Bloomberg Commodity Index (BCOM)

## A Dip in the Trend

- Excess demand vs. supply in all commodity sectors should prevail
- Sharp crude oil reversal from year ago pushes bullish extremes
- Copper to gold: 1H improves prospects for 2H metals recovery
- The near-perfect agriculture storm of June is unsustainable
- When crude is on the move, it's all that matters in commodities

**Broad Market Outlook Energy** 3 Metals 6 **Agriculture** 9 DATA **PERFORMANCE**: Overview, Commodity TR, Prices, Volatility **CURVE ANALYSIS:** 18 Contango/Backwardation, Roll Yields. Forwards/Forecasts **MARKET FLOWS:** 21 Open Interest, Volume, COT, ETFs **PERFORMANCE** 24

Data and outlook as of June 29

Note - Click on graphics to get to the Bloomberg terminal

Mike McGlone - BI Senior Commodity Strategist

# Excess Demand vs. Supply in All Commodity Sectors Should Prevail

Performance: June -3.5%, YTD +0.0%, Spot +1.2%. (Returns are total return (TR) unless noted)

(Bloomberg Intelligence) -- The worst month for the Bloomberg Commodity Index (BCOM) in two years should pan out similar to the 5% decline in July 2016 that was just a dip in an early recovery. Likely in a nascent bull-market stage, the near-perfect storm at 1H's end will pass, allowing favorable demand vs. supply conditions to prevail. The best quarter for most dollar measures in years is poised to stall or reverse. A sharp crude-oil decline is a primary risk, but it's more likely the most significant commodity acts as a broad-market springboard.

Priced for about the best of summer-production prospects and worst from trade tension, agriculture should have the most potential to revert higher. Metals, the most dollar sensitive and also pressured on trade, remain fundamentally strong and have dropped back into good bull-market support zones.

### A Trade Tensions Dip

When Crude Is on the Move, It's All That Matters in Commodities. WTI crude oil's 23% 1H gain is indicative of the potential for broad commodities. Perfect storms don't last. In this case, extreme dollar strength, trade tension and the best crop conditions for June in decades should pass, allowing the nascent commodity bull market to get back on track.

Crude Oil Should Be Commodity Launchpad. The ease and extent of the 1H crude-oil rally is indicative of commodities' path of least resistance. No commodity has the ability to lift all boats more than crude oil. Essentially back to unchanged for 2018 to greet 2H, BCOM is poised to follow WTI's 20%-plus gain. It'll

#### BI COMD (the commodity dashboard)

probably take some combination of events -- further strong dollar gains, weakness in already-buried agriculture, a sharp stock-market correction or worsening trade tensions -- to stop that from happening. The more likely 2H outcome is mean reversion of the primary greenback, trade and favorable-weather pressure factors of 2Q.

Broad Commodities Likely to Catch-Up to Crude Oil

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### **MACRO PERFORMANCE**

#### Macro: Dollar Pullback vs. Commodity Rebound.

The dollar is unlikely to maintain its 1H spot near the top of the macro-index leader board. Commodities succumbed to the strong dollar in June, but show divergent strength. Despite the flat Bloomberg Dollar Spot Index, the BCOM spot is up about 12% on a one-year basis. Resembling a bear-market bounce, the greater potential for a 2H dollar pullback is set to provide more than the typical beta boost to commodities.

Roll yields, another key difference vs. a year ago, have been halved and are positive in the most significant sector (energy). In 2H, the macro-market indexes are

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unlikely to remain within the 3% up or down threshold that held in 1H. Favorable demand vs. supply conditions, a nascent bull-market stage and a little dollar weakness should favor commodities.

Greenback Shouldn't Last Near Top of Leader Board

Security	Chg YTD %	1 Chg	Chg	1Yr %	2Yr %
		June	QTD Pct	Chg	Chg
S&P 500 Total Return Index	+2.6%	+.6%	+3.4%	+14.6%	36.7%
Bloomberg Dollar Spot	+1.9%	+.9%	+4.9%		
S&P 500 Index	+1.7%	+.5%	+3.1%	+12.5%	31.4%
Bloomberg Commodity Spot Index	+1.2%	-3.3%	+.9%	+12.6%	11.4%
Bloomberg Barclays US Corporat	+.1%	+.4%	+1.0%	+2.6%	16.0%
Bloomberg Commodity Index Tota		-3.5%	+.4%	+9.0%	
MSCI World Net Total Return US		5%	+1.3%	+10.4%	32.2%
Bloomberg Barclays U.S. Treasu	-2.9%	+.3%	+.4%	3%	-7.9%

### **SECTOR PERFORMANCE**

Strong Energy Should Gain Followers in 2H. Sector performance disparity is poised to normalize in 2H, supporting broad-index total returns. Additional energy returns will depend on crude oil rallying further into the \$70-a-barrel handle, which should need sustained geopolitical risk. If the summer sizzle is a bit excessive, natural gas has plenty of upside. Backwardation is a positive, supporting total energy returns in excess of spot gains for the first time in four years. Unless the dollar bounce turns into more of a sustained rally, metals are the most likely sector to catch up with energy.

Other Sectors Set to Catch Up to Strong Energy

		_	3,	
Chg YTD %	Chg	Chg	1Yr %	2Yr %
	Julie	QID PCL	ung	Chg
+12.7%	+2.7%	+10.7%	+37.0%	12.8%
-3.3%	-11.7%	-9.7%	-13.4%	-24.7%
-5.0%	-3.3%	-4.5%	-1.0%	-9.1%
-5.1%	+2.7%	+5.5%	-8.1%	-3.8%
-5.2%	-4.1%	-1.6%	+7.8%	12.8%
-5.3%	-4.8%	+1.0%	+15.7%	36.1%
-5.8%	-10.5%	-8.7%	-10.5%	-24.6%
-11.8%	-7.4%	-1.9%	-6.8%	-30.1%
	+12.7% -3.3% -5.0% -5.1% -5.2% -5.3% -5.8%	June +12.78 +2.78 -3.38 -11.78 -5.08 -3.38 -5.18 +2.78 -5.28 -4.18 -5.38 -4.68 -5.08 -10.58	June QTD Pct +12.7% +2.7% +10.7% -3.3% -11.7% -9.7% -5.0% -3.3% -4.5% -5.1% +2.7% +5.5% -5.2% -4.1% -1.6% -5.3% -4.8% +1.0% -5.9% -10.5% -8.7%	Chg YTD %

Similar to energy, metals demand vs. supply is quite favorable. Conditions are in transition for agriculture, notably the grains. Back near multiyear lows with trade tension eliminating much of a production-risk premium, prospects for a price spike are elevated.

### **ATTRIBUTION**

Lead Gainer Crude Oil Generally Has Followers.

Other commodity sectors are likely to follow the lead of crude oil -- BCOM's 1H return stalwart with 360 bps of total index returns attributed to energy -- though it's unclear how closely. Agriculture, led by plunging soybeans and sugar, was the largest sector drag,

subtracting about 200 bps. A little summer sizzle and reprieve from trade tension would lessen the drag. Base metals are the most likely to reverse 1H's 120-bp hit, especially if the dollar rally shifts.

Precious metals, a similar laggard in 1H, will depend on continued dollar strength to stay down. Some reversion of the strongest quarter for the trade-weighted broad dollar in three years is likely. Livestock was a 40-bp drag.

**Energy Performance Contribution Set to Spread 2H** 



**Individual Commodity Index Total Returns** 

Name		3 Mth % Change	YTD <b>∜</b> Change	1 Yr % Change
■ BCOM Total Return Indices				
WTI Crude Index	8.8	13.2	23.2	62.8
Brent Crude Index	2.7	16.7	23.0	73.7
Nickel Index	-2.1	12.1	16.8	59.4
Heating Oil Index	0.3	10.5	10.2	55.6
Cotton Index	-7.9	6.1	8.9	27.7
Gasoline Index	0.2	7.7	8.7	45.3
Wheat Index	-7.5	4.7	8.1	-15.2
HRW Wheat Index	-12.4	-1.6	4.7	-18.3
Soybean Meal Index	-12.9	-15.4	2.1	6.4
Natural Gas Index	-0.7	4.2	-2.9	-18.0
Corn Index	-10.8	-11.0	-3.2	-14.3
Live Cattle Index	2.8	6.9	-4.3	-8.9
Aluminum Index	-6.7	8.7	-4.3	12.0
Gold Index	-3.7	-5.5	-4.6	-0.1
Silver Index	-1.9	-0.9	-6.0	-3.7
Lean Hogs Index	2.5	3.0	-8.0	-8.1
Platinum Index	-6.1	-8.1	-8.8	-7 <b>.</b> 5
Copper Index	-3.7	-2.7	-11.0	8.1
Soybeans Index	-15.3	-18.0	-11.6	-9.6
Coffee Index	-8.5	-5.5	-12.7	-16.7
Zinc Index	-7.3	-12.1	-12.8	6.1
Soybean Oil Index	-6.6	-9 <b>.</b> 3	-13.2	-12.6
Sugar Index	-6.3	-3.1	-20.4	-13.4

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**Energy** (Index weight: 29% of BCOM)
Performance: June +2.7%, YTD +12.7, Spot +12.8%
\*Note index weights are the YTD average.

## **Lifting All Commodity Boats**

Sharp Crude Oil Reversal From Year Ago
Pushes Bullish Extremes. Appearing as bullish as
they were bearish (near bottom) a year ago, energy
markets warrant caution approaching 2H. Absent a
sustained geopolitical-risk bid, performance is unlikely to
get much better for WTI crude oil -- the global commodity
benchmark and 2018 leader. Momentum and such risks
support longs, notably with positive carry due to
backwardation. Yet prices are stretched as supply gains
the upper hand, though not without a few blips.
Conditions are about as good as they get in WTI.

Crude oil is more likely to back and fill, but its ease of recovery in 1H indicates a nascent broad-commodity bull market. Stuck near \$3 per MMBtu, favorable natural gas demand vs. supply trends and declining inventories support a move to \$4 rather than \$2 into summer-sizzle season.

### New Higher Range Crude Oil

Commodity Leadership in 1H May Be as Good as It Gets for WTI. Supported by geopolitical tension, WTI crude oil should rally, though the top 1H performer is more likely to pause in 2H. The primary global commodity benchmark's recovery from the bear market a year ago appears to be about as good as it gets. Position squaring seemed predominant as the WTI-to-Brent discount normalized.

### Stocks-to-Use Supporting Crude Oil, But Limited.

A year removed from the widely declared bear market, the crude oil bull appears to be a mirror image of enthusiasm, which should instill caution. Stocks-to-use, among the highest negatively correlated to crude, is moving favorably, but rapid price appreciation has stretched the market into solid layers of resistance in the low \$70-a-barrel handle. Four successive quarterly gains last occurred in 2009, amid recovery from global crises. Prices at the end of June are just beyond the halfway mark of the 2011-16 peak-to-trough and near the 30-quarter average.

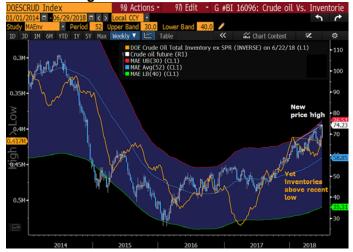
**Favorable Stocks-to-Use Driving Crude Oil** 



This mean acted as support from 2009-14. The stocks-touse measure (DOE crude oil and liquid fuel-inventory OECD vs. world production) has a negative 0.75 annual correlation to crude oil prices since 2004.

Higher Crude Oil Range -- Bullish Caution. The four-year high in WTI crude oil futures at the end of June should raise some flags for bulls. Elevated geopolitical tension and a greater-than-expected decline in U.S. inventories support the price surge, but total crude holdings are still above the recent low. Prices about 11% higher than the end-of-January level, when inventories were 1% below the latest measure, may indicate that price appreciation is a bit extended. Increasing prices and inventories are unsustainable, absent a geopolitical-risk premium.

**New Price High With Inventories Above Recent Peak** 



Despite OPEC's commitment to increase supply, bullish momentum is prevailing as markets look ahead to potential further inventory declines. Absent that and a sustained geopolitical-premium bid, which is generally

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more fleeting, prices are more likely carving out a peak within a higher range.

Best of Crude Oil's Bull Drivers Exhausted. Primary crude-oil rally companions are near exhaustion, which should limit further price appreciation. The best of the trends toward backwardation and demand exceeding supply should be over. The recent peak in combined one-year futures-curve measures for WTI crude, Brent, gasoline and diesel near the 2014 backwardation extreme, and well above the database average since 2004 (2.97% contango), indicates the limits of appreciating front-futures prices.

Limits to Demand vs. Supply, Backwardation Trends



In April 2011, crude peaked at \$114.83 a barrel despite the curve moving deeper into backwardation, though combined IEA and EIA demand vs. supply estimates show that favorable trend is near an end. Peaks in the demand vs. supply ratio have been declining since 2008, and the recovery from the 2016 trough about matches 2005-08, albeit from lower levels.

WTI Crude Oil Discount to Brent Showing Staying Power This Time. At about a 12% discount to Brent in mid-June, WTI crude oil was extremely low, but key companions indicate the dispersion has staying power. U.S. DOE crude oil net imports and North Sea production top the list of highly correlated data sets to the percentage spread between the benchmarks. Both indicate the recent WTI/Brent extreme should have less propensity to revert to the mean, as happened in the aftermath of hurricanes last September. Annualized measures of U.S. net imports and North Sea output are plunging rapidly, supporting a widening WTI discount.

WTI Likely to Remain Well Discounted to Brent



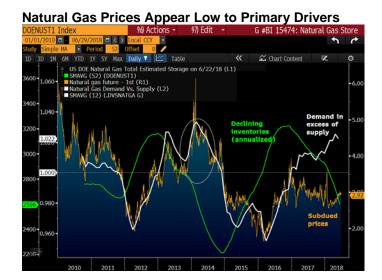
The WTI/Brent ratio spread recently bottomed at a similar extreme vs. its annual mean as reached last September, but remains below the 2017 low. Since 2014, the average WTI-to-Brent discount is about 7%, and it should continue to increase.

### Natural Gas Summer Sizzle Risk

Stuck at \$3, Natural Gas' Risks Favor \$4 Revisit Rather Than \$2. Natural gas, mired near \$3 per MMBtu, is at a greater risk of breaking toward \$4 than \$2, as extreme price-range compression enhances the potential. Demand vs. supply is favorable, with inventories in decline entering peak summer-electricity needs and no apparent limit in sources.

Inventory, Demand Gauges Say Gas Should Be Higher. Natural gas prices are too low, based on the primary bull-market drivers -- demand exceeding supply and declining inventories. Our analysis of key U.S.-traded futures shows a strongly positive trend, with the ratio of demand vs. supply at its highest level in four years. Simultaneously, the annualized measure of inventories has peaked and is plunging rapidly. Conditions look similar to 2013-14, when natural gas averaged \$4 MMBtu.

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The 2018 average price of \$2.82 is on the back of the narrowest range in futures history in 2017 and similar to the past 52 weeks. There's an increasing risk of a sharp rally, with the market highly susceptible to bullish catalysts, such as hot summer weather.

Natural Gas Yearning to Break Out Higher. Natural gas is a leader among commodities with the most momentous rally potential. The narrowest percentage range in futures history last year, the most compressed 52-week Bollinger Bands since 1994 and persistent backwardation provide a strong foundation for a price breakout higher. Technicals indicate about an equal chance of a sharp surge vs. drifting flat to lower. Increasingly bound since the December 2016 high of \$3.99 MMBtu and February low of \$2.52, a sustained breach is more likely into the \$4 handle.

Narrowing Price Range vs. Backwardation Trend

Backwardation in natural gas futures is an oxymoron. Indicating demand in excess of supply, the year-out future is 9% above the front contract. The average for this curve

measure since 1994 is 9.3% in contango. Managedmoney net positions are a bit elevated, but well off recent extremes.

### **PERFORMANCE DRIVERS**

### Conditions May Not Be So Optimal Again for WTI.

WTI crude oil was the 1H commodity leader, but conditions are unlikely to remain as optimal. Up 23% through June 29, the crude-subindex total return also was about a half a percentage-point ahead of the front future's increase. Strong spot-price gains in a backwardated market have the additional kicker of positive carry (roll yields). A narrowing of the steep WTI discount vs. Brent suppressed the seaborne benchmark's returns in June, but declining Brent production and U.S. net imports should prevent further compression.

**WTI Tops 1H Commodity Leader Board** 

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Security	Chg YTD %	l Chg June	Chg 1Y OTD Pct Cl	r% 2Yr% ha Cha
Bloomberg WTI Crude Oil Subind	+23.2%		+13.2% +62	5
Bloomberg Brent Crude Subindex	+23.0%	+2.7%	+16.7% +73	3.7% 43.3%
Bloomberg Petroleum Subindex T	+18.3%	+3.8%	+13.0% +62	2.2% 33.5%
BBG Energy Spot	+12.8%	+2.0%	+10.0% +40	).2% 34.1%
Bloomberg Energy Subindex Tota	+12.7%	+2.7%	+10.7% +37	7.0% 12.8%
Bloomberg Heating Oil Subindex	+10.2%	+.3%	+10.5% +55	.6% 31.7%
Bloomberg Unleaded Gasoline Su	+8.7%	+.2%	+7.7% +45	.3% 27.6%
Bloomberg Natural Gas Subindex	-2.9%	7%	+4.2% -18	3.0% -32.1%

Backwardation in natural gas, also predominant on the basis of a one-year curve, is indicative of demand exceeding supply and potential positive carry -- historically an oxymoron. Gas is basically flat this year, but summer-sizzle risks are elevated.

Front Energy Futures to June 28

Ticker	Last	Chg YTD ${}^{9}$	Chg MTD	Chg	1 Yr	2 Yrs	Chg	Change
			o o	QTD %	Ago	Ago	Pct 1Yr	2 Year
								Percent
+ Generic 1st 'CL' Future	74.4	+23.1%	+10.9%	+14.5%	44.9	49.9	+65.5%	49.0%
+ Generic 1st 'XB' Future	217.9	+21.1%	+.9%	+8.0%	148.6	152.5	+46.7%	42.9%
+ Generic 1st 'CO' Future	79.4	+18.8%	+2.4%	+13.0%	47.4	50.6	+67.5%	57.0%
+ Generic 1st 'H0' Future	220.9	+6.4%	+.8%	+8.9%	144.6	153.4	+52.8%	44.1%
+ Generic 1st 'NG' Future	2.9	-1.0%	-1.0%	+7.0%	3.0	2.9	-3.9%	2.1%

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## **Metals**

**All** (Index weight: 35% of BCOM) Performance: June -4.1%, YTD -5.2%

**Industrial** (Index weight: 19.0% of BCOM. Performance: June -4.8%, YTD -5.3 Spot -5.6%)

**Precious** (Index weight: 16.1% of BCOM. Performance: June -3.3%, YTD -5.0, Spot -4.5%)

### Stage Set for 2H Recovery

Copper to Gold: 1H Improves Prospects for 2H Metals Recovery. Pressured back into support zones at the end of 1H, metals have a firmer foundation to resume the bullish trend in 2H. The most dollar-sensitive commodity sector is unlikely to face similar pressure after 2Q, the strongest quarter for the trade-weighted broad dollar since 3Q15. Even if the greenback embarks on a bull market of its own, the velocity of strength is unsustainable. The dollar is more likely to revert some 2Q strength, which should spark the next leg of a metals rally.

Some tempering of trade tensions would allow prices to appreciate again with favorable demand vs. supply. The duration of gold's confinement within a narrow range has been extended, but should eventually climb with inflation and a peak dollar.

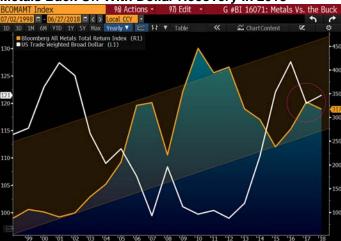
### All Metals Divergent Strength

Metals Have Plenty of Room to Rally, Even With Strong Greenback. Only the third year into recovery, the 2018 metals decline on the back of a strong dollar should be temporary. Demand far exceeds supply, with most prices at substantial discounts vs. peaks about seven years ago. It would take unlikely forces to derail the metals' bull market.

Metals Showing Bullish Divergence vs. Dollar. The metals' strong backdrop should prevail, though sustained dollar strength would be a drag. The sharp 2017 metals rally and dollar decline are more likely to resume, now that they've paused, refreshed and partially retraced. Bullish divergence is the 1H indication. The Bloomberg All Metals Total Return Index has retraced about 25% of the 2017 rally vs. almost 50% for the trade-weighted broad dollar. In a nascent recovery, this year's metals decline amid dollar strength should be temporary.

In Bloomberg All Metals Total Return Index history since 1997, the gauge has a negative 0.70 correlation to the trade-weighted broad dollar, and a minus 3.1 beta, measured annually. Historically, dollar gains of 4% have been accompanied by a 12% metals decline, but they're down only 4%.

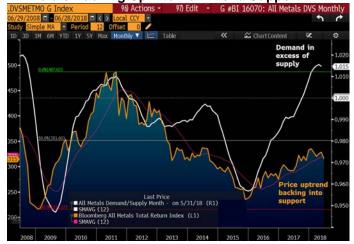
Metals Back Off With Dollar Recovery in 2018



### Price Dip Comes With Excess Demand vs. Supply.

The first month-end Bloomberg All Metals Total Return Index reading below its 12-month average in two years is more likely a blip in the bullish trend than an indication of failure. The greatest disparity in demand vs. supply in a decade may be peaking, but should hold above par, supporting a continued price recovery. A sharp stockmarket plunge or reduction in global GDP is likely necessary to end this bullish trend. The 2014 crude-oil collapse distorted the high correlation of our metals demand vs. supply ratio with price trends, but oil is charging forward again.

All-Metals Backing Up Into Bull-Trend Support



World Bureau of Metal Statistics data are used for the industrial metals on a per-ton basis, so aluminum and

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copper are predominant. The reciprocal of the tradeweighted broad dollar vs. its 20-month average is the proxy for precious metals.

### Refreshing Base Metals Bull

June Decline Should Set Stage for 2H Industrial Metals Recovery. The key takeaway from 1H is that June's dip in the industrial metals' bullish trend appears temporary. The dollar would need to sustain 2Q's rally pace and heightened trade tensions would need to further escalate to suppress the metals in 2H. Both scenarios are unlikely, in our view.

Demand in Excess of Supply = Price Appreciation

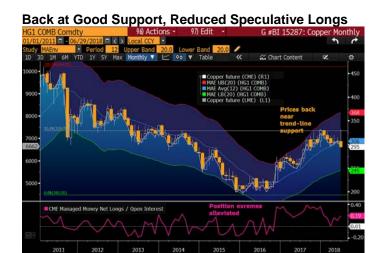


Favorable Trends Support Base-Metals Rally. Our analysis of World Bureau of Metal Statistics data indicates strongly favorable demand vs. supply conditions for industrial metals, with prices recently recovering from good support. The ratio has held above par for the longest period in the database since 1995. Indications are for further price appreciation and aluminum and copper dominance in measured tons of global consumption vs. production.

Slightly below the peak from December, the Bloomberg Industrial Metals Spot Subindex has had plenty of time to consolidate gains. Unless disrupted by some unforeseen strong macroeconomic factor, industrial metals should continue the appreciation trend toward resistance from the 2011 peak, about 30% above June 29 prices.

The Copper Bull Appears Rested and Well Fed. A copper rally should resume, trading this year within December's range and with support, back at the appreciating 12-month trendline. Managed-money net positions were just too long at the end of 2017, with copper stretched too far and fast while revisiting the halfway mark of the 2011-16 bear market for the first time. But that looks like a mere speed bump. Net

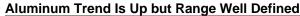
positions are well off extremes, indicating less liquidation risk.



Good support is near \$2.90 a pound. Initial resistance is the March-April high of about \$3.20. A spiking VIX index, which sparked the 2018 decline, is a key risk. The narrowing range is indicative of a market ready to break higher.

### Range Set in April, Aluminum Trending Higher.

Aluminum is likely to climb higher after setting its 2018 range in April. Under pressure before U.S. sanctions against Russia's Rusal, the \$1,969-\$2,700-a-ton range last month should market key support and resistance levels. The market indicates it's more likely the metal will eventually sustain above the peak rather than below the nadir. Initial support is near the appreciating 12-month average (\$2,134). Aluminum should mark lows in the normal distribution of trading post-April, likely to extend toward \$2,500.





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Nickel Catching Up to Strong Demand vs. Supply.

This year's best-performing metal -- nickel -- is likely to sustain its leadership role. Among the most beaten-up commodities of 2017, nickel prices are likely to advance to the mean. Despite the most favorable demand vs. supply conditions in more than two decades, the metal is still about 25% below the halfway mark of its 2011-16 bear market. By comparison, zinc is about 16% above the high from the same period.

A revisit of the midpoint of about \$19,000 a ton should be in play. On a 25-year annual basis, nickel's 0.61 negative correlation vs. the trade-weighted broad dollar is about the same positive vs. copper. Strong demand for stainless steel, anticipation of greater consumption in electric vehicles, declining stockpiles and supply hiccups are price-supportive.

Nickel Recovery July Be Just Heating Up



### **Precious Metals Softpatch**

Gold Should Eventually Cross Its New \$1,300 Line in the Sand. Gold's failure after June's interest-rate hike knocks the metal back into its narrowing range, delaying an eventual breach to the upside, in our view. About \$1,240-\$1,300 an ounce should hold the market until the dollar rally runs its course. Bottoming inflation and stockmarket volatility with a peak greenback should support gold prices.

### \$1,300: The Key Gold Line in the Sand.

The down pattern for gold after the central bank raised interest rates signals more weakness, at least in the short term. To show strength, gold needs to close above key resistance near \$1,300 an ounce. The metal traded above the three-week consolidation-period high and closed below the low, indicating a market that's more likely to revisit bottom-of-the-range support near \$1,240

on the back of a strengthening greenback -- a primary risk factor for dollar-priced gold.

Key Gold Resistance Is Now \$1,300

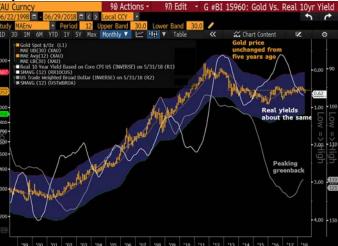


Gold's annual correlation reading (minus 0.57) to the Bloomberg Dollar Spot Index (since 2004) is about the same as the metal's positive ties to the consumer price index (CPI). Inflation and the dollar are primary gold-price drivers. Both are trending supportively for the longer term.

Higher Gold Prices Likely Eventual Outcome vs. Dollar, Yields. Unchanged from five years ago and down in 2018, the gold price indicates elevated levels of peer performance frustration that should be nearing an extreme. Since June 20, 2013, the precious metal's stagnant performance has been dwarfed by total returns of about 90% in the S&P 500, 26% in the Bloomberg Barclays US Treasury 20+ Index and a 60x gain in Bitcoin. Relative to its primary companions, notably the dollar, gold has shown divergent strength.

Stagnant Gold Should Be Nearing Maximum

**Impatience** 



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Dollar-priced gold typically has the highest negative correlation to the greenback. The trade-weighted broad dollar is up 21%. The U.S. consumer price index is up only 7%, just recovering from its lowest-for-longest period vs. its five-year average in 50 years. Real U.S. Treasury 10-year yields are about the same. Absent sustained dollar strength, gold has plenty of catch-up room.

### **PERFORMANCE DRIVERS**

Pressure From Strong Dollar, But Well Supported.

Sharp dollar strength in June should only temporarily pressure metals. The Bloomberg Dollar Spot Index is having its best quarter since 4Q16. Even stalwart nickel gave back some 2018 gains, but its minor June decline is a sign of divergent strength vs. a 4.8% retreat for the Bloomberg Industrial Metals Subindex. Carrying the most weight, gold is the most significant drag on metals, succumbing to June's 1.9% dollar rally. Next in significance, copper is showing signs of bottoming.

Metals Succumb to Strong Dollar Into Support

Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		June	QTD Pct	Chg	Chg
Bloomberg Nickel Subindex Tota	+16.8%		+12.1%	+59.4%	54.5%
Bloomberg Aluminum Subindex To	-4.3%	-6.7%	+8.7%	+12.0%	28.6%
Bloomberg Gold Subindex Total	-4.6%	-3.7%	-5.5%		-7.2%
Bloomberg Precious Metals Subi	-5.0%	-3.3%	-4.5%	-1.0%	-9.1%
Bloomberg All Metals Total Ret	-5.2%	-4.1%	-1.6%	+7.8%	12.8%
Bloomberg Industrial Metals Su	-5.3%	-4.8%	+1.0%	+15.7%	36.1%
Bloomberg Silver Subindex Tota	-6.0%	-1.9%	9%	-3.7%	-14.5%
Bloomberg Copper Subindex Tota	-11.0%	-3.7%	-2.7%	+8.1%	30.7%
Bloomberg Zinc Subindex Total	-12.8%	-7.3%	-12.1%	+6.1%	38.1%

Stretching to a new 2018 high early in the month, then revisiting the lows since September later in the month on escalating trade tensions, copper appears to be marking time in a range, awaiting a catalyst for the next leg of its recovery. Reduced trade tension and a stall in the recovering greenback should refuel the metals bull.

**Agriculture** (Index weight: 30% of BCOM) Performance: June -10.5%, YTD -5.8%, Spot -1.9%)

**Grains** (Index Weight: 24% of BCOM)
Performance: June -11.7%, YTD -3.3%, Spot +2.3%)

**Softs** (Weight: 6% of BCOM)

Performance: June -7.4%, YTD -11.8, Spot -10.7%)

### **Unsustainable Perfect Storm**

The Near-Perfect Agriculture Storm of June Is Unsustainable. Subject to soybeans and trade tensions, the market's unlikely to sustain the depressed agriculture prices reached in June. With few signs of a trade resolution, Corn Belt growing conditions need to stay well above average for prices to not gain. Mean reversion is the more likely scenario in a sector dominated by the grains, with demand exceeding supply and peaking stocks-to-use, notably in corn. These trends indicate the June trade-spat-driven grain plunge, about the worst for the month in Bloomberg Grains Subindex history, is more likely a one-off.

Crop conditions have rarely been better prior to the primary growing months, elevating mean-reversion risks. In soft commodities, peaking cotton and substantially expended short-covering fuel in sugar indicate lower for longer. Coffee appears to be the readiest for a rally spark.

### **Broad Agriculture Discount**

**Unsustainably Low Ag Prices** 



Hard to Get Much Worse Than What Agriculture Weathered in June. About the worst June in Bloomberg Agriculture Subindex Total Return tracking since 1991 shouldn't derail agriculture gains for 2018. Returns

Bloomberg Commodity Index (BCOM)

approached 15% in 2009 and 1997, when the June TR declined a respective 9.7% (similar to this year) and 10.8%. Down about 6% in 2018, the ags' discount is too extreme.

Agriculture: the Primary Discounted Sector. The nearperfect storm in agriculture in June may have pushed prices to lows that aren't sustainable. Demand exceeds supply, and the steepening discount vs. broad commodity prices indicates limited downside and plenty of catch-up room. In the best June conditions in decades, corn, soybeans and wheat appear priced for only the top production estimates, and with little easing of trade tensions. Prices have declined on greater U.S. supply prospects, but should push demand to an even greater excess.

Corn is the most significant ag commodity with demand in excess of supply and inventories in decline, yet with minimal exposure to trade rifts. It's also the most drought-sensitive. The June decline is warranted, based on very good crop conditions, but it's July-August that'll really matter.

### **How Much Worst for Grains?**

Sweet 16 in Corn, Soybeans and Wheat Supports Price Bottoming. A nine-year low in front soybean futures in June is much less sustainable than in September. The most subject to trade tensions, soybeans lead the price backup in a grain market where demand exceeds supply and stocks-to-use are peaking. Corn and soybean crop conditions don't get much better, with broad indicators harkening back to the 2002 recovery.

**Grains Appear Similar to 16 Years Ago** 



Grain Conditions Reminiscent of 2002 Recovery. Narrowing price ranges that show signs of bottoming along with peaking stocks-to-use is the bigger-picture setup in the grain market. June pressured prices back

toward 2017 lows, but the Bloomberg Grains Spot Subindex has extended last year's high, indicating a recovery. The most recent similarities in declining stocksto-use and low, compressed price ranges occurred in 2002. From the 2001 low to 2004 peak, the grain index doubled. Risks appear quite high for shorts at the 2017 low before primary growing season (July-August).

Good-to-excellent conditions and trade tension likely need to maintain June extremes to sustain end-of-month pricing. They might, but the best June corn and soybeans good-to-excellent readings since 2010 have plenty of mean-reversion risk on a little hotter and dryer-than-expected weather.

#### **Demand Is Greater Despite Bumper-Crop Trend.**

Conditions for higher global grain prices are the most favorable in five years, based on USDA demand vs. supply data. Persistent outsized relative demand since 2015's 30-year low has yielded only a mild recovery in prices still near the bottom. Above par for the first time since June 2013, the 12-month average of grains demand vs. supply is unlikely to sustain back below until higher prices tamp demand. Low prices are limiting supply.

Favorable Demand vs. Supply = Prices Too Low



Corn is the primary driver of the ratio, measured in tons of production. The U.S. is the biggest producer, and planted acres of corn, below soybeans for the first time, are unlikely to increase until higher prices add incentive. Grain prices are nearing initial support at the 12-month average. The 2016 peak, about 16% higher, is good resistance.

### Soybeans Subject to Spikes If Production Trails.

Backing into support at 2017's low, soybeans are more vulnerable to price spikes in the prime U.S. growing season. New lows in June may be premature ahead of the critical soybean-yield stage in August. Good emergence, trade tension and the sharp decline in Brazil's currency have resulted in prices that assume

Bloomberg Commodity Index (BCOM)

strong U.S. production. Front soybean prices are about unchanged from the 2014 low, which coincided with the most extreme trough in 35 years, based on USDA demand vs. supply forecasts.

Soybeans Back on Support, Demand vs. Supply Flat



The ratio of demand vs. supply flatlined just below par for almost three years after recovering from the 2015 deficit. A hotter and dryer-than-expected summer should return soybeans toward the year's high of \$10.82 a bushel. The next support level is the multiyear bottom at \$8.44.

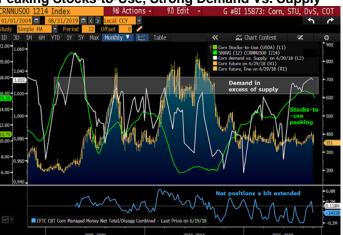
Wheat Prices Improve In Sync With Demand. Corn prices appear low relative to improving demand vs. supply, but wheat appears spot on. USDA estimates on the global wheat balance are the most favorable in four years. Wheat prices are recovering in a similar fashion and look destined to revisit resistance at 2017's peak of \$5.74 a bushel. Initial support is the \$4.58 upward-sloping 12-month average. Wheat prices and demand vs. supply appear to be in the early days of making the turn toward recovery. At the current pace, it should take a little more than a year for wheat demand to extend above par vs. supply.

Wheat Prices Improving With Demand Vs. Supply



Corn Conditions Harken Back to 2006. It's been 12 years since U.S. corn stocks-to-use estimates showed a similar pattern of peaking with demand exceeding supply. Recently reaching the highest level since 2006, USDA stocks-to-use appears to have peaked with rising demand, notably for ethanol, and diminishing acres vs. soybeans. Global corn demand is also at a 12-year high vs. supply. This summer's Corn Belt production likely needs to beat expectations to suppress these trends.

Peaking Stocks-to-Use, Strong Demand Vs. Supply



From a similar stocks-to-use pattern in August 2006 to the high in 2008, corn prices increased about 240%. In the past 30 years, corn prices have a negative 0.67 annual correlation to stocks-to-use and positive 0.55 to demand vs. supply. Elevated net-long positions have been a pressure factor in June, but should be sharply reduced with about a 9% decline.

### Soft Softs Subject to Brazil

Soft Sugar, Coffee Subject to Declining Real, Cotton Resistance. The market indicates that soft-commodity weakness has legs, notably if Brazil's real continues to decline. Cotton, the strongest of the trio, appears to have peaked. Sugar, the most significant, has covered a good amount of excessive shorts. Lowly coffee has short holders salivating, but at an extreme with low volatility.

Sugar Likely Transitions to Range-Bound Market. No longer an extreme short-commodity standout, sugar should be range-bound awhile. The most significant soft commodity is stuck between good longer-term trend-line support and downward momentum. The most immediate risk is likely a continued plunge in Brazil's currency. Down about 14% this year ahead of October elections, the real to dollar cross is a strong contributor to the 21% decline in the front sugar future. Rapidly increasing stocks-to-use is another, but much of the worst case appears to be priced in.

Bloomberg Commodity Index (BCOM)

Shorts Covered, Sugar at Mercy of Fundamentals



Nearing 2015 lows, with Brazilian production subject to adverse weather and global demand for ethanol rapidly increasing (notably from China), sugar should have limited downside. This year's 10.7 cents-a-pound low is good support. The 12-month average near 13.6 cents is good resistance.

### **Cotton Appears More Prone to Mean Reversion.**

Cotton's failure in June to sustain levels near the top of the seven-year range in a bottoming stocks-to-use environment indicates the best of the bull market has run its course. A similar but less extreme price peak in 2017 resulted in a 23% decline. Still well above the upward-sloping 12-month moving average on June 26, cotton futures favor continued mean reversion. Sharply reduced U.S. production or a big lift to exports will likely be necessary to keep cotton above June's high of 96.5 cents a pound. USDA global data showing demand exceeds supply is price-supportive.

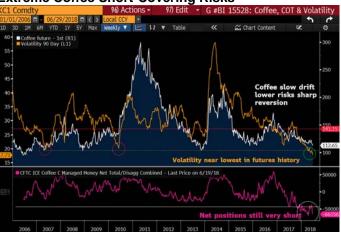
**June Cotton Peak Has Legs** 



Coffee at Extreme Short-Covering Risk. Coffee is near the top of the list of commodities with predominant net short positions, but also with historically low volatility. The

slowly downward-drifting pattern since the 2016 peak indicates elevated risk of high-velocity mean reversion. Declining currencies in producer countries, notably the Brazilian real, are prime price-pressure factors. Continued real weakness is likely necessary to further pressure coffee prices.

**Extreme Coffee Short-Covering Risks** 



Coffee managed-money positions (66,156 net short) are surpassed only by soybean oil (93,139). Coffee has had good reason to be short, down 9% in 2018 to June 26, yet 90-day volatility (near 18%, the lowest since 1988) portends sharp mean reversion. Price increases typically resolve extremely low commodity volatility.

### PERFORMANCE DRIVERS

### Trade Tensions, Wet Weather Pressure Soybeans.

The worst month for the Bloomberg Soybeans Subindex Total Return in seven years, down about 14%, may signal an aftermath similar to September 2011, the most recent greater extreme (down 19%). The index bottomed three months later, then rallied 82% to the 2014 peak. Preprimary growing season plunges are more suspect. Mean reversion was the June theme on the best grain-growing conditions in decades, the sharp plunge in the Brazilian real and trade tension. Less affected by trade, the corn index declined only 10%.

Bloomberg Commodity Index (BCOM)

**Soybeans Lead June Decliners on Trade Tensions** 

Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		June	QTD Pct	Chg	Chg
Bloomberg Cotton Subindex Tota	+8.9%	-7.9%	+6.1%	+27.7%	30.6%
Bloomberg Wheat Subindex Total	+8.1%	-7.5%	+4.7%	-15.2%	-20.6%
Bloomberg Kansas Wheat Subinde	+4.7%	-12.4%	-1.6%	-18.3%	-19.7%
BBG Soybean Meal TR	+2.1%	-12.9%	-15.4%	+6.4%	-22.4%
Bloomberg Corn Subindex Total	-3.2%	-10.8%	-11.0%	-14.3%	-24.9%
Bloomberg Grains Subindex Tota	-3.3%	-11.7%	-9.7%	-13.4%	-24.7%
Bloomberg Live Cattle Subindex	-4.3%	+2.8%	+6.9%	-8.9%	4.6%
Bloomberg Livestock Subindex T	-5.1%	+2.7%	+5.5%	-8.1%	-3.8%
Bloomberg Agriculture Subindex	-5.8%	-10.5%	-8.7%	-10.5%	-24.6%
Bloomberg Lean Hogs Subindex T	-8.0%	+2.5%	+3.0%	-8.1%	-15.8%
Bloomberg Soybeans Subindex To	-11.6%	-15.3%	-18.0%	-9.6%	-27.9%
BBG Softs TR	-11.8%	-7.4%	-1.9%	-6.8%	-30.1%
Bloomberg Coffee Subindex Tota	-12.7%	-8.5%	-5.5%	-16.7%	-33.6%
Bloomberg Soybean Oil Subindex	-13.2%	-6.6%	-9.3%	-12.6%	-12.3%
Bloomberg Sugar Subindex Total	-20.4%	-6.3%	-3.1%	-13.4%	-46.4%

Wheat remains the leader among the grains, with front futures prices up almost 12% in 2018, but still within last year's range. Oversupplied sugar is no longer the commodity with the most short positions. That title has been passed to soybean oil, the penultimate 2018 decliner.

## **DATA on BI COMD**

# **Performance - Overview**

**Key Metrics** 

Name	% Change on Day	WTD % Change	MTD % Change	1 Mth % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change	3 Yr % Change	5 Yr % Change
■ Commodities										
■ BCOM Index TR	0.7	0.1	-3.5	-3.0	0.4	0.0	9.0	-0.1	-11.3	-28.2
■ Energy Index	1.1	4.0	2.7	4.3	10.7	12.7	37.0	12.8	-23.3	-50.1
■ All Metals Index	0.0	-1.9	-4.1	-3.6	-1.6	-5.2	7.8	12.8	12.8	0.9
■ Industrial Metals Index	-0.4	-2.4	-4.8	-4.1	1.0	-5.3	15.7	36.1	19.2	4.6
■ Precious Metals Index	0.4	-1.4	-3.3	-3.1	-4.5	-5.0	-1.0	-9.1	2.9	-6.3
Ags & Livestock Index	1.1	-1.6	-8.4	-8.7	-6 <b>.</b> 5	-5.8	-10.2	-21.4	-21.4	-35.3
■ Livestock Index	2.2	1.1	2.7	3.9	5.5	-5.1	-8.1	-3.8	-12.5	-13.0
■ Agriculture Index	0.8	-2.1	-10.5	-11.0	-8.7	-5.8	-10.5	-24.6	-23.3	-39.3
■ Grains Index	1.5	-2.4	-11.7	-13.1	-9.7	-3.3	-13.4	-24.7	-31.6	-47.1
■ Softs Index	-0.1	0.0	-7.4	-5 <b>.</b> 5	-1.9	-11.8	-6.8	-30.1	-10.9	-35.7
■ BCOM EX Indices TR										
■ BCOM Index Roll Select TR	0.6	-0.2	-4.0	-3.5	0.1	0.0	8.9	3.2	-5.5	-21.7
■ BCOM Index Forwards TR										
■ BCOM Index ER	0.7	0.1	-3.6	-3.2	-0.1	-0.9	7 <b>.</b> 5	-2.1	-13.2	-29.8
■ BCOM Index Spot	0.7	0.1	-3.3	-2.8	0.9	1.2	12.6	11.4	9.4	-7.1
■ Stocks										
■ S&P 500 Index TR	0.1	-1.3	0.6	1.2	3.4	2.6	14.6	36.7	40.6	87.7
■ Bonds										
■ Barclays U.S. Aggregate	-0.1	0.3	-0.2	-0.5	-0.2	-1.7	-0.6	-0.8	5.2	11.9
■ Currencies										
■ Bloomberg U.S. Dollar Spot Index	-0.5	0.0	0.9	0.4	4.9	1.9	-0.1	-0.4	0.4	13.5
US Dollar Index	-0.9	0.0	0.5	-0.4	4.8	2.6	-1.2	-1.3	-0.3	13.7
Pound Index	0.5	-0.4	-0.3	-0.6	-3.2	-1.1	0.3	-4.4	-19.7	-9.5

Name	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ Commodities										
■ BCOM Index TR	-0.7%	1.7%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%	18.9%
■ Energy Index	11.5%	-4.3%	16.3%	-38.9%	-39.3%	5.2%	-9.4%	-16.0%	-10.5%	-5.3%
■ All Metals Index	-5.2%	20.8%	15.7%	-19.5%	-7.1%	-21.6%	2.9%	-11.5%	25.9%	60.2%
■ Industrial Metals Index	-4.9%	29.4%	19.9%	-26.9%	-6.9%	-13.6%	0.7%	-24.2%	16.2%	80.0%
■ Precious Metals Index	-5.4%	10.9%	9.5%	-11.5%	-6.7%	-30.8%	6.3%	4.6%	42.7%	29.2%
■ Ags & Livestock Index	-6.8%	-8.1%	0.9%	-16.1%	-6.0%	-12.6%	2.7%	-12.4%	33.9%	7.9%
■ Livestock Index	-7.1%	6.4%	-5.6%	-18.8%	11.6%	-3.5%	-3.5%	-2.3%	9.3%	-15.1%
■ Agriculture Index	-6.6%	-11.0%	2.1%	-15.6%	-9.2%	-14.3%	4.0%	-14.4%	38.5%	13.7%
■ Grains Index	-4.8%	-11.3%	-5.9%	-19.4%	-9.4%	-16.9%	18.3%	-14.4%	30.3%	-1.6%
■ Softs Index	-11.7%	-14.8%	13.2%	-9.9%	-10.1%	-16.9%	-22.4%	-14.0%	59.9%	44.2%
■ BCOM EX Indices TR										
■ BCOM Index Roll Select TR	-0.6%	3.6%	14.6%	-23.4%	-15.2%	-9.1%	-0.4%	-8.8%	19.5%	23.1%
■ BCOM Index Forwards TR										
■ BCOM Index ER	-1.6%	0.7%	11.4%	-24.7%	-17.0%	-9.6%	-1.1%	-13.4%	16.7%	18.7%
■ BCOM Index Spot	0.4%	7.6%	23.1%	-18.4%	-17.0%	-8.7%	3.7%	-8.1%	26.4%	41.2%
■ Stocks										
■ S&P 500 Index TR	2.6%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%
■ Bonds										
■ Barclays U.S. Aggregate	-1.7%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%
■ Currencies										
■ Bloomberg U.S. Dollar Spot Index	2.4%	-8.5%	2.8%	9.0%	11.0%	3.3%	-0.7%	1.8%	-1.8%	-4.8%
US Dollar Index	2.9%	-9.9%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%	-4.2%
Pound Index	-4.7%	11.6%	-30.3%	-5.7%	-4.3%	3.9%	8.7%	-0.5%	-6.6%	17.3%

**Performance – Commodity Total Returns Key Metrics** 

Name	% Change on Day	WTD % Change					
■ BCOM Total Return Indices							
WTI Crude Index	0.9	7.2	8.8	13.2	23.2	62.8	27.9
Brent Crude Index	2.1	5.2	2.7	16.7	23.0	73.7	43.3
Nickel Index	0.8	-2.4	-2.1	12.1	16.8	59.4	54 <b>.</b> 5
Heating Oil Index	1.4	3.9	0.3	10.5	10.2	55.6	31.7
Cotton Index	0.4	-1.6	-7.9	6.1	8.9	27.7	30.6
Gasoline Index	2.2	4.8	0.2	7.7	8.7	45.3	27.6
Wheat Index	3.7	-0.6	-7.5	4.7	8.1	-15.2	-20.6
HRW Wheat Index	3.5	-3.3	-12.4	-1.6	4.7	-18.3	-19.7
Soybean Meal Index	-0.4	0.0	-12.9	-15.4	2.1	6.4	-22.4
Natural Gas Index	-0.6	-0.6	-0.7	4.2	-2.9	-18.0	-32.1
Corn Index	1.5	-1.9	-10.8	-11.0	-3.2	-14.3	-24.9
Live Cattle Index	2.9	8.0	2.8	6.9	-4.3	-8.9	4.6
Aluminum Index	-1.0	-2.0	-6.7	8.7	-4.3	12.0	28.6
Gold Index	0.3	-1.2	-3.7		-4.6	-0.1	-7.2
Silver Index	1.0	-2.0	-1.9		-6.0		-14.5
Lean Hogs Index	1.0	1.5	2.5	3.0		-8.1	-15 <b>.</b> 8
Platinum Index	0.3	-1.9	-6.1	-8.1	-8.8	-7 <b>.</b> 5	-16 <b>.</b> 5
Copper Index	-0.2	-2.7	-3.7	-2.7	-11.0	8.1	30.7
Soybeans Index	-0.4	-3.9	-15.3		-11.6		-27.9
Coffee Index	-0.6	-1.5	-8.5			-16.7	-33.6
Zinc Index	-1.5	-2.1	-7.3		-12.8		38.1
Soybean Oil Index	0.2	-0.6	-6.6		-13.2		-12.3
Sugar Index	0.0	-1.3	-6.3	-3.1	-20.4	-13.4	-46.4

Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ BCOM Total Return Indices										
WTI Crude Index	23.2%	5.1%	7.1%	-44.3%	-41.7%	6.8%	-11.8%	-3.6%	3.8%	4.4%
Brent Crude Index	23.0%	14.2%	25.4%	-45.6%	-47.6%	7.2%	7.6%	16.8%	11.5%	28.6%
Nickel Index	16.8%	25.6%	11.8%	-42.6%	7.3%	-20.1%	-10.2%	-24.7%	32.2%	54.9%
Heating Oil Index	10.2%	15.0%	33.5%	-42.8%	-38.8%	0.4%	5.5%	10.7%	8.3%	20.5%
Cotton Index	8.9%	12.5%	10.5%	3.0%	-21.2%	9.0%	-12.7%	-21.7%	98.2%	30.1%
Gasoline Index	8.7%	2.8%	6.4%	-12.6%	-43.8%	1.9%	25.7%	14.5%	13.1%	74.7%
Wheat Index	8.1%	-12.5%	-24.1%	-22.2%	-9.4%	-27.2%	9.8%	-34.0%	21.2%	-26.0%
HRW Wheat Index	4.7%	-14.9%	-25.3%	-32.7%	-4.7%	-26.2%	5.6%	-22.9%	42.1%	-23.8%
Soybean Meal Index	2.1%	-4.8%	18.1%	-18.0%	11.8%	20.0%	49.1%	-18.1%	38.9%	34.7%
Natural Gas Index	-2.9%	-36.4%	10.3%	-39.9%	-30.7%	5.0%	-30.6%	-47.1%	-40.6%	-51.6%
Corn Index	-3.2%	-12.1%	-9.8%	-19.2%	-13.3%	-30.3%	19.0%	1.1%	30.7%	-10.1%
Live Cattle Index	-4.3%	9.1%	-7.4%	-14.3%	22.1%	-5.0%	-3 <b>.</b> 9%	-1.0%	15.0%	-9.8%
Aluminum Index	-4.3%	31.2%	9.7%	-22.9%	-3.1%	-20.7%	-4.0%	-21.7%	5 <b>.</b> 4%	33.8%
Gold Index	-4.6%	12.8%	7.7%	-10.9%	-1.7%	-28.7%	6.1%	9.6%	28.7%	22.9%
Silver Index	-6.0%	5.8%	14.0%	-12.7%	-20.4%	-36.6%	7.1%	-10.1%	81.8%	47.6%
Lean Hogs Index	-8.0%	2.8%	-2.9%	-26.1%	-4.4%	-2.0%	-2.9%	-4.6%	0.3%	-22.5%
Platinum Index	-8.8%	3.0%	88.0	-26.5%	-12.3%	-11.8%	8.7%	-21.8%	19.3%	54.0%
Copper Index	-11.0%	29.2%	15.7%	-25.1%	-16.6%	-8.8%	5.0%	-24.4%	29.5%	130.0%
Soybeans Index	-11.6%	-8.1%	14.8%	-14.6%	-5.5%	10.5%	24.0%	-16.4%	34.9%	22.9%
Coffee Index	-12.7%	-16.0%	-1.3%	-31.5%	37.8%	-30.5%	-41.6%	-11.2%	67.0%	10.3%
Zinc Index	-12.8%	29.7%	<b>57.</b> 5%	-28.0%	3.5%	-7.0%	9.0%	-27.8%	-8.8%	98.3%
Soybean Oil Index	-13.2%	-7.0%	7.3%	-7.7%	-20.6%	-22.4%	-9.8%	-15.2%	33.8%	14.2%
Sugar Index	-20.4%	-25.4%	22.8%	-4.7%	-30.9%	-20.0%	-13.0%	-11.9%	24.0%	86.3%

**Performance – Prices Key Metrics** 

Name	% Change on Day	WTD % Change	MTD % Change	3 Mth % Change	YTD % Change		2 Yr % Change
■ BCOM Single Commodity Price							
Brent Crude	2.0	0.0	2.4	13.0	18.8	67.5	57.0
WTI Crude	1.2	8.4	10.9	14.5	23.0	65.4	49.0
Nickel	0.8	0.0	-2.2	11.9	16.7	60.3	57.7
Gas Oil	1.5	4.6	-1.5	9.0	12.5	55.1	50.1
Heating Oil	1.4	0.0	0.8	8.9	6.4	52.8	44.1
Gasoline	2.2	0.0	0.9	8.0	21.1	46.7	42.9
Cotton	0.5	0.0	-8.3	4.8	8.6	15.4	32.4
Aluminum	-0.8	0.0	-5.8	8.7	-4.2	13.5	32.7
Soybean Meal	0.4	0.0	-11.3	-13.3	<b>6.</b> 5	13.0	-16.2
Palladium	2.0	0.3	-4.0	0.6	-10.5	12.2	60.7
Copper (LME)	0.0	0.0	-3.1	-0.8	-8.0	12.0	37.3
Copper (CME)	0.0	-2.4	-3.7	-2.4	-10.5	10.1	35.2
Zinc	-1.2	0.0	-6.9	-11.9	-13.3	4.9	38.6
Wheat	3.8	0.0	-5.5	10.3	16.5	3.6	15.8
Gold	0.3	-1.3	-3.5	-5.2	-4.2	0.7	-5.5
HRW Wheat	3.9	0.0	-13.2	0.7	10.2	-2.0	17.7
Corn	1.5	0.0	-11.1	-9.7	-0.1	-2.6	-6.0
Silver	1.0	0.0	-2.2	-1.0	-6.1	-2.9	-12.3
Natural Gas	-0.5	-0.7	-0.9	7.0	-1.0	-3.9	2.1
Soybeans	-0.3	0.0	-15.7	-17.8	-9 <b>.</b> 8	-6.2	-25.0
Platinum	0.2	-2.5	-6.4	-8.2	-8.8	-7.3	-15.8
Lean Hogs	2.2	0.0	8.2	44.8	15.5	-7.4	-0.3
Live Cattle	2.9	0.0	1.6	-6.2	-12.2	-8.4	-6.5
Soybean Oil	0.4	0.0	-6.4	-8.6	-12.0	-10.2	-5 <b>.</b> 5
Coffee	-0.6	0.0	-9.9	-5.6	-11.6	-10.6	-21.9
Sugar	-0.2	0.0	-7.3	-4.0	-21.8	-10.8	-43.0

Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ BCOM Single Commodity Price										
WTI Crude	22.8%	12.5%	45.0%	-30.5%	-45.9%	7.2%	-7.1%	8.2%	15.1%	77.9%
Gasoline	21.3%	8.1%	31.4%	-11.7%	-48.5%	-0.9%	4.7%	9.5%	19.5%	103.6%
Brent Crude	18.7%	17.7%	52.4%	-35.0%	-48.3%	-0.3%	3.5%	13.3%	21.6%	70.9%
Wheat	17.3%	4.7%	-13.2%	-20.3%	-2.6%	-22.2%	19.2%	-17.8%	46.7%	-11.3%
Nickel	15.8%	27.5%	13.5%	-41.8%	9.0%	-18.6%	-9.2%	-24.2%	33.8%	58.8%
Lean Hogs	15.4%	8.5%	10.6%	-26.4%	-4.9%	-0.3%	1.7%	5.7%	22.3%	7.1%
Gas Oil	13.0%	19.8%	53.6%	-36.3%	-45.8%	1.9%	0.3%	21.2%	20.0%	51.9%
Cotton	8.6%	11.3%	11.6%	5.0%	-28.8%	12.6%	-18.1%	-36.6%	91.5%	54.2%
HRW Wheat	7.0%	2.1%	-10.7%	-25.2%	-2.2%	-22.9%	15.9%	-15.7%	58.7%	-14.9%
Soybean Meal	6.6%	-0.1%	18.4%	-27.5%	-16.7%	4.1%	35 <b>.</b> 9%	-16.4%	18.0%	4.5%
Heating Oil	6.3%	21.8%	54.8%	-40.4%	-40.0%	1.1%	3.8%	15.4%	20.1%	50.7%
Corn	-0.9%	-0.4%	-1.9%	-9.6%	-5.9%	-39.6%	8.0%	2.8%	51.7%	1.8%
Natural Gas	-0.9%	-20.7%	59.3%	-19.1%	-31.7%	26.2%	12.1%	-32.1%	-20.9%	-0.9%
Aluminum	-3.4%	33.3%	12.5%	-17.9%	4.1%	-13.9%	2.5%	-18.8%	11.6%	45.6%
Gold	-4.0%	13.7%	8.6%	-10.5%	-1.5%	-28.3%	7.0%	10.2%	29.7%	24.0%
Silver	-6.1%	7.2%	15.8%	-11.5%	-19.5%	-35 <b>.</b> 9%	8.3%	-9.8%	83.7%	49.1%
Copper (LME)	-8.0%	30.6%	17.3%	-25.8%	-13.9%	-6.8%	4.2%	-21.2%	31.2%	141.1%
Soybeans	-8.7%	-4 <b>.</b> 5%	14.4%	-14.5%	-22.3%	-7.5%	18.4%	-14.0%	34.0%	6.9%
Platinum	-9.2%	3.6%	1.1%	-26.2%	-11.8%	-10.9%	9.9%	-21.1%	21.5%	55.9%
Copper (CME)	-10.6%	31.7%	17.4%	-24.4%	-16.8%	-7.0%	6.3%	-22.7%	32.9%	137.3%
Palladium	-10.6%	55.3%	21.6%	-29.6%	11.2%	2.1%	7.2%	-18.3%	96.5%	116.7%
Coffee	-10.7%	-7.9%	8.2%	-23.9%	50 <b>.</b> 5%	-23.0%	-36.6%	-5.7%	76 <b>.</b> 9%	21.3%
Soybean Oil	-12.1%	-3.9%	12.7%	-4.4%	-17.6%	-21.0%	-5.6%	-9.8%	43.1%	21.2%
Zinc	-12.3%	30.1%	60.2%	-26.2%	6.0%	-0.5%	12.2%	-25.2%	-3.5%	113.5%
Live Cattle	-14.7%	4.7%	-15.2%	-16.4%	21.5%	1.8%	8.9%	12.1%	25.9%	0.0%
Sugar	-21.8%	-22.3%	28.0%	5.0%	-11.5%	-15.9%	-16.3%	-27 <b>.</b> 5%	19.2%	128.2%

## **Performance – Volatility**

Name	Current	% Change on Day	WTD % Change	MTD % Change	1 Mth % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change
■ BCOM 3M Implied Volatility									
Aluminum	21.5	-8.1	13.6	339.0	-5.3	18.6	27.6	40.9	24.8
Brent Crude	24.9	0.5	4.1	-1.9	-3.6	3.2	31.0	-15.7	-31.8
Live Cattle	19.8	-1.2	2.1	-5.1	-3.8	0.4	6.2	-10.6	-2.0
Copper (COMEX)	17.3	-2.9	3.0	-2.3	-0.3	0.2	-0.1	4.0	-13.6
Coffee	17.1	0.9	-4.0	-28.1	-19.3	-18.4	-28.2	-39.5	-50.9
Corn	23.7	1.1	-11.5	-12.5	-13.9	9.4	85.6	-5.5	-21.1
Cotton	23.9	-0.8	-6.2	-8.5	-8.3	17.1	5.8	20.0	19.3
Crude Oil	24.3	1.2	1.4	-3.6	-5.3	4.2	28.3	-19.9	-31.2
Gas Oil	23.0	-2.2	3.1	-5.5	-8.0	2.9	21.7	-15.6	-32.2
Gold	9.6	-0.8	3.8	-1.1	-6.4	-3.4	0.0	-11.8	-45.5
Heating Oil	22.9	1.0	1.4	-1.5	-2.3	2.4	22.0	-8.4	-27.3
HRW Wheat	24.2	3.4	-10.5	-17.8	-23.8	0.1	19.1	-2.6	-1.0
Copper (LME)	18.5	-3.6	10.2	10.6	8.8	-1.1	4.3	19.6	-2.6
Lean Hogs	26.6	3.8	-0.6	3.3	11.6	7.6	28.5	-1.5	26.6
NaturalGas	20.9	0.1	-7.0	-3.9	0.4	-5.2	-38.9	-37.9	-45.5
Nickel	32.5	13.8	0.1	0.2	2.6	6.6	15.0	45.3	47.7
Palladium	21.6	-3.9	1.4	-11.6	-14.6	-2.6	-4.7	-26.8	-26.0
Platinum	16.4	-6.2	17.6	30.5	25.1	23.1	25.6	-5.5	-20.7
Silver	16.3	-0.4	-1.6	2.8	-0.7	0.5	4.8	-6.2	-39.9
Soybeans	23.2	-1.3	-1.2	20.6	18.1	38.3	105.7	29.8	-15.8
Soybean Meal	23.8	-1.9	-1.6	8.2	4.1	0.0	55.5	19.0	-24.9
Soybean Oil	16.0	-1.7	-2.3	8.3	6.9	6.7	4.1	-23.2	-22.1
Sugar	25.2	-1.2	-3.3	-3.6	-2.0	6.0	16.1	-17.1	-33.7
Unlead Gas	24.2	-3.3	-0.3	3.4	1.2	3.5	20.6	-14.0	-39.3
Wheat	24.3	<b>7.</b> 5	-9.6	-13.3	-20.7	7.8	21.5	-5.0	-1.0
Zinc	25.1	4.5	15.3	18.0	13.3	18.3	18.4	1.7	0.5
■ BCOM 60 Day Historical Volatility	27.0	0.4	0.0	0.0		0.4.4	447.6	400.4	00.0
Aluminum	37.0	0.1	-0.2	0.8	0.9	94.4	117.6	180.1	98.0
Brent Crude	25.0	-0.3	0.7	3.5	2.6	15.9	24.1	-7.6	-35.5
Live Cattle	34.7	2.4	3.1	6.7	7.9	17.9	83.5	26.7	62.1
Copper (CME)	17.4	-0.2	-4.0	2.3	1.4	-9.1	-10.1	-1.9	-20.2
Coffee	21.1	0.1	0.9	1.6	5.4	11.8	-6.6	-31.0	-31.6
Corn	20.2	1.6	0.7	12.0	14.2	48.4	46.1	-2.2	-34.3
Cotton	26.1	0.1	-6.1	15.4	13.9	27.0	39.9	3.1	17.9
Crude Oil	26.8	-2.0	1.3	3.9	4.4	16.9	28.0	-6.0	-27.6
Gas Oil	24.2	-0.2	3.6	12.0	12.6	20.8	21.8	1.2	-39.3
Gold	9.7	-0.7	-7.0	-10.4	-13.1	-17.0	-5.7	-10.4	-44.7
Heating Oil	23.1	0.1	0.0	10.2	12.8	15.5	7.4	-1.3	-38.4
HRW Wheat	34.7	2.4	3.1	6.7	7.9	17.9	83.5	26.7	16.8
Copper (LME)	16.7	-1.4	-2.6	1.7	1.7	-11.0	-13.6	-2.4	-21.6
Lean Hogs	60.5		-3.7	-5.7		136.6	95.5		82.1
		0.0			-5.5			111.6	
Natural Gas	22.5	-0.1	0.2	0.7	1.4	-51.9	-51.3	-27.8	-56.9
Nickel Gas	29.0	-0.3	1.4	-1.6	-1.1	-5.5	-17.4	18.2	1.0
Palladium	26.4	1.2	2.7	3.5	2.8	-2.1	42.3	16.2	-8.7
Platinum	16.5	0.0	0.6	11.9	7.8	2.5	-3.4	-21.3	-31.9
Silver	19.5	0.6	-3.5	8.6	4.4	7.3	4.4	13.9	-14.3
Soybeans	18.2	-0.2	-2.4	-1.1	-1.2	22.1	41.7	37.6	-30.4
Soybean Meal	19.1	-0.3	-0.9	-13.5	-14.2	-17.2	15.2	35 <b>.</b> 5	-43.6
Soybean Oil	13.5	-0.2	-5.5	-2.9	-3.0	-1.7	-3.3	-23.7	-32.1
Sugar	29.2	0.0	2.5	19.8	11.2	-1.9	23.2	-13.1	-14.7
Unlead Gas	22.2	0.8	1.8	8.6	10.0	-17.2	-7.8	-14.7	-38.1
Wheat	35.6	1.9	3.0	9.1	10.3	28.2	67.7	32.7	12.4
Zinc	22.1	0.4	3.4	8.1	6.8	8.3	6.0	-8.8	-15.2

Bloomberg Commodity Index (BCOM)

# Curve Analysis – Contango (-) | Backwardation (+) Key Metrics

Name	Current Position	1 Yr Ago	1 Yr Change	YTD Change	MTD Change	1 Mth Change	3 Mth Change	2 Yr Change
■ 1 Year Spread % of First Contract								
■ BCOM	-2.3	-2.7	0.5	-0.5	-0.1	-0.1	1.1	0.8
■ Sector								
■ Energy	6.0	-1.5	7.5	1.7	0.5	0.7	0.9	12.8
■ Livestock	4.1	9.9	-5.8	-2.3	8.7	10.3	12.5	-0.9
■ Industrial Metals	-0.3	-1.1	0.9	0.5	0.4	0.4	1.1	0.8
■ Precious Metals	-3.0	-2.1	-0.9	-0.7	0.0	0.0	0.1	-1.6
■ Agriculture	-7.5	-5.7	-1.8	-1.6	-1.8	-2.3	-0.1	-4.8
■ Single Commodities								
Crude Oil	12.2	-5.4	17.6	7.2	6.0	5.9	4.0	20.3
Lean Hogs	11.5	14.8	-3.3	4.8	10.4	12.5	29.5	6.3
Thermal Coal	10.8	6.6	4.1	5.3	0.4	0.3	3.6	
Natural Gas	7.6	5.6	2.0	11.2	-2.0	-0.9	3.9	14.1
Brent Crude	6.7	-5.7	12.4	0.4	1.1	1.9	-0.2	15.5
Unleaded Gas	3.2	-4.0	7.2	-1.5	0.5	0.6	-0.1	11.4
Zinc	3.1	1.5	1.6	-0.4	1.7	1.8	1.2	3.5
Soybean Meal	2.8	-3.8	6.7	6.2	-3.0	-4.5	-4.1	-8.0
Cotton	1.8	8.7	-6.9	-4.3	-1.3	-1.7	-2.5	5.4
Palladium	1.1	2.3	-1.2	-0.3	-0.6	0.1	-0.1	1.6
Gas Oil	1.0	-3.4	4.3	-5.2	-1.5	-1.8	-3.2	8.7
Aluminum	0.6	-1.8	2.4	2.9	-0.5	-0.2	3.1	2.3
Heating Oil	0.3	-4.3	4.6	-5.6	-0.8	-1.2	-2.0	7.0
Copper (LME)	-0.6	-1.1	0.5	0.7	0.5	0.5	1.2	-0.1
Nickel	-1.6	-2.3	0.7	0.4	-0.2	-0.1	0.0	0.0
Platinum	-1.9	-1.2	-0.7	-0.5	0.0	0.0	0.1	-1.3
Copper (CME)	-2.7	-2.0	-0.8	-0.9	0.3	0.3	0.2	-1.4
Gold	-2.9	-1.7	-1.2	-0.7	-0.1	-0.1	-0.2	-1.6
Silver	-3.1	-2.5	-0.6	-0.6	0.1	0.1	0.4	-1.6
Live Cattle	-3.2	5.1	-8.3	-9.5	7.0	8.1	-4.4	-8.2
Sovbean	-6.0	-3.9	-2.2	-2.7	-4.7	-6.2	-6.1	-13.6
Sovbean Oil	-6.3	-2.7	-3.6	-5.1	0.0	0.0	-1.3	-1.8
Sugar	-8.7	-7.6	-1.1	-5.2	-0.1	0.3	7.5	-17.6
Wheat	-10.3	-13.0	2.7	5.3	2.3	0.9	7.5	6.7
Corn	-12.6	-11.5	-1.0	-0.4	-3.0	-3.6	-3.7	-5.9
Coffee	-13.8	-10.5	-3.3	-2.8	-3.0	-2.7	-2.4	-7.1
HRW Wheat	-17.0	-15.2	-1.8	2.0	-4.4	-5.7	0.9	3.6

Measured via the one-year futures spread as a percent of the first contract price. Negative means the one-year out future is higher (contango). Positive means the one-year out future is lower (backwardation.

Historical										
Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
1 Year Spread % of First Contract										
■ BCOM	-2.3	-1.7	-2.2	-7.1	-4.4	0.3	-0.9	-2.0	2.3	-4.1
■ Sector										
■ Energy	5.9	4.3	0.4	-14.0	-11.3	3.5	-1.3	-2.5	-2.1	-9.4
■ Livestock	4.1	6.5	8.1	0.6	8.3	4.1	-0.7	-0.2	-1.8	-4.8
■ Industrial Metals	-0.3	-0.8	-0.8	-1.5	-0.8	-1.8	-2.5	-2.1	0.5	-2.3
■ Precious Metals	-3.0	-2.3	-1.7	-1.0	-0.8	-0.7	-0.7	-0.7	-0.9	-0.9
■ Agriculture	-7.5	-5.9	-4.2	-5.5	-5.6	-1.5	-2.3	-1.8	12.2	-0.3
■ Single Commodities										
Crude Oil	12.2	5.0	-5.9	-20.4	-13.5	7.3	-1.3	1.4	-3.2	-6.7
Lean Hogs	11.5	6.7	2.9	-7.0	9.6	5.7	2.0	4.2	0.2	-5.3
Thermal Coal	10.3	5.4	18.4	14.0	1.7	1.9	-8.3	-6.2	11.2	-7.9
Natural Gas	7.6	-3.7	-0.1	-22.6	-22.2	-3.2	-20.7	-29.9	-18.4	-21.1
Brent Crude	6.7	6.3	-3.1	-22.1	-16.4	4.9	6.3	4.0	-0.4	-8.3
Unleaded Gas	3.2	4.7	2.8	1.0	-12.3	7.0	9.8	7.9	3.7	-2.9
Zinc	3.1	3.4	0.2	-2.8	-1.4	-2.3	-4.5	-3.9	-1.7	-3.2
Soybean Meal	2.8	-3.4	-0.4	-5.7	9.8	19.9	12.5	-2.4	9.9	9.5
Cotton	1.8	6.1	1.7	-2.7	-8.6	6.7	-5.7	3.6	34.6	-2.6
Palladium	1.1	1.5	-0.5	-0.2	-0.1	-0.5	-0.2	-0.4	0.0	-0.3
Gas Oil	1.0	6.2	-4.8	-23.8	-12.0	3.1	2.9	3.0	-4.2	-11.0
Aluminum	0.6	-2.3	-1.0	-2.7	-3.1	-7.5	-5.0	-5.2	-2.3	-5.0
Heating Oil	0.3	5.9	-4.5	-24.5	-4.5	3.2	2.1	2.1	-3.4	-8.0
Copper (LME)	-0.6	-1.3	-0.3	0.3	1.6	1.1	-0.7	-0.3	2.7	-0.9
Nickel	-1.6	-2.0	-1.9	-1.4	-1.1	-1.8	-1.4	-0.1	1.1	-1.1
Platinum	-1.9	-1.4	-1.1	-0.4	-0.4	-0.5	-0.7	-1.0	-0.5	-1.2
Copper (CME)	-2.7	-1.8	-0.8	-1.1	-0.2	1.3	-1.1	-0.8	2.5	-1.2
Gold	-2.9	-2.2	-1.5	-0.5	-0.3	-0.4	-0.7	-0.9	-0.9	-1.0
Silver	-3.1	-2.5	-2.0	-1.4	-1.2	-0.9	-0.7	-0.5	-0.9	-0.8
Live Cattle	-3.2	6.3	13.3	8.1	7.0	2.5	-3.3	-4.5	-3.8	-4.3
Soybean	-6.0	-3.3	0.4	-2.0	0.9	13.1	7.7	-1.2	5.9	1.7
Soybean Oil	-6.3	-1.1	-1.2	-3.1	-0.9	-3.8	-2.8	-1.6	-0.9	-5.3
Sugar	-8.7	-3.5	4.8	0.9	-13.1	-8.2	-5.5	-0.3	26.0	21.9
Wheat	-10.3	-15.5	-17.1	-10.5	-5.0	-7.2	-6.9	-12.4	-8.7	-15.3
Corn	-12.6	-12.1	-10.5	-9.5	-8.1	-9.2	12.7	7.2	9.4	-8.5
Coffee	-13.8	-10.9	-9.2	-8.4	-7.4	-11.2	-11.5	-4.9	6.1	-5.7
HRW Wheat	-17.0	-19.1	-16.1	-14.9	-6.3	-5.5	-5.7	-7.9	-3.1	-12.7

Bloomberg Commodity Index (BCOM)

# **Curve Analysis – Gross Roll Yield Key Metrics**

Name	Current 1Yr Yld	Yld 6 Months Ago	Yld 1 Yr Ago	Change from 1 Yr Ago		Change from 2 Yr Ago
■ 1 Year Gross Yield						
■ Sector Roll Yield						
BCOM Livestock	-0.3	0.5	6.5	-6.8	-0.6	0.3
BCOM Industrial Metals	-0.9	-3.0	-2.7	1.9	-2.1	1.3
BCOM Precious Metals	-0.9	-0.2	-1.2	0.3	-0.7	-0.2
BCOM	-3.6	-5.9	-7.4	3.8	-9.3	5.7
BCOM Softs	-3.9	-4.2	-3.7	-0.2	-9.2	5.3
BCOM Energy	-5.4	-7.7	-11.9	6.4	-20.3	14.9
BCOM Grains	-10.3	-10.7	-9.5	-0.7	-4.9	-5.3
BCOM Agriculture		-8.0	-7.3			
■ Commodities Roll Yield						
Cotton	9.8	1.0	-9.8	19.6	-0.6	10.4
Gas Oil	7.9	-0.9	-8.0	15.9	-16.4	24.3
Brent Crude	2.5	-4.9	-8.5	11.1	-17.9	20.4
Zinc	1.2	-3.1	-3.0	4.3	-3.8	5.1
Gold	-0.5	-0.3	-1.0	0.5	-0.5	0.0
Heating Oil	-0.6	-6.4	-9.8	9.2	-11.1	10.5
Platinum	-0.6	-1.1	-1.5	0.9	-0.1	-0.5
Silver	-0.7	0.1	-1.5	0.8	-1.2	0.6
Aluminum	-1.7	-3.2	-3.1	1.4	-5.5	3.8
Copper (CME)	-2.5	-3.5	-1.9	-0.6	-0.8	-1.7
Nickel	-2.6	-0.6	-1.6	-1.0	0.0	-2.6
Unlead Gas	-3.0	-4.0	-9.2	6.2	-6.3	3.3
Soybean Oil	-3.7	-2.9	-6.8	3.1	-4.3	0.6
Lean Hogs	-4.1	-8.2	-15.9	11.9	-1.8	-2.2
Coffee	-5.6	-9.2	-8.2	2.6	-11.2	5.5
Crude Oil	-6.1	-7.3	-11.9	5.8	-24.7	18.6
Soybean	-6.2	-3.0	-3.1	-3.1	-1.9	-4.3
Soybean Meal	-6.6	-4.8	-1.2	-5.4	2.8	-9.5
Sugar	-7.4	-3.2	0.1	-7.5	-13.0	5.6
Natural Gas	-13.9	-14.0	-22.8	8.9	-35.3	21.4
Corn	-14.2	-12.4	-6.0	-8.3	-7.6	-6.6
HRW Wheat	-20.9	-17.8	-22.4	1.6	-8.5	-12.3
Wheat	-23.7	-18.0	-18.4	-5.3	-2.0	-21.7

Measured on a gross roll yield basis; the 251 business day difference between the total return and spot change.

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Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ 1 Year Gross Yield										
■ Sector Roll Yield										
BCOM Livestock	-0.3	0.5	0.2	1.1	-0.2	-4.5	-9.8	-12.3	-14.8	-20.2
BCOM Industrial Metals	-0.9	-3.0	-2.0	-1.8	-2.1	-3.9	-3.3	-2.2	-4.1	-16.7
BCOM Precious Metals	-0.9	-0.2	-1.1	-0.6	-0.4	-0.5	-0.9	-0.6	-1.1	-1.1
ВСОМ	-3.6	-5.9	-11.4	-6.3	0.0	-0.9	-4.7	-6.6	-9.5	-21.8
BCOM Softs	-3.9	-4.2	-5.6	-7.4	-12.5	-4.9	0.9	9.0	0.5	-24.7
BCOM Energy	-5.4	-7.7	-32.5	-12.6	1.6	-5.1	-11.7	-11.0	-13.8	-51.8
BCOM Agriculture	-7.6	-8.0	-6.1	-4.1	-1.0	4.9	1.9	-1.9	-9.6	-8.3
BCOM Grains	-10.3	-10.7	-7.0	-4.7	0.7	8.2	3.6	-5.8	-12.6	-2.5
■ Commodities Roll Yield										
Cotton	9.8	1.0	-1.1	-2.1	7.7	-3.6	5.2	15.5	14.3	-24.1
Gas Oil	7.9	-0.9	-22.7	-11.0	-1.6	2.1	7.4	2.1	-12.3	-20.5
Brent Crude	2.5	-4.9	-27.7	-23.3	0.3	6.9	4.2	8.3	-12.5	-55.6
Zinc	1.2	-3.1	-2.7	-2.5	-4.6	-8.8	-3.1	-3.0	-5.3	-11.2
Live Cattle	-0.5	4.4	7.8	2.0	0.6	-6.8	-12.8	-12.5	-12.2	-9.6
Gold	-0.5	-0.3	-0.9	-0.4	-0.2	-0.4	-0.9	2.9	-1.0	-1.1
Heating Oil	-0.6	-6.4	-25.3	-3.0	1.1	-1.3	1.0	-2.9	-11.7	-25.3
Platinum	-0.6	-1.1	-0.4	-0.2	-0.5	-0.8	-1.2	0.9	-2.7	-6.2
Silver	-0.7	0.1	-1.8	-1.2	-0.9	-0.7	-1.1	4.5	-5.1	-1.5
Aluminum	-1.7	-3.2	-2.9	-6.0	-9.1	-8.4	-6.2	-3.3	-6.0	-13.6
Copper (CME)	-2.5	-3.5	-1.6	-0.7	0.3	-1.7	-1.3	-0.1	-3.6	-7.1
Nickel	-2.6	-0.6	-1.7	0.5	-2.9	-2.3	-1.0	-1.7	-1.6	-7.3
Unlead Gas	-3.0	-4.0	-27.2	1.1	4.7	1.3	18.9	4.5	-6.9	-16.9
Soybean Oil	-3.7	-2.9	-5.4	-3.2	-2.9	-1.3	-4.2	-4.2	-8.5	-6.9
Lean Hogs	-4.1	-8.2	-13.6	0.3	0.6	-1.7	-4.5	-9.6	-23.8	-30.8
Coffee	-5.6	-9.2	-9.7	-7.8	-12.6	-7.2	-5.0	-3.4	-8.5	-11.1
Crude Oil	-6.1	-7.3	-38.2	-14.0	4.3	-0.3	-4.5	-9.7	-11.3	-70.3
Soybean	-6.2	-3.0	0.2	-0.2	17.0	18.5	5.5	-1.8	0.5	16.1
Soybean Meal	-6.6	-4.8	-0.5	9.6	28.7	16.5	13.0	-1.3	20.7	30.2
Sugar	-7.4	-3.2	-5.2	-9.9	-19.5	-4.1	3.1	18.7	4.6	-41.8
Natural Gas	-13.9	-14.0	-52.6	-19.8	0.8	-22.3	-42.7	-13.8	-16.1	-47.6
Corn	-14.2	-12.4	-7.9	-9.6	-7.4	9.4	10.8	0.4	-20.9	-11.8
HRW Wheat	-20.9	-17.8	-14.7	-7.6	-2.5	-3.3	-4.1	-7.6	-9.9	-4.7
Wheat	-23.7	-18.0	-10.9	-1.9	-7.0	-5.1	-9.4	-14.6	-23.8	-14.7

## **Curve Analysis – Forwards / Forecasts** Spread %

Name	6/2018	5/2018	4/2018	3/2018	2/2018	1/2018	12/2017	11/2017	10/2017	9/2017	8/2017
■ 1 Yr Spread ((Forward-Forecast)/ Forecast											
■ Energy											
WTI Crude Spread %	6.1	4.3	7.3	3.6	0.3	4.7	19.4	13.7	9.0	3.9	-4.4
Brent Crude Spread %	7.1	8.9	9.8	4.6	0.3	7.7	23.8	17.8	15.2	7.2	0.3
ULS Diesel Spread %	8.4	9.6	6.1	2.6	0.8	7.6	32.8	18.4	20.8	16.1	11.6
Unleaded Gasoline Spread %	-0.1	1.4	3.5	1.3	-0.2	8.3	15.1	7.7	12.1	2.7	11.9
■ Soft											
Sugar Spread %	-2.3	0.7	-6.2	-6.9	-4.0	-4.5	-5.2	-4.4	-7.0	-12.4	-11.0
Coffee Spread %	-5.6	-2.5	-1.3	-4.0	-4.3	-6.0	-6.5	-5.9	-7.7	-5.4	-5.0
Cotton Spread %	-0.2	9.9	2.5	5.1	10.2	6.7	7.7	2.1	-6.3	-5.9	-2.6
■ Industrial Metals											
Copper Spread % (LME)	-2.9	-1.3	-2.5	-3.5	3.3	7.0	17.8	10.5	13.3	8.0	17.8
Aluminum Spread %	0.2	3.9	3.3	-3.9	2.7	7.5	14.7	3.9	10.9	8.5	13.3
Zinc Spread %	-4.2	-0.4	-2.1	2.8	7.5	10.1	16.6	10.8	16.5	13.0	15.4
Nickel Spread %	8.4	10.8	5.1	10.3	14.5	13.4	23.2	7.3	20.3	3.3	19.0
■ Precious Metals											
Gold Spread %	-2.2	0.3	1.1	1.5	1.8	5.4	4.1	1.2	1.3	2.1	5.6
Silver Spread %	-4.1	-2.3	-2.6	-3.2	-3.6	1.1	0.1	-4.4	-2.9	-3.4	1.9
■ Grain											
Corn Spread %	-5.9	2.4	4.4	3.6	3.0	0.2	-3.3	-5.2	-4.8	-3.5	-5.8
Soybeans Spread %	-8.0	0.6	2.6	4.4	4.3	2.8	-2.7	1.0	0.2	0.1	-4.4
Wheat Spread %	0.0	10.3	8.6	2.7	9.1	4.0	-3.0	-6.6	-5.4	1.3	-4.5

### **Data Set**

Data Oct												
Name	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
■ Data Set												
■ 1 Yr Spread												
■ Energy												
Natural Gas Forward	2.95	2.95	3.72	2,34	2.89	4.23	3.35	2.99	4.34	5.57	5.62	7.48
WTI Crude Forward	68.2	60.4	53.7	37.0	53.3	98.4	91.8	98.8	91.4	79.4	44.6	96.0
WTI Crude Forecast	64.3	50.6	43.2	50.0	93.6	98.2	95.0	94.0	79.0	61.4	101.5	69.6
Brent Crude Forward	74.8	66.9	56.8	37.3	57.3	110.8	111.1	107.4	94.8	77.9	45.6	93.9
Brent Crude Forecast	69.8	54.0	44.9	54.0	100.0	108.0	111.9	110.7	80.0	62.0	99.1	71.0
ULS Diesel Forward	2.14	2.08	1.70	1.10	1.85	3.08	3.05	2.94	2.54	2.12	1.41	2.64
ULS Diesel Forecast	1.98	1.56	1.34	1.69	2.79	2.98	3.05	2.87	2.13	2.12	2.96	2.01
Unleaded Gasoline Forward	2.01	1.80	1.67	1.27	1.44	2.79	2.81	2.69	2.45	2.05	1.01	2,48
Unleaded Gasoline Forecast	2.01	1.56	1.39	1.64	2,65	2.86	2.95	2.91	2.12	1.47	2.49	2.40
■ Soft	2.01	1.50	1.07	1.01	2.00	2.00	2.75	2.71	2.12	1.17	2.17	
Sugar Forward	0.12	0.15	0.20	0.15	0.15	0.16	0.20	0.23	0.32	0.27	0.12	0.11
Sugar Forecast	0.13	0.16	0.18	0.13	0.17	0.18	0.22	0.27	0.21	0.17	0.13	0.10
Coffee Forward	1.16	1.26	1.37	1.27	1.67	1.11	1.44	2.27	2.40	1.36	1.12	1.36
Coffee Forecast	1.23	1.35	1.37	1.34	1.79	1.26	1.78	2.53	1.60	1.23	1.36	2.00
Cotton Forward	0.85	0.79	0.71	0.63	0.60	0.85	0.75	0.92	1.45	0.76	0.49	0.68
Cotton Forecast	0.85	0.73	0.65	0.64	0.76	0.84	0.79	1.34	0.90	0.60	0.67	0.67
■ Industrial Metals												
Copper Forward (LME)	6,779	7,219	5,526	4,713	6,349	7,373	7,913	7,595	9,644	7,352	3,049	6,651
Copper Forecast (LME)	6,980	6,129	4,826	5,575	6,871	7,334	7,958	8,855	7,460	5,100	6,973	6,750
Aluminum Forward	2,204	2,258	1,694	1,506	1,834	1,762	2,047	1,997	2,459	2,204	1,514	2,366
Aluminum Forecast	2,200	1,968	1,600	1,693	1,883	1,883	2,038	2,450	2,167	1,675	2,607	2,550
Zinc Forward	3,039	3,335	2,564	1,600	2,168	2,045	2,055	1,831	2,447	2,535	1,187	2,356
Zinc Forecast	3,196	2,861	2,043	1,961	2,170	1,930	1,963	2,210	2,192	1,641	1,905	2,775
Nickel Forward	14,445	12,714	9,975	8,788	15,088	13,843	17,008	18,731	24,715	18,467	11,629	26,060
Nickel Forecast	13,323	10,322	9,594	12,170	17,000	15,124	17,602	22,997	21,814	14,672	21,229	28,263
■ Precious Metals												
Gold Forward	1,286	1,309	1,152	1,060	1,184	1,202	1,676	1,567	1,421	1,096	884	838
Gold Forecast	1,312	1,258	1,262	1,165	1,265	1,420	1,677	1,575	1,211	960	872	747
Silver Forward	16.35	17.15	15.99	13.80	15.57	19.34	30.17	27.88	30.91	16.82	11.27	14.80
Silver Forecast	16.99	17.13	17.11	15.84	19.10	24.00	31.40	35.50	19.68	14.66	15.00	13.46
Platinum Forecast	945	951	1,000	1,076	1,390	1,514	1,556	1,752	1,616	1,184	1,575	1,350
Palladium Forecast	1,009.5	855.0	616.6	700.0	803.0	734.0	643.0	733.0	520.0	255.0	350.5	330.0
■ Grain												
Corn Forward	3.7	3.5	3.5	3.6	4.0	4.2	7.0	6.5	6.3	4.1	4.1	4.6
Corn Forecast	3.9	3.6	3.6	3.8	4.1	5.9	7.0	6.9	4.9	3.8	5.4	3.6
Soybeans Forward	9.2	9.5	10.0	8.7	10.2	13.1	14.2	12.0	13.9	10.4	9.7	12.0
Soybeans Forecast	10.1	9.8	9.9	9.5	12.4	14.0	14.7	13.5	10.5	10.4	12.4	9.9
Wheat Forward	4.9	4.3	4.1	4.7	5.9	6.1	7.8	6.5	7.9	5.4	6.1	8.9
Wheat Forecast	4.9	4.4	4.4	5.1	5.8	6.9	7.5	7.4	6.2	5.4	8.4	6.2

**Market Flows – Open Interest Key Metrics** 

Name	Current	MTD % Change	3 Mth % Change	YTD % Change	1 Yr <b>%</b> Change	2 Yr % Change	2 Year High
■ Open Interest (Aggregate - 1,000s)							
■ Single Commodities							
Corn	1,840	-6.4	0.1	19.5	35.9	41.2	2,007
Soybean Meal	501	-5.5	8.2	33.2	32.5	32.9	530
Soybean Oil	488	-6.0	-5.4	9.9	31.5	33.7	542
Cotton	257	-17.9	-7.9	-7.9	27.9	38.2	322
Coffee	275	3.0	0.0	26.2	23.3	58.1	283
Gas Oil	1,091	2.3	12.0	26.1	19.1	54.8	1,091
Soybean	800	-11.1	-8.6	13.5	18.9	4.0	976
Nickel	173	-1.7	6.1	<b>15.</b> 3	17.7	11.6	188
Platinum	87	7.4	16.0	4.8	17.6	42.6	94
Wheat	465	-15.3	-7.2	-11.1	16.0	15.1	581
Crude Oil	2,479	-6.1	-1.2	0.8	15.3	41.7	2,714
Sugar	939	-6.8	-4.4	24.7	15.1	8.6	1,037
Natural Gas	1,477	-3.4	3.5	2.0	11.0	38.8	1,574
Unlead Gas	435	-10.5	0.2	12.4	6.6	10.1	501
Aluminum	483	-6.8	-0.8	-7.1	4.1	-13.1	594
Gold	470	2.2	-7.5	-0.4	4.0	-24.3	658
Copper (CME)	267	1.1	-8.9	-4.6	3.9	59.9	338
Silver	210	0.5	-7.5	8.3	3.5	0.5	243
Brent Crude	2,430	-6.7	0.5	4.7	1.2	9.5	2,704
HRW Wheat	243	-17.9	-13.5	-26.4	-4.0	12.5	342
Heating Oil	376	-11.1	-9.6	-16.3	-10.7	-0.3	491
Lean Hogs	229	-4.2	-3.4	-4.2	-11.2	-10.9	282
Zinc	174	-11.2	-7.5	-13.0	-13.4	-0.6	225
Live Cattle	325	-6.1	-9.0	-2.4	-15.1	35.4	432
Copper (LME)	168	-9.7	-4.0	-17.2	-15.2	8.4	234
Palladium	22	0.0	-8.3	-40.5	-38.9	0.0	40

Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ Open Interest (Aggregate - 1,000s)										
■ BCOM	15,337	14,623	12,965	11,965	10,881	11,033	10,367	9,282	10,206	8,524
■ Sector										
■ Energy	8,289	7,931	7,084	6,057	5,033	5,346	4,980	4,230	4,262	3,712
■ Agriculture	5,808	5,168	4,493	4,563	4,211	4,090	3,876	3,418	4,399	3,447
■ Industrial Metals	1,265	1,354	1,319	1,178	1,224	1,104	1,006	1,159	1,105	1,016
■ Precious Metals	788	786	667	673	620	613	658	585	783	669
■ Livestock	555	572	501	431	481	591	578	552	534	443
■ Single Commodities										
Crude Oil	2,479	2,460	2,051	1,671	1,468	1,616	1,473	1,328	1,430	1,193
Brent Crude	2,430	2,322	2,159	2,031	1,513	1,443	1,285	886	873	728
Corn	1,840	1,540	1,236	1,334	1,237	1,203	1,128	1,151	1,549	1,002
Natural Gas	1,477	1,448	1,243	957	939	1,291	1,165	1,011	772	708
Gas Oil	1,091	865	802	700	435	477	512	458	619	545
Sugar	939	753	805	879	836	830	754	559	613	834
Soybean	800	705	632	646	599	576	546	460	629	418
Soybean Meal	501	376	329	402	341	262	212	194	192	162
Soybean Oil	488	444	372	384	355	340	306	273	358	211
Aluminum	483	520	541	551	595	539	495	682	546	487
Gold	470	472	416	415	372	380	428	419	585	490
Wheat	465	523	448	368	371	411	456	384	492	362
Unlead Gas	435	387	400	355	332	239	282	277	267	235
Heating Oil	376	449	429	342	346	279	263	269	301	304
Live Cattle	325	333	306	265	266	327	329	317	327	265
Coffee	275	218	191	172	160	142	144	105	140	126
Copper (CME)	267	280	224	166	160	167	147	121	167	155
Cotton	257	279	242	185	178	172	171	152	207	187
HRW Wheat	243	330	239	193	132	154	158	139	219	145
Lean Hogs	229	239	194	166	215	264	248	235	207	178
Silver	210	194	164	168	151	132	141	106	136	124
Zinc	174	200	184	167	182	184	166	148	135	149
Nickel	173	150	160	148	132	81	69	65	61	62
Copper (LME)	168	203	209	146	155	132	130	143	196	163
Platinum	87	83	63	65	64	62	60	42	39	33
Palladium	22	37	24	24	33	39	29	18	23	23

**Market Flows – Commitment of Traders Key Metrics** 

Name	Current	5 Day Change	1 Mth Change			1 Yr Change	2 Yr Change
■ Net - Managed Money Total/Disagg			_		_	_	
■ Single Commodities							
Brent Crude	453,218	-5,231	-48,416	-113,876	-108,066	253,014	126,161
WTI Crude	390,795	76,928	13,275	-67,814	-21,177	257,189	211,365
Aluminum (Post- MiFID II)	193,142	0	18,855	96,982			
Natural Gas	165,768	-21,031	-30,767	22,329	218,214	84,802	195,048
Aluminum (Pre- MiFID II)	163,475	6,307	-3,292	21,105	3,315	-10,481	115,362
Zinc (Pre MiFID II)	79,906	-1,121	-6,682	3,640	-471	-8,898	44,606
Gasoline	77,563	-7,831	-54,502	-11,671	-1,887	97,702	69,615
Cotton	76,391	-4,847	-15,100	-6,508	-26,011	44,981	40,773
Zinc (Post MiFID II)	63,503	0	4,021	-9,500	,	•	•
Soybean Meal	63,136	-20,438	-52,160	-36,342	31,879	117,566	669
Heating Oil	54,309	-11,027	-32,155	10,176	-27,515	86,611	41,042
Copper (LME) (Post MiFID II)	48,673	0	-13,028	15,672			
Nickel	42,230	-664	-1,792	12,113	13,772	5,041	22,602
Copper (LME) (Pre MiFID II)	37,448	-917	-16,651	-27,111	-31,597	-34,385	25,052
HRW Wheat	30,882	-16,331	-15,441	1,296	65,304	-13,358	45,459
Live Cattle	29,796	2,882	18,979	-40,621	-52,914	-95,389	14,277
Silver	22,166	-5,898	22,598	57,338	29,271	9,739	-55,891
Copper (CME)	22,061	-29,240	-12,187	2,292	-77,459	-36,755	27,974
Palladium	6,319	-2,870	-2,495	-5,773	-19,496	-17,557	1,204
Gold	4,186	-19,328	-23,341	-117,652	-105,733	-72,546	-268,993
Lean Hogs	-5,457	-3,654	4,596	-13 <b>,4</b> 86	-59,414	-72,762	-73,218
Wheat	-12,477	-11,725	-10,792	43,630	133,258	-2,319	69,509
Sugar	-14,809	12,442	97,314	132,372	58,247	98,625	-277,301
Platinum	-26,168	-1,160	-5,975	-39,065	-21,958	-16,411	-39,652
Soybeans	-43,985	-31,184	-142,213	-239,507	25,106	74,698	-239,255
Corn	-60,319	-46,281	-260,289	-273,550	146,305	45,800	
Coffee	-68,210	-2,054	-22,036	-8,600	-10,364	-24,591	-97,998
Soybean Oil	-90,180	2,959	-42,931	-65,260	-93,586	-100,691	-110,378

Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
Net - Managed Money Total/Disagg										
■ BCOM	1.4M	1.2M	1.8M	107,932.0	1.1M	835,105.0	791,313.0	637,042.0	1.6M	1.1M
■ Sector										
■ Energy	1.1M	1.1M	1.0M	95,835.0	278,790.0	623,230.0	258,739.0	230,666.0	224,236.0	185,192.0
■ Industrial Metals	345,120	437,560	423,576	90,351	218,292	35,635	14,988	-4,018	39,105	15,752
■ Livestock	24,339	136,667	147,051	24,525	117,295	137,611	110,898	104,018	133,520	83,521
■ Precious Metals	6,503	124,419	101,310	-239	153,310	70,026	171,032	134,710	232,650	252,599
■ Agriculture	-119,571	-449,709	225,844	-75,733	383,375	-1,048	281,653	188,257	962,170	594,114
■ Single Commodities										
Brent Crude	453,218	561,284	454,585	163,672	115,571	136,611	125,397	81,537		
WTI Crude	390,795	411,972	307,909	100,797	199,388	270,386	134,834	192,466	217,046	133,742
Aluminum (Post- MiFID II)	193,142									
Natural Gas	165,768	-52,446	174,043	-161,686	-53,308	134,994	-89,820	-124,269	-96,119	-27,225
Aluminum (Pre- MiFID II)	163,475	160,160	145,790	71,738	118,175					
Zinc (Pre MiFID II)	79,906	80,377	81,039	20,140	49,726					
Gasoline	77,563	79,450	50,091	28,391	44,226	54,637	64,383	61,288	67,205	50,763
Cotton	76,391	102,402	76,052	51,307	11,005	43,288	25,828	6,683	40,645	61,292
Zinc (Post MiFID II)	63,503									
Soybean Meal	63,136	31,257	19,537	-40,843	54,132	57,931	41,489	-15,232	40,129	35,586
Heating Oil	54,309	81,824	33,541	-35,339	-27,087	26,602	23,945	19,644	36,104	27,912
Copper (LME) (Post MiFID II)	48,673	-								
Nickel	42,230	28,458	57,232	15,372	29,631					
Copper (LME) (Pre MiFID II)	37,448	69,045	67,384	9,065	25,215					
HRW Wheat	30,882	-34,422	9,085	-14,975	24,999	8,022	23,619	9,128	49,108	9,943
Live Cattle	29,796	82,710	92,516	11,081	80,102	96,771	59,569	68,105	104,412	49,281
Silver	22,166	-7,105	39,098	6,282	17,051	5,573	23,113	6,200	26,836	26,631
Copper (CME)	22,061	99,520	72,131	-25,964	-4,455	35,635	14,988	-4,018	39,105	15,752
Palladium	6,319	25,815	12,742	8,690	19,970	15,660	16,769	5,212	13,034	11,626
Gold	4,186	109,919	41,247	-24,263	98,391	34,104	101,922	111,919	169,987	197,560
Lean Hogs	-5,457	53,957	54,535	13,444	37,193	40,840	51,329	35,913	29,108	34,240
Wheat	-12,477	-145,735	-108,927	-83,120	20,481	-71,468	-11,899	-29,252	36,542	-8,683
Sugar	-14,809	-73,056	138,442	165,810	-66,824	-25,626	19,000	43,792	141,534	167,357
Platinum	-26,168	-4,210	8,223	9,052	17,898	14,689	29,228	11,379	22,793	16,782
Soybeans	-43,985	-69,091	107,075	-63,515	39,446	136,683	109,007	23,683	164,287	69,606
Corn	-60,319	-206,624	-113,648	-136,111	239,704	-94,812	140,109	148,653	396,782	205,427
Coffee	-68,210	-57,846	12,706	-15,181	25,385	-8,417	-23,076	2,905	36,182	23,630
Sovbean Oil	-90.180	3.406	85.522	60.895	35.047	-46.649	-42.424	-2.103	56.961	29.956

Market Flows – ETF Flows (annual)

Market Flows - EIF	LIOM:	s (an	nuai)							
Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ ETFs (\$ Billion AUM)										
■ Total ETF Assets Under Management	139.79	141.76	120.35	86.92	101.22	110.91	195.29	171.15	166.48	113.35
■ Precious Metals	105.43	109.99	90.30	62.95	77.79	84.93	164.56	142.18	130.39	80.66
<b>■</b> Gold	93.04	95.35	76.91	51.78	62.75	68.70	143.55	120.88	105.90	70.06
■ Silver	9.42	10.11	9.41	7.24	8.64	10.60	16.18	16.38	18.41	8.02
■ Platinum	1.39	2.40	2.26	2.22	3.32	3.46	2.48	2.49	2.83	1.41
■ Palladium	0.82	1.28	1.07	1.24	2.30	1.40	1.37	1.32	2.12	0.65
<ul><li>■ Precious Metals Basket</li><li>■ Other</li></ul>	0.64 0.11	0.70 0.15	0.57 0.08	0.40	0.64 0.13	0.68	0.92	1.07 0.02	1.13	0.52
■ Broad Commodity	21.45	17.26	14.83	10.84	14.55	17.70	19.57	18.21	19.74	14.55
■ Energy	9.30	11.07	12.20	10.72	5.40	4.61	6.72	5.79	9.65	12.15
■ Agriculture	1.95	1.78	1.82	1.75	2.37	2.61	3.11	3.90	5.23	4.76
■ Industrial Metals	1.64	1.65	1.17	0.64	1.09	1.02	1.27	0.99	1.38	1.16
■ Livestock	0.01	0.01	0.02	0.02	0.03	0.03	0.06	0.08	0.10	0.08
■ ETFs Fund Flows (\$ Billion)										
■ Total ETF Fund Flows (\$ Billion)	3.06	8.72	23.47	9.77	3.14	-40.74	19.52	1.76	16.15	37.80
■ Broad Commodity	4.35	1.05	2.38	-0.01	1.37	-0.41	0.45	-0.83	2.20	6.47
■ Precious Metals ■ Gold	2.93 3.35	8.60 8.79	22.61 21.91	-3.83 -3.01	-2.45 -3.87	-36.83 -37.83	17.74 14.93	5.92 6.97	14.98 11.23	19.61 16.84
# Gold  # Silver	0.09	0.02	0.95	0.00	0.38	0.82	2.45	-0.86	2.01	1.89
■ Precious Metals Basket	0.00	0.02	0.17	-0.16	-0.01	-0.01	-0.20	-0.07	0.35	0.28
■ Other	-0.07	-0.02	0.00	0.00	0.01	0.05	0.05	0.02	0.00	0.LO
■ Platinum	-0.11	0.07	0.00	-0.25	0.33	0.17	0.31	0.26	0.85	0.47
■ Palladium	-0.33	-0.31	-0.41	-0.41	0.72	-0.03	0.21	-0.41	0.54	0.14
■ Industrial Metals	0.16	0.05	0.30	-0.14	0.20	-0.15	0.27	-0.03	0.08	0.65
■ Agriculture	0.05	0.22	0.15	-0.19	-0.17	-0.04	-0.76	-0.64	-0.72	2.54
■ Livestock	0.00	0.00	0.00	0.00	-0.01	-0.02	-0.02	-0.01	0.01	0.03
■ Energy	-4.42	-1.20	-1.97	13.94	4.19	-3.29	1.85	-2.64	-0.40	8.50
Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
DELTA WEIGHTED:										
= ETEs (& Billion AUM) (DW)										
■ ETFs (\$ Billion AUM) (DW)	444.60	446.54	400.00	00.40	404.64	440.46	407.00	474.60	470.44	44404
■ Total ETF Assets Under Management	144.60	146.24	123.03	88.63	101.61	110.16	197.39	171.68	168.44	114.84
■ Precious Metals	106.81	111.23	91.00	62.94	77.80	85.03	166.20	142.68	131.34	81.00
<b>■</b> Gold	98.61	100.99	82.54	55.90	67.72	74.56	153.96	129.85	117.13	75.55
■ Silver	5.25	5.74	4.50	3.10	3.67	4.83	7.40	7.90	8.10	2.86
■ Platinum	1.38	2.40	2.24	2.21	3.28	3.39	2.42	2.44	2.85	1.42
■ Palladium	0.82	1.28	1.07	1.24	2.30	1.40	1.37	1.32	2.12	0.65
■ Precious Metals Basket	0.67	0.73	0.61	0.43	0.70	0.75	0.99	1.14	1.15	0.52
									1.13	0.52
■ Other	0.08	0.08	0.04	0.06	0.13	0.10	0.06	0.02	40.75	
■ Broad Commodity	21.73	17.50	14.85	10.87	14.55	17.70	19.57	18.21	19.75	14.56
■ Energy	12.40	13.93	14.07	12.28	5.71	3.72	7.20	5.84	10.63	13.25
■ Agriculture	1.99	1.91	1.90	1.85	2.46	2.69	3.17	3.97	5.28	4.81
■ Industrial Metals	1.65	1.67	1.19	0.68	1.06	0.99	1.20	0.90	1.35	1.15
■ Livestock	0.01	0.01	0.02	0.02	0.03	0.03	0.06	0.08	0.10	0.08
■ ETFs Fund Flows (\$ Billion) (DW)	0.01	0.01	0.02	0.02	0.05	0.05	0.00	0.00	0.10	0.00
■ Total ETF Fund Flows (\$ Billion)	0.40	11 20	10.57	10.07	0.00	41.00	21 54	1.40	14 74	20.00
	0.40	11.39	19.57	19.87	8.80	-41.92	21.56	1.62	16.34	38.85
■ Broad Commodity	4.40	1.22	2.37	-0.01	1.37	-0.41	0.45	-0.83	2.20	6.47
■ Precious Metals	3.17	8.75	22.83	-3.35	-1.85	-36.09	18.61	5.75	14.48	19.69
■ Industrial Metals	0.15	0.03	0.28	-0.03	0.22	-0.09	0.28	-0.05	0.03	0.61
■ Agriculture	0.04	0.30	0.15	-0.16	-0.17	0.03	-0.78	-0.56	-0.78	2.57
■ Livestock	0.00	-0.01	0.00	0.00	-0.01	-0.03	-0.02	-0.01	0.01	0.03
■ Energy	-7.35	1.10	-6.06	23.41	9.23	-5.33	3.02	-2.66	0.39	9.47
≡ Liici gy	7.55	1.10	0.00	25,71	7.23	5.55	5.02	2.00	0.37	7.7/

# **PERFORMANCE: Bloomberg Commodity Indices**

## **Composite Indices**

\* Click hyperlinks to open in Bloomberg

Index None			2018								
Index Name	Ticker	Jun	May	Q2	Q1	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
Bloomberg Commodity ER	BCOM	-3.64%	1.25%	-0.07%	-0.79%	-0.86%	5.82%	-14.88%	-29.77%	-62.49%	-9.48%
Bloomberg Commodity TR	<b>BCOMTR</b>	-3.50%	1.42%	0.40%	-0.40%	0.00%	7.35%	-13.00%	-28.17%	-61.25%	31.62%
Bloomberg Commodity Spot	<b>BCOMSP</b>	-3.30%	1.19%	0.95%	0.21%	1.16%	10.91%	7.32%	-7.09%	-24.17%	268.65%
Bloomberg Roll Select	BCOMRST	-4.04%	1.79%	0.10%	-0.11%	0.00%	7.26%	-7.06%	-21.66%	-50.39%	191.94%
1 Month Forward	BCOMF1T	-3.67%	1.58%	0.21%	0.20%	0.41%	8.27%	-9.87%	-23.41%	-54.35%	137.95%
2 Month Forward	BCOMF2T	-3.92%	1.75%	0.16%	0.50%	0.66%	8.34%	-8.18%	-22.48%	-54.42%	176.07%
3 Month Forward	<b>BCOMF3T</b>	-3.82%	1.78%	0.25%	0.73%	0.99%	9.21%	-6.68%	-20.50%	-51.11%	195.67%
4 Month Forward	BCOMF4T	-3.94%	1.75%	0.02%	0.72%	0.74%	8.82%	-3.15%	-16.75%	-46.32%	
5 Month Forward	BCOMF5T	-3.86%	1.86%	0.21%	0.87%	1.08%	9.73%	-2.25%	-16.61%	-45.54%	
6 Month Forward	BCOMF6T	-3.91%	1.81%	-0.01%	0.98%	0.97%	9.35%	-1.49%	-15.96%	-44.18%	
Energy	<b>BCOMENTR</b>	2.70%	2.66%	10.73%	1.76%	12.68%	34.75%	-24.74%	-50.11%	-89.32%	-29.39%
Petroleum	<b>BCOMPETR</b>	3.84%	1.69%	12.98%	4.71%	18.31%	58.45%	-11.78%	-43.92%	-77.72%	175.77%
Agriculture	<b>BCOMAGTR</b>	-10.48%	0.58%	-8.66%	3.15%	-5.79%	-13.29%	-26.87%	-39.26%	-52.23%	-43.75%
Grains	<b>BCOMGRTR</b>	-11.74%	-0.73%	-9.74%	7.09%	-3.34%	-16.74%	-35.75%	-47.12%	-62.96%	-52.57%
Industrial Metals	<b>BCOMINTR</b>	-4.76%	2.43%	0.98%	-6.23%	-5.31%	15.19%	19.80%	4.61%	-37.88%	171.65%
Precious Metals	<b>BCOMPRTR</b>	-3.29%	-0.98%	-4.45%	-0.53%	-4.95%	-0.78%	3.57%	-6.28%	16.21%	256.26%
Softs	<b>BCOMSOTR</b>	-7.39%	6.57%	-1.86%	-10.10%	-11.78%	-7.88%	-12.56%	-35.35%	-37.99%	-58.89%
Livestock	<b>BCOMLITR</b>	2.74%	2.22%	5.47%	-10.03%	-5.11%	-9.37%	-12.99%	-13.01%	-43.29%	-54.58%
Ex-Energy	<b>BCOMXETR</b>	-6.40%	0.83%	-4.23%	-1.36%	-5.53%	-2.99%	-7.72%	-19.56%	-33.71%	31.77%
Ex-Petroleum	<b>BCOMXPET</b>	-5.79%	1.33%	-3.33%	-1.94%	-5.21%	-4.34%	-14.16%	-26.74%	-58.68%	
Ex-Natural Gas	<b>BCOMXNGT</b>	-3.75%	1.06%	0.06%	0.17%	0.22%	9.55%	-8.08%	-22.98%	-45.25%	
Ex-Agriculture	<b>BCOMXAGT</b>	-0.38%	1.79%	4.55%	-1.92%	2.54%	17.21%	-7.18%	-24.24%	-66.12%	
Ex-Grains	<b>BCOMXGRT</b>	-1.67%	1.89%	2.69%	-1.88%	0.76%	13.43%	-7.66%	-24.03%	-62.30%	
Ex-Industrial Metals	<b>BCOMXIMT</b>	-3.24%	1.21%	0.28%	0.95%	1.23%	5.35%	-18.87%	-33.99%	-66.42%	
Ex-Precious Metals	<b>BCOMXPMT</b>	-3.53%	1.84%	1.28%	-0.38%	0.89%	8.87%	-16.31%	-32.21%	-67.38%	
Ex-Softs	<b>BCOMXSOT</b>	-3.21%	1.05%	0.57%	0.34%	0.91%	8.51%	-13.46%	-28.11%	-63.57%	
Ex-Livestock	<b>BCOMXLIT</b>	-3.87%	1.37%	0.09%	0.26%	0.35%	8.56%	-13.01%	-29.12%	-62.70%	
Ex-Agriculture & Livestock	<b>BCOMXALT</b>	-0.66%	1.75%	4.47%	-1.12%	3.29%	20.11%	-6.68%	-25.46%	-68.66%	
Bloomberg Dollar Spot	BBDXY	0.90%	2.09%	4.94%	-2.92%	1.88%	-0.22%	0.04%	13.52%	28.71%	
S&P 500 Total Return	<u>SPXT</u>	0.62%	2.41%	3.43%	-0.76%	2.65%	14.37%	40.23%	87.70%	163.40%	249.99%
US Aggregate	<u>LBUSTRUU</u>	-0.12%	0.71%	-0.16%	-1.46%	-1.62%	-0.40%	5.25%	11.89%	44.09%	150.45%
US Treasury	<u>LUATTRUU</u>	0.02%	0.90%	0.10%	-1.18%	-1.08%	-0.65%	3.09%	7.62%	34.03%	133.52%
US Corporate	LUACTRUU	-0.58%	0.54%	-0.98%	-2.32%	-3.27%	-0.83%	9.49%	18.84%	69.07%	187.20%
US High Yield	<u>LF98TRUU</u>	0.40%	-0.03%	1.03%	-0.86%	0.16%	2.62%	17.52%	30.78%	119.76%	254.89%

## **Single Commodity Indices**

			2018								
Index Name	Ticker	Jun	May	Q2	Q1	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
Natural Gas	<b>BCOMNGTR</b>	-0.65%	5.60%	4.25%	-6.85%	-2.90%	-17.81%	-54.81%	-69.90%	-98.86%	-99.44%
WTI Crude	<b>BCOMCLTR</b>	8.85%	-1.94%	13.23%	8.83%	23.23%	58.94%	-22.86%	-53.08%	-86.13%	89.37%
Brent Crude	<b>BCOMCOT</b>	2.72%	4.59%	16.73%	5.40%	23.03%	69.61%	-4.47%	-43.39%	-69.20%	535.51%
ULS Diesel	<b>BCOMHOTR</b>	0.34%	3.03%	10.52%	-0.32%	10.17%	52.23%	-7.35%	-36.90%	-69.16%	225.16%
<b>Unleaded Gasoline</b>	<b>BCOMRBTR</b>	0.20%	1.75%	7.70%	0.88%	8.65%	41.80%	-12.88%	-36.45%	-50.76%	395.90%
Corn	<b>BCOMCNTR</b>	-10.78%	-1.53%	-11.00%	8.72%	-3.24%	-16.88%	-38.02%	-58.67%	-72.94%	-83.50%
Soybeans	<b>BCOMSYTR</b>	-15.31%	-2.70%	-18.01%	7.88%	-11.55%	-12.40%	-22.89%	-21.26%	-12.36%	150.00%
Wheat	<b>BCOMWHTR</b>	-7.52%	3.25%	4.71%	3.22%	8.07%	-20.07%	-46.05%	-55.15%	-84.04%	-89.47%
Soybean Oil	<b>BCOMBOTR</b>	-6.56%	1.80%	-9.26%	-4.38%	-13.24%	-13.86%	-23.15%	-45.91%	-72.05%	-46.22%
Soybean Meal	<b>BCOMSMT</b>	-12.86%	-4.54%	-15.45%	20.70%	2.06%	2.56%	-12.05%	21.17%	108.93%	945.61%
HRW Wheat	<b>BCOMKWT</b>	-12.44%	1.09%	-1.61%	6.44%	4.72%	-22.92%	-52.50%	-60.83%	-81.34%	-76.21%
Copper	<b>BCOMHGTR</b>	-3.66%	-0.13%	-2.68%	-8.55%	-11.00%	7.48%	7.87%	-8.10%	-34.58%	327.34%
Alumnium	<b>BCOMALTR</b>	-6.72%	2.31%	8.74%	-12.02%	-4.33%	11.79%	19.41%	-0.83%	-59.08%	-1.50%
Zinc	<b>BCOMZSTR</b>	-7.27%	-0.80%	-12.11%	-0.82%	-12.83%	6.11%	40.91%	42.57%	6.89%	89.54%
Nickel	<b>BCOMNITR</b>	-2.10%	11.52%	12.06%	4.19%	16.76%	57.69%	19.89%	1.29%	-41.37%	483.04%
Gold	<b>BCOMGCTR</b>	-3.70%	-1.41%	-5.49%	0.95%	-4.59%	0.20%	4.67%	-0.48%	25.92%	282.32%
Silver	<b>BCOMSITR</b>	-1.89%	0.51%	-0.85%	-5.22%	-6.03%	-3.59%	-0.19%	-22.08%	-17.47%	156.92%
Sugar	<b>BCOMSBTR</b>	-6.25%	9.03%	-3.08%	-17.87%	-20.40%	-15.30%	-17.42%	-54.72%	-45.85%	-26.06%
Coffee	<b>BCOMKCTR</b>	-8.54%	0.90%	-5.54%	-7.61%	-12.72%	-16.25%	-34.34%	-40.32%	-68.92%	-88.77%
Cotton	<b>BCOMCTTR</b>	-7.91%	11.28%	6.14%	2.59%	8.90%	25.18%	25.97%	9.10%	24.50%	-69.06%
Live Cattle	<b>BCOMLCTR</b>	2.83%	0.33%	6.88%	-10.41%	-4.25%	-8.71%	-14.97%	3.58%	-27.91%	-3.36%
Lean Hogs	<b>BCOMLHTR</b>	2.52%	5.63%	3.01%	-10.72%	-8.04%	-11.44%	-10.21%	-36.20%	-62.97%	-87.88%

# **PERFORMANCE: Bloomberg Commodity Roll Select Indices**

Composite Roll Select Indices \* Click hyperlinks to open in Bloomberg

Indov Novo	Tieleen		2018								
Index Name	Ticker	Jun	May	Q2	Q1	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
BCOM Roll Select	BCOMRST	-4.04%	1.79%	0.10%	-0.11%	0.00%	7.26%	-7.06%	-21.66%	-50.39%	191.94%
Roll Select Agriculture	<b>BCOMRAGT</b>	-10.14%	1.56%	-7.49%	3.13%	-4.59%	-11.14%	-23.31%	-36.42%	-45.37%	5.01%
Roll Select Ex-Ags & Livestock	<b>BBURXALT</b>	-1.36%	2.09%	3.83%	-0.87%	2.93%	19.25%	2.37%	-16.26%	-57.25%	
Roll Select Grains	<b>BCOMRGRT</b>	-11.44%	0.41%	-8.55%	7.18%	-1.99%	-13.59%	-31.64%	-45.63%	-59.30%	-6.50%
Roll Select Softs	<b>BCOMRSOT</b>	-7.29%	7.00%	-1.68%	-10.47%	-11.97%	-10.01%	-12.73%	-31.41%	-23.66%	-25.56%
Roll Select Livestock	<b>BCOMRLIT</b>	0.13%	-0.37%	1.49%	-8.87%	-7.51%	-12.77%	-24.55%	-16.25%	-34.64%	44.98%
Roll Select Energy	<b>BCOMRENT</b>	1.30%	3.46%	9.88%	2.13%	12.22%	32.80%	-8.00%	-35.80%	-79.77%	220.76%
Roll Select Ex-Energy	<b>BCOMRXET</b>	-6.53%	1.02%	-4.21%	-1.08%	-5.24%	-2.36%	-6.61%	-17.67%	-27.12%	127.49%
Roll Select Petroleum	<b>BCOMRPET</b>	2.53%	2.70%	12.78%	5.05%	18.47%	54.06%	3.94%	-31.38%	-61.24%	701.01%
Roll Select Industrial Metals	<b>BCOMRINT</b>	-4.75%	2.28%	0.33%	-5.85%	-5.54%	15.21%	20.89%	6.71%	-32.57%	307.11%
Roll Select Precious Metals	<b>BCOMRPRT</b>	-3.29%	-0.98%	-4.46%	-0.49%	-4.93%	-0.72%	3.96%	-5.81%	16.94%	272.21%

## **Single Commodity Roll Select Indices**

			2018								
Index Name	Ticker	Jun	May	Q2	Q1	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
Natural Gas RS	<b>BCOMRNGT</b>	-2.08%	5.69%	2.08%	-6.07%	-4.11%	-14.25%	-38.45%	-53.87%	-96.60%	-85.82%
WTI Crude RS	<b>BCOMRCLT</b>	4.57%	-0.36%	11.09%	7.66%	19.60%	52.04%	2.82%	-36.04%	-66.70%	716.73%
Brent Crude RS	<b>BCOMRCOT</b>	2.81%	4.98%	16.99%	5.26%	23.14%	65.82%	5.55%	-30.78%	-57.31%	864.43%
ULS Diesel RS	<b>BCOMRHOT</b>	0.14%	3.03%	9.54%	0.69%	10.29%	44.51%	-5.75%	-35.99%	-67.06%	472.01%
Unleaded Gasoline RS	<b>BCOMRRBT</b>	0.41%	3.61%	10.62%	4.07%	15.13%	44.14%	9.40%	-18.81%	-38.86%	758.83%
Corn RS	<b>BCOMRCNT</b>	-10.13%	-0.38%	-9.51%	7.86%	-2.40%	-14.00%	-34.28%	-57.49%	-69.38%	-68.40%
Soybeans RS	<b>BCOMRSYT</b>	-14.57%	-0.85%	-15.41%	9.22%	-7.61%	-6.70%	-13.09%	-13.39%	-3.86%	268.69%
Wheat RS	<b>BCOMRWHT</b>	-8.44%	3.59%	3.19%	2.84%	6.12%	-19.21%	-47.17%	-57.77%	-81.61%	-62.17%
Soybean Oil RS	<b>BCOMRBOT</b>	-6.56%	1.46%	-9.40%	-4.42%	-13.40%	-13.89%	-22.17%	-43.65%	-68.15%	-20.28%
Soybean Meal RS	<b>BCOMRSMT</b>	-11.52%	-2.60%	-11.72%	20.61%	6.47%	9.14%	-5.57%	25.50%	132.95%	1272.76%
HRW Wheat RS	<b>BCOMRKWT</b>	-12.35%	1.16%	-1.72%	6.10%	4.27%	-21.27%	-49.85%	-59.73%	-79.20%	-40.21%
Copper RS	<u>BCOMRHGT</u>	-3.79%	-0.11%	-2.74%	-7.93%	-10.46%	8.45%	9.23%	-7.31%	-30.42%	517.59%
Alumnium RS	<b>BCOMRALT</b>	-6.47%	1.60%	5.68%	-11.79%	-6.78%	9.73%	18.74%	1.98%	-55.15%	46.80%
Zinc RS	<b>BCOMRZST</b>	-7.53%	-0.52%	-11.66%	-0.14%	-11.78%	7.13%	44.22%	46.98%	19.43%	199.36%
Nickel RS	<b>BCOMRNIT</b>	-2.01%	11.48%	12.11%	3.99%	16.59%	57.30%	20.82%	3.43%	-36.52%	838.72%
Gold RS	<u>BCOMRGCT</u>	-3.70%	-1.41%	-5.49%	0.99%	-4.55%	0.27%	5.17%	-0.06%	26.09%	289.49%
Silver RS	<b>BCOMRSIT</b>	-1.93%	0.49%	-0.92%	-5.20%	-6.07%	-3.56%	0.02%	-21.34%	-15.60%	189.58%
Sugar RS	<b>BCOMRSBT</b>	-5.77%	7.39%	-4.42%	-18.16%	-21.78%	-21.14%	-19.86%	-50.73%	-30.66%	57.16%
Coffee RS	<b>BCOMRKCT</b>	-8.51%	0.90%	-5.51%	-7.88%	-12.95%	-16.71%	-34.17%	-38.56%	-64.05%	-81.59%
Cotton RS	<u>BCOMRCTT</u>	-8.28%	16.51%	9.99%	1.97%	12.16%	29.83%	30.96%	15.86%	48.90%	-48.08%
Live Cattle RS	<b>BCOMRLCT</b>	2.83%	0.33%	6.88%	-9.39%	-3.16%	-8.90%	-15.73%	0.09%	-19.70%	83.66%
Lean Hogs RS	<u>BCOMRLHT</u>	-5.39%	-1.78%	-8.83%	-7.62%	-15.78%	-20.50%	-37.90%	-39.94%	-56.16%	-25.41%

## **BCOM Constituent Weights**

**Total** 

BCOM Index MEMB <GO> \* Click hyperlinks to open in Bloomberg

Jun 2018 May 31 2018 2018 Target Jun 2018 Contrib to Jun 29 2018 Weight% Group Commodity **Ticker Return %** Weight % Weight % Weight Change **Natural Gas** -0.07 8.35 8.21 0.13 8.01% NG 0.90 WTI Crude <u>CL</u> 0.68 8.51 7.62 7.32% **Brent Crude** CO 0.23 8.87 8.36 0.51 7.68% **Energy ULS Diesel** 0.01 3.92 3.77 0.15 3.67% HO 0.09 Gasoline 0.01 4.36 4.27 3.75% <u>XB</u> 32.24 30.43% **Subtotal** 0.86 34.01 1.77 Corn -0.72 6.19 6.56 (0.37)6.13% <u>C</u> Soybeans -0.93 5.33 5.96 (0.63)5.96% <u>S</u> -0.30 3.74 3.80 (0.06)Wheat 3.26% W **Grains** Soybean Oil -0.16 2.39 2.41 (0.03)2.75% **BO** Soybean Meal -0.44 3.07 3.37 (0.31)3.04% <u>SM</u> 1.44 1.54 **HRW Wheat KW** -0.20 (0.11)1.30% **Subtotal** -2.76 23.64 22.44% 22.14 (1.50)Copper HG -0.26 6.48 6.48 0.00 7.16% Aluminum <u>LA</u> -0.31 4.30 4.51 (0.21)4.51% Industrial 2.60 Zinc -0.21 2.72 (0.13)3.10% <u>LX</u> Metals Nickel -0.07 3.24 0.04 <u>LN</u> 3.19 2.76% Subtotal -0.85 16.62 16.90 (0.28)17.53% Gold <u>GC</u> -0.44 11.17 11.24 (0.06)11.95% **Precious** Silver -0.07 3.39 <u>SI</u> 3.33 0.06 3.67% Metals **Subtotal** -0.51 14.56 14.57 (0.00)15.62% -0.18 2.83 2.86 (0.03)3.54% Sugar <u>SB</u> 立立立 Coffee -0.21 2.30 2.39 (0.09)2.61% **KC** Softs Cotton <u>CT</u> -0.13 1.54 1.65 (0.11)1.45% (0.23)Subtotal -0.52 6.67 6.90 7.60% LC 3.58 0.22 Live Cattle 0.10 3.80 4.31% 0.05 Livestock Lean Hogs 2.19 2.16 0.03 2.08% <u>LH</u> **Subtotal** 0.15 5.99 5.74 0.25 6.39%

100.00

100.00

-3.64

100.00%

### **BLOOMBERG INTELLIGENCE: COMMODITY DASHBOARDS**

### **BI <GO>** \* Click hyperlinks to open in Bloomberg

BI provides analysis on several key drivers of BCOM performance; industrial and precious metals mining, oil and natural gas production, and agricultural chemicals. The dashboards include key macro data libraries and interactive charting and commentary from analysts with an average of seventeen years of experience.

### Crude Oil Production: BI OILS <GO>



### Natural Gas Production: BI NGAS <GO>



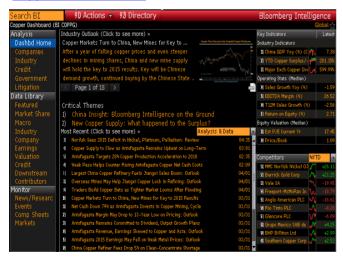
### **Precious Metal Mining: BI PMET <GO>**



### Agricultural Chemicals: BI AGCH <GO>



### Copper: BI COPP <GO>



### **Aluminum: BI ALUM <GO>**



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### **Broad Commodities**

Top commodity news	СТОР
Global commodity prices	<u>GLCO</u>
Commodity playbook	CPLY
Commitments of traders report	COT
Calendar of commodity events	ECO17
Commodity arbitrage calculator	CARC
Commodity fundamental data explorer	FDM
Commodity futures overview	CMBQ
Security finder	SECF
Commodity data contributors & broker	CDAT
Contract table menu	CTM
Seasonality chart	SEAG
Commodity curve analysis	CCRV
Commodity fair values	CFVL
Commodity price forecasts	CPFC
Commitments of Traders Report	COT
Commodity maps	BMAP
Commodity options monitor	OMON
Commodities charts	COSY
Commodity Investors menu	CMNV
US exchange traded product fund flows	ETF

#### **Commodity Indices**

Index description	BCOM Index DES
Index constituent weights	<b>BCOM Index MEMB</b>
Listed index futures	BCOM Index CT
Option volatility surface	<b>BCOM Index OVDV</b>
Seasonality chart	<b>BCOMNG Index SEAG</b>
Commodity index futures movers	<u>FMV</u>
Commodity index ranked returns	CRR

#### Weather

Global weather database	WETR
US snow monitor	SNOW
EU weather & utility models	<b>EUMM</b>

### Energy

Top energy news	ETOP
Top oil news	<u>OTOP</u>
Crude Oil Production Dashboard	BI OILS
First Word oil	NI BFWOIL
News on oil inventories	TNI OIL INV
Oil Buyer's Guide newsletter	NI OBGBRIEF
Pipes & Wires newsletter	NI PAWSBRIEF
Oil market analysis	BOIL
Nat gas spot prices	<b>BGAS</b>
Forward European utility markets	<u>EUM</u>
News on oil markets	NI OILMARKET
News on OPEC	NI OPEC
OPEC production and prices	<u>OPEC</u>
Oil markets menu	<u>OIL</u>
Crude stored in tankers	NOON
Refinery outages	REFO
Oil's decline	EXT5
Oil versus inflation expectations	<u>SWIF</u>

#### Metals

Top metal news	METT
Precious metal dashboard	<b>BI PMETG</b>
Base metals dashboard	BI BMET
Metals prices and data	MINE
Precious metals prices and rates	MTL
Metals Bulletin	MB
COMEX inventories	COMX
LME monitor	<u>LME</u>
LME implied volatilities	<u>LMIV</u>
LME warehouse inventories	<u>LMEI</u>

### **Agriculture**

Top agriculture news	YTOP
Agriculture calendar	<u>AGRI</u>
Agriculture spot prices	<u>AGGP</u>
Agriculture supply & demand	<b>AGSD</b>
Crop calendar	CCAL

### BCOM QUICK FACTS Index Methodology

Weighting Bias	2/3 market liquidity and 1/3 world production
No. of Commodities	20
Re-balancing Frequency	Annual
Roll Schedule	Monthly (5 day roll)
Caps/Limits	Single commodity: max 15%
	Single commodity and its derivatives: max 25%
	Related commodity groups: max 33%
First Value Date	30 December 1990

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