Bloomberg Commodity Index (BCOM)

Broad Commodity Divergent Strengths

- Commodities vs. stocks -- disparity reversion has barely begun
- Crude oil rally runs its course; natural gas ready to burst
- Rested and refreshed, all-metals index set to rejoin the rally
- Soybeans to sugar: agriculture appears near historic recovery
- Commodities with elevated explosion risks include grains, precious metals and natural gas

Data and outlook as of May 31

Mike McGlone - BI Senior Commodity Strategist

BI COMD (the commodity dashboard)

Broad Commodities Gaining Support, Showing Divergent Strength

Performance: May +1.4%, YTD +3.6%, Spot +4.6%. (Returns are total return (TR) unless noted)

(Bloomberg Intelligence) -- In the wider scheme of investing and market performance, the 2018 commodity recovery to May 31 is a rounding error -- it promises to gain significance. Primary rally risks include a sharp plunge in crude oil, a very good U.S. corn-belt growing season, sustained U.S. dollar strength and a sharp decline in the stock market. The greenback bounce should be almost complete, with a likely peak in U.S. Treasury bond yields. Despite the dollar's recovery. commodities have shown divergent strength. Stocks are overdue for an extended period of underperformance, but a severe reversal is unlikely with strong underlying economic growth and increasing inflation -- commodity and bond yield positives. Commodities with historically elevated explosion risks include grains, precious metals (gold, silver and platinum) and natural gas.

Improving Commodity Macro

Commodities vs. Stocks -- Disparity Reversion Has Barely Begun. On a stand-alone basis, broad commodities have a lot going. Versus stocks, mean-reversion potential risks are historically extreme. The relative performance of the Bloomberg Commodity Index vs. the S&P 500 harkens back to the bottom in 1999.

Commodities Likely Early Recovery Days vs. Stocks.

The trend in commodities underperforming the stock market has barely budged. Although the almost 5% 2018 gain in the Bloomberg Commodity Spot index to May 31 is double that of the S&P 500, the graphic indicates scant movement in the relationship. There is little historical precedence for the CBOE Volatility Index (VIX) bottoming from a lower level and the dollar peaking from higher.

Periods of dollar weakness and VIX strength are highly favorable for commodities vs. stocks.

Broad Market Outlook

PERFORMANCE:

MARKET FLOWS:

Open Interest, Volume,

Prices, Volatility

CURVE ANALYSIS:

Roll Yields, Forwards/Forecasts

COT, ETFs

DATA

Overview, Commodity TR,

Contango/Backwardation,

3

6

12

17

21

24

Energy

Metals Agriculture

Risk vs. Reward Favors Commodities Over Stocks



The greatest macroeconomic risk is stocks simply decline more than commodities. Longer-term trends and relative values favor further commodity appreciation, less than three years in a bull market vs. about a decade for extended stocks. A more likely case is the commodity bull continues while stocks consolidate gains, potentially for an extended period.

Young Commodity Bull Nearing Initial Resistance.

The commodity bull is just getting started but may pull back some, likely driven by crude oil. Indicating momentum gains, the GSCI has recovered above its 60-month average for the first time in four years, but the Bloomberg Commodity Spot Index is nearing the midpoint of its 2009-11 range. From the bottom in 2016, that midpoint is a key initial target resistance -- an area from which we expect a stall or pullback.

Indicating a market with diminishing liquidation risk, managed-money net positions as a percentage of open

Bloomberg Commodity Index (BCOM)

interest are below the peaks from 2014 and 2017 that marked index setbacks. A bit too hot, crude oil is likely at the greatest risk of mean reversion, which would pressure the GSCI more, though carry is positive on backwardation.

Commodity Bull Getting Stronger



MACRO PERFORMANCE

Divergent Strength Favors Commodities. Stocks are trying hard to play catch-up to commodities in 2018, but have strong headwinds vs. the tailwinds in commodities. The extended duration and extent of the stock bull market, with inflation gaining and the Federal Reserve rapidly normalizing, are key headwinds and typically tailwinds for commodities, i.e. inflation. Since the 1991 inception of the Bloomberg Commodity Index, it's 0.71 correlated to the Consumer Price Index (annually) vs. 0.14 for the S&P 500.

Commodities Rally Sustained Despite Dollar Bounce

Security	Chg YTD %	1 Chg	Chg 1Yr %	2Yr %
		May	QTD Pct Chg	Chg
Bloomberg Commodity Spot Index	+4.6%	+1.2%	+4.4% +15.1%	21.5%
Bloomberg Commodity Index Tota	+3.6%	+1.4%	+4.0% +11.0%	8.3%
S&P 500 Total Return Index	+2.0%	+2.4%	+2.8% +14.4%	34.4%
S&P 500 Index	+1.2%	+2.2%	+2.4% +12.2%	29.0%
Bloomberg Dollar Spot	+1.0%	+2.1%	+4.0% -2.3%	
MSCI World Net Total Return US	+.8%	+1.0%	+2.1% +11.9%	30.3%
Bloomberg Barclays US Corporat	3%	1%	+.5% +2.3%	16.2%
Bloomberg Barclays U.S. Treasu	-3.7%	+1.7%	4%2%	-2.2%

Commodities are showing divergent strength, despite the dollar recovery in April and May. Typically the Bloomberg Commodity (BCOM) Index moves about 1.5x inverse (the beta) the Bloomberg Dollar Index on an annual basis. Since the end of March, BCOM has gained over 5% vs. 4% for the dollar. Such divergence periods typically signal higher commodities.

Sectors: Energy Risk, Ag Opportunity

Crude Oil Risks Passing Performance to Gold, Soybeans. Commodity sector performance for the rest of 2018 favors some catch-up from metals and continued recovery in grains. If the dollar bounce fails, metals should be primary beneficiaries. Soybeans will be subject to weather and trade issues, but appear better poised to extend the 2018 recovery than crude oil.

Sector Performance Risks -- Crude Oil and Grains.

The greatest commodity sector risk for the rest of 2018 is likely energy -- crude oil further backing away from four-year highs reached in May. A very good northern-hemisphere growing season should be necessary to materially pressure grains and agriculture. Some normalization in favorable weather patterns, hotter and dryer than the past few years, could easily double the grains 2018 performance, up to almost 10% through May 31. Trade issues are a wild card that should eventually be grain supportive. They're low-hanging fruit for China to appease its best export customer.

Grains and Crude Oil Leading 2018 Sector Gainers

	ug _u				_
Security	Chg YTD %	Chg May	Chg OTD Pct	1Yr % Cha	2Yr % Chg
		riay	QID PCL	ulig	ulig
Bloomberg Energy Subindex Tota	+9.7%	+2.7%	+7.8%	+26.3%	15.1%
Bloomberg Grains Subindex Tota	+9.5%	7%	+2.3%	+.2%	-17.4%
Bloomberg Agriculture Subindex	+5.2%	+.6%	+2.0%	2%	-14.3%
Bloomberg Industrial Metals Su	6%	+2.4%	+6.0%	+25.0%	51.7%
Bloomberg All Metals Total Ret	-1.2%	+.8%	+2.6%	+12.5%	27.4%
Bloomberg Precious Metals Subi	-1.7%	-1.0%	-1.2%	6%	3.9%
BBG Softs TR	-4.7%	+6.6%	+6.0%	-7.1%	-12.6%
Bloomberg Livestock Subindex T	-7.6%	+2.2%	+2.6%	-13.4%	-7.3%

The end of the dollar bounce, which may have run its course with the U.S. Treasury 10-year yield above 3%, would aid all commodities, notably metals and gold. Precious metals, grains and natural gas have the most compressed ranges and are ripe to move.

ATTRIBUTION

Crude Oil Leads Gains, Must Subject Going Forward. Energy, the largest contributor to 2018 broad index total

returns, will be susceptible to crude oil mean reversion from the extended prices reached in May, but there's plenty of room for other sectors to pick up some slack. Metals are prime performance candidates, notably if the weak U.S. dollar trend resumes. Base and precious subtracted marginally -- about 30 bps each -- from index total returns in 2018 to May 31. Caged gold is trend ready is it gets, and base metals returned to good trend-line supports with favorable fundamentals.

Led by the grains, agriculture's 136 bps of contribution to index returns will be subject to grain growing-season

Bloomberg Commodity Index (BCOM)

weather. Contribution should increase, unless production is well above most estimates. Livestock is the biggest drag on total returns, subtracting about 55 bps from total returns.

Crude Oil, Soybeans, Wheat, Corn Driving Returns

Name	Start % Wgt	End % Wgt	Avg % Wgt		CTF
BCOM_SB (Exclus	100.0	100.0	100.0	2.9	2.9
■ Energy	30.4	32.2	31.0	9.0	2.7
■ Agriculture	27.1	30.5	30.2	4.5	1.4
■ Base Metals	20.9	16.9	17.4		-0.3
■ Precious Metals	15.5	14.6	15.3	-2.4	-0.4
■ Livestock	6.1	5.7	6.1		-0.5
Port Wgt				Contribution	ı
31.01		Energy		BCOM Attribution	2.74
30.22		Agriculture		2017 through May 31. Note, these are	1.36
17.40		Base Metals		estimates, actual results will vary.	-0.30
15.27	Pr	ecious Metal	s	resuls will vary.	-0.36
6.11		Livestock			-0.55

Energy (Index weight: 29% of BCOM)
Performance: May +2.7%, YTD +9.7, Spot +10.5%
*Note index weights are the YTD average.

How Low Does Crude Oil Go?

Crude Oil Rally Runs Its Course; Natural Gas Ready to Burst. Absent further geopolitical risk, the energy bull appears past its prime, with crude oil-led prices signaling a May peak and underlying dynamics favoring a natural-gas rally. Month-end levels at the halfway mark of 2011-16's bear market support this notion, with key bullish drivers (backwardation, demand exceeding supply) nearing historical limits. Positive carry should last though, boosting total returns by rolling into backwardation. OPEC and Russia's willingness to add production is the headline, but markets indicate they've been near price limits for some time.

It's different this time, as the reverse of the 1970s is rapidly occurring, with U.S. production on a tear and flatlined demand from developing nations. Probing for a crude oil low should be the focus. The high-\$50-a-barrel handle in WTI is likely.

How Low Should Crude Oil Go

May Crude-Oil Peak Has Legs, But Positive Carry Is Sustainable. May is likely to mark a longer-term peak for crude prices, but positive carry (roll yield) should continue to support total returns. OPEC and Russia's willingness to

increase supply is the headline catalyst, but underlying market dynamics have been indicating extended prices for awhile. Good support should come in the high-\$50 WTI handle.

Potential Longer-Term Price Peak in Crude Oil.

We need to go back seven years to find crude oil this stretched above mean levels, indicating that May prices may mark a longer-term peak. The high from 2011 was the last time that WTI and Brent crude traded more than the recent 25% above 10-month and 200-day averages. There are two primary differences this time -- managed-money petroleum positions are near a record net-long, and the energy market is in the midst of a technology-driven paradigm shift

Crude Beginning Mean Reversion From Key Levels



The electric-vehicle market, a primary demand source, is advancing rapidly, and the U.S. (once the world's largest crude-oil importer) is the top source of increasing incremental supply. Crude is unlikely to decline 77% like it did in 2011-16, but is at a high risk of revisiting annual mean measures, such as the 12-month average -- \$57.96 a barrel in WTI and \$63.35 in Brent.

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.

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Limits to Demand vs. Supply, Backwardation Trends

DVSCRUDX G Index

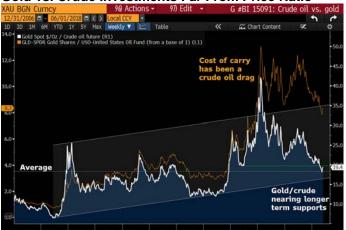
90 Actions 97) Edit G #BI 15456: Brent DVS CO



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.

Coiled Gold vs. Uncaged Crude -- Gold Favored. The gold-to-crude oil relationship is approaching longer-term support levels favoring the metal. At 19.4 barrels of WTI crude vs. an ounce of gold, the ratio returned to the average since 2007. Since the ratio bottom close to 6 in 2008, the trend has been higher, with gold outperforming oil. With WTI pushing on good resistance to above \$70 a barrel vs. gold stuck in the narrowest 52-week range in over a decade, the ratio may drift lower, but risks a sharp reversion recovery.

Gold vs. Crude Investments Far From Price Ratio



Gold is ripe to break out of its narrowing cage with positive primary drivers: increasing inflation, a weakening greenback and bottoming stock market volatility. Once geopolitical issues subside, crude oil is at high risk of a

20% correction, common in the current bull market since 2016. Investments in gold vs. crude oil generally favor the metal.

Natural Gas Appears Too Low

Natural Gas Too Low vs. Key Drivers Supply, Demand and Inventory. The risk of a price decline in natural gas is limited, while its potential to surge is nearing historic extremes. Demand exceeds supply, and inventories are declining at the most rapid pace in four years. Against a backdrop of the narrowest-ever annual futures range, prices look too low.

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.

Natural Gas Prices Appear Low to Primary Drivers



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

Bloomberg Commodity Index (BCOM)

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 8% 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

Energy Performance: Brent, Largest Contributor.

Energy components were generally net positive in May, but are at elevated risk of reverting more 2018 gains. WTI crude oil risks appear similar to copper's at the end of 2017 -- the peak was the halfway mark of the 2011-16 bear market. In May, WTI crude oil and Brent peaked near their 50% bear-market retracements. They're likely to mark longer-term highs, but positive roll yields should last awhile.

Brent and WTI Driving Returns, Spot Likely Limited

brent and will briv	ing Ketur	ns, spot i	Like	у ∟п	mte	a
Security	Chg '	YTD %	Chg	Chg	1Yr %	2Yr %
			May	QTD Pct	Chg	Chg
Bloomberg Brent Crude Subindex	+19.8%		+4.6%	+13.6%	+57.7%	42.4%
Bloomberg Petroleum Subindex T	+13.9%		+1.7%	+8.8%	+45.8%	29.5%
Bloomberg WTI Crude Oil Subind	+13.2%		-1.9%	+4.0%	+38.6%	18.4%
BBG Energy Spot	+10.5%		+2.2%	+7.9%	+30.5%	40.2%
Bloomberg Heating Oil Subindex	+9.8%		+3.0%	+10.1%	+47.1%	35.5%
Bloomberg Energy Subindex Tota	+9.7%		+2.7%	+7.8%	+26.3%	15.1%
Bloomberg Unleaded Gasoline Su	+8.4%		+1.7%	+7.5%	+34.9%	21.3%
Bloomberg Natural Gas Subindex	-2.3%		+5.6%	+4.9%	-18.8%	-18.1%

The Bloomberg Brent Crude Subindex total return near 20% in 2018 is the biggest contributor to index performance. Backing away further from May's four-year highs is likely, but positive carry will make up some of the

difference. Brent's total return is about 4% ahead of the spot price this year. The Bloomberg Petroleum Subindex Total Return near 15% is about half a percentage point above the spot gauge.

Front Energy Futures to May 31

Ticker	Last	Chg YTD &	Chg MTD	Chg	1 Yr	2 Yrs	Chg	Change
			ő	QTD %	Ago	Ago	Pct 1Yr	2 Year
								Percent
+ Generic 1st 'XB' Future	216.0	+20.1%	+1.5%					
+ Generic 1st 'CO' Future	77.6	+16.0%	+3.2%	+10.4%	50.3	49.7	+54.2%	56.1%
+ Generic 1st 'CL' Future	67.1	+11.1%	-2.1%	+3.3%	48.3	49.1	+38.9%	36.7%
+ Generic 1st 'H0' Future	219.1	+5.6%	+1.1%	+8.0%	151.5	149.8	+44.6%	46.3%
+ Generic 1st 'NG' Future	3.0		+6.9%	+8.0%	3.1	2.3	-3.8%	29.1%

Curve Analysis - Contango (-) | Backwardation (+)

•				,
Name	Current Position		1 Yr Change	
■ 1 Year Spread % of First Contract	1 obicion		change	change
■ BCOM	-2.2	-3.1	0.9	-0.5
■ Sector				
■ Energy	5.4	0.3	5.2	1.2
■ Industrial Metals	-0.6	-1.5	0.8	0.2
■ Precious Metals	-3.0	-2.0	-1.0	-0.7
■ Livestock	-4.6	5.9	-10.4	-11.0
■ Agriculture	-5.8	-6.4	0.7	0.2
_ 1.51.104.144.19	2.0	011	0.7	0.12
■ Single Commodities				
Thermal Coal	10.5	7.5	3.0	5.1
Natural Gas	9.5	5.6	3.9	13.2
Crude Oil	6.2	-1.5	7.7	1.2
Soybean Meal	5.9	-3.2	9.0	9.3
Brent Crude	5.6	-2.3	7.9	-0.7
Cotton	3.1	5.1	-2.0	-2.9
Unleaded Gas	2.7	-0.2	2.9	-2.0
Gas Oil	2.4	-3.8	6.2	-3.8
Palladium	1.7	0.6	1.1	0.2
Zinc	1.4	-0.1	1.5	-2.0
Heating Oil	1.1	-3.5	4.6	-4.8
Lean Hogs	1.1	5.7	-4.6	-5.5
Aluminum	1.1	-1.4	2.5	3.4
Copper (LME)	-1.1	-1.2	0.1	0.2
Soybean	-1.4	-3.2	1.9	1.9
Nickel	-1.4	-2.5	1.0	0.6
Platinum	-1.9	-1.4	-0.4	-0.5
Gold	-2.8	-1.6	-1.2	-0.6
Copper (CME)	-3.0	-2.1	-0.9	-1.2
Silver	-3.2	-2.4	-0.9	-0.7
Soybean Oil	-6.2	-3.7	-2.5	-5.1
Sugar	-8.6	-5.1	-3.5	-5.1
Corn	-9.6	-10.6	1.0	2.5
Live Cattle	-10.2	6.0	-16.2	-16.5
Coffee	-10.8	-10.6	-0.2	0.1
Wheat	-12.5	-16.9	4.4	3.0
HRW Wheat	-12.7	-18.5	5.9	6.4

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.

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Metals

All (Index weight: 35% of BCOM) Performance: May +0.8%, YTD -1.2%

Industrial (Index weight: 19.0% of BCOM. Performance: May +2.4%, YTD -0.6 Spot -0.7%)

Precious (Index weight: 16.1% of BCOM. Performance: May -1.0%, YTD -1.7, Spot -1.2%)

Rested for Rally Resumption

Copper to Gold: Metals Resume Rally, Show Divergent Strength. Divergent strength in April-May is a key takeaway as metals enter the summer. Despite the strongest two months for the dollar in almost two years, metals have simply marked time, backing up into good support levels. Sustained greenback strength is a primary risk, though metals appear to be looking ahead to the buck holding May's peak along with U.S. bond yields, or inflationary repercussions of sustained higher yields. A weak dollar and inflation are strong metals companions.

Industrial metals are poised to accelerate their outperformance vs. the aging stock-market bull in this rate-tightening cycle, with demand exceeding supply, bottoming equities volatility and a peak greenback. Gold indicates it will need sustained dollar strength to keep it from breaking higher from its compressed range.

All Metals Rally Ready

Rested and Refreshed, All-Metals Index Set to Rejoin the Rally As a combined major sector, metals' subdued 2018 performance indicates a sufficient consolidation of last year's sharp gains to resume a rally. Approaching 2H, precious and industrial primary metals prices appear low with favorable drivers.

Metals Still Digesting 2017's Gains. The primary question in metals is what it'll take to end a nascent rally. Sustained dollar strength and a reversal of excess demand vs. supply are the primary suspects, though both are unlikely. Our analysis of the primary drivers for the Bloomberg All Metals Index components shows that the ratio of demand vs. supply is the highest since 2006. The annualized measure likely has peaked, but should remain well above par on the back of the improving global economy and strong purchasing managers' indexes.

In a reinflating global economy, metals remain relatively attractive less than three years into a bull market vs. about a decade-long run for stocks. Appearing more paused and refreshed at the end of May, the all-metals index continues to consolidate the 21% gain from 2017.



Base Metals Over Taking Stocks

Aluminum to Zinc: Base Metals Set to Continue Outperforming. The base-metals bull is increasingly rested and refreshed, notably vs. the stock market, after showing divergent strength in May. Industrial metals looking beyond the recovering dollar is an indication of rally resumption.

The Base Metals' Upper Hand vs. Stocks. Industrial metals outperformance vs. stocks appears set to accelerate. Up about 64% since the inception of the rate-hike cycle, the Bloomberg Industrial Metals Spot

Bloomberg Commodity Index (BCOM)

Subindex has risen twice as fast as the S&P 500 Index. Our featured graphic indicates stronger legs for metals. Base metals' nascent bull market -- less than three years old vs. almost 10 for stocks -- has strong support from the highest sustained BI-calculated demand vs. supply gauge in 13 years.

Additional support comes from the peak dollar and bottoming CBOE Volatility Index (VIX), which favor metals over stocks. The metals-index ratio vs. the S&P 500 has been in a clear downward trend along with the VIX since 2009. Metals vs. equities bottomed in 2015, preempting VIX's bottom in January.

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.

Back at Good Support, Reduced Speculative Longs



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 (\$2,110). Aluminum should mark lows in the normal distribution of trading post-April, likely to extend

toward \$2,500.



Industrial Metals Preparing to Rotate Higher. A rapidly appreciating 12-month moving average that's holding the low of April is indicative of a continuation of the industrial-metals bull market. What was initial resistance in August, when the Bloomberg Industrial Metals Spot Subindex first leapt above the halfway marks of the 2008-09 and 2011-16 bear markets, is holding support. This indicates a market that's rotating to the upper-end of the drawn-out range. The 2011 peak is the next key resistance point, about 22% above the May 18 level.

Old Resistance Is Holding Support in 2018



The market could still pull back below the December low (about 10%) and maintain bullish indications. Negative catalysts are unlikely.

Nickel Catching Up to Strong Demand vs. Supply.

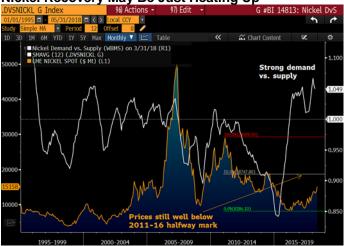
This year's best-performing metal -- nickel -- is likely to sustain its leadership role. Among the most beaten-up commodities of 2017, nickel prices are likely to advance to the mean. Despite the most favorable demand vs. supply conditions in more than two decades, the metal is

Bloomberg Commodity Index (BCOM)

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 May Be Just Heating Up



Gold Divergent Strength

Gold Getting Antsy, Shows Divergent Strength vs. Recovering Buck. The last time the Bloomberg Dollar Spot Index gained 2% or more in successive months, gold plunged, but now the sentiment is more like a yawn. Continued greenback strength is a negative, but dollar resistance in May, along with 3% 10-year Treasury yields, appears strong. Sustained inflation would be positive for gold.

Gold Should Need Much Stronger Buck to Not Rally. When the dollar rises, gold is supposed to go down, but the metal is showing divergent strength. Despite a Bloomberg Dollar Spot Index more than 2% above its 200-day moving average after a long run below for the first time in almost two years, gold isn't reacting like it has in the past. The metal typically declines at 1.2x the rate of the dollar (monthly since 2004). In April and May, gold retreated at about half the rate vs. its 200-day gauge, while the dollar was about 2% above its own.

Higher Lows for Gold Despite Dollar Strength



Gold may be looking ahead to the dollar sustaining May's resistance, along with 3% in the 10-year note. Recordlong Treasury futures positions indicate that the 3.11% apex has legs, and so should a potential greenback peak. Indications are that, unless the dollar sustains its strength, gold prices should as well.

Determined Gold ETF Investors Set to Prevail. The recent divergence in declining net futures positions vs. increasing gold ETF inflows is an indication for higher underlying prices. Strong and persistent demand for gold is evident from the rapid appreciation of total known gold ETF holdings. Since the inception of the rate-hike cycle, the number of ounces estimated held by gold ETFs has increased more than 2x the price of gold, 52% vs. 22%. The 75 million ounces in gold ETFs equates to gold near \$1,600, if the price appreciated at the same pace.

Gold ETFs Set to Get Satisfaction From Futures



A sharp liquidation of futures-managed money net-long positions indicates prices should be accelerating in that direction. Positions back near levels that have marked lows in the nascent bull market show long liquidation risks

Bloomberg Commodity Index (BCOM)

have been mostly alleviated, offering a green light for more price appreciation.

Gold ETFs Favored in 'Wall of Worry'. ETF flows indicate gold may be entering a potential win-win scenario vs. stock-market performance. Essentially, the benchmark alternative asset, gold ETF holdings, increased rapidly as the stock market rally hit successive records in 2017. The indication is wall-of-worry diversification buying. As the stock market has corrected this year, gold ETF inflows leapt to new multiyear highs. Both a higher and lower stock market is coinciding with increasing interest in gold.

Gold May be Entering Win-Win Vs. Stocks



A decade into the aging bull market, there appears to be traction for the nascent gold bull, less than three years old. Increasing inflation, a declining greenback and increasing stock-market volatility typically favors dollar-based gold performance over most financial assets.

Acceleration Is the Indication for Gold Prices. The recent price setback in gold is typical of this nascent bull market. Commencing with the first Federal Reserve rate hike in December 2015, the rally should continue, with indications favoring acceleration. Gold 52-week Bollinger Bands are the narrowest since 2001, a period that preceded the strong 10-year bull market. The risk is that gold may need to flush out a few more weak long positions and revisit the bottom band near \$1,230 an ounce before resuming the uptrend.

The range is so compressed that a revisit of the upper end near \$1,360 should be a mere speed bump before moving higher. In an environment with the dollar weakening, inflation increasing and stock-market volatility bottoming, costlier gold should be a matter of time. **Gold Bull Just Taking Its Time**



Silver ETF Investors Remain Stalwart. The question of time when the tenacity of silver ETF investors should prevail is approaching historic extremes. Earning its nickname as the "devil's metal," silver is caged within the narrowest 52-week range since October 2000. ETF holdings have stayed steady near all-time highs. As of May 25, total known silver ETF holdings increased a bit less than 1% to 661 million despite the spot price declining a bit over 1%. Up is the path of least resistance on the back of increasing gold, industrial metals and a weak dollar.

Tenacious Silver ETF Holders Await Price Movement



Indications are for a potentially explosive silver break out. Increasing silver ETF holdings also reflects changing investor preferences. Exposure to physically-backed silver ETFs can be sustained for as little as 30 bps, reducing the hassles of storage.

The Silver Setup Is Potentially Explosive. It's been about 50 years since silver's 12-month range was this narrow, increasing the likelihood of a sharp rally. Bulls appear to have lost faith in the uniquely industrial and

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precious metal, also a currency. We find similarities to 2003 with favorable silver companions, especially increasing industrial metals and a peaking greenback. Essentially unchanged from June 2016, silver has plenty of room to catch up to the 50% rally in the Bloomberg Industrial Metals Spot Index and 3% decline in the tradeweighted broad dollar.

Silver Foundation May Be Strongest in 50 Years



Silver has a 0.70 correlation to industrial metals and minus 0.58 to the dollar when measured annually over the past 20 years. More than 50% industrial-demand based vs. about 30% two decades ago, silver has the most appreciation potential among commodities.

Platinum Favored at a Discount to Palladium. Platinum should gain the upper hand vs. more-expensive palladium. Platinum is scarcer, a more-efficient catalyst and priced at an unusual discount vs. palladium, yet has a more-favorable risk vs. reward profile. Almost two decades since the squeeze of 2000-01, palladium shouldn't be as vulnerable at the same levels as that peak, but history and relative value favor platinum. Vehicle emissions, chemical-catalyst and jewelry demand support platinum, as does a 56% discount to the metal's historic high from 2008 at \$2,250 an ounce.

Platinum is favored, notably if this year's mean-reversion trends continue -- a bottoming VIX, increasing inflation and a declining dollar. Similar to gold, platinum is one of the few commodities without a mean to which it can revert, stuck within its narrowest 52-week range in three decades.

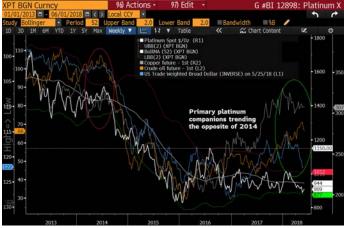
History Shines More Favorably on Platinum



Platinum Ripe to Revisit \$1,150 With Key Drivers.

Unless things are very different this time, platinum has plenty of upside relative to its key companions, based on historical trends. Ripe to break out of an increasingly compressed cage, platinum appears to be in the opposite situation of four years ago, when it declined from a similarly narrow range. Topping the leader board of high correlations to platinum, copper and crude oil are in strong uptrends. Leading those with negative correlations, the trade-weighted broad dollar (in a downtrend) adds support to platinum prices.

Primary Platinum Companions Signal Higher Prices



For the past 20 years, the annual correlations to platinum are 0.78 vs. copper, 0.67 vs. crude oil and minus 0.66 to the dollar. Supply and demand often find ways to support commodities at discounts to typical companions, notably when they're as rare as platinum.

Key Mean-Reversion-Risk Candidate: Palladium

Palladium's price-decline risks are elevated on a standalone basis and vs. platinum, relative to peak vehicle sales and bottoming stock-market volatility. Recently inching above the 2001 high, the palladium

Bloomberg Commodity Index (BCOM)

market appears similar to the silver peak in 2011, potentially playing a key role in the 2018 mean-reversion theme. Indications of peaks in primary companions the past decade -- global vehicles sales and the S&P 500 Index -- increase palladium's price risk.

Palladium Quite Vulnerable With Peaking

Companions



Car sales will eventually recover, but the lowest-forlongest VIX ever has plenty more mean-reversion room. At a lower price than platinum, palladium gained plenty of favor the past decade, notably for gasoline-vehicle emission control. Yet, at a price premium with key drivers peaking, palladium may lose more luster.

PERFORMANCE DRIVERS

Nickel Leading All-Metals Performance. Metals are marking time, with nickel and aluminum strength offsetting copper and zinc weakness. Up over 11%, May was the best month for nickel since December. The all-metals gauge, ending 2017 at a three-year high, has been a primary drag on this year's performance as prices consolidate, with copper leading the decliners. Excess demand and prices back near annual means shine favorably on copper. The best month of the year for the broad trade-weighted dollar was a pressure factor, but metals showed relative strength.

Metals Consolidating 2017 Gains on Buck Recovery

Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		May	QTD Pct	Chg	Chg
Bloomberg Nickel Subindex Tota	+19.3%	+11.5%	+14.5%	+68.4%	76.3%
Bloomberg Aluminum Subindex To	+2.6%	+2.3%	+16.6%	+19.2%	45.1%
Bloomberg Industrial Metals Su	6%	+2.4%	+6.0%	+25.0%	51.7%
Bloomberg Gold Subindex Total	9%	-1.4%	-1.9%	+1.4%	5.1%
Bloomberg All Metals Total Ret	-1.2%	+.8%	+2.6%	+12.5%	27.4%
Bloomberg Precious Metals Subi	-1.7%	-1.0%	-1.2%	6%	3.9%
Bloomberg Silver Subindex Tota	-4.2%	+.5%	+1.1%	-6.5%	.0%
Bloomberg Zinc Subindex Total	-6.0%	8%	-5.2%	+21.3%	61.7%
Bloomberg Copper Subindex Tota	-7.6%	1%	+1.0%	+16.8%	41.3%

All-metals has a negative beta of 3.1 vs. the dollar, measured annually the past 20 years. Copper has the highest negative correlation (0.69). With the greenback and U.S. bond yields nearing good resistance in May, a weaker currency and stronger metals are more likely for the rest of 2018.

Market Flows - ETF Flows (annual)

Name	2018↓	2017	2016
= ETEc (# Dillion AUM)			
■ ETFs (\$ Billion AUM)	146 25	141 76	120.25
■ Total ETF Assets Under Management	146.25	141.76	120.35
■ Precious Metals	111.81	109.99	90.30
■ Gold	98.85	95.35	76.91
■ Silver	9.79	10.11	9.41
■ Platinum	1. 50	2.40	2.26
■ Palladium	0.86	1.28	1.07
■ Precious Metals Basket	0.70	0.70	0.57
■ Other	0.11	0.15	0.08
■ Broad Commodity	21.52	17.26	14. 83
■ Energy	9.09	11.07	12.20
■ Agriculture	2.09	1.78	1.82
■ Industrial Metals	1.73	1.65	1.17
■ Livestock	0.01	0.01	0.02
■ ETFs Fund Flows (\$ Billion)			
■ Total ETF Fund Flows (\$ Billion)	5.58	8.73	23.47
■ Precious Metals	5.33	8.60	22.61
■ Gold	5.61	8.79	21.91
≖ Silver	0.15	0.02	0.95
■ Precious Metals Basket	0.04	0.05	0.17
■ Other	-0.07	-0.02	0.00
■ Platinum	-0.10	0.07	0.00
■ Palladium	-0.31	-0.31	-0.41
■ Broad Commodity	3.97	1.05	2.38
■ Industrial Metals	0.18	0.05	0.30
■ Agriculture	0.06	0.22	0.15
■ Livestock	0.00	0.00	0.00
■ Energy	-3.96	-1.20	-1.97

Bloomberg Commodity Index (BCOM)

Agriculture (Index weight: 30% of BCOM)
Performance: May +0.6%, YTD +5.2%, Spot +7.5%)

Grains (Index Weight: 24% of BCOM)

Performance: May +3.0%, YTD +10.3%, Spot +14.3%)

Softs (Weight: 6% of BCOM)

Performance: May +6.6%, YTD -4.7, Spot -4.4%)

Growing Season Strength

Bring It On; Prices Unlikely to Drop Without Another Bumper Crop. Knocked around by trade tension as the Northern Hemisphere enters growing season, the grains, comprising the majority of agricultural commodities, should come out with higher prices. Markets have recovered slightly, with another bumper crop necessary to revert to means of the past three years of historically subdued prices. Demand is responding, exceeding supply for the first time in five years -- higher prices are typically the necessary suppressant. Indicating voracious demand, the primary U.S. export to China -- soybeans -- is being challenged by Brazil, on pace to double the exports of the U.S.

Grain demand has grown accustomed to record incremental production and relatively low prices. The worst appears to be over for soft commodities, with cotton looking a bit too hot, and sugar and coffee the opposite.

Favorable Broad Agriculture

Primary Agricultural Drivers Point to Continued Price Recovery. Multiple years of relatively low agriculture prices appear close to an end. Demand has caught up to rapidly increasing grain production, indicating higher prices should be inevitable unless some unexpected force contains demand. Trade issues are just noise, and another bumper crop should be needed to stall this year's rally.

Soybeans to Sugar: Agriculture Appears Near Historic Recovery. Higher prices are the likely solution to a historic divergence between supply and demand. Based on Bloomberg Agriculture Subindex component data since 1970, we find that the ratio has never recovered as swiftly from lows reached at year-end 2014. Essentially unchanged from that date, the broad index should move higher, with gains potentially substantial. Typically it takes higher prices to suppress such a strong demand excess. Peaks in the agriculture index in 2008 and 2011 coincided with an extended downtrend in

demand vs. supply.



Of equal significance is a potential longer-term greenback peak. A high from similar levels in the broad tradeweighted dollar in 2002 declined 26% to the 2008 trough, coincident with a 217% increase in the agriculture index.

Warming Grain Prices

Demand Exceeding Supply, Prices Low in Corn, Soybeans and Wheat. Weather needs to be quite favorable over the next few months for the 1H grain rally to fade. Demand vs. supply indicates that this market is ripe for more recovery. Historically compressed ranges indicate sharp-rally risks far exceed more of the lower-drifting range trading we've seen the past few years.

Unsustainable Trends Absent Higher Prices. Low grain prices should be a thing of the past. Our analysis of USDA data on global corn, soybeans and wheat demand vs. supply shows that conditions are the most beneficial for pricing in five years. Of equal importance is the strong

Bloomberg Commodity Index (BCOM)

trend of demand exceeding supply despite multiple years of record yields and production. A key takeaway is that the market has reached an inflection point of unsustainably low prices and strong production. Demand is simply too strong.

The most widely produced grain -- corn -- is a primary driver, and the U.S. (the world's largest producer) is in the midst of a paradigm shift. For the first time, more corn is being used for fuel, while fewer acres are planted than for soybeans. Low prices and a lack of net revenue are the key reasons.

This Disparity Indicates Grain Prices Too Low. Higher pricing is our primary takeaway from current grain conditions. USDA data offer little historical precedent for global grain demand vs. supply recovering more swiftly from a lower level. There's some resemblance to 1985-88, with combined corn, soybeans and wheat bottoming and then recovering from levels similar to 2015-18. From the 1987 low to 1988 peak, corn prices surged about 150% to revisit the 1984 highs.

Demand vs. Supply Recovery Similar to 30 Years Ago

DVSGRAIN G Index

90 Actions 97) Edit 9 G #BI 15492: Grains DvS LT, Corn, USD

OVD01/970 0 05/31/2018 0 0 0 05/31/2018

10 30 1M 6M YTD 17 57 Max Monthly 1 12 Table

Grains Demand vs. Supply (R1)

Corn's price at the end of May was about 25% below the 2014 peak level of \$5.17 a bushel. Production will need to be above-trend for prices to avoid continuing toward that resistance level. We're unlikely to have a drought year as extreme as 1988's, though the run of strong production is overdue to normalize. A potential peak dollar is additional support.

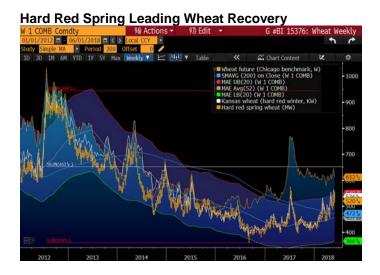
Soybeans, a Market Waiting for Excuse to Rally. The narrowest-for-longest 12-month soybean range since the early 1990s signals a price rally is imminent. Such price compression typically doesn't last as long, and results in sharp rallies. The summer growing season of 2006 is the most recent example. Within a similarly compressed but less extended range, soybeans peaked in July, fell to a new year-plus low into early September harvest and rallied more than 200% to the peak in 2008. Lack-of-faith

indications were extreme.



Conditions are similar now. The market may continue to range-trade, but is ripe for a rally catalyst. June was the last time the bottom 12-month Bollinger Bands were tested -- a new year-plus low. Hovering at the top band for four of the five months in 2018, soybeans are preparing for a breakout higher.

Contracts Show There's a Lot of Spring in Wheat Bull-Market Step. Futures indicate a nascent bull market in wheat, as a period of failed rallies shifts to moresustainable gains. Similarly stretched above mean levels that have marked peaks in the bear market since 2012, wheat is susceptible to similar seasonal pullbacks. Yet risks are tilting toward continued retracement. For the second time in less than 12 months, the benchmark Chicago-wheat future is about 20% above its 52-week mean. That hasn't happened in six years.



The lesser-traded (Minnesota) hard-red spring wheat is likely to pull Chicago and Kansas City varieties higher. Initial retracement-resistance should be \$6-\$6.50 a

Bloomberg Commodity Index (BCOM)

bushel (near 2014-15 peaks) for Chicago wheat. The converging 52- and 200-week averages within \$4.60-\$4.70 are key supports.

Technical Potential for Corn Is Popping. The narrowest-for-longest 12-month corn range in over 50 years portends a breakout higher. Bollinger Bands indicate the tightest conditions since March 1970. Six months later, prices peaked 30% higher. If history rhymes, corn prices have a greater propensity to rally out of such extreme compression than to decline. Downside is naturally limited by production costs, which are about even with corn prices.

Corn Prices Don't Get More Compressed



The pattern was similar in 2010, when total production declined 2.4%, beginning a run that culminated in 2012 with prices about 160% higher. Despite record yields, U.S. corn production declined 4% in 2017, indicating a peak, until higher prices increase farmers' incentive to plant. The 12-month corn Bollinger Bands haven't been narrower for longer since 1964.

Largest Corn Discount Post-Ethanol Mandate. Corn appears to be in the early stages of recovering from a significant discount. Slightly above its five-year average for the first time since 2013, the market is rebounding from about a three-decade extreme (36%) reached in 2015. Down 0.4% in 2017 marked an unprecedented fifth consecutive annual decline, elevating its mean-reversion risk. A similar string of losses last occurred in 1984-86, followed by 78% appreciation in 1986-88.

Before the ethanol-mandate bid prices in 2006, corn ended 10 consecutive years below the 25-year average; 2017 closed on that longer-term mean. Initial resistance at last year's high near \$4 a bushel has been met. The market is poised to test resistance at the 2014 high of \$5.23. Key support is the 2017 close at \$3.52.

Rate of Change recovering from 3-decade low

Strengthening Softs Foundation

Sugar Short-Covering Bounce Has Legs for Soft-Commodity Bottom. Adverse weather leaves cotton a bit too hot, while sugar positions indicate the worst is over and a bottom in the soft commodities. Mostly technical indicators -- extreme sugar shorts, historically low coffee volatility and stretched cotton prices -- point to continued recovery in the Bloomberg Softs Subindex.

Extreme Short-Covering Risks in the Softs. Driven by cotton's strength and short covering in sugar, the Bloomberg Softs Subindex low in April is gaining legs for a longer-term bottom on the back of May's recovery. Similar extremes in net short-managed-money positions have marked longer-term lows in the gauge, but there's no precedent (data since 2006) for the levels from which the market is recovering. Led by sugar -- still the shortest major commodity, based on the CFTC's Commitments of Traders data -- the softs index's May rebound of about 6% should mark a longer-term bottom.

Softs Index Appears to Be Bottoming



Bloomberg Commodity Index (BCOM)

Combined net sugar, cotton and coffee futures positions are just starting to recover from an extreme, and remain well below historical measures. A similar but less-extreme low in June boosted index levels until January.

Short-Covering Prospects Should Boost Sugar. The most actively traded sugar future should continue to recover. Initial resistance near 14 cents, about 13% above the May 23 price, is a prime mean-reversion level. Sugar's managed-money net positions are just recovering from the shortest ever (since 2005). The orderly price decline over about the past 12 weeks, fueled by new shorts, is a prime candidate for covering retracement.

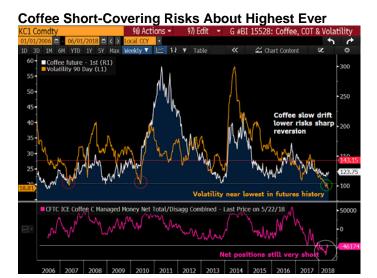
Still the Shortest Commodity on the Planet



The sugar setup looks like a bear trap. Positions are short a net 142,256 contracts, well above soybean oil, which is next on the list at 55,442. Sugar is ripe for position cleansing before potentially resuming the downtrend. Such extremes often form longer-term bottoms.

End of Buried Coffee Volatility; Price Recovery Near. Coffee futures are at extreme risk of a sharp reversion

Coffee futures are at extreme risk of a sharp reversion rally. A pattern of prices drifting lower, on the back of record managed-money net shorts and many volatility measures declining to the lowest levels in decades, indicates a market that's vulnerable to a rally catalyst. Coffee's 90-day volatility, almost 19%, is the lowest since 1991. More-recent lows in April 2007 and June 2010 coincided with sharply higher prices.



Buried volatility indicates the current lower prices aren't sustainable. Such a high level of net shorts indicates substantial cover risks. Initial resistance should be near the 2H high of \$1.43 a pound, about 20% above May 23. The 2018 low of \$1.13 is initial support and may indicate a longer-term trough.

Cotton Looks as Good as Near the Last Peak. The cotton upswing looks strong, but prices are approaching good resistance, which is likely to keep a lid on the market. Since the 2016 bottom, price levels that are about as stretched as in the second half of May have proven prudent to respect. A year ago, futures traded just over 20% above cotton's 52-week mean, revisiting levels not seen since 2014, and then declining 23% until the bottom in October. Risks are similar now, as the market just extended that 2017 peak, nearing a similar 20% above the mean red-line.



Net positions are elevated, but below the 2017 extreme. Cotton could dip to the 52-week mean near 76 cents a

Bloomberg Commodity Index (BCOM)

pound, about 13% below May 23, and still be in a clear bull market. A price of 95 cents is the significant resistance point from 2014 highs.

PERFORMANCE DRIVERS

Performance: Cotton Joins Ripening Grains. Leading the grain-price recovery, wheat and soybean meal remain the strongest drivers of agriculture performance in 2018, though a sharp May rally moved cotton toward the top of the leader board. Cotton may be the most prone to mean reversion as the growing season progresses. A year ago, it peaked from similar but less-extreme stretched-from-the-mean levels. Among the soft commodities, sugar has the most potential to continue its May recovery.

2018 Ag Performance - Grains Getting Cotton Help

Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		May	QTD Pct	Chg	Chg
Bloomberg Kansas Wheat Subinde	+19.6%	+1.1%	+12.4%	+4.0%	-16.8%
Bloomberg Cotton Subindex Tota	+18.3%	+11.3%	+15.3%	+26.3%	45.6%
BBG Soybean Meal TR	+17.1%	-4.5%	-3.0%	+21.2%	-10.5%
Bloomberg Wheat Subindex Total	+16.9%	+3.3%	+13.2%	+2.7%	-19.7%
Bloomberg Grains Subindex Tota	+9.5%	7%	+2.3%	+.2%	-17.4%
Bloomberg Corn Subindex Total	+8.5%			-6.4%	-22.2%
Bloomberg Agriculture Subindex	+5.2%	+.6%	+2.0%		-14.3%
Bloomberg Soybeans Subindex To	+4.4%	-2.7%	-3.2%	+7.2%	-10.6%
Bloomberg Coffee Subindex Tota	-4.6%	+.9%	+3.3%	-12.5%	-14.9%
BBG Softs TR	-4.7%	+6.6%	+6.0%	-7.1%	-12.6%
Bloomberg Live Cattle Subindex	-6.9%	+.3%	+3.9%	-15.1%	-1.6%
Bloomberg Soybean Oil Subindex	-7.1%	+1.8%	-2.9%	-3.3%	-9.2%
Bloomberg Livestock Subindex T	-7.6%	+2.2%	+2.6%	-13.4%	-7.3%
Bloomberg Lean Hogs Subindex T	-10.3%	+5.6%	+.5%	-11.9%	-16.6%
Bloomberg Sugar Subindex Total	-15.1%	+9.0%	+3.4%	-17.2%	-31.5%

Sugar is the shortest commodity, based on managedmoney net positions. Its recovery should have shortcovering legs for some time. The grains, which comprise the majority of the ags and typically perform well in June, were down slightly in May. July and August, the prime growing months, are often the most volatile and lower, dictated by weather.

Market Flows – Open Interest

Name	Current	MTD %	3 Mth %	YTD %
		Change	Change	Change
■ Open Interest (Aggregate - 1,000s)				
■ Single Commodities				
Soybean Meal	530	3.3	16.5	41.0
Sugar	1,007	1.1	16.4	33.7
Soybean	900	5.5	16.6	27.7
Corn	1,965	15.3	20.0	27.6
Unlead Gas	486	6.1	17.1	25.6
Gas Oil	1,067	1.0	4.3	23.4
Coffee	267	4.3	15.6	22.5
Nickel	176	6.0	8.6	17.3
Soybean Oil	519	4.2	10.2	16.9
Cotton	313	16.8	20.4	12.2
Brent Crude	2,604	1.7	9.7	12.1
Silver	209	10.0	8.3	7.7
Crude Oil	2,639	0.0	7.3	7.3
Natural Gas	1,529	6.3	14.2	5.6
Wheat	549	21.2	24.2	5.0
Live Cattle	346	-1.1	-8.2	3.9
Lean Hogs	239	-5.9	3.5	0.0
Aluminum	518	2.0	6.4	-0.4
Zinc	196	3.7	-6.2	-2.0
Platinum	81	2.5	-5.8	-2.4
Gold	460	-7.3	-13.7	-2.5
Copper (CME)	264	9.5	-0.4	-5.7
Heating Oil	423	-3.0	3.7	-5.8
Copper (LME)	186	4.5	3.9	-8.4
HRW Wheat	296	17.9	-1.7	-10.3
Palladium	22	-8.3	-21.4	-40.5

Market Flows - Commitment of Traders

name	Currenŧ	S Day Change	2 Mtn Change	2 Mtn Change	Change
■ Net - Managed Money Total/Disagg			5	5	
■ Single Commodities					
Brent Crude	501,634	-46,921	-118,248	-21,661	-59,650
WTI Crude	377,520	-7,763	-64,888	-66,850	-34,452
Corn	199,970	8,298	61,726	181,296	406,594
Natural Gas	196,535	41,897	41,665	107,772	248,981
Aluminum (Pre- MiFID II)	163,475	6,307	-3,292	21,105	3,315
Aluminum (Post- MiFID II)	155,740	0	33,601	47,358	
Gasoline	132,065	7,765	34,087	50,468	52,615
Soybean Meal	115,296	-6,236	6,144	30,207	84,039
Sovbeans	98,228	-9,833	-94,740	-883	167,319
Cotton	91,491	2,231	11,380	25,345	-10,911
Heating Oil	86,464	232	24,598	46,970	4,640
Zinc (Pre MiFID II)	79,906	-1,121	-6,682	3,640	-471
Zinc (Post MiFID II)	61,122	0	-6,783	-3,131	
Copper (LME) (Post MiFID II)	57,568	0	7,921	17,886	
HRW Wheat	46,323	2,133	10,398	33,182	80,745
Nickel	42,230	-664	-1,792	12,113	13,772
Copper (LME) (Pre MiFID II)	37,448	-917	-16,651	-27,111	-31,597
Copper (CME)	34,248	9,115	11,770	-12,773	-65,272
Gold	27,527	-3,800	-116,067	-159,791	-82,392
Live Cattle	10,817	1,726	-11,525	-87,913	-71,893
Palladium	8,814	70	27	-6,951	-17,001
Silver	-432	15,620	14,030	10,000	6,673
Wheat	-1,685	3,837	48,453	65,354	144,050
Lean Hogs	-10,053	-2,195	-10,811	-27,364	-64,010
Platinum	-20,193	-6,374	-16,617	-48,814	-15,983
Coffee	-46,174	3,889	24,537	11,420	11,672
Soybean Oil	-47,249	8,193	-6,422	-20,114	-50,655
Sugar	-112,123	30,133	45,182	15,455	-39,067

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	0.0	-0.2	1.4	1.4	3.4	3.6	11.0	8.3	-8.3	-29.1
■ Energy Index	-0.1	-0.1	2.7	2.7	13.1	9.7	26.3	15.1	-27.0	-52.7
■ All Metals Index	0.0	0.4	8.0	0.8	0.3	-1.2	12.5	27.4	13.6	-4.6
■ Industrial Metals Index	0.2	1.0	2.4	2.4	1.4	-0.6	25.0	51.7	19.7	2.0
■ Precious Metals Index	-0.2	-0.3	-1.0	-1.0	-1.1	-1.7	-0.6	3.9	3.9	-15.0
Ags & Livestock Index	0.1	-0.8	0.8	8.0	-1.5	2.9	-2.7	-13.0	-9 . 5	-31.5
■ Livestock Index	-1.3	1.3	2.2	2.2	-4.6	-7.6	-13.4	-7.3	-19.9	-12.7
■ Agriculture Index	0.3	-1.2	0.6	0.6	-0.8	5.2	-0.2	-14.3	-7.8	-35.0
■ Grains Index	0.1	-2.8	-0.7	-0.7	-0.2	9.5	0.2	-17.4	-13.7	-43.8
■ Softs Index	1.8	3.1	6.6	6.6	1.0	-4.7	-7.1	-12.6	-3.3	-30.1
■ BCOM EX Indices TR										
■ BCOM Index Roll Select TR	0.1	-0.1	1.8	1.8	3.8	4.2	11.8	13.1	-1.5	-22.4
■ BCOM Index Forwards TR										
■ BCOM Index ER	0.0	-0.2	1.3	1.3	2.9	2.9	9.5	6.3	-10.1	-30.6
■ BCOM Index Spot	0.0	-0.2	1.2	1.2	3.6	4.6	15.1	21.5	13.2	-10.1
■ Stocks										
■ S&P 500 Index TR	-0.7	-0.5	2.4	2.4	0.2	2.0	14.4	34.4	36.7	84.1
■ Bonds										
■ Barclays U.S. Aggregate	-0.4	0.4	0.6	0.6	0.5	-1.6	-0.5	1.1	4.1	10.2
■ Currencies										
■ Bloomberg U.S. Dollar Spot Index	0.1	0.0	2.1	2.1	3.1	1.0	-2.3	-2.6	-1.8	12.8
US Dollar Index	-0.1	-0.3	2.3	2.3	3.7	2.0	-3.0	-2.0	-3.0	12.7
Pound Index	0.0	-0.4	-2.2	-2.2	-1.3	-0.8	0.6	-12.5	-18.0	-9.1

Name	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ Commodities										
■ BCOM Index TR	3.6%	1.7%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%	18.9%
■ Energy Index	9.8%	-4.3%	16.3%	-38.9%	-39.3%	5.2%	-9.4%	-16.0%	-10.5%	-5.3%
■ All Metals Index	-1.2%	20.8%	15.7%	-19.5%	-7.1%	-21.6%	2.9%	-11.5%	25.9%	60.2%
■ Industrial Metals Index	-0.7%	29.4%	19.9%	-26.9%	-6.9%	-13.6%	0.7%	-24.2%	16.2%	80.0%
■ Precious Metals Index	-1.5%	10.9%	9.5%	-11.5%	-6.7%	-30.8%	6.3%	4.6%	42.7%	29.2%
■ Ags & Livestock Index	2.8%	-8.1%	0.9%	-16.1%	-6.0%	-12.6%	2.7%	-12.4%	33.9%	7.9%
■ Livestock Index	-6.4%	6.4%	-5.6%	-18.8%	11.6%	-3.5%	-3.5%	-2.3%	9.3%	-15.1%
■ Agriculture Index	4.9%	-11.0%	2.1%	-15.6%	-9.2%	-14.3%	4.0%	-14.4%	38.5%	13.7%
■ Grains Index	9.4%	-11.3%	-5.9%	-19.4%	-9.4%	-16.9%	18.3%	-14.4%	30.3%	-1.6%
■ Softs Index	-6.4%	-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	4.1%	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	2.9%	0.7%	11.4%	-24.7%	-17.0%	-9.6%	-1.1%	-13.4%	16.7%	18.7%
■ BCOM Index Spot	4.6%	7.6%	23.1%	-18.4%	-17.0%	-8.7%	3.7%	-8.1%	26.4%	41.2%
■ Stocks										
■ S&P 500 Index TR	2.7%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%
■ Bonds										
■ Barclays U.S. Aggregate	-1.6%	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	0.9%	-8.5%	2.8%	9.0%	11.0%	3.3%	-0.7%	1.8%	-1.8%	-4.8%
US Dollar Index	2.1%	-9.9%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%	-4.2%
Pound Index	-2.4%	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	Change	Change	Change	Change	Change	Change
■ BCOM Total Return Indices							
Brent Crude Index	-0.2	1.5	4.6	21.9	19.8	57.7	42.4
HRW Wheat Index	0.3	-3.8	1.1	0.7	19.6	4.0	-16.8
Nickel Index	0.6	3.0	11.5	10.4	19.3	68.4	76. 3
Cotton Index	0.7	4.4	11.3	13.4	18.3	26.3	45.6
Soybean Meal Index	-0.4	-1.3	-4.5	-5.5	17.1	21.2	-10.5
Wheat Index	8.0	-3.1	3.3	3.3	16.9	2.7	-19.7
WTI Crude Index	-1.7	-1.2	-1.9	10.1	13.2	38.6	18.4
Heating Oil Index	-0.9	0.0	3.0	17.0	9.8	47.1	35.5
Corn Index	0.1	-2.9	-1.5	1.4	8.5	-6.4	-22.2
Gasoline Index	-0.5	-0.6	1.7	12.2	8.4	34.9	21.3
Soybeans Index	-0.4	-2.2	-2.7	-4.0	4.4	7.2	-10.6
Aluminum Index	1.0	1.4	2.3	9.3	2.6	19.2	45.1
Gold Index	-0.1	-0.3	-1.4	-1.5	-0.9	1.4	5.1
Natural Gas Index	2.3	-0.3	5.6	6.5	-2.3	-18.8	-18.1
Platinum Index	0.2	1.0	8.0	-8.0	-2.8	-4.6	-8.2
Silver Index	-0.5	-0.5	0.5	0.3	-4.2	-6.5	0.0
Coffee Index	2.8	2.8	0.9	0.2	-4.6	-12.5	-14.9
Zinc Index	-1.0	1.6	-0.8	-9.9	-6.0	21.3	61.7
Live Cattle Index	-0.5	1.6	0.3	-6.9	-6.9	-15.1	-1.6
Soybean Oil Index	-1.1	-0.7	1.8	-3.8	-7.1	-3.3	-9.2
Copper Index	-0.1	-0.4	-0.1	-2.3	-7.6	16.8	41.3
Lean Hogs Index	-2.6	0.7	5.6	-0.2	-10.3	-11.9	-16.6
Sugar Index	1.5	2.7	9.0	-4.4	-15.1	-17.2	-31.5

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Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ BCOM Total Return Indices										
Brent Crude Index	20.0%	14.2%	25.4%	-45.6%	-47.6%	7.2%	7.6%	16.8%	11.5%	28.6%
HRW Wheat Index	19.2%	-14.9%	-25.3%	-32.7%	-4.7%	-26.2%	5.6%	-22.9%	42.1%	-23.8%
Nickel Index	18.6%	25.6%	11.8%	-42.6%	7.3%	-20.1%	-10.2%	-24.7%	32.2%	54.9%
Soybean Meal Index	17.6%	-4.8%	18.1%	-18.0%	11.8%	20.0%	49.1%	-18.1%	38.9%	34.7%
Cotton Index	17.4%	12.5%	10.5%	3.0%	-21.2%	9.0%	-12.7%	-21.7%	98.2%	30.1%
Wheat Index	15.9%	-12.5%	-24.1%	-22.2%	-9.4%	-27.2%	9.8%	-34.0%	21.2%	-26.0%
WTI Crude Index	15.2%	5.1%	7.1%	-44.3%	-41.7%	6.8%	-11.8%	-3.6%	3.8%	4.4%
Heating Oil Index	10.8%	15.0%	33.5%	-42.8%	-38.8%	0.4%	5.5%	10.7%	8.3%	20.5%
Gasoline Index	9.0%	2.8%	6.4%	-12.6%	-43.8%	1.9%	25.7%	14.5%	13.1%	74.7%
Corn Index	8.3%	-12.1%	-9.8%	-19.2%	-13.3%	-30.3%	19.0%	1.1%	30.7%	-10.1%
Soybeans Index	4.9%	-8.1%	14.8%	-14.6%	-5.5%	10.5%	24.0%	-16.4%	34.9%	22.9%
Aluminum Index	1.5%	31.2%	9.7%	-22.9%	-3.1%	-20.7%	-4.0%	-21.7%	5.4%	33.8%
Gold Index	-0.8%	12.8%	7.7%	-10.9%	-1.7%	-28.7%	6.1%	9.6%	28.7%	22.9%
Platinum Index	-3.0%	3.0%	0.8%	-26.5%	-12.3%	-11.8%	8.7%	-21.8%	19.3%	54.0%
Silver Index	-3.7%	5.8%	14.0%	-12.7%	-20.4%	-36.6%	7.1%	-10.1%	81.8%	47.6%
Natural Gas Index	-4.5%	-36.4%	10.3%	-39.9%	-30.7%	5.0%	-30.6%	-47.1%	-40.6%	-51.6%
Zinc Index	-5.1%	29.7%	57.5%	-28.0%	3.5%	-7.0%	9.0%	-27.8%	-8.8%	98.3%
Soybean Oil Index	-6.1%	-7.0%	7.3%	-7.7%	-20.6%	-22.4%	-9.8%	-15.2%	33.8%	14.2%
Live Cattle Index	-6.4%	9.1%	-7.4%	-14.3%	22.1%	-5.0%	-3.9%	-1.0%	15.0%	-9.8%
Coffee Index	-7.2%	-16.0%	-1.3%	-31.5%	37.8%	-30.5%	-41.6%	-11.2%	67.0%	10.3%
Copper Index	-7.5%	29.2%	15.7%	-25.1%	-16.6%	-8.8%	5.0%	-24.4%	29.5%	130.0%
Lean Hogs Index	-7.9%	2.8%	-2.9%	-26.1%	-4.4%	-2.0%	-2.9%	-4.6%	0.3%	-22.5%
Sugar Index	-16.4%	-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			2 Yr % Change
■ BCOM Single Commodity Price							
HRW Wheat	0.3	-3.8	4.6	6.7	27.0	25.7	21.3
Wheat	0.8	-3.1	2.7	8.6	23.2	22.6	13.3
Gasoline	-1.1	-1.0	1.5	22.9	20.1	34.0	33.8
Soybean Meal	-0.4	-1.3	-4.3	-4.8	20.1	25.9	-5.4
Nickel	0.6	2.9	11.5	10.3	19.3	69.8	80.6
Cotton	0.7	4.4	10.0	14.1	18.5	21.0	45.7
Brent Crude	0.1	1.5	3.2	18.0	16.0	54.2	56.1
Gas Oil	-0.2	0.6	4.3	18.5	13.9	53.4	50.7
Corn	0.1	-3.0	0.4	5.2	12.3	5.9	-2.7
WTI Crude	-1.6	-1.1	-2.1	8.9	11.1	38.9	36.7
Soybeans	-0.4	-2.2	-1.9	-2.5	7.0	11.2	-5.6
Lean Hogs	-0.9	3.3	15.6	14.0	6.8	-6.5	-4.9
Heating Oil	-1.8	-0.8	1.1	14.5	5.6	44.6	46.3
Aluminum	1.0	1.4	1.5	7.9	1.8	19.7	48.7
Natural Gas	2.4	0.5	6.9	10.7	0.0	-3.8	29.1
Gold	-0.3	-0.4	-1.6	-1.5	-0.9	2.0	6.8
Coffee	2.8	2.7	2.5	2.2	-2.0	-4.4	1.8
Platinum	-0.2	0.6	0.3	-8.2	-2.9	-4.6	-7.5
Silver	-0.7	-0.7	0.7	0.6	-4.2	-5.6	2.7
Copper (LME)	0.2	-0.4	1.0	-0.8	-5.1	20.9	46.3
Soybean Oil	-1.1	-0.7	2.5	-2.6	-5.9	-0.7	-2.2
Palladium	1.3	1.2	3.0	-5.6	-6.8	20.6	80.5
Zinc	-0.9	1.6	-0.7	-10.2	-6.9	19.9	61.8
Copper (CME)	-0.1	-0.4	0.4	-1.4	-7.2	18.8	46.2
Live Cattle	-1.0	0.4	-1.0	-14.8	-13.6	-15.6	-13.3
Sugar	1.5	2.6	11.0	-5.1	-15.6	-14.0	-26.9

Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ BCOM Single Commodity Price										
HRW Wheat	27.1%	2.1%	-10.7%	-25.2%	-2.2%	-22.9%	15.9%	-15.7%	58.7%	-14.9%
Gasoline	22.4%	8.1%	31.4%	-11.7%	-48.5%	-0.9%	4.7%	9.5%	19.5%	103.6%
Wheat	21.8%	4.7%	-13.2%	-20.3%	-2.6%	-22.2%	19.2%	-17.8%	46.7%	-11.3%
Soybean Meal	20.2%	-0.1%	18.4%	-27.5%	-16.7%	4.1%	35.9%	-16.4%	18.0%	4.5%
Nickel	18.6%	27.5%	13.5%	-41.8%	9.0%	-18.6%	-9.2%	-24.2%	33.8%	58.8%
Cotton	17.8%	11.3%	11.6%	5.0%	-28.8%	12.6%	-18.1%	-36.6%	91.5%	54.2%
Brent Crude	16.1%	17.7%	52.4%	-35.0%	-48.3%	-0.3%	3.5%	13.3%	21.6%	70.9%
Gas Oil	14.5%	19.8%	53.6%	-36.3%	-45.8%	1.9%	0.3%	21.2%	20.0%	51.9%
Corn	12.7%	-0.4%	-1.9%	-9.6%	-5.9%	-39.6%	8.0%	2.8%	51.7%	1.8%
WTI Crude	10.9%	12.5%	45.0%	-30.5%	-45.9%	7.2%	-7.1%	8.2%	15.1%	77.9%
Lean Hogs	7.1%	8.5%	10.6%	-26.4%	-4.9%	-0.3%	1.7%	5.7%	22.3%	7.1%
Soybeans	6.8%	-4.5%	14.4%	-14.5%	-22.3%	-7.5%	18.4%	-14.0%	34.0%	6.9%
Heating Oil	5.8%	21.8%	54.8%	-40.4%	-40.0%	1.1%	3.8%	15.4%	20.1%	50.7%
Aluminum	0.7%	33.3%	12.5%	-17.9%	4.1%	-13.9%	2.5%	-18.8%	11.6%	45.6%
Gold	-0.6%	13.7%	8.6%	-10.5%	-1.5%	-28.3%	7.0%	10.2%	29.7%	24.0%
Natural Gas	-1.7%	-20.7%	59.3%	-19.1%	-31.7%	26.2%	12.1%	-32.1%	-20.9%	-0.9%
Platinum	-2.2%	3.6%	1.1%	-26.2%	-11.8%	-10.9%	9.9%	-21.1%	21.5%	55.9%
Silver	-3.4%	7.2%	15.8%	-11.5%	-19.5%	-35.9%	8.3%	-9.8%	83.7%	49.1%
Coffee	-3.5%	-7.9%	8.2%	-23.9%	50.5%	-23.0%	-36.6%	-5.7%	76.9%	21.3%
Copper (LME)	-5.3%	30.6%	17.3%	-25.8%	-13.9%	-6.8%	4.2%	-21.2%	31.2%	141.1%
Soybean Oil	-5.9%	-3.9%	12.7%	-4.4%	-17.6%	-21.0%	-5.6%	-9.8%	43.1%	21.2%
Zinc	-6.0%	30.1%	60.2%	-26.2%	6.0%	-0.5%	12.2%	-25.2%	-3.5%	113.5%
Palladium	-7.0%	55.3%	21.6%	-29.6%	11.2%	2.1%	7.2%	-18.3%	96.5%	116.7%
Copper (CME)	-7.3%	31.7%	17.4%	-24.4%	-16.8%	-7.0%	6.3%	-22.7%	32.9%	137.3%
Live Cattle	-12.7%	4.7%	-15.2%	-16.4%	21.5%	1.8%	8.9%	12.1%	25.9%	0.0%
Sugar	-16.5%	-22.3%	28.0%	5.0%	-11.5%	-15.9%	-16.3%	-27.5%	19.2%	128.2%

Performance – Volatility

i enomiance – v	Olatility			1					
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		OII Day	Change	Change	Change	Change	Change	Change	Change
Nickel	32.4	16.7	10.3	-15.1	-15.1	11.6	14.7	38.6	4.9
HRW Wheat	29.4	-1.4	-8.8	-3.3	-3.3	-0.9	44.9	19.2	29.3
Wheat	28.0	-2.6	-8.4	2.7	2.7	7.9	40.2	18.4	20.2
Corn	27.1	-0.8	-3.0	3.0	3.0	61.9	112.1	2.8	-6.4
Cotton	26.1	3.0	22.1	26.4	26.4	23.6	15.6	32.0	26.8
Sugar	26.1	3.7	2.1	4.9	4.9	10.6	20.4	3.6	-20.7
Lean Hogs	25.8	7.3	8.3	9.1	9.1	13.2	24.4	14.6	27.1
Brent Crude	25.3	2.0	4.2	2.3	2.3	8.4	33.5	-13.1	-31.1
Crude Oil	25.2	1.8	1.6	1.1	1.1	10.3	33.0	-14.8	-29.9
Palladium	24.5	0.3	-3.7	0.2	0.2	8.9	7.8	2.3	-17.1
Gas Oil	24.4	-2.2	6.2	9.6	9.6	8.8	28.8	-8.6	-18.7
Coffee	23.8	10.9	9.7	-1.6	-1.6	15.6	-0.2	-18.1	-21.2
Unlead Gas	23.3	-1.5	-3.8	-0.4	-0.4	2.0	16.6	-3.0	-40.1
Heating Oil	23.2	2.0	3.4	7.5	7.5	7.4	23.9	-5.7	-27.4
Soybean Meal	22.0	-0.5	-2.2	-16.0	-16.0	-13.3	43.8	10.9	-29.9
NaturalGas	21.8	-4.1	1.8	5.5	5.5	-13.2	-36.4	-37.8	-46.9
Zinc	21.3	290.9	7.3	-59.0	-59.0	21.282M	0.3	-5.7	-16.9
Live Cattle	20.8	3.7	0.5	0.1	0.1	9.4	11.8	-0.8	16.6
Soybeans	19.2	-2.2	-4.7	-2.7	-2.7	15.1	70.6	8.6	-23.9
Copper (COMEX)	17.7	-1.8	7.2	-2.4	-2.4	-5.0	2.3	8.0	-21.3
Copper (LME)	16.7	0.0	-5.3	2,089.6	2,089.6	80.8	-5.7	16.735M	-12.2
Silver	15.8	-4.2	-3.3	-12.3	-12.3	-12.0	2.0	-19.2	-36.9
Soybean Oil	14.8	-0.4	-1.2	-2.7	-2.7	2.4	-3.9	-31.4	-37.1
Platinum	12.6	-3.9	-8.2	-17.4	-17.4	-17.0	-3.8	-30.3	-38.1
Gold	9.7	2.2	4.4	-2.2	-2.2	-6.5	1.0	-7.5	-34.5
Aluminum	4.9	-75 . 2	-79.1	-76.9	-76.9	-76.4	-70.9	-64.8	-71.7
■ BCOM 60 Day Historical Volatilit									
Lean Hogs	64.1	0.0	0.2	9.0	9.0	134.0	107.3	109.5	98.4
Aluminum	36.7	0.1	0.1	1.7	1.7	68.9	115.9	180.2	110.8
Wheat	32.7	-0.6	0.6	3.5	3.5	29.9	53.7	27.2	13.4
Live Cattle	32.5	-0.5	0.6	1.0	1.0	36.6	71.9	24.3	58.1
HRW Wheat	32.5	-0.5	0.6	1.0	1.0	36.6	71.9	24.3	15.9
Nickel Gas	29.5	0.0	-1.2	-8.0	-8.0	-9.6	-16.1	8.7	-15.5
Crude Oil	25.8	-0.9	0.4	1.2	1.2	23.8	23.2	-10.2	-38.2
Palladium	25.5	-0.8	-0.8	-13.5	-13.5	8.7	37.5	17.1	-7.3
Sugar	24.4	-7 . 5	-7.6	-15.1	-15.1	-15.5	2.9	-14.3	-30.8
Brent Crude	24.2	-0.8	-0.5	-1.9	-1.9	19.2	19.9	-1.4	-36.5
Cotton	22.6	0.1	2.6	5.9	5.9	14.8	21.2	-8.8	10.5
Natural Gas	22.3	1.9	3.3	-5.6	-5.6	-58.6	-51.6	-33.2	-56.2
Soybean Meal	22.1	-0.5	-0.8	-3.4	-3.4	9.0	33.2	52.8	-26.1
Gas Oil	21.7	-0.7	0.8	-3.8	-3.8	1.7	8.8	-10.1	-49.3
Heating Oil	21.0	0.6	3.1	-4.1	-4.1	-4.4	-2.5	-6.4	-47.2
Coffee	20.7	4.0	3.3	13.4	13.4	-8.1	-8.0	-15.8	-24.6
Unlead Gas	20.5	-0.1	2.1	-25.2	-25.2	-17.0	-15.1	-9.6	-39.0
Zinc	20.5	-1.1	-0.6	-8.3	-8.3	12.6	-2.0	-19.5	-29.7
Soybeans	18.4	-0.4	0.4	16.1	16.1	51.3	43.3	37.3	-13.6
Corn	18.0	0.0	3.9	18.5	18.5	52.2	30.5	-8.4	-27.7
Silver	17.9	-1.8	-3.2	-7.4	-7.4	0.1	-3.8	9.7	-30.1
Copper (CME)	17.9	-0.4	-0.8	-14.3	-14.3	-20.6	-12.2	-5.6	-30.1 -12.3
	16.4								
Copper (LME)		0.0	0.0	-13.8	-13.8	-20.1	-15.1	-9.8	-22.1
Platinum	14.7	-2.8	-3.3	-10.9	-10.9	-11.8	-13.6	-15.7	-40.6
Soybean Oil	13.9	0.0	0.1	-3.3	-3.3	3.3	-0.5	-22.5	-29.3
Gold	10.9	-0.5	-2.9	-12.0	-12.0	3.1	5.2	1.6	-33.1

Bloomberg Commodity Index (BCOM)

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

Name	Current Position	1 Yr Ago	1 Yr Change		MTD Change	1 Mth Change	3 Mth Change	2 Yr Change
■ 1 Year Spread % of First Contract	1 OSICIOII		change	Change	change	Change	Change	Change
■ BCOM	-2.2	-3.1	0.9	-0.5	0.1	0.1	-0.3	1.1
■ Sector	2.2	5.1	0.7	0.5	0.1	0.1	0.5	1.1
■ Energy	5.4	0.3	5.2	1.2	-1.3	-0.7	1.0	13.3
■ Industrial Metals	-0.6	-1.5	0.8	0.2	0.3	0.3	0.5	0.6
■ Precious Metals	-3.0	-2.0	-1.0	-0.7	0.1	0.1	0.1	-1.5
■ Livestock	-4.6	5.9	-10.4	-11.0	4.5	4.5	-3.9	-9.1
■ Agriculture	-5.8	-6.4	0.7	0.2	-0.1	-0.1	-0.9	-3.0
iii /igriculture	5.0	0.1	0.,	0.2	0.1	0.1	0.5	5.0
■ Single Commodities								
Thermal Coal	10.5	7.5	3.0	5.1	-0.4	3.6	1.9	
Natural Gas	9.5	5.6	3.9	13.2	2.9	2.9	8.6	38.3
Crude Oil	6.2	-1.5	7.7	1.2	-2.8	-2.8	-2.0	11.2
Soybean Meal	5.9	-3.2	9.0	9.3	-2.5	-2.5	-3.2	-8.0
Brent Crude	5.6	-2.3	7.9	-0.7	-2.5	-2.5	-0.3	11.6
Cotton	3.1	5.1	-2.0	-2.9	-3.9	-3.9	-2.3	3.8
Unleaded Gas	2.7	-0.2	2.9	-2.0	-2.1	-2.1	-0.8	5.4
Gas Oil	2.4	-3.8	6.2	-3.8	-1.9	-1.9	0.2	7.6
Palladium	1.7	0.6	1.1	0.2	0.2	0.2	-0.2	2.1
Zinc	1.4	-0.1	1.5	-2.0	0.3	0.3	-0.7	1.7
Heating Oil	1.1	-3.5	4.6	-4.8	-2.2	-2.2	-0.5	6.0
Lean Hogs	1.1	5.7	-4.6	-5.5	11.0	11.0	6.4	-2.5
Aluminum	1.1	-1.4	2.5	3.4	0.1	0.1	2.3	3.7
Copper (LME)	-1.1	-1.2	0.1	0.2	0.7	0.7	0.7	-1.3
Soybean	-1.4	-3.2	1.9	1.9	-2.3	-2.3	-2.8	-6.1
Nickel	-1.4	-2.5	1.0	0.6	0.1	0.1	0.1	0.3
Platinum	-1.9	-1.4	-0.4	-0.5	0.1	0.1	-0.4	-1.4
Gold	-2.8	-1.6	-1.2	-0.6	0.1	0.1	0.0	-1.5
Copper (CME)	-3.0	-2.1	-0.9	-1.2	0.3	0.3	0.1	-1.6
Silver	-3.2	-2.4	-0.9	-0.7	0.1	0.1	0.1	-1.6
Soybean Oil	-6.2	-3.7	-2.5	-5.1	0.3	0.3	-2.4	-3.6
Sugar	-8.6	-5.1	-3.5	-5.1	5.0	5.0	0.4	-10.5
Corn	-9.6	-10.6	1.0	2.5	-0.6	-0.6	-0.4	-5.4
Live Cattle	-10.2	6.0	-16.2	-16.5	-2.0	-2.0	-14.3	-15.7
Coffee	-10.8	-10.6	-0.2	0.1	0.3	0.3	-1.1	-2.2
Wheat	-12.5	-16.9	4.4	3.0	-1.3	-1.3	1.9	1.1
HRW Wheat	-12.7	-18.5	5.9	6.4	2.9	2.9	1.8	3.9
Measured via the one-year futures spread as a per	cent of the firs	st contract or	ice Negativ	e means the	one-vear ou	t future is hi	aher (contant	nn) Positive

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.

Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ 1 Year Spread % of First Contract										
■ BCOM	-2.2	-1.7	-2.2	-7.1	-4.4	0.3	-0.9	-2.0	2.3	-4.1
■ Sector										
■ Energy	5.5	4.3	0.4	-14.0	-11.3	3.5	-1.3	-2.5	-2.1	-9.4
■ Industrial Metals	-0.6	-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
■ Livestock	-4.4	6.5	8.1	0.6	8.3	4.1	-0.7	-0.2	-1.8	-4.8
■ Agriculture	-5.7	-5.9	-4.2	-5.5	-5.6	-1.5	-2.3	-1.8	12.2	-0.3
■ Single Commodities										
Thermal Coal	10.9	5.4	18.4	14.0	1.7	1.9	-8.3	-6.2	11.2	-7.9
Natural Gas	8.1	-3.7	-0.1	-22.6	-22.2	-3.2	-20.7	-29.9	-18.4	-21.1
Crude Oil	6.9	5.0	-5.9	-20.4	-13.5	7.3	-1.3	1.4	-3.2	-6.7
Soybean Meal	6.7	-3.4	-0.4	-5.7	9.8	19.9	12.5	-2.4	9.9	9.5
Brent Crude	5.1	6.3	-3.1	-22.1	-16.4	4.9	6.3	4.0	-0.4	-8.3
Gas Oil	3.0	6.2	-4.8	-23.8	-12.0	3.1	2.9	3.0	-4.2	-11.0
Cotton	2.7	6.1	1.7	-2.7	-8.6	6.7	-5.7	3.6	34.6	-2.6
Unleaded Gas	2.6	4.7	2.8	1.0	-12.3	7.0	9.8	7.9	3.7	-2.9
Heating Oil	1.7	5.9	-4.5	-24.5	-4.5	3.2	2.1	2.1	-3.4	-8.0
Palladium	1.7	1.5	-0.5	-0.2	-0.1	-0.5	-0.2	-0.4	0.0	-0.3
Zinc	1.3	3.4	0.2	-2.8	-1.4	-2.3	-4.5	-3.9	-1.7	-3.2
Aluminum	0.9	-2.3	-1.0	-2.7	-3.1	-7.5	-5.0	-5.2	-2.3	-5.0
Lean Hogs	0.8	6.7	2.9	-7.0	9.6	5.7	2.0	4.2	0.2	-5.3
Soybean	-0.8	-3.3	0.4	-2.0	0.9	13.1	7.7	-1.2	5.9	1.7
Copper (LME)	-1.1	-1.3	-0.3	0.3	1.6	1.1	-0.7	-0.3	2.7	-0.9
Nickel	-1.4	-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
Gold	-2.8	-2.2	-1.5	-0.5	-0.3	-0.4	-0.7	-0.9	-0.9	-1.0
Copper (CME)	-2.9	-1.8	-0.8	-1.1	-0.2	1.3	-1.1	-0.8	2.5	-1.2
Silver	-3.2	-2.5	-2.0	-1.4	-1.2	-0.9	-0.7	-0.5	-0.9	-0.8
Soybean Oil	-6.3	-1.1	-1.2	-3.1	-0.9	-3.8	-2.8	-1.6	-0.9	-5.3
Sugar	-8.6	-3.5	4.8	0.9	-13.1	-8.2	-5.5	-0.3	26.0	21.9
Live Cattle	-9.5	6.3	13.3	8.1	7.0	2.5	-3.3	-4.5	-3.8	-4.3
Corn	-9.6	-12.1	-10.5	-9.5	-8.1	-9.2	12.7	7.2	9.4	-8.5
Coffee	-11.1	-10.9	-9.2	-8.4	-7.4	-11.2	-11.5	-4.9	6.1	-5.7
Wheat	-12.3	-15.5	-17.1	-10.5	-5.0	-7.2	-6.9	-12.4	-8.7	-15.3
HRW Wheat	-12.7	-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	Yld 6	Yld 1 Yr	Change	Yld 2 Yr	Change
		Months Ago	Ago		Ago	from 2 Yr
				Ago		Ago
■ 1 Year Gross Yield						
■ Sector Roll Yield						
BCOM Precious Metals	-0.4	-0.8	-1.1	0.7	-0.6	0.2
BCOM Industrial Metals	-0.7	-1.9	-2.4	1.7	-2.1	1.4
BCOM Livestock	-2.4	1.8	5.6	-8.0	-0.1	-2.3
BCOM Softs	-3.1	-4.0	-5.2	2.1	-9.7	6.6
BCOM Energy	-3.3	-13.6	-17.0	13.6	-17.4	14.1
BCOM	-4.1	-6.1	-8.0	3.8	-8.4	4.3
BCOM Grains	-11.5	-9.7	-9.2	-2.2	-5.7	-5.7
BCOM Agriculture		-8.2	-5.8			
■ Commodities Roll Yield						
Gas Oil	5.0	-2.1	-6.6	11.6	-11.5	16.4
Cotton	4.2	0.2	-3.7	7.9	-1.3	5.5
Brent Crude	4.0	-13.3	-11.6	15.6	-12.8	16.8
Zinc	2.9	-1.6	-4.9	7.8	-1.7	4.6
Heating Oil	1.5	-5.3	-10.0	11.5	-11.1	12.6
Nickel	1.1	-1.0	-2.1	3.2	-1.1	2.2
Sugar	0.5	-1.4	-2.0	2.5	-15.6	16.1
Crude Oil	-0.2	-9.4	-13.9	13.7	-22.5	22.2
Platinum	-0.3	-0.7	-0.7	0.4	-0.2	-0.1
Gold	-0.4	-1.0	-0.9	0.5	-0.2	-0.1
Aluminum	-0.4	-0.7	-3.5	3.1	-4.7	4.2
Unlead Gas	-0.8	-6.4	-9.9	9.1	-5.9	5.1
Silver	-0.9	-1.5	-1.6	0.7	-1.1	0.1
Copper (CME)	-1.9	-2.2	-2.3	0.4	-1.0	-0.9
Soybean Oil	-2.3	-5.3	-5.6	3.3	-3.5	1.1
Soybean	-3.6	-3.6	-3.1	-0.4	0.9	-4.5
Lean Hogs	-4.4	-3.8	-8.6	4.1	-1.6	-2.8
Soybean Meal	-4.7	-5.1	-1.3	-3.5	4.6	-9.4
Coffee	-7.0	-4.8	-9.4	2.4	-8.8	1.8
Corn	-11.9	-9.9	-10.6	-1.3	-9.8	-2.1
Natural Gas	-15.1	-16.5	-32.8	17.7	-27.2	12.1
Wheat	-19.9	-16.1	-15.7	-4.2	-4.5	-15.4
HRW Wheat Maggured on a gross roll yield basis: the 251 business da	-21.4	-16.8	-18.1	-3.3	-10.7	-10.7

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

i iiStoricai										
Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ 1 Year Gross Yield										
■ Sector Roll Yield										
BCOM Precious Metals	-0.4	-0.2	-1.1	-0.6	-0.4	-0.5	-0.9	-0.6	-1.1	-1.1
BCOM Industrial Metals	-0.9	-3.0	-2.0	-1.8	-2.1	-3.9	-3.3	-2.2	-4.1	-16.7
BCOM Energy	-1.0	-7.7	-32.5	-12.6	1.6	-5.1	-11.7	-11.0	-13.8	-51.8
BCOM Livestock	-2.4	0.5	0.2	1.1	-0.2	-4.5	-9.8	-12.3	-14.8	-20.2
BCOM Softs	-3.1	-4.2	-5.6	-7.4	-12.5	-4.9	0.9	9.0	0.5	-24.7
BCOM	-4.1	-5.9	-11.4	-6.3	0.0	-0.9	-4.7	-6.6	-9.5	-21.8
BCOM Agriculture	-8.3	-8.0	-6.1	-4.1	-1.0	4.9	1.9	-1.9	-9.6	-8.3
BCOM Grains	-11.5	-10.7	-7.0	-4.7	0.7	8.2	3.6	-5.8	-12.6	-2.5
■ Commodities Roll Yield										
Gas Oil	4.6	-0.9	-22.7	-11.0	-1.6	2.1	7.4	2.1	-12.3	-20.5
Heating Oil	4.5	-6.4	-25.3	-3.0	1.1	-1.3	1.0	-2.9	-11.7	-25.3
Cotton	4.2	1.0	-1.1	-2.1	7.7	-3.6	5.2	15.5	14.3	-24.1
Brent Crude	4.0	-4.9	-27.7	-23.3	0.3	6.9	4.2	8.3	-12.5	-55.6
Zinc	2.9	-3.1	-2.7	-2.5	-4.6	-8.8	-3.1	-3.0	-5.3	-11.2
Nickel	1.1	-0.6	-1.7	0.5	-2.9	-2.3	-1.0	-1.7	-1.6	-7.3
Crude Oil	-0.1	-7.3	-38.2	-14.0	4.3	-0.3	-4.5	-9.7	-11.3	-70.3
Platinum	-0.3	-1.1	-0.4	-0.2	-0.5	-0.8	-1.2	0.9	-2.7	-6.2
Aluminum	-0.4	-3.2	-2.9	-6.0	-9.1	-8.4	-6.2	-3.3	-6.0	-13.6
Unlead Gas	-0.8	-4.0	-27.2	1.1	4.7	1.3	18.9	4.5	-6.9	-16.9
Gold	-0.8	-0.3	-0.9	-0.4	-0.2	-0.4	-0.9	2.9	-1.0	-1.1
Silver	-0.9	0.1	-1.8	-1.2	-0.9	-0.7	-1.1	4.5	-5.1	-1.5
Live Cattle	-1.4	4.4	7.8	2.0	0.6	-6.8	-12.8	-12.5	-12.2	-9.6
Copper (CME)	-1.9	-3.5	-1.6	-0.7	0.3	-1.7	-1.3	-0.1	-3.6	-7.1
Sugar	-2.3	-3.2	-5.2	-9.9	-19.5	-4.1	3.1	18.7	4.6	-41.8
Soybean Oil	-2.3	-2.9	-5.4	-3.2	-2.9	-1.3	-4.2	-4.2	-8.5	-6.9
Soybean	-4.4	-3.0	0.2	-0.2	17.0	18.5	5.5	-1.8	0.5	16.1
Lean Hogs	-4.4	-8.2	-13.6	0.3	0.6	-1.7	-4.5	-9.6	-23.8	-30.8
Soybean Meal	-4.8	-4.8	-0.5	9.6	28.7	16.5	13.0	-1.3	20.7	30.2
Coffee	-7.0	-9.2	-9.7	-7.8	-12.6	-7.2	-5.0	-3.4	-8.5	-11.1
Corn	-13.7	-12.4	-7.9	-9.6	-7.4	9.4	10.8	0.4	-20.9	-11.8
Natural Gas	-15.1	-14.0	-52.6	-19.8	8.0	-22.3	-42.7	-13.8	-16.1	-47.6
Wheat	-19.9	-18.0	-10.9	-1.9	-7.0	-5.1	-9.4	-14.6	-23.8	-14.7
HRW Wheat	-21.4	-17.8	-14.7	-7.6	-2.5	-3.3	-4.1	-7.6	-9.9	-4.7

Curve Analysis – Forwards / Forecasts Spread %

Name	5/2018	4/2018	3/2018	2/2018	1/2018	12/2017	11/2017	10/2017	9/2017	8/2017	7/2017
■ 1 Yr Spread ((Forward-Forecast)/ Fore											
■ Energy											
WTI Crude Spread %	4.3	7.3	3.6	0.3	4.7	19.4	13.7	9.0	3.9	-4.4	-1.2
Brent Crude Spread %	9.2	9.8	4.6	0.3	7.7	23.8	17.8	15.2	7.2	0.3	-0.9
ULS Diesel Spread %	9.6	6.1	2.6	8.0	7.6	32.8	18.4	20.8	16.1	11.6	5.2
Unleaded Gasoline Spread %	6.1	3.5	1.3	-0.2	8.3	15.1	7.7	12.1	2.7	11.9	-0.1
■ Soft											
Sugar Spread %	-0.9	-6.2	-6.9	-4.0	-4.5	-5.2	-4.4	-7.0	-12.4	-11.0	-4.6
Coffee Spread %	-3.3	-1.3	-4.0	-4. 3	-6.0	-6 . 5	-5.9	-7.7	-5 . 4	-5.0	0.3
Cotton Spread %	9.9	2.5	5.1	10.2	6.7	7.7	2.1	-6.3	-5.9	-2.6	-4.6
■ Industrial Metals											
Copper Spread % (LME)	-1.3	-2.5	-3.5	3.3	7.0	17.8	10.5	13.3	8.0	17.8	11.0
Aluminum Spread %	4.3	3.3	-3 . 9	2.7	7.5	14.7	3.9	10.9	8.5	13.3	3.5
Zinc Spread %	-1.0	-2.1	2.8	7 . 5	10.1	16.6	10.8	16.5	13.0	15.4	4.5
Nickel Spread %	10.8	5.1	10.3	14.5	13.4	23.2	7.3	20.3	3.3	19.0	1.5
■ Precious Metals											
Gold Spread %	0.2	1.1	1.5	1.8	5.4	4.1	1.2	1.3	2.1	5.6	3.0
Silver Spread %	-2.3	-2.6	-3.2	-3.6	1.1	0.1	-4.4	-2.9	-3.4	1.9	-2.1
■ Grain											
Corn Spread %	3.5	4.4	3.6	3.0	0.2	-3.3	-5.2	-4.8	-3.5	-5.8	2.4
Soybeans Spread %	1.0	2.6	4.4	4.3	2.8	-2.7	1.0	0.2	0.1	-4.4	2.6
Wheat Spread %	10.3	8.6	2.7	9.1	4.0	-3.0	-6.6	-5.4	1.3	-4.5	9.4

Data Set

Name	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
■ 1 Yr Spread												
■ Energy												
Natural Gas Forward	2.94	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	66.7	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	64.0	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	74.6	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	68.3	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	2.17	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		2.96	
Unleaded Gasoline Forward	2.04	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	1.92	1.56	1.39	1.64	2.65	2.86	2.95	2.91	2.12	1.47	2.49	
■ Soft												
Sugar Forward	0.13	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	1.21	1.26	1.37	1.27	1.67	1.11	1.44	2.27	2.40	1.36	1.12	1.36
Coffee Forecast	1.25	1.35	1.37	1.34	1.79	1.26	1.78	2.53	1.60	1.23	1.36	
Cotton Forward	0.89	0.79	0.71	0.63	0.60	0.85	0.75	0.92	1.45	0.76	0.49	0.68
Cotton Forecast	0.81	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)	6,884	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)	6,977	6,129	4,826	5,575	6,871	7,334	7,958	8,855	7,460	5,100	6,973	6,750
Aluminum Forward	2,282	2,258	1,694	1,506	1,834	1,762	2,047	1,997	2,459	2,204	1,514	2,366
Aluminum Forecast	2,175	1,968	1,600	1,693	1,883	1,883	2,038	2,450	2,167	1,675	2,607	2,550
Zinc Forward	3,186	3,335	2,564	1,600	2,168	2,045	2,055	1,831	2,447	2,535	1,187	2,356
Zinc Forecast	3,220	2,861	2,043	1,961	2,170	1,930	1,963	2,210	2,192	1,641	1,905	2,775
Nickel Forward	14,650	12,714	9,975	8,788	15,088	13,843	17,008	18,731	24,715	18,467	11,629	26,060
Nickel Forecast	13,219	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	1,315	1,309	1,152	1,060	1,184	1,202	1,676	1,567	1,421	1,096	884	838
Gold Forecast	1,314	1,258	1,262	1,165	1,265	1,420	1,677	1,575	1,211	960	872	747
Silver Forward	16.56	17.15	15.99	13.80	15.57	19.34	30.17	27.88	30.91	16.82	11.27	14.80
Silver Forecast	17.00	17.13	17.11	15.84	19.10	24.00	31.40	35.50	19.68	14.66	15.00	13.46
Platinum Forecast	963	951	1,000	1,076	1,390	1,514	1,556	1,752	1,616	1,184	1,575	1,350
Palladium Forecast	1,040.0	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	4.0	3.5	3.5	3.6	4.0	4.2	7.0	6.5	6.3	4.1	4.1	4.6
Corn Forecast	3.8	3.6	3.6	3.8	4.1	5.9	7.0	6.9	4.9	3.8	5.4	3.6
Soybeans Forward	10.2	9.5	10.0	8.7	10.2	13.1	14.2	12.0	13.9	10.4	9.7	12.0
Soybeans Forecast	10.2 5.2	9.8	9.9	9.5 4.7	12.4	14.0 6.1	14.7	13.5	10.5	10.4	12.4 6.1	9.9 8.9
Wheat Forward Wheat Forecast	5.2 4.8	4.3 4.4	4.1 4.4	5.1	5.9 5.8	6.1	7.8 7.5	6.5 7.4	7.9 6.2	5.4 5.4	6.1 8.4	6.2
wheat Forecast	4.8	4.4	4.4	5.1	5.8	0.9	7.5	7.4	0.2	5.4	ŏ.4	0.2

Market Flows – Open Interest Key Metrics

Name	Current	MTD % Change	3 Mth % Change				2 Year High
■ Open Interest (Aggregate - 1,000s)							
■ Single Commodities							
Corn	1,965	15.3	20.0	27.6	41.4	39.3	1,965
Soybean	900	5.5	16.6	27.7	30.6	1.6	976
Cotton	313	16.8	20.4	12.2	29.9	54.2	321
Soybean Meal	530	3.3	16.5	41.0	29.3	39.5	530
Gas Oil	1,067	1.0	4.3	23.4	27.5	42.3	1,067
Unlead Gas	486	6.1	17.1	25.6	26.6	24.3	501
Coffee	267	4.3	15.6	22.5	24.2	35.5	279
Sugar	1,007	1.1	16.4	33.7	23.7	12.5	1,037
Crude Oil	2,639	0.0	7.3	7.3	20.1	54.3	2,714
Soybean Oil	519	4.2	10.2	16.9	19.9	27.5	542
Nickel	176	6.0	8.6	17.3	19.7	12.1	182
Platinum	81	2.5	-5.8	-2.4	17.4	30.7	94
Wheat	549	21.2	24.2	5.0	17.3	32.0	581
Zinc	196	3.7	-6.2	-2.0	14.0	21.0	225
Heating Oil	423	-3.0	3.7	-5.8	9.6	3.4	491
HRW Wheat	296	17.9	-1.7	-10.3	7.3	28.7	342
Brent Crude	2,604	1.7	9.7	12.1	7.1	18.9	2,704
Copper (CME)	264	9.5	-0.4	-5.7	6.0	21.7	338
Gold	460	-7.3	-13.7	-2.5	6.0	-6.9	658
Silver	209	10.0	8.3	7.7	2.0	5.6	243
Aluminum	518	2.0	6.4	-0.4	1.6	-3.9	594
Natural Gas	1,529	6.3	14.2	5.6	0.9	42.2	1,574
Lean Hogs	239	-5.9	3.5	0.0	0.0	4.4	282
Copper (LME)	186	4.5	3.9	-8.4	-4.1	6.9	234
Live Cattle	346	-1.1	-8.2	3.9	-18.0	33.6	432
Palladium	22	-8.3	-21.4	-40.5	-26.7	0.0	40

Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ Open Interest (Aggregate - 1,000s)										
■ BCOM	16,445	14,623	12,965	11,965	10,881	11,033	10,367	9,282	10,206	8,524
■ Sector										
■ Energy	8,725	7,931	7,084	6,057	5,033	5,346	4,980	4,230	4,262	3,712
■ Agriculture	6,340	5,168	4,493	4,563	4,211	4,090	3,876	3,418	4,399	3,447
■ Industrial Metals	1,350	1,354	1,319	1,178	1,224	1,104	1,006	1,159	1,105	1,016
■ Precious Metals	782	786	667	673	620	613	658	585	783	669
■ Livestock	592	572	501	431	481	591	578	552	534	443
■ Single Commodities										
Crude Oil	2,621	2,460	2,051	1,671	1,468	1,616	1,473	1,328	1,430	1,193
Brent Crude	2,604	2,322	2,159	2,031	1,513	1,443	1,285	886	873	728
Corn	1,965	1,540	1,236	1,334	1,237	1,203	1,128	1,151	1,549	1,002
Natural Gas	1,529	1,448	1,243	957	939	1,291	1,165	1,011	772	708
Gas Oil	1,054	865	802	700	435	477	512	458	619	545
Sugar	1,007	753	805	879	836	830	754	559	613	834
Soybean	900	705	632	646	599	576	546	460	629	418
Wheat	547	523	448	368	371	411	456	384	492	362
Soybean Meal	530	376	329	402	341	262	212	194	192	162
Aluminum	528	520	541	551	595	539	495	682	546	487
Soybean Oil	519	444	372	384	355	340	306	273	358	211
Unlead Gas	486	387	400	355	332	239	282	277	267	235
Gold	469	472	416	415	372	380	428	419	585	490
Heating Oil	430	449	429	342	346	279	263	269	301	304
Live Cattle	353	333	306	265	266	327	329	317	327	265
Cotton	313	279	242	185	178	172	171	152	207	187
HRW Wheat	292	330	239	193	132	154	158	139	219	145
Coffee	267	218	191	172	160	142	144	105	140	126
Copper (CME)	266	280	224	166	160	167	147	121	167	155
Lean Hogs	239	239	194	166	215	264	248	235	207	178
Silver	209	194	164	168	151	132	141	106	136	124
Zinc	194	200	184	167	182	184	166	148	135	149
Copper (LME)	186	203	209	146	155	132	130	143	196	163
Nickel	176	150	160	148	132	81	69	65	61	62
Platinum	81	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

Troy mounted							
Name	Currenŧ	5 Day Change	1 Mth Change		YTD Change	1 Yr Change	
■ Net - Managed Money Total/Disagg						_	
■ Single Commodities							
Brent Crude	501,634	-46,921	-118,248	-21,661	-59,650	153,782	120,518
WTI Crude	377,520	-7,763	-64,888	-66,850	-34,452	184,377	135,592
Corn	199,970	8,298	61,726	181,296	406,594	376,473	135,274
Natural Gas	196,535	41,897	41,665	107,772	248,981	-37,490	309,377
Aluminum (Pre- MiFID II)	163,475	6,307	-3,292	21,105	3,315	-10,481	115,362
Aluminum (Post- MiFID II)	155,740	0	33,601	47,358	,		
Gasoline	132,065	7,765	34,087	50,468	52,615	134,756	110,802
Soybean Meal	115,296	-6,236	6,144	30,207	84,039	150,757	44,639
Soybeans	98,228	-9,833	-94,740	-883	167,319	160,583	-103,945
Cotton	91,491	2,231	11,380	25,345	-10,911	-4,413	63,322
Heating Oil	86,464	232	24,598	46,970	4,640	75,618	73,086
Zinc (Pre MiFID II)	79,906	-1,121	-6,682	3,640	-471	-8,898	44,606
Zinc (Post MiFID II)	61,122	0	-6,783	-3,131			
Copper (LME) (Post MiFID II)	57,568	0	7,921	17,886			
HRW Wheat	46,323	2,133	10,398	33,182	80,745	44,157	65,287
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
Copper (CME)	34,248	9,115	11,770	-12,773	-65,272	-15,943	67,717
Gold	27,527	-3,800	-116,067	-159,791	-82,392	-90,134	-141,964
Live Cattle	10,817	1,726	-11,525	-87,913	-71,893	-119,869	-20,155
Palladium	8,814	70	27	-6,951	-17,001	-9,910	3,216
Silver	-432	15,620	14,030	10,000	6,673	-30,118	-59,306
Wheat	-1,685	3,837	48,453	65,354	144,050	111,526	87,951
Lean Hogs	-10,053	-2,195	-10,811	-27,364	-64,010	-58,803	-58,690
Platinum	-20,193	-6,374	-16,617	-48,814	-15,983	-15,500	-43,360
Coffee	-46,174	3,889	24,537	11,420	11,672	-30,340	-51,699
Soybean Oil	-47,249	8,193	-6,422	-20,114	-50,655	-38,628	-93,658
Sugar	-112,123	30,133	45,182	15,455	-39,067	-103,405	-324,316

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Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
■ Net - Managed Money Total/Disagg										
■ BCOM	2.0M	1.2M	1.8M	107,932.0	1.1M	835,105.0	791,313.0	637,042.0	1.6M	1.1M
■ Sector										
■ Energy	1.3M	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	357,307	437,560	423,576	90,351	218,292	35,635	14,988	-4,018	39,105	15,752
■ Agriculture	344,077	-449,709	225,844	-75,733	383,375	-1,048	281,653	188,257	962,170	594,114
■ Precious Metals	15,716	124,419	101,310	-239	153,310	70,026	171,032	134,710	232,650	252,599
∓ Livestock	764	136,667	147,051	24,525	117,295	137,611	110,898	104,018	133,520	83,521
■ Single Commodities										
Brent Crude	501,634	561,284	454,585	163,672	115,571	136,611	125,397	81,537		
WTI Crude	377,520	411,972	307,909	100,797	199,388	270,386	134,834	192,466	217,046	133,742
Corn	199,970	-206,624	-113,648	-136,111	239,704	-94,812	140,109	148,653	396,782	205,427
Natural Gas	196,535	-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	,		,	,	
Aluminum (Post- MiFID II)	155,739.9			•	•					
Gasoline	132,065	79,450	50,091	28,391	44,226	54,637	64,383	61,288	67,205	50,763
Soybean Meal	115,296	31,257	19,537	-40,843	54,132	57,931	41,489	-15,232	40,129	35,586
Soybeans	98,228	-69,091	107,075	-63,515	39,446	136,683	109,007	23,683	164,287	69,606
Cotton	91,491	102,402	76,052	51,307	11,005	43,288	25,828	6,683	40,645	61,292
Heating Oil	86,464	81,824	33,541	-35,339	-27,087	26,602	23,945	19,644	36,104	27,912
Zinc (Pre MiFID II)	79,906	80,377	81,039	20,140	49,726	•	•	,	,	
Zinc (Post MiFID II)	61,122.5									
Copper (LME) (Post MiFID II)	57,567.9									
HRW Wheat	46,323	-34,422	9,085	-14,975	24,999	8,022	23,619	9,128	49,108	9,943
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					
Copper (CME)	34,248	99,520	72,131	-25,964	-4,455	35,635	14,988	-4,018	39,105	15,752
Gold	27,527	109,919	41,247	-24,263	98,391	34,104	101,922	111,919	169,987	197,560
Live Cattle	10,817	82,710	92,516	11,081	80,102	96,771	59,569	68,105	104,412	49,281
Palladium	8,814	25,815	12,742	8,690	19,970	15,660	16,769	5,212	13,034	11,626
Silver	-432	-7,105	39,098	6,282	17,051	5,573	23,113	6,200	26,836	26,631
Wheat	-1,685	-145,735	-108,927	-83,120	20,481	-71,468	-11,899	-29,252	36,542	-8,683
Lean Hogs	-10,053	53,957	54,535	13,444	37,193	40,840	51,329	35,913	29,108	34,240
Platinum	-20,193	-4,210	8,223	9,052	17,898	14,689	29,228	11,379	22,793	16,782
Coffee	-46,174	-57,846	12,706	-15,181	25,385	-8,417	-23,076	2,905	36,182	23,630
Soybean Oil	-47,249	3,406	85,522	60,895	35,047	-46,649	-42,424	-2,103	56,961	29,956
Sugar	-112,123	-73,056	138,442	165,810	-66,824	-25,626	19,000	43,792	141,534	167,357

Market Flows – ETF Flows (annual)

IVIAI KELI IOWS — LI			muaij	2045	2011	2042	2042	2044	2040	2000
Name	2018↓	2017	2016	2015	2014	2013	2012	2011	2010	2009
= ETFs (\$ Billion AUM)										
■ Total ETF Assets Under Manageme	146.25	141.76	120.35	86.92	101.22	110.91	195.29	171.15	166.48	113.35
■ Precious Metals	111.81	109.99	90.30	62.95	77.79	84.93	164.56	142.18	130.39	80.66
■ Gold	98.85	95.35	76.91	51.78	62.75	68.70	143.55	120.88	105.90	70.06
■ Silver	9.79	10.11	9.41	7.24	8.64	10.60	16.18	16.38	18.41	8.02
■ Platinum	1.50	2.40	2.26	2.22	3.32	3.46	2.48	2.49	2.83	1.41
■ Palladium	0.86	1.28	1.07	1.24	2.30	1.40	1.37	1.32	2.12	0.65
■ Precious Metals Basket	0.70	0.70	0.57	0.40	0.64	0.68	0.92	1.07	1.13	0.52
■ Other	0.11	0.15	0.08	0.06	0.13	0.10	0.06	0.02		
■ Broad Commodity	21.52	17.26	14.83	10.84	14.55	17.70	19.57	18.21	19.74	14.55
■ Energy	9.09	11.07	12.20	10.72	5.40	4.61	6.72	5.79	9.65	12.15
■ Agriculture	2.09	1.78	1.82	1.75	2.37	2.61	3.11	3.90	5.23	4.76
■ Industrial Metals	1.73	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)	5.58	8.7 3	23.47	9.77	3.14	-40.74	19.52	1.76	16.15	37.80
■ Precious Metals	5.33	8.60	22.61	-3.83	-2.45	-36.83	17.74	5.92	14.98	19.61
■ Gold	5.61	8.79	21.91	-3.01	-3.87	-37.83	14.93	6.97	11.23	16.84
■ Silver	0.15	0.02	0.95	0.00	0.38	0.82	2.45	-0.86	2.01	1.89
■ Precious Metals Basket	0.04	0.05	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		
■ Platinum	-0.10	0.07	0.00	-0.25	0.33	0.17	0.31	0.26	0.85	0.47
■ Palladium	-0.31	-0.31	-0.41	-0.41	0.72	-0.03	0.21	-0.41	0.54	0.14
■ Broad Commodity	3.97	1.05	2.38	-0.01	1.37	-0.41	0.45	-0.83	2.20	6.47
■ Industrial Metals	0.18	0.05	0.30	-0.14	0.20	-0.15	0.27	-0.03	0.08	0.65
Agriculture	0.06	0.22	0.15	-0.19	-0.17	-0.04	-0.76	-0.64	-0.72	2.54
■ Livestock ■ Energy	0.00 -3.96	0.00 -1.20	0.00 -1.97	0.00 13.94	-0.01 4.19	-0 . 02 -3 . 29	-0 . 02	-0.01 -2.64	0.01 -0.40	0.03 8.50
DELTA WEIGHTED:	-3.90	-1.20	-1.97	13.94	4.19	-3,29	1.00	-2.04	-0.40	0.30
DEE III III EE III II EE I										
■ ETFs (\$ Billion AUM) (DW)										
■ Total ETF Assets Under Manageme	150.62	146.24	123.03	88.63	101.61	110.16	197.39	171.68	168.44	114.84
■ Precious Metals	113.14	111.23	91.00	62.94	77.80	85.03	166.20	142.68	131.34	81.00
■ Gold	104.61	100.99	82.54	55.90	67.72	74.56	153.96	129.85	117.13	75.55
■ Silver	5.38	5.74	4.50	3.10	3.67	4.83	7 . 40	7.90	8.10	2.86
■ Platinum	1.48	2.40	2.24	2.21	3.28	3.39	2,42	2.44	2.85	1.42
■ Palladium	0.86	1.28	1.07	1.24	2.30	1.40	1.37	1.32	2.12	0.65
■ Precious Metals Basket	0.73	0.73	0.61	0.43	0.70	0.75	0.99	1.14	1.15	0.52
■ Other	0.08	0.08	0.04	0.06	0.13	0.10	0.06	0.02		
■ Broad Commodity	21.78	17.50	14.85	10.87	14.55	17.70	19.57	18.21	19.75	14.56
■ Energy	11.81	13.93	14.07	12.28	5.71	3.72	7.20	5.84	10.63	13.25
■ Agriculture	2.13	1.91	1.90	1.85	2.46	2.69	3.17	3 . 97	5.28	4.81
■ Industrial Metals	1.74	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	0102	0.05	0105	0100	0.00	0110	0.00
■ Total ETF Fund Flows (\$ Billion)	2.84	11.40	19.57	19.87	8.80	-41.92	21.56	1.62	16.34	38.85
■ Precious Metals	5.40	8.75	22.83	-3 . 35	-1.85	-36.09	18.61	5 . 75	14.48	19.69
+ Gold	5.65	8.47	22.50	-2.99	-3.46	-37.93	15.70	5.28	12.18	18.10
■ dotd ■ Silver	0.14	0.47	0.61	0.45	0.56	1.66	2.56	0.67	0.55	0.69
Precious Metals Basket	0.04	0.04	0.17	-0.16	-0.01	0.01	-0.21	0.01	0.35	0.28
Other	-0.02	-0.01	-0.03	0.00	0.01	0.01	0.05	0.01	0.55	V.20
■ Platinum	-0.02	0.09	0.00	-0.24	0.01	0.05	0.03	0.02	0.86	0.47
■ Ptatilidiii ■ Palladium	-0.10	-0.31	-0.41	-0.41	0.72	-0.03	0.31	-0.41	0.54	0.47
Broad Commodity	4.01	1.22	2.37	-0.41	1.37	-0.03	0.45	-0.41	2.20	6.47
Industrial Metals	0.17	0.03	0.28	-0.01	0.22	-0.41	0.43	-0.05	0.03	0.47
Agriculture	0.06	0.30	0.15	-0.03	-0.17	0.03	-0.78	-0.05	-0.78	2 . 57
Livestock	0.00	-0.01	0.00	0.00	-0.17	-0.03	-0.02	-0.01	0.01	0.03
■ Energy	-6.78	1.11	-6.06	23.41	9.23	-5.33	3.02	-2.66	0.39	9.47

PERFORMANCE: Bloomberg Commodity Indices

Composite Indices

* Click hyperlinks to open in Bloomberg

			2018		2017						
Index Name	Ticker	May	Apr	Q1	Q4	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
Bloomberg Commodity ER	BCOM	1.25%	2.42%	-0.79%	4.39%	2.89%	9.52%	-10.13%	-30.55%	-57.60%	-8.48%
Bloomberg Commodity TR	BCOMTR	1.42%	2.58%	-0.40%	4.71%	3.62%	11.02%	-8.29%	-29.08%	-56.19%	33.46%
Bloomberg Commodity Spot	BCOMSP	1.19%	3.17%	0.21%	6.51%	4.61%	15.11%	13.18%	-10.12%	-13.60%	279.11%
Bloomberg Roll Select	BCOMRST	1.79%	2.48%	-0.11%	4.41%	4.20%	11.76%	-1.45%	-22.42%	-43.21%	200.15%
1 Month Forward	BCOMF1T	1.58%	2.41%	0.20%	4.82%	4.24%	12.27%	-4.64%	-24.43%	-48.29%	143.57%
2 Month Forward	BCOMF2T	1.75%	2.45%	0.50%	4.56%	4.76%	12.66%	-2.78%	-23.44%	-48.03%	182.27%
3 Month Forward	BCOMF3T	1.78%	2.41%	0.73%	5.03%	4.99%	13.51%	-1.27%	-21.62%	-44.30%	203.41%
4 Month Forward	BCOMF4T	1.75%	2.33%	0.72%	4.86%	4.87%	13.32%	2.59%	-17.80%	-38.59%	
5 Month Forward	BCOMF5T	1.86%	2.33%	0.87%	5.20%	5.14%	14.22%	3.39%	-17.77%	-37.73%	
6 Month Forward	BCOMF6T	1.81%	2.21%	0.98%	5.06%	5.07%	13.85%	4.14%	-17.04%	-36.10%	
Energy	BCOMENTR	2.66%	5.02%	1.76%	8.93%	9.72%	26.30%	-27.05%	-52.67%	-88.49%	-35.86%
Petroleum	BCOMPETR	1.69%	7.00%	4.71%	16.38%	13.94%	45.79%	-16.94%	-44.54%	-76.71%	137.78%
Agriculture	BCOMAGTR	0.58%	1.44%	3.15%	-2.01%	5.24%	-0.15%	-7.84%	-34.97%	-38.68%	-36.21%
Grains	BCOMGRTR	-0.73%	3.01%	7.09%	-4.82%	9.52%	0.16%	-13.72%	-43.76%	-50.86%	-44.19%
Industrial Metals	BCOMINTR	2.43%	3.52%	-6.23%	10.72%	-0.57%	25.03%	19.70%	2.04%	-31.64%	169.92%
Precious Metals	BCOMPRTR	-0.98%	-0.23%	-0.53%	2.04%	-1.73%	-0.61%	3.90%	-14.99%	25.01%	280.17%
Softs	BCOMSOTR	6.57%	-0.56%	-10.10%	5.17%	-4.74%	-7.14%	-3.33%	-30.07%	-24.71%	-56.85%
Livestock	BCOMLITR	2.22%	0.42%	-10.03%	3.31%	-7.65%	-13.45%	-19.90%	-12.71%	-46.73%	-56.66%
Ex-Energy	BCOMXETR	0.83%	1.48%	-1.36%	2.91%	0.93%	4.91%	1.52%	-19.12%	-23.45%	40.43%
Ex-Petroleum	BCOMXPET	1.33%	1.27%	-1.94%	1.49%	0.62%	2.48%	-5.88%	-27.53%	-52.08%	
Ex-Natural Gas	BCOMXNGT	1.06%	2.86%	0.17%	6.07%	4.12%	13.75%	-3.20%	-22.96%	-38.44%	
Ex-Agriculture	BCOMXAGT	1.79%	3.10%	-1.92%	7.42%	2.93%	15.81%	-8.96%	-27.72%	-63.61%	
Ex-Grains	BCOMXGRT	1.89%	2.49%	-1.88%	6.75%	2.47%	13.51%	-7.26%	-26.15%	-58.78%	
Ex-Industrial Metals	BCOMXIMT	1.21%	2.40%	0.95%	3.22%	4.62%	7.82%	-13.65%	-34.68%	-61.81%	
Ex-Precious Metals	BCOMXPMT	1.84%	3.09%	-0.38%	5.22%	4.59%	13.30%	-10.97%	-32.26%	-62.93%	
Ex-Softs	BCOMXSOT	1.05%	2.81%	0.34%	4.68%	4.25%	12.37%	-9.09%	-29.53%	-59.05%	
Ex-Livestock	BCOMXLIT	1.37%	2.72%	0.26%	4.81%	4.40%	12.86%	-7.60%	-30.07%	-57.27%	
Ex-Agriculture & Livestock	BCOMXALT	1.75%	3.35%	-1.12%	7.82%	3.98%	19.05%	-8.00%	-29.18%	-65.88%	
Bloomberg Dollar Spot	BBDXY	2.09%	1.88%	-2.92%	-0.09%	0.97%	-2.34%	-1.79%	12.81%	27.43%	
S&P 500 Total Return	<u>SPXT</u>	2.41%	0.38%	-0.76%	6.64%	2.02%	14.38%	36.67%	84.05%	139.72%	261.97%
US Aggregate	<u>LBUSTRUU</u>	0.71%	-0.74%	-1.46%	0.39%	-1.50%	-0.37%	4.23%	10.30%	44.15%	152.89%
US Treasury	<u>LUATTRUU</u>	0.90%	-0.81%	-1.18%	0.05%	-1.10%	-0.83%	2.16%	6.42%	35.06%	136.17%
US Corporate	<u>LUACTRUU</u>	0.54%	-0.93%	-2.32%	1.17%	-2.70%	0.06%	8.10%	16.24%	68.97%	191.02%
US High Yield	LF98TRUU	-0.03%	0.65%	-0.86%	0.47%	-0.24%	2.35%	15.31%	26.84%	112.76%	254.74%

Single Commodity Indices

			2018		2017						
Index Name	Ticker	May	Apr	Q1	Q4	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
Natural Gas	BCOMNGTR	5.60%	-0.64%	-6.85%	-11.78%	-2.26%	-18.75%	-51.82%	-73.10%	-98.69%	-99.38%
WTI Crude	BCOMCLTR	-1.94%	6.09%	8.83%	16.00%	13.21%	38.56%	-30.61%	-54.93%	-85.97%	52.09%
Brent Crude	BCOMCOT	4.59%	8.65%	5.40%	19.23%	19.77%	57.75%	-10.44%	-43.88%	-66.96%	481.25%
ULS Diesel	BCOMHOTR	3.03%	6.91%	-0.32%	13.92%	9.80%	47.12%	-10.90%	-35.46%	-67.30%	203.38%
Unleaded Gasoline	BCOMRBTR	1.75%	5.64%	0.88%	13.69%	8.44%	34.94%	-12.18%	-37.15%	-47.98%	350.72%
Corn	BCOMCNTR	-1.53%	1.30%	8.72%	-4.59%	8.45%	-6.38%	-18.20%	-56.78%	-63.33%	-80.58%
Soybeans	BCOMSYTR	-2.70%	-0.50%	7.88%	-2.59%	4.43%	7.19%	4.05%	-10.70%	20.89%	212.89%
Wheat	BCOMWHTR	3.25%	9.65%	3.22%	-8.18%	16.86%	2.68%	-25.61%	-55.33%	-80.89%	-88.89%
Soybean Oil	BCOMBOTR	1.80%	-4.60%	-4.38%	0.59%	-7.15%	-3.30%	-16.51%	-45.21%	-67.78%	-42.25%
Soybean Meal	BCOMSMT	-4.54%	1.65%	20.70%	-1.24%	17.12%	21.17%	20.27%	35.01%	202.92%	1201.36%
HRW Wheat	BCOMKWT	1.09%	11.16%	6.44%	-6.91%	19.61%	4.04%	-34.94%	-59.16%	-76.48%	-73.65%
Copper	BCOMHGTR	-0.13%	1.15%	-8.55%	11.30%	-7.62%	16.82%	7.15%	-11.82%	-26.83%	321.97%
Alumnium	BCOMALTR	2.31%	13.94%	-12.02%	7.59%	2.55%	19.18%	23.58%	-1.88%	-53.58%	1.61%
Zinc	BCOMZSTR	-0.80%	-4.45%	-0.82%	5.97%	-5.99%	21.33%	38.63%	47.15%	10.60%	93.45%
Nickel	BCOMNITR	11.52%	2.64%	4.19%	21.32%	19.26%	68.40%	16.14%	-4.48%	-40.30%	425.07%
Gold	BCOMGCTR	-1.41%	-0.45%	0.95%	1.87%	-0.92%	1.44%	7.05%	-9.21%	36.38%	302.84%
Silver	BCOMSITR	0.51%	0.54%	-5.22%	2.55%	-4.22%	-6.46%	-5.35%	-30.64%	-13.05%	184.21%
Sugar	BCOMSBTR	9.03%	-5.18%	-17.87%	7.85%	-15.09%	-17.20%	-11.03%	-51.65%	-32.52%	-20.98%
Coffee	BCOMKCTR	0.90%	2.36%	-7.61%	-3.71%	-4.57%	-12.51%	-25.89%	-39.07%	-61.74%	-89.79%
Cotton	BCOMCTTR	11.28%	3.58%	2.59%	14.88%	18.25%	26.26%	42.75%	27.69%	44.80%	-63.38%
Live Cattle	BCOMLCTR	0.33%	3.60%	-10.41%	0.93%	-6.88%	-15.09%	-19.05%	2.05%	-28.69%	-7.42%
Lean Hogs	BCOMLHTR	5.63%	-4.88%	-10.72%	7.85%	-10.30%	-11.86%	-21.45%	-34.25%	-67.86%	-88.53%

PERFORMANCE: Bloomberg Commodity Roll Select Indices

Composite Roll Select Indices * Click hyperlinks to open in Bloomberg

Inday Name	Tieleen		2018		2017						
Index Name	Ticker	May	Apr	Q1	Q4	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
BCOM Roll Select	BCOMRST	1.79%	2.48%	-0.11%	4.41%	4.20%	11.76%	-1.45%	-22.42%	-43.21%	200.15%
Roll Select Agriculture	BCOMRAGT	1.56%	1.38%	3.13%	-1.89%	6.18%	1.83%	-3.58%	-32.72%	-30.45%	19.09%
Roll Select Ex-Ags & Livestock	BBURXALT	2.09%	3.11%	-0.87%	7.46%	4.36%	19.38%	1.60%	-19.79%	-52.72%	
Roll Select Grains	BCOMRGRT	0.41%	2.85%	7.18%	-4.34%	10.68%	3.46%	-8.43%	-42.84%	-46.24%	9.40%
Roll Select Softs	BCOMRSOT	7.00%	-0.89%	-10.47%	4.22%	-5.05%	-9.51%	-3.36%	-26.89%	-8.85%	-20.87%
Roll Select Livestock	BCOMRLIT	-0.37%	1.73%	-8.87%	2.45%	-7.63%	-14.44%	-28.19%	-14.92%	-34.52%	40.77%
Roll Select Energy	BCOMRENT	3.46%	4.84%	2.13%	8.15%	10.79%	27.02%	-9.71%	-38.21%	-77.60%	204.12%
Roll Select Ex-Energy	BCOMRXET	1.02%	1.44%	-1.08%	2.83%	1.37%	5.73%	3.05%	-17.51%	-15.48%	143.37%
Roll Select Petroleum	BCOMRPET	2.70%	7.11%	5.05%	14.70%	15.55%	45.06%	-0.78%	-31.66%	-58.15%	637.61%
Roll Select Industrial Metals	BCOMRINT	2.28%	2.98%	-5.85%	10.66%	-0.83%	25.04%	20.91%	4.37%	-25.69%	305.83%
Roll Select Precious Metals	BCOMRPRT	-0.98%	-0.23%	-0.49%	2.09%	-1.69%	-0.54%	4.31%	-14.57%	25.84%	297.10%

Single Commodity Roll Select Indices

			2018		2017						
Index Name	Ticker	May	Apr	Q1	Q4	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
Natural Gas RS	BCOMRNGT	5.69%	-1.36%	-6.07%	-10.28%	-2.08%	-14.29%	-34.25%	-57.54%	-96.03%	-85.07%
WTI Crude RS	BCOMRCLT	-0.36%	6.62%	7.66%	14.86%	14.37%	40.18%	-2.96%	-36.94%	-64.25%	636.48%
Brent Crude RS	BCOMRCOT	4.98%	8.40%	5.26%	17.87%	19.78%	56.24%	-0.19%	-31.56%	-53.68%	801.25%
ULS Diesel RS	BCOMRHOT	3.03%	6.16%	0.69%	13.86%	10.14%	38.13%	-9.18%	-34.82%	-64.53%	439.50%
Unleaded Gasoline RS	BCOMRRBT	3.61%	6.33%	4.07%	8.93%	14.66%	39.12%	7.52%	-18.95%	-33.99%	710.38%
Corn RS	BCOMRCNT	-0.38%	1.07%	7.86%	-4.12%	8.61%	-3.98%	-13.90%	-56.65%	-58.76%	-62.96%
Soybeans RS	BCOMRSYT	-0.85%	-0.13%	9.22%	-1.78%	8.15%	13.65%	16.52%	-2.67%	30.99%	353.37%
Wheat RS	BCOMRWHT	3.59%	8.79%	2.84%	-8.10%	15.91%	3.78%	-26.43%	-57.60%	-77.78%	-59.37%
Soybean Oil RS	BCOMRBOT	1.46%	-4.43%	-4.42%	0.12%	-7.32%	-3.33%	-15.00%	-43.09%	-63.18%	-13.42%
Soybean Meal RS	BCOMRSMT	-2.60%	2.44%	20.61%	-0.36%	20.34%	26.80%	27.18%	37.83%	226.98%	1543.60%
HRW Wheat RS	BCOMRKWT	1.16%	10.85%	6.10%	-6.89%	18.97%	5.51%	-31.38%	-58.06%	-73.81%	-33.84%
Copper RS	<u>BCOMRHGT</u>	-0.11%	1.20%	-7.93%	11.40%	-6.93%	18.05%	8.65%	-11.07%	-22.17%	512.32%
Alumnium RS	BCOMRALT	1.60%	11.20%	-11.79%	7.36%	-0.34%	16.86%	23.00%	1.70%	-48.97%	51.52%
Zinc RS	BCOMRZST	-0.52%	-3.97%	-0.14%	6.02%	-4.60%	22.60%	42.24%	52.42%	24.25%	208.47%
Nickel RS	BCOMRNIT	11.48%	2.64%	3.99%	20.99%	18.99%	67.88%	17.05%	-2.53%	-35.61%	747.04%
Gold RS	BCOMRGCT	-1.41%	-0.45%	0.99%	1.92%	-0.88%	1.49%	7.57%	-8.83%	36.63%	310.06%
Silver RS	BCOMRSIT	0.49%	0.54%	-5.20%	2.58%	-4.21%	-6.36%	-5.09%	-29.99%	-11.05%	220.95%
Sugar RS	BCOMRSBT	7.39%	-5.55%	-18.16%	4.88%	-16.99%	-23.55%	-13.64%	-47.65%	-17.62%	70.71%
Coffee RS	BCOMRKCT	0.90%	2.36%	-7.88%	-3.74%	-4.86%	-13.02%	-25.58%	-37.30%	-55.88%	-81.98%
Cotton RS	BCOMRCTT	16.51%	2.93%	1.97%	16.36%	22.29%	31.48%	49.00%	29.33%	73.69%	-39.82%
Live Cattle RS	BCOMRLCT	0.33%	3.60%	-9.39%	0.41%	-5.82%	-15.27%	-19.78%	-1.39%	-18.38%	73.72%
Lean Hogs RS	<u>BCOMRLHT</u>	-1.78%	-1.90%	-7.62%	5.57%	-10.98%	-13.42%	-40.35%	-35.01%	-56.76%	-23.68%

BCOM Constituent Weights

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

Group	Commodity	Ticker	May 2018 Contrib to Return %	May 31 2018 Weight %	Apr 30 2018 Weight %	May 2018 Weight% Change	2018 Target Weight
	Natural Gas	<u>NG</u>	0.42	8.21	7.88	0.33	8.01%
	WTI Crude	<u>CL</u>	-0.16	7.62	7.87	(0.26)	7.32%
Гионач	Brent Crude	CO	0.36	8.36	8.18	1 0.18	7.68%
Energy	ULS Diesel	<u>HO</u>	0.11	3.77	3.71	0.06	3.67%
	Gasoline	XB	0.07	4.27	4.26	1 0.02	3.75%
	Subtotal		0.81	32.24	31.90	1 0.33	30.43%
	Corn	<u>C</u>	-0.11	6.56	6.75	₩ (0.19)	6.13%
	Soybeans	<u>S</u>	-0.18	5.96	6.21	(0.25)	5.96%
	Wheat	W	0.11	3.80	3.73	1 0.07	3.26%
Grains	Soybean Oil	BO	0.04	2.41	2.40	1 0.01	2.75%
	Soybean Meal	<u>SM</u>	-0.17	3.37	3.58	(0.21)	3.04%
	HRW Wheat	KW	0.01	1.54	1.55	(0.00)	1.30%
	Subtotal		-0.29	23.64	24.22	(0.57)	22.44%
	Copper	HG	-0.02	6.48	6.57	(0.10)	7.16%
Industrial	Aluminum	<u>LA</u>	0.10	4.51	4.47	1 0.04	4.51%
	Zinc	LX	-0.03	2.72	2.78	(0.06)	3.10%
Metals	Nickel	<u>LN</u>	0.33	3.19	2.90	0.29	2.76%
	Subtotal		0.38	16.90	16.72	1 0.18	17.53%
Precious	Gold	GC	-0.18	11.24	11.49	(0.26)	11.95%
	Silver	<u>SI</u>	0.01	3.33	3.36	(0.03)	3.67%
Metals	Subtotal		-0.17	14.57	14.86	(0.29)	15.62%
	Sugar	SB	0.23	2.86	2.66	0.20	3.54%
Softs	Coffee	<u>KC</u>	0.02	2.39	2.40	(0.01)	2.61%
Soits	Cotton	<u>CT</u>	0.17	1.65	1.51	0.15	1.45%
	Subtotal		0.42	6.90	6.57	0.34	7.60%
	Live Cattle	<u>LC</u>	0.00	3.58	3.70	(0.12)	4.31%
Livestock	Lean Hogs	<u>LH</u>	0.11	2.16	2.04	0.12	2.08%
	Subtotal		0.12	5.74	5.74	0.01	6.39%
Total			1.25	100.00	100.00		100.00%

BLOOMBERG INTELLIGENCE: COMMODITY DASHBOARDS

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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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