Mar 18 to 18 Mar 19



Livestock

Lean Hogs Front Month Futures Price

Daily data in USd/lb., from 18 Mar 18 to 18 Mar 19



Feeder Cattle Front Month Futures Price

Daily data in USd/lb., from 18 Mar 18 to 18 Mar 19







Daily data in USD/t oz., from 18 Mar 18 to 18 Mar 19



Live Cattle Front Month Futures Price

Daily data in USd/lb., from 18 Mar 18 to 18 Mar 19



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.



Futures Curves

Agriculture







Coffee Futures USd/lb. \$1.35 \$1.30 \$1.25 \$1.20 \$1.15 \$1.10 \$1.05 \$1.00 \$0.95 \$0.90 щ Μ5 M6 М8 M10 M12 M13 M15 Ч2 М7 6W **M14** Ξ 24 ١ Maturity (Month) -18 Dec 18 -18 Mar 19 -11 Mar 19 -19 Feb 19 Source: Bloomberg, WisdomTree



Soybean Oil Futures





Soybeans Futures USd/bu.







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.







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



Industrial Metals



















Source: Bloomberg, WisdomTree

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



Precious Metals













<u>Livestock</u>







Live Cattle Futures USd/lb. \$1.35 \$1.30 \$1.25 \$1.20 \$1.15 \$1.10 \$1.05 M1 M2 M3 M4 M5 M7 M8 M6 Maturity (Month) —11 Mar 19 —18 Mar 19 –19 Féb 19 -18 Dec 18 Source: Bloomberg, WisdomTree



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 - R	ecent Blogs						
19-Mar-19	Lidia Treiber		Can AT1 CoCos be the better way to play the European bank trade?				
13-Mar-19	Kevin Flanagan		Manufacturing a slowdown				
11-Mar-19	Christopher Gannatti		China's supremacy in Artificial Intelligence may be greatly exaggerated				
06-Mar-19	WisdomTree		Take your currency bets off the table				
04-Mar-19	Christopher Gannatti		Why the gold price rally may continue				
27-Feb-19	Christopher Gannatti		Will foreign investors ever buy Japanese equities again?				
25-Feb-19	Lidia Treiber		AT1 CoCo bonds are in the newsbut why?				
18-Feb-19	WisdomTree		Small caps as responsible repurchases				
18-Feb-19	WisdomTree		Factor investing as an edge				
14-Feb-19	Christopher Go	annatti	Will 2019 be the year of small caps in Europe				
13-Feb-19	WisdomTree		50 shades of value				
11-Feb-19	Aneeka Gupta		The 500km dispute				
11-Feb-19	Christopher Go	annatti	Unplug from day-to-day market moves with the Artificial Intelligence megatrend				
WisdomTree - F	ast Issues of Cor	mmodity Monthly Moni	itor				
Jul - Aug 2018	Research Tean	n	Precious metals ripe for a short-covering rally				
Aug - Sept 2018	3 Research Tean	n	Supply tightness aids cyclical commodities				
Sept - Oct 2018	3 Research Tean	n	Past peak bearishness				
Oct - Nov 2018	Oct - Nov 2018 Research Team		G-20 sets tone for further upside				
Nov - Feb 2019	Nov - Feb 2019 Research Team		Commodities – a phoenix rising from the ashes				
The research n	otes are for qual	lified investors only.					
Key Reports							
Current	Next release						
08-Mar-19	09-Apr-19	USDA	World Agricultural Supply and Demand Estimates				
12-Mar-19	09-Apr-19	EIA	Short-Term Energy Outlook				

12-Mar-19	09-Apr-19	EIA	Short-Term Energy Outlook
14-Mar-19	10-Apr-19	OPEC	OPEC Oil Market Report
15-Mar-19	11-Apr-19	IEA	IEA Oil Market Report

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