Tables & Charts – July 2017 Edition

July Commodity Giddy-Up Could be Just the Beginning

- Beating stocks in July could mark commodity transition
- Metals led recovery may portend the opposite in stocks and bonds
- Crude oil and energy setup is for continued 2H recovery
- Agriculture marks time in July for further appreciation with increasing demand vs. supply
- The BCOM is likely in early days of catching-up to the U.S. dollar shift down
- Inflation fears should be revived with a commodity recovery, pressuring primary assets

Mike McGlone - BI Senior Analyst; Commodities. BI COMD (the commodity dashboard)

July Should Mark the Transition to **Renewed Commodities Recovery**

Performance: July +2.3%, YTD -3.1, Spot 0.0%. (returns are total return (TR) unless noted)

(Bloomberg Intelligence) -- The first month of the year they beat stocks is a good sign for commodities, but should have negative repercussions for primary assets, if sustained. Indicating a market transitioning to demand driven, the Bloomberg Commodity Index's 2.3% total return in July beat the spot gain by the most since June 2014. Indicating demand in excess of supply, backwardation is prevalent not only in livestock, but also energy, the most expensive to store sectors. Copper leading metals gainers indicates an organic recovery.

Commodities seem to have shifted to the refresh stage after a 1H pause. Higher commodities and a declining U.S. dollar have been mostly absent since the global crisis. Now that reflation fears have been mostly alleviated, renewed commodity vigor appears to be in early days.

IMPROVING MACRO OUTLOOK

Commodities Likely in Early Days of Catching-Up To Dollar Shift. Increasingly convinced the U.S. Dollar has peaked, commodities could be in early days of catching up to its slide. Ending July unchanged for 2017 on a spot basis, the Bloomberg Commodity Index is poised to gain vs. the 9% decline in the Bloomberg Dollar Spot Index. Over the past 10 years, the quarterly beta of the BCOM to the dollar is minus 1.7, indicating spot commodities could recover 15% in 2H with a stable dollar. At a two-year low, the dollar may see some bounce, but so, too, may crude oil.

Crude has been the biggest drag on broad commodities since 2014. Improving demand vs. supply and a backwarded energy futures curve indicates better days for oil. The declining dollar is just additional support. BCOM must rally about 4% to reach the similar 2015 peak in the Bloomberg Dollar Spot Index.

Market Commentary

PERFORMANCE: Overview, Commodity TR,

Prices, Volatility **CURVE ANALYSIS:**

Roll Yields, Forwards/Forecasts MARKET FLOWS:

COT, ETFs

DATA

Contango/Backwardation,

Open Interest, Volume,

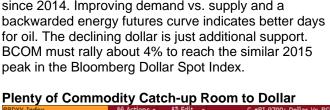
Energy

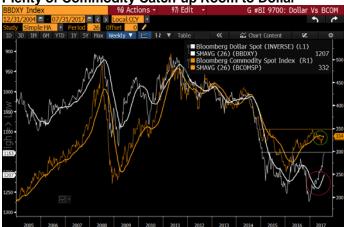
Metals Agriculture 4

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Commodities Ripe to Sustain Recovery & Revive Inflation Fears. Commodities appear refreshed following the 1H pause. July marked the first month in 2017 the Bloomberg Commodity Index total return (2.3%) bested the S&P 500. It could be the beginning of a trend. Increasing commodity prices and the weaker U.S. dollar are leading inflation indicators that have been notably absent in this recovery. Supported by demand exceeding supply, on the back of multiple years of declining prices, a peaking dollar should mark an inflection point for sustained commodity recovery.

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Commodities May Be In Early Stock Market Catch-up

Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		July	QTD Pct		Chg
MSCI World Net Total Return US	+13.3%	+2.4%	+2.4%	+16.1%	15.5%
S&P 500 Total Return Index	+11.7%	+2.1%	+2.1%	+16.1%	22.6%
Bloomberg Barclays US Corporat	+6.1%	+1.1%	+1.1%	+10.9%	16.5%
Bloomberg Barclays U.S. Treasu	+5.0%				6.7%
Bloomberg Commodity Index Tota	-3.1%	+2.3%	+2.3%	+.8%	-7.3%
Bloomberg Dollar Spot	-9.0%	-2.6%	-2.6%	-2.3%	-4.6%

The extended stock market, as evidenced by the lowest VIX Index 200-day moving average in its history, since 1990, is at high risk. Bond yields appear in a similar situation. Long nascent inflation would be a primary asset class pressure factor, potentially led by recovering commodities.

BCOM Improving Demand vs. Supply Signaling Giddy-Up for Prices. Broad commodity prices appear set to recover on increasing demand vs. supply. Unchanged since February 2015, the spot Bloomberg Commodity Index (BCOM) shows a similar recovery pattern as 2009, after the financial crisis. Since the bottom in the weighted index demand vs. supply estimates at 0.966 in 2015, the ratio has improved to 1.01, above the 1.00 threshold. The spot index appears to be forming a potential inverted head-and-shoulders pattern to catch up to increasing demand vs. supply.

Broad Commodities Demand Increasing vs. Supply



Spot prices appear low relative to the increasing demand vs. supply ratio, but total returns are worse. High negative roll yields have been driven by steep contango in energy, but they've reversed positive. The average of the BCOM three-months curves reached the steepest backwardation since 2014 at the end of June.

Backwardated Curves Portend Better Days for Commodity Investors. Bloomberg Commodity Index (BCOM) three-month curves reached into backwardation.

indicating positive total returns. For the first time since 2014, the average of the BCOM commodities three-month futures curves ended June in a slight backwardation before backed-up some in July. Most commodity indexes, including BCOM, roll the majority of positions into the most liquid contracts within the first few months. Thus the three-month curves are a close proxy for expected roll yields, which may be on the road to positive territory.

Three-Month Curves: First Backwardation Since 2014



At minus 7.9%, the BCOM one-year roll yield remains high vs. the 4.4% average since 2011. The average contango of the three-month curves over the same period is 1.3% compared with 1.1% at the end of July. If futures curves sustain current levels, roll yields should continue to decline.

SECTOR PERFORMANCE

Green Go For Commodities With Energy and Dollar Drags Alleviated. Off to a good 2H start, commodity momentum should be shifting positive. The most beaten-up sectors -- energy and softs -- were the best performers in July, and should have more to go. Range-trading crude oil, ending the month at \$50 a barrel, is less compelling for the bullish case than \$46 at the end of June, but the massive position liquidation is past and curves have shifted positive. Sugar, the primary softs driver, appears to be in an early recovery period after a substantial correction.

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Most to Gain Energy Playing Some Catch-Up in July

Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		July	QTD Pct	Chg	Chg
Bloomberg Industrial Metals Su	+10.7%	+4.1%	+4.1%	+18.6%	16.8%
Bloomberg All Metals Total Ret	+9.5%	+3.0%	+3.0%	+3.8%	16.5%
Bloomberg Precious Metals Subi	+8.1%	+1.8%	+1.8%		13.4%
Bloomberg Livestock Subindex T	+6.0%	-4.8%	-4.8%	+11.0%	-6.6%
Bloomberg Grains Subindex Tota	+.6%				-13.3%
Bloomberg Agriculture Subindex	-2.5%	+.9%	+.9%		-4.3%
BBG Softs TR	-12.4%	+7.3%	+7.3%		10.8%
Bloomberg Energy Subindex Tota	-16.3%	+4.6%	+4.6%	2%	-31.7%

Metals, the most investable of all commodities, leading 2017 gainers is a good sign of organic recovery. If no longer dragged lower by declining crude oil and a strengthening dollar, metals should remain the commodity markets' shining stars.

ATTRIBUTION

BCOM Attribution: Metals Contribution May Spark Some Energy. Metals index support is set to gain some assistance from energy and agriculture. Still the primary drag on the Bloomberg Commodity Index total returns, subtracting about 570 bps in 2017, the energy sector is set for positive contribution on the back of backwardated futures curves. Agriculture, a subtraction of almost 100 bps from total returns, is more of a wild card, with August weather and less potential for positive roll yields due to contango, but supported by rapidly improving demand vs. supply balances.

Metals Leading Index Positive Contributions

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Name	Start % Wgt	End % Wgt	Avg % Wgt	Tot Rtn	CT		
BCOM_SB (Exclusion: Cash)	100.0	200.0	100.0	-3.6			
■ Base Metals	16.9	38.2	18.2	10.2			
■ Precious Metals	13.3	32.6	16.1	7.6			
■ Livestock	4.2	12.1	6.4				
■ Agriculture	26.8	61.0	30.4	-3.0			
■ Energy	38.8	56.1					
Port Wgt			Contribution				
30.41	Agricultur	e	. I		-1.02		
28.98	Energy			COM Attribution – 117 through July 31.	-5.71		
		le '		ote, these are			
18.17	Base Meta		es	timates, actual	1.77		
16.07	Precious Metals		re	1.05			
6.37	Livestock	(0.35		

Led by 100 bps from copper, base metals have leapt ahead as the leading sector contributor to broad index total returns, with 180 bps. Gold is close behind, with 90 bps of index contribution. Unless the U.S. dollar-decline sharply reverses and crude oil collapses, the BCOM is set for a strong 2H.

One Year Futures Curves

Name	20171	2016	2015	2014	2013
■ 1 Year Spread % of First Contract					
■ BCOM	-3.0	-2.2	-7.1	-4.4	0.3
■ Sector					
■ Livestock	3.7	8.1	0.6	8.3	4.1
■ Energy	0.5	-2.6	-18.7	-13.5	3.7
■ Industrial Metals	-1.6	-0.8	-1.5	-0.8	-1.8
■ Precious Metals	-2.0	-1.7	-1.0	-0.8	-0.7
■ Agriculture	-6.7	-4.2	-5.5	-5.6	-1.5
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■ Single Commodities					
Lean Hogs	4.5	2.9	-7.0	9.6	5.7
Cotton	3.6	1.7	-2.7	-8.6	6.7
Unleaded Gas	3.0	2.8	1.0	-12.3	7.0
Live Cattle	2.8	13.3	8.1	7.0	2.5
Palladium	2.1	-0.5	-0.2	-0.1	-0.5
Gas Oil	1.5	-4.8	-23.8	-12.0	3.1
Heating Oil	1.3	-4.5	-24.5	-4.5	3.2
Zinc	0.3	0.2	-2.8	-1.4	-2.3
Natural Gas	-0.4	-0.1	-22.6	-22.2	-3.2
Crude Oil	-0.7	-5.9	-20.4	-13.5	7.3
Platinum	-1.4	-1.1	-0.4	-0.4	-0.5
Copper (LME)	-1.5	-0.3	0.3	1.6	1.1
Brent Crude	-1.6	-3.1	-22.1	-16.4	4.9
Gold	-1.6	-1.5	-0.5	-0.3	-0.4
Nickel	-2.1	-1.9	-1.4	-1.1	-1.8
Copper (CME)	-2.2	-0.8	-1.1	-0.2	1.3
Soybean Oil	-2.3	-1.2	-3.1	-0.9	-3.8
Silver	-2.4	-2.0	-1.4	-1.2	-0.9
Aluminum	-2.7	-1.0	-2.7	-3.1	-7.5
Soybean	-3.2	0.4	-2.0	0.9	13.1
Soybean Meal	-3.4	-0.4	-5.7	9.8	19.9
Sugar	-7.2	4.8	0.9	-13.1	-8.2
Coffee	-9.6	-9.2	-8.4 -9.5	-7.4	-11.2
Corn Wheat	-10.6	-10.5 -17.1	-10.5	-8.1 -5.0	-9.2 -7.2
HRW Wheat	-16.4 -18.3	-17.1	-10.5	-6.3	-7.2 -5.5
nrw wheat	-10.3	-10.1	-14.9	-0.3	-5.5

Three Month Futures Curves

Name	2017↓	2016	2015	2014	2013
■ 3M Spread % of First Contract					
■ BCOM	-0.3	-2.9	-3.3	-1.2	-0.9
■ Sector					
■ Livestock	8.6	-6.0	-16.0	-5.4	-8.9
■ Energy	0.1	-3.0	-8.3	-5.0	0.0
■ Precious Metals	-0.6	-2.4	10.9	14.2	0.3
■ Industrial Metals	-0.8	-0.4	-0.4	-0.3	-0.6
■ Agriculture	-3.9	-2.3	-1.8	-1.5	-0.5
■ Single Commodities					
Lean Hogs	18.3	-15.6	-30.4	-12.7	-17.2
Unleaded Gas	10.1	-11.8	-19.2	-20.1	-6.3
Cotton	2.1	-0.5	-1.3	-1.3	0.3
Gas Oil	1.5	-1.7	-7.2	-3.4	0.6
Palladium	0.9	-0.1	0.0	-0.1	-0.2
Brent Crude	0.0	-2.9	-5.7	-5.0	0.8
Platinum	-0.3	-0.5	-0.2	0.0	-0.2
Heating Oil	-0.4	-2.1	-6.1	2.4	1.1
Zinc	-0.4	-0.6	-0.8	-0.5	-0.6
Aluminum	-0.4	-0.6	-0.8	-0.5	-0.6
Gold	-0.5	-4.2	22.3	28.9	1.0
Copper (LME)	-0.5	-0.2	0.1	0.9	0.2
Crude Oil	-0.7	-4.3	-7.9	-3.2	0.4
Silver	-0.8	-0.6	-0.5	-0.4	-0.4
Live Cattle	-1.0	3.7	-1.6	2.0	-0.6
Copper (CME)	-1.2	-0.5	-0.5	0.0	0.7
Nickel	-1.2	-0.5	-0.5	0.0	0.7
Soybean Oil	-1.3	-2.1	-2.1	-1.8	-2.7
Soybean Meal	-2.0	-2.9		6.9	8.4
Soybean	-2.2	-2.3	-0.6	-1.7	3.7
Sugar	-4.5	1.3	2.1	-2.8	-0.9
Coffee	-5.1	-3.4	-3.2	-3.2	-4.0
Corn	-6.9	-3.5	-3.3	-3.9	-3.6
HRW Wheat	-9.4	-5.4	-4.3	-1.5	-0.5
Wheat Natural Gas	-9.8	-6.4 4.9	-2.8 -3.7	-1.3 -0.5	-1.9
Naturat GdS	-10.1	4.9	-3./	-0.5	3.2

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Energy (Index weight: 29.0% of BCOM. Performance: July +4.6%, YTD -16.3, Spot -10.9%) *Note index weights are the YTD average

Crude Oil and Energy Setup for Continued 2H Recovery

Back at \$50, Crude Oil Appears Poised to Sustain the Handle. Crude oil and energy have proven in 2017 to be markets for range traders, but they're gaining upside momentum. With a 2017 WTI range of \$42.05-\$55.24 a barrel, indications at the end of July favored revisiting the upper end. The near-historic onslaught of futures position liquidation from February through June has been withstood with futures curves indicating demand in excess of supply. One-year futures curves ended July with the steepest backwardation in almost three years.

Up for the first July since 2013, the Bloomberg Unleaded Gasoline Subindex led all commodities, indicating that the bear market is over. Extreme bearish sentiment at the end of June, and a substantial reversal of the strong dollar, add to the foundation for a continued energy-price recovery.

<u>PERFORMANCE DRIVERS</u>

Fired-Up Unleaded Gas Recovery Fuels 2H Commodity Reversal. Unleaded gas leading commodity gainers in July portends continued recovery in 2H. On a spot basis, gasoline ended the month with a 2017 gain of 2%. For the first year since 2013, the Bloomberg Unleaded Gasoline Subindex rallied in July. Its 11.7% total return was the best monthly gain since December, on the back of declining inventories. Recovering neckand-neck with diesel, the Bloomberg Heating Oil Subindex is the closest to ending the year in the black, with a minus 6.8% total return as of July 31.

Unleaded Gas, Heating Oil Lead July Recovery

Security		Chg YTD %		thg Chg		2Yr %
			J	uly QTD Pc	t Chg	Chg
Bloomberg Heating Oil Subindex	-6.8%		+1	2.0% +12.09	+15.7%	-18.3%
BBG Energy Spot	-10.9%		+	4.8% +4.89	+15.6%	2.7%
Bloomberg Brent Crude Subindex	-11.2%		+	7.2% +7.29	+8.2%	-26.5%
Bloomberg WTI Crude Oil Subind	-11.6%		+	8.5% +8.5	+6.1%	-33.1%
Bloomberg Unleaded Gasoline Su	-12.0%		+1	1.7% +11.79	+17.6%	-22.6%
Bloomberg Energy Subindex Tota	-16.3%		+	4.6% +4.69		-31.7%
Bloomberg Natural Gas Subindex	-30.6%			7.7% -7.7	-24.2%	-46.9%

On a spot basis, unleaded gas and diesel led Bloomberg Commodity Index gainers in July. Natural gas was the leading energy decliner as summer-sizzle risks subsided with cooler weather. Further natural-gas declines should be limited by backwardation and the favorable demand vs. supply balance.

IMPROVING PRICING OUTLOOK.

Renewed Energy Vigor Displayed by Backwardated Futures Curves. Energy returns are poised for continued improvement on the back of the bullishly inclined futures curves. Ending July 0.5% in backwardation, the most since October 2014, the average of the Bloomberg Petroleum Subindex components' one-year futures curves indicates that demand exceeds supply. Led by the one-year unleaded gas future, 3% above the front future, and much less overweight net petroleum longs portends recovery. WTI crude oil, Brent, gasoline and diesel positions appear in early recovery days.

Petroleum Backwardation Supports Improved Returns



Managed-money net positions began July at the lowest level since just before crude oil prices bottomed in January 2016. From this February's peak to the June low, it was the most extreme liquidation for a similar period in the combined-database history since 2011.

Flushed Hedge Funds and Flattening Curves Improve Energy Outlook. Down 16% in 2017 but unchanged since April 2016, the worst should be over for the Bloomberg Energy Subindex Total Return. Improving demand vs. supply, flattening futures curves and much less overweight net longs indicate recovery. Managedmoney net positions in WTI crude oil, Brent, gasoline, diesel and natural gas declined 563,000 contracts earlier

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in the month before rebounding slightly. It was the most extreme liquidation for a similar period in the combined database history since 2011.



With the majority of excessive long positions liquidated and the forward-looking futures curve flattening, returns should improve. At 0.3% backwardation, the average of the one-year futures curves has flattened substantially from 14% in April 2016. Flattening contango indicates increasing demand vs. supply.

Front Energy Futures

Ticker	Last	Chg YTD q	Chg MTD	Chg	1 Yr	2 Yrs Ch	g Change
			0	QTD %	Ago	Ago Pct 1\	'r 2 Year
							Percent
+ Generic 1st 'XB' Future	170.6	+2.4%	+12.6%	+12.6%	132.1	184.1 +29.1	-7.3%
+ Generic 1st 'H0' Future	165.2	-3.1%	+12.0%	+12.0%	127.6	158.4 +29.5	4.3%
+ Generic 1st 'CL' Future	50.2	-6.6%	+9.0%	+9.0%	41.6	47.1 +20.6	6.5%
+ Generic 1st 'CO' Future	52.6	-7.3%	+9.9%	+9.9%	42.5	52.2 +24.0	88.
+ Generic 1st 'NG' Future	2.8	-24.4%	-7.3%	-7.3%	2.9	2.7 -2.2	3.6%

Metals

All (Index weight: 34.3% of BCOM. Performance: July +3.0, YTD +9.5)

Industrial (Index weight: 18.2% of BCOM. Performance: July +4.1, YTD +10.7, Spot +11.6%)

Precious (Index weight: 16.1% of BCOM. Performance: July +1.8%, YTD +8.1%, Spot +9.1%)

Metals Recovery May Portend Opposite in Stocks & Bonds

Metals May Be Taking the Baton from Dollar, Stocks and Bonds. Up almost 11% in 2017 through July 31, the Bloomberg Industrial Metals Subindex is neck-and-neck with the S&P 500 Index. Industrial metals appear to have a stronger foundation, potentially in the early days of recovery following a multiyear decline vs. the extended stock and bond markets. Momentum may be shifting asset classes. Metals melt-up risks are increasing on the back of the rapidly reverting dollar, increasing demand vs. supply measures and with stable crude oil no longer dragging the metals lower.

Global industrial metals demand vs. supply shows the highest sustained ratio in 12 years -- all-metals, the highest in six years, based on BI analysis. Organic U.S. inflation indicators are rapidly gaining momentum on the weaker dollar, stronger metals and very low unemployment rate.

PERFORMANCE DRIVERS

Reflation Trade Back On; Copper Takes the 2017 Commodity Lead. The signal from metals in July is that reflation is back on. Supported by the 9% decline this year in the Dollar Index Spot (on pace for its worst performance in 14 years) and increasing demand vs. supply, copper's 7% leap in July makes it the Bloomberg Commodity Index (BCOM) leader in 2017 with a 14.2% total return. When the primary industrial metal leads broad commodities, it's typically an organic recovery signal. All BCOM metals ended July with 2017 gains. Nickel led for the month, up 8.7%.

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Metals All in The Green for 2017 at End of July

Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		July	QTD Pct	Chg	Chg
Bloomberg Copper Subindex Tota	+14.2%	+6.8%	+6.8%	+27.7%	18.5%
Bloomberg Aluminum Subindex To	+11.7%	5%	5%	+14.3%	11.6%
Bloomberg Industrial Metals Su	+10.7%	+4.1%	+4.1%	+18.6%	16.8%
Bloomberg All Metals Total Ret	+9.5%	+3.0%	+3.0%	+3.8%	16.5%
Bloomberg Gold Subindex Total	+9.5%	+2.0%	+2.0%		14.2%
Bloomberg Precious Metals Subi	+8.1%	+1.8%	+1.8%	-10.7%	13.4%
Bloomberg Zinc Subindex Total	+7.8%	+1.2%	+1.2%	+22.7%	40.5%
Bloomberg Silver Subindex Tota	+4.2%	+1.0%	+1.0%	-19.0%	10.5%
Bloomberg Nickel Subindex Tota	±1 .1%	+8.7%	+8.7%	-5.4%	-10.2%

On a two-year return basis, nickel remains the only metal with a loss, 10%. A greater sign of inflation and higher bond yields, copper has surpassed gold in 2017, up about 10%. Copper has the highest negative correlation (0.51) to the dollar index among BCOM metals

IMPROVING OUTLOOK

Hedge-Fund Impatience Increases Risk of a 'Melt-Up' in Metals. Surging demand, the weakening dollar and the fewest managed-money net longs in over a year should support continued metal-price recovery. Stalled metals may be at risk of a melt-up in price, simply catching up with the weakening dollar. Up 9.5% in 2017 through July 31, yet only 3.8% higher over the past year, the Bloomberg All Metals Subindex could surge another 10% if its historical relationship to the dollar holds. Since 2005, the metals' quarterly beta to the Bloomberg Dollar Spot Index is minus 1.9.

Metals Demand Surges Past Supply, Positions Drop



Down 9% in 2017, the dollar appears to have peaked as metals underperform. It could be a negative divergence, but the excess of industrial metals demand vs. supply suggests otherwise. Pressured along with weaker crude

oil, metals appear to be in a pause-to-refresh stage before rally resumption.

Hedge Funds Defiantly Challenge Gold Despite Better Fundamental. A declining dollar and the fewest net-long positions since January 2016 should support precious metals prices. Add to the mix new net shorts on the early July price decline, and the market should need a bearish fundamental kicker to knock it down more. Gold, silver, platinum and palladium net managed-money positions at 30,314 on July 11, declined to the least long since Jan. 19, 2016, which was about a month after the Federal Reserve's first interest-rate hike this cycle.

Metals Prices Catching Up to Demand vs. Supply



Open interest up 6% from June 20 to July 11 with prices declining was an indication of new shorts. Considered quasi-currencies, precious metals are often the reciprocal of the dollar. Down 9% in 2017, the Bloomberg Dollar Spot Index is providing strong fundamental preciousmetals support.

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Agriculture (Index weight: 30.3% of BCOM. Performance: July +3.1%, YTD -3.4%, Spot +0.9)

Grains (Index Weight: 23.6% of BCOM.

Performance: July +6.2%, YTD +3.0%, Spot +8.6%)

Softs (Weight: 6.7% of BCOM.

Performance: July -6.6%, YTD -18.4%, Spot -16.8%)

Agriculture Marks Time in July For Further Recovery

What Weather? It May Be a Matter of Time for Grains Recover. Indicating a transition to demand exceeding supply, for the first July since 2012, the Bloomberg Agriculture Subindex posted a positive total return for the month, up 0.9%. Corn Belt weather remains the primary focus, but it will transition after August to actual production. Demand vs. supply analysis indicating the most favorable conditions in six years, and rapidly increasing U.S. exports with the peaking dollar an added kicker, suggest that higher prices are a matter of time.

If soybeans sustain the leadership role through August, it should set a bullish agriculture-sector tone for the rest of 2017. Wheat appears to have sparked the recovery, now in the hands of the primary agriculture commodities -- corn and soybeans.

PERFORMANCE DRIVERS

Soybeans Taking Baton From Wheat in July Sets Up for Key August. For the first time since 2012, the Bloomberg Soybean Subindex had a positive total return (5.6%) in the month of July, indicating a transition to a more demand-driven market. Big bumper crops in the U.S. in 2016 and South America in 2017 are being offset by rapidly increasing demand. July, when corn reaches its maturity, saw a 2.6% decline in the Bloomberg Corn Subindex, taking back the year's gain on some reduction of the weather premium. August should set the tone for the remainder of 2017 in agriculture.

Wheat Passes Rally Baton to Soybeans in July

Security	Chg	YTD %	Chg July	Chg QTD Pct	1Yr % Chg	2Yr % Chg
Bloomberg Live Cattle Subindex	+10.1%		-3.8%	-3.8%	+12.2%	-7.1%
Bloomberg Wheat Subindex Total	+6.8%		-9.7%	-9.7%	-2.3%	-24.8%
Bloomberg Livestock Subindex T	+6.0%		-4.8%	-4.8%	+11.0%	-6.6%
Bloomberg Kansas Wheat Subinde	+3.7%		-10.3%	-10.3%	-4.2%	-31.4%
Bloomberg Grains Subindex Tota	+.6%		-2.3%			-13.3%
Bloomberg Lean Hogs Subindex T					+8.1%	-5.4%
Bloomberg Corn Subindex Total	3%					-17.4%
BBG Soybean Meal TR	9%		+4.7%	+4.7%		-4.3%
Bloomberg Soybean Oil Subindex	-1.2%		+5.5%	+5.5%	+9.4%	5.5%
Bloomberg Cotton Subindex Tota	-1.6%		+.5%	+.5%	-6.8%	6.9%
Bloomberg Soybeans Subindex To	-2.1%		+5.6%	+5.6%		2.5%
Bloomberg Agriculture Subindex	-2.5%		+.9%	+.9%		-4.3%
Bloomberg Coffee Subindex Tota	-3.0%		+10.9%	+10.9%		-8.1%
BBG Softs TR	-12.4%		+7.3%	+7.3%	-16.3%	10.8%
Bloomberg Sugar Subindex Total	-24.2%		+8.1%	+8.1%	-24.6%	17.9%

August is when soybeans are made, as farmers say, so the most widely traded futures should be a key 2H indicator for broader agriculture. A better winter-wheat harvest than expected pressured wheat prices and the grains. Soft commodities have sprung back to life on sugar, which appears to have bottomed.

MACRO DRIVERS LEANING BULLISH

Agriculture Appears in Early Recovery Stages on Surging Demand. The bear market in agriculture prices should be in the early transition stages, if history is a guide. Near the end of June, the Bloomberg Agriculture Subindex Total Return reached a nine-year low. Up about 6% since June 26, the index is still 18% below the 2016 high, yet the ratio of demand vs. supply is the highest in six years. Dominated by the grains, agriculture appears to be at the inflection point of a price bottom as elastic demand exceeds supply, due to the multiyear price decline.

Ag Demand vs. Supply Highest Since 2011



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Wheat, up 16% in 2017, should just be getting things started as the prime corn- and soybean-growing season progresses. Agriculture commodities, up 0.8% this month, haven't had a positive July since 2012. Managed-money net positions (202,000) remain well below the 10-year average of 265,000. Positions are just recovering from the end of May, greatest amount of net shorts in the combined database history since 2006.

Farmers May Just Be Starting to Get Upper Hand on Hedge Funds. The 2017 grain-price rally appears to be in the nascent stages. Corn Belt production will likely need to be quite a bumper crop to reverse the price recovery. Corn, soybeans and wheat managed-money net positions have just recovered from record short, appearing to be in the early covering stages. Indicating new shorts, open interest increased 3% last week as the Bloomberg Grains Subindex declined 3.5%. Extreme bearishness may be just reverting as demand vs. supply trends have shifted favorably.

Recent Record Shorts, Exports Soaring



BI's analysis of USDA data shows that corn, soybean and wheat exports are on a record pace. Global demand vs. supply trends also are the most favorable since 2012. The 1.011 ratio of global grain consumption vs. production is near 2012's peak (1.022) and well above the historical low of 0.95 in 2014.

SOFTS SWEETENING WITH SUGAR

Hedge Funds Dare Sugar With Support Disparity Similar to 2010. Sugar short-covering risks are historically elevated. Since 2006, sugar net managed positions have never been shorter, with such a distinct trend in USDA global stocks-to-use favoring higher prices. In July, ICE sugar net positions reached 118,000

short, which were last exceeded in March 2015, three months before prices bottomed, even as stocks-to-use trended unfavorably higher. The most recent similar price divergence from a favorable stocks-to-use trend occurred in 2010.

Extreme Sugar Shorts vs. Peaking Stocks-to-Use



At the end of 2008, sugar stocks-to-use shifted down as prices began to recover earlier that year. From the 2010 peak to trough, prices corrected 54% before resuming the rally. Prices have corrected 47% from the 2016 peak to the 2017 trough through July 31.

BCOM Forwards and Roll Select

Ticker	Ticker		YTD Change ⁹	ł I	Chg June	Chg 6M Pct	Chg Pct 1Yr	Change 2 Year
								Percent
+ BBG Cmdty Spot	BCOMSP				+1.9%	7%	+8.5%	10.4
+ BBGCI-F6T	BCOMF6T	1%			+2.5%		+5.0%	2.3
+ BBGCI-F5T	BCOMF5T	2%			+2.6%	-1.4%	+4.6%	1.4
+ BBGCI-F4T	BCOMF4T	4%			+2.5%	-1.6%	+4.9%	1.4
+ BBG RollSelctT	BCOMRST	-1.0%			+2.5%	-2.1%	+3.5%	-1.4
+ BBG Cmdty 3 M Fwd TR	BCOMF3T	-1.4%			+2.4%	-2.4%	+2.5%	-2.4
+ BBG Cmdty 2 M Fwd TR	BCOMF2T	-1.6%			+2.4%	-2.5%	+2.7%	-3.1
+ BBG Cmdty 1 M Fwd TR	BCOMF1T	-2.5%			+2.3%	-3.0%	+1.4%	-4.8
+ BBG Commodity TR	BCOMTR	-3.1%			+2.3%	-3.2%	+.8%	-7.3
+ BBG Commodity	BCOM	-3.6%			+2.2%	-3.7%	+.1%	-8.1

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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	-0.1	-0.1	2.3	2.3	0.7	-3.1	8.0	-7.3	-33.5	-40.9
■ Energy Index	-0.3	-0.3	4.6	4.6	-2.6	-16.3	-0.2	-31.7	-64.0	-62.7
■ All Metals Index	0.3	0.3	3.0	3.0	3.0	9.5	3.8	16.5	-10.3	-21.1
■ Industrial Metals Index	0.5	0.5	4.1	4.1	6.5	10.7	18.6	16.8	-14.6	-16.2
■ Precious Metals Index	0.0	0.0	1.8	1.8	-0.9	8.1	-10.7	13.4	-7.8	-29.2
■ Ags & Livestock Index	-0.3	-0.3	-0.2	-0.2	1.2	-0.9	-2.7	-4.3	-21.3	-39.2
■ Livestock Index	-0.5	-0.5	-4.8	-4.8	-1.5	6.0	11.0	-6.6	-22.1	-12.1
■ Agriculture Index	-0.3	-0.3	0.9	0.9	1.7	-2.5	-5.3	-4.3	-21.6	-43.7
■ Grains Index	-0.9	-0.9	-2.3	-2.3	2.9	0.6	-2.1	-13.3	-23.2	-50.9
■ Softs Index	1.9	1.9	7.3	7.3	-4.6	-12.4	-16.3	10.8	-27.5	-42.5
■ BCOM EX Indices TR										
■ BCOM Index Roll Select TR	0.0	0.0	2.5	2.5	0.9	-1.0	3 . 5	-1.4	-28.2	-33.9
■ BCOM Index Forwards TR										
■ BCOM Index ER	-0.1	-0.1	2.2	2.2	0.5	-3.6	0.1	-8.1	-34.0	-41.5
■ BCOM Index Spot	-0.1	-0.1	1.9	1.9	0.8	0.0	8.5	10.4	-16.6	-24.2
■ Stocks										
■ S&P 500 Index TR	-0.1	0.0	2.1	2.1	4.2	11.7	16.1	22.6	36.4	99.4
Bonds										
■ Barclays U.S. Aggregate	0.1	0.0	0.4	0.4	1.1	2.7	-0.5	5.4	8.4	10.5
■ Currencies										
■ Bloomberg U.S. Dollar Spot Index	-0.3	-0.3	-2.6	-2.6	-5.2	-9.0	-2.3	-4.6	12.9	14.7
US Dollar Index	-0.5	-0.5	-2.9	-2.9	-6.3	-9.2	-2.8	-4.6	14.0	12.3
Pound Index	0.0	0.0	-0.6	-0.6	-2.5	0.1	-3.0	-20.9	-17.9	-13.3

Name	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ Commodities										
■ BCOM Index TR	-3.1%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%	18.9%	-35.6%
■ Energy Index	-16.3%	16.3%	-38.9%	-39.3%	5.2%	-9.4%	-16.0%	-10.5%	-5.3%	-47.3%
■ All Metals Index	9.5%	15.7%	-19.5%	-7.1%	-21.6%	2.9%	-11.5%	25.9%	60.2%	-33.3%
■ Industrial Metals Index	10.7%	19.9%	-26.9%	-6.9%	-13.6%	0.7%	-24.2%	16.2%	80.0%	-48.3%
■ Precious Metals Index	8.1%	9.5%	-11.5%	-6.7%	-30.8%	6.3%	4.6%	42.7%	29.2%	-4.1%
■ Ags & Livestock Index	-0.9%	0.9%	-16.1%	-6.0%	-12.6%	2.7%	-12.4%	33.9%	7.9%	-27.1%
■ Livestock Index	6.0%	-5.6%	-18.8%	11.6%	-3.5%	-3.5%	-2.3%	9.3%	-15.1%	-28.4%
■ Agriculture Index	-2.5%	2.1%	-15.6%	-9.2%	-14.3%	4.0%	-14.4%	38.5%	13.7%	-27.5%
■ Grains Index	0.6%	-5.9%	-19.4%	-9.4%	-16.9%	18.3%	-14.4%	30.3%	-1.6%	-26.3%
■ Softs Index	-12.4%	13.2%	-9.9%	-10.1%	-16.9%	-22.4%	-14.0%	59.9%	44.2%	-28.4%
■ BCOM EX Indices TR										
■ BCOM Index Roll Select TR	-1.0%	14.6%	-23.4%	-15.2%	-9.1%	-0.4%	-8.8%	19.5%	23.1%	-29.8%
■ BCOM Index Forwards TR										
■ BCOM Index ER	-3.6%	11.4%	-24.7%	-17.0%	-9.6%	-1.1%	-13.4%	16.7%	18.7%	-36.6%
■ BCOM Index Spot	0.0%	23.1%	-18.4%	-17.0%	-8.7%	3.7%	-8.1%	26.4%	41.2%	-28.9%
■ Stocks										
■ S&P 500 Index TR	11.6%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%
■ Bonds										
■ Barclays U.S. Aggregate	2.7%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%
■ Currencies										
■ Bloomberg U.S. Dollar Spot Index	-9.0%	2.8%	9.0%	11.0%	3.3%	-0.7%	1.8%	-1.8%	-4.8%	8.9%
US Dollar Index	-9.1%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%	-4.2%	6.0%
Pound Index	6.9%	-30.3%	-5.7%	-4.3%	3.9%	8.7%	-0.5%	-6.6%	17.3%	-45.5%

Tables & Charts – July 2017 Edition

Performance – Commodity Total Returns

Key Metrics

Name	% Change on Day	WTD % Change					2 Yr % Change
■ BCOM Total Return Indices							
Copper Index	0.6	0.6	6.8	10.7	14.2	27.7	18.5
Aluminum Index	0.6	0.6	-0.5	-0.3	11.7	14.3	11.6
Live Cattle Index	-0.4	-0.4	-3.8	-6.5	10.1	12.2	-7.1
Gold Index	-0.1	-0.1	2.0	-0.2	9 . 5	-7.2	14.2
Zinc Index	0.7	0.7	1.2	6.2	7.8	22.7	40.5
Wheat Index	-1.3	-1.3	-9.7	6.6	6.8	-2.3	-24.8
Silver Index	0.6	0.6	1.0	-2.9	4.2	-19.0	10.5
HRW Wheat Index	-1.3	-1.3	-10.3	4.8	3.7	-4.2	-31.4
Platinum Index	0.4	0.4	1.6	-0.9	3.6	-18.9	-5.4
Nickel Index	0.1	0.1	8.7	7.7	1.1	-5 . 4	-10.2
Lean Hogs Index	-0.7	-0.7	-6.3	7.2	0.0	8.1	-5.4
Corn Index	-0.9	-0.9	-2.6	-0.6	-0.3	-0.7	-17.4
Soybean Meal Index	-0.9	-0.9	4.7	1.8	-0.9	-11.1	-4.3
Soybean Oil Index	0.3	0.3	5.5	9.4	-1.2	9.4	5.5
Cotton Index	0.1	0.1	0.5	-8.8	-1.6	-6.8	6.9
Soybeans Index	-0.6	-0.6	5.6	4.9	-2.1	-3.6	2.5
Coffee Index	1.0	1.0	10.9	2.8	-3.0	-13.1	-8.1
Heating Oil Index	1.6	1.6	12.0	8.8	-6.8	15.7	-18.3
Brent Crude Index	1.0	1.0	7.2	-0.6	-11.2	8.2	-26.5
WTI Crude Index	0.9	0.9	8 . 5	0.3	-11.6	6.1	-33.1
Gasoline Index	1.9	1.9	11.7	9.6	-12.0	17.6	-22.6
Sugar Index	3.8	3.8	8.1	-8.6	-24.2	-24.6	17.9
Natural Gas Index	-5.0	-5.0	-7.7	-16.9	-30.6	-24.2	-46.9

Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ BCOM Total Return Indices										
Copper Index	14.2%	15.7%	-25.1%	-16.6%	-8.8%	5.0%	-24.4%	29.5%	130.0%	-53.1%
Aluminum Index	11.7%	9.7%	-22.9%	-3.1%	-20.7%	-4.0%	-21.7%	5.4%	33.8%	-40.1%
Live Cattle Index	10.1%	-7.4%	-14.3%	22.1%	-5.0%	-3.9%	-1.0%	15.0%	-9.8%	-26.2%
Gold Index	9.5%	7.7%	-10.9%	-1.7%	-28.7%	6.1%	9.6%	28.7%	22.9%	3.9%
Zinc Index	7.8%	57.5%	-28.0%	3.5%	-7.0%	9.0%	-27.8%	-8.8%	98.3%	-51.0%
Wheat Index	6.8%	-24.1%	-22.2%	-9.4%	-27.2%	9.8%	-34.0%	21.2%	-26.0%	-38.5%
Silver Index	4.2%	14.0%	-12.7%	-20.4%	-36.6%	7.1%	-10.1%	81.8%	47.6%	-25.4%
HRW Wheat Index	3.7%	-25.3%	-32.7%	-4.7%	-26.2%	5.6%	-22.9%	42.1%	-23.8%	-36.5%
Platinum Index	3.6%	0.8%	-26.5%	-12.3%	-11.8%	8.7%	-21.8%	19.3%	54.0%	-38.2%
Nickel Index	1.1%	11.8%	-42.6%	7.3%	-20.1%	-10.2%	-24.7%	32.2%	54.9%	-56.2%
Lean Hogs Index	0.0%	-2.9%	-26.1%	-4.4%	-2.0%	-2.9%	-4.6%	0.3%	-22.5%	-31.9%
Corn Index	-0.3%	-9.8%	-19.2%	-13.3%	-30.3%	19.0%	1.1%	30.7%	-10.1%	-21.9%
Soybean Meal Index	-0.9%	18.1%	-18.0%	11.8%	20.0%	49.1%	-18.1%	38.9%	34.7%	-8.6%
Soybean Oil Index	-1.2%	7.3%	-7.7%	-20.6%	-22.4%	-9.8%	-15.2%	33.8%	14.2%	-36.5%
Cotton Index	-1.6%	10.5%	3.0%	-21.2%	9.0%	-12.7%	-21.7%	98.2%	30.1%	-42.8%
Soybeans Index	-2.1%	14.8%	-14.6%	-5.5%	10.5%	24.0%	-16.4%	34.9%	22.9%	-21.2%
Coffee Index	-3.0%	-1.3%	-31.5%	37.8%	-30.5%	-41.6%	-11.2%	67.0%	10.3%	-26.2%
Heating Oil Index	-6.8%	33.5%	-42.8%	-38.8%	0.4%	5.5%	10.7%	8.3%	20.5%	-47.2%
Brent Crude Index	-11.2%	25.4%	-45.6%	-47.6%	7.2%		16.8%	11.5%	28.6%	-51.2%
WTI Crude Index	-11.6%	7.1%	-44.3%	-41.7%	6.8%		-3.6%	3.8%	4.4%	-53.2%
Gasoline Index	-12.0%	6.4%	-12.6%	-43.8%	1.9%	25.7%	14.5%	13.1%	74.7%	-61.4%
Sugar Index	-24.2%	22.8%	-4.7%	-30.9%	-20.0%		-11.9%	24.0%	86.3%	-19.9%
Natural Gas Index	-30.6%	10.3%	-39.9%	-30.7%	5.0%	-30.6%	-47.1%	-40.6%	-51.6%	-37.1%

Tables & Charts – July 2017 Edition

Performance – Prices Key Metrics

Name	% Change on Day	WTD % Change	MTD % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change
■ BCOM Single Commodity Price		3			5		5
Palladium	0.5	0.5	5.7	7.0	29.5	24.7	44.8
Lean Hogs	-1.4	-1.4	-11.4	19.9	21.4	16.4	2.3
Wheat	-1.4	-1.4	-7.1	13.4	16.3	16.4	-5.0
Copper (CME)	0.6	0.6	7.1	11.3	15.4	30.1	22.3
Copper (LME)	0.6	0.6	7.1	11.0	14.8	29.0	21.5
HRW Wheat	-1.3	-1.3	-7.1	11.8	13.4	15.9	-3.6
Aluminum	0.6	0.6	-0.6	-0.2	12.1	16.1	19.5
Gold	0.0	0.0	2.1	0.0	10.2	-6.0	15.9
Zinc	0.7	0.7	1.1	6.6	8.7	24.2	45.8
Corn	-0.9	-0.9	0.1	3.6	5.3	10.8	-0.1
Silver	0.7	0.7	1.5	-2.2	5.2	-17.3	14.1
Platinum	0.7	0.7	2.1	-0.6	4.6	-18.0	-4.3
Gasoline	1.8	1.8	12.6	10.2	2.4	29.1	-7.3
Nickel	0.1	0.1	8.8	8.2	2.0	-4.0	-7.5
Soybean Meal	-0.7	-0.7	4.7	2.2	1.8	-9.0	-10.2
Coffee	1.0	1.0	12.3	6.3	1.6	-4.8	11.2
Soybean Oil	0.3	0.3	5.4	10.4	0.8	14.4	15.8
Soybeans	-0.6	-0.6	5.5	5.2	-0.2	-3.7	1.4
Cotton	0.4	0.4	-6.4	-12.1	-0.2	-4.9	10.1
Gas Oil	2.0	2.0	13.3	9.0	-1.2	33.3	1.2
Heating Oil	0.7	0.7	12.0	9.8	-3.1	29.5	4.3
Live Cattle	-0.8	-0.8	-3.7	-9.7	-3.5	-1.0	-23.1
WTI Crude	0.9	0.9	9.0	1.7	-6.6	20.6	6.5
Brent Crude	0.2	0.2	9.9	1.8	-7.3	24.0	8.0
Sugar	3.8	3.8	9.0	-7.0	-23.6	-21.7	33.8
Natural Gas	-4.5	-4.5	-7.4	-14.2	-24.5	-2.3	3.5

Historical										
Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
BCOM Single Commodity Price										
Palladium	30.1%	21.6%	-29.6%	11.2%	2.1%	7.2%	-18.3%	96.5%	116.7%	-50.1%
Lean Hogs	21.4%	10.6%	-26.4%	-4.9%	-0.3%	1.7%	5.7%	22.3%	7.1%	5.2%
Wheat	16.5%	-13.2%	-20.3%	-2.6%	-22.2%	19.2%	-17.8%	46.7%	-11.3%	-31.0%
Copper (CME)	14.9%	17.4%	-24.4%	-16.8%	-7.0%	6.3%	-22.7%	32.9%	137.3%	-53.6%
Copper (LME)	14.8%	17.3%	-25.8%	-13.9%	-6.8%	4.2%	-21.2%	31.2%	141.1%	-54.2%
HRW Wheat	13.8%	-10.7%	-25.2%	-2.2%	-22.9%	15.9%	-15.7%	58.7%	-14.9%	-31.0%
Aluminum	12.1%	12.5%	-17.9%	4.1%	-13.9%	2.5%	-18.8%	11.6%	45.6%	-36.0%
Gold	10.2%	8.6%	-10.5%	-1.5%	-28.3%	7.0%	10.2%	29.7%	24.0%	5.5%
Zinc	8.7%	60.2%	-26.2%	6.0%	-0.5%	12.2%	-25.2%	-3.5%	113.5%	-49.6%
Corn	4.8%	-1.9%	-9.6%	-5.9%	-39.6%	8.0%	2.8%	51.7%	1.8%	-10.6%
Platinum	4.7%	1.1%	-26.2%	-11.8%	-10.9%	9.9%	-21.1%	21.5%	55.9%	-38.7%
Silver	4.4%	15.8%	-11.5%	-19.5%	-35.9%	8.3%	-9.8%	83.7%	49.1%	-24.3%
Nickel	2.0%	13.5%	-41.8%	9.0%	-18.6%	-9.2%	-24.2%	33.8%	58.8%	-55.4%
Soybean Meal	1.1%	18.4%	-27.5%	-16.7%	4.1%	35.9%	-16.4%	18.0%	4.5%	-9.4%
Coffee	0.8%	8.2%	-23.9%	50.5%	-23.0%	-36.6%	-5.7%	76.9%	21.3%	-17.7%
Soybean Oil	0.1%	12.7%	-4.4%	-17.6%	-21.0%	-5.6%	-9.8%	43.1%	21.2%	-31.9%
Cotton	0.1%	11.6%	5.0%	-28.8%	12.6%	-18.1%	-36.6%	91.5%	54.2%	-27.9%
Gasoline	0.0%	31.4%	-11.7%	-48.5%	-0.9%	4.7%	9.5%	19.5%	103.6%	-59.3%
Soybeans	-1.1%	14.4%	-14.5%	-22.3%	-7.5%	18.4%	-14.0%	34.0%	6.9%	-18.9%
Gas Oil	-2.4%	53.6%	-36.3%	-45.8%	1.9%	0.3%	21.2%	20.0%	51.9%	-50.1%
Heating Oil	-2.5%	54.8%	-40.4%	-40.0%	1.1%	3.8%	15.4%	20.1%	50.7%	-46.8%
Live Cattle	-3.5%	-15.2%	-16.4%	21.5%	1.8%	8.9%	12.1%	25.9%	0.0%	-10.5%
WTI Crude	-7.2%	45.0%	-30.5%	-45.9%	7.2%	-7.1%	8.2%	15.1%	77.9%	-53.5%
Brent Crude	-8.1%	52.4%	-35.0%	-48.3%	-0.3%	3.5%	13.3%	21.6%	70.9%	-51.4%
Sugar	-23.5%	28.0%	5.0%	-11.5%	-15.9%	-16.3%	-27.5%	19.2%	128.2%	9.1%
Natural Gas	-24.4%	59.3%	-19.1%	-31.7%	26.2%	12.1%	-32.1%	-20.9%	-0.9%	-24.9%

Bloomberg Commodity Index (BCOM) Tables & Charts – July 2017 Edition

Performance – Volatility

	Clatility	1					d		
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		On Duy	change	change	change	change	change	change	change
Lean Hogs	28.6	-1.3	-1.3	12.6	12.6	27.5	17.0	-13.9	-0.4
Live Cattle	21.1	1.4	1.4	-4.0	-4.0	12.7	16.7	1.7	56.3
Soybeans	19.1	-5.1	-5.1	-8.6	-8.6	5.4	12.7	-24.0	-4.9
Unlead Gas	27.2	3.9	3.9	0.0	0.0	-2.2	8.1	-36.6	-26.8
Soybean Oil	20.9	-1.3	-1.3	1.4	1.4	-4.5	7.4	4.8	0.1
Corn	21.0	-1.4	-1.4	-20.4	-20.4	-15.1	6.6	-12.7	-26.3
Crude Oil	29.3	2.6	2.6	-0.9	-0.9	2.3	2.8	-27.8	-20.1
Wheat	22.6	-2.0	-2.0	-17.9	-17.9	-10.7	2.0	-6.9	-15.2
HRW Wheat	22.5	-2.5	-2.5	-16.3	-16.3	-8.0	1.1	-3.8	-15.7
Cotton	19.3	2.8	2.8	-2.7	-2.7	19.3	1.1	-20.7	-2.5
Soybean Meal	21.7	-4.2	-4.2	-4.7	-4.7	4.7	0.2	-23.8	-12.5
Brent Crude Coffee	28.9	3.2	3.2	3.7	3.7	-0.9	-1.1	-30.9	-15.4
Heating Oil	27.9 23.5	0.4 1.4	0.4 1.4	-1.9 -4.0	-1.9 -4.0	-1.3 -10.1	-6.2 -13.8	-14.4 -34.2	-12.9 -26.2
Aluminum	14.8	0.0	0.0	0.0	0.0	-29.0	-15.7	-34.2	-26.2
Gas Oil	24.1	-3.6	-3.6	-4.4	-4.4	-12.9	-16.3	-34.4	-13.4
NaturalGas	30.4	-6.3	-6.3	-10.4	-10.4	-5.6	-17.5	-20.8	-16.3
Sugar	24.5	-0.5	-0.5	-22.2	-22.2	-1.4	-18.8	-21.3	5.4
Nickel	26.6	7.8	7.8	47.4	47.4	-5.0	-23.3	5.7	-24.6
Zinc	21.9	0.1	0.1	-8.8	-8.8	-24.7	-23.5	-0.1	-8.8
Silver	19.4	-1.1	-1.1	14.0	14.0	0.9	-23.7	-31.2	-27.8
Gold	11.2	3.1	3.1	10.4	10.4	0.2	-23.9	-26.8	-28.0
Copper (LME)	15.9	3.7	3.7	8.3	8.3	-17.5	-24.2	25.3	-36.8
Palladium Platinum	22.5 14.9	-2.4 4.9	-2.4 4.9	-18.5 -12.4	-18.5 -12.4	-6.0 -5.3	-24.5 -29.7	-16.0 -24.1	-11.6 -28.3
Copper (COMEX)	15.2	4.8	4.8	3.2	3.2	-20.7	-37.1	-23.0	-40.3
							2002		
■ BCOM 60 Day Historical Volatili	tv								
Cotton	33.4	-0.2	-0.2	30.5	30.5	83.2	94.5	37.9	72.5
Live Cattle	32.0	0.2	0.2	6.8	6.8	39.7	47.2	38.7	161.9
HRW Wheat	32.0	0.2	0.2	6.8	6.8	39.7	47.2	21.6	-5.3
Sugar	35.2	2.7	2.7	4.0	4.0	23.3	35.0	10.9	16.6
Wheat	32.3	0.5	0.5	9.8	9.8	35.9	18.0	16.5	-13.7
Soybeans	19.6	0.2	0.2	34.7	34.7	49.7	13.2	-39.6	-9.7
Corn	25.5	0.0	0.0	18.9	18.9	48.8	11.4	-24.9	-13.5
Coffee	29.8	0.2	0.2	-2.5	-2.5	32.4	3.2	-7.5	-2.5
Soybean Meal	21.5	0.1	0.1	35.9	35.9	49.0	-4.3	-38.4	-21.4
Unlead Gas	26.8	0.2	0.2	1.8	1.8	-14.7	-17.2	-25.8	-21.1
Crude Oil	29.6	-0.3	-0.3	2.0	2.0	28.9	-19.0	-20.5	-12.8
Heating Oil	25.0	-0.7	-0.7	4.7	4.7	32.9	-21.3	-33.0	-17.1
Brent Crude	28.7	-0.5	-0.5	5.5	5.5	33.3	-21.5	-23.5	-8.8
Gas Oil	25.6	0.0	0.0	7.1	7.1	17.7	-22.0	-23.9	-8.7
Platinum	19.6	0.1	0.1	-6.7	-6.7	14.8		-13.7	31.2
Palladium		-0.9	-0.9	-11.8	-11.8	-4.7	-23.8 -25.1	-15.7	
	20.2								-13.0
Aluminum	11.8	-1.8	-1.8	-10.4	-10.4	-20.1	-26.3	-31.3	-26.1
Gold	10.4	0.0	0.0	-3.9	-3.9	3.7	-27.2	-37.1	-19.1
Soybean Oil	17.4	-0.8	-0.8	-1.7	-1.7	-14.1	-30.4	-22.2	-25.6
Copper (CME)	15.3	-0.1	-0.1	-13.6	-13.6	-27.4	-30.7	-23.4	-21.9
Nickel Gas	21.9	0.0	0.0	-10.5	-10.5	-25.3	-30.9	-34.0	-40.3
Silver	18.7	0.1	0.1	9.4	9.4	15.7	-36.1	-18.4	-13.6
Lean Hogs	36.7	0.4	0.4	28.1	28.1	17.0	-39.3	33.0	47.4
Natural Gas	33.6	3.6	3.6	9.1	9.1	-14.0	-41.0	-28.6	-10.9
Copper (LME)	13.6	-4.6	-4.6	-20.4	-20.4	-36.1	-41.3	-30.5	-34.2
Zinc	19.2	0.2	0.2	-20.7	-20.7	-29.6	-45.9	-18.6	-9.5

Tables & Charts - July 2017 Edition

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

Name	Current Position	1 Yr Ago	1 Yr Change			1 Mth Change	3 Mth Change	2 Yr Change
■ 1 Year Spread % of First Contract								
■ Sector								
■ Energy	0.5	-12.1	12.6	3.1	3.1	3.1	1.8	8.6
■ Precious Metals	-2.0	-1.7	-0.4	-0.3	0.1	0.1	0.1	-1.2
■ Industrial Metals	-1.6	-1.1	-0.5	-0.9	-0.6	-0.6	-0.1	0.5
■ Agriculture	-6.7	-3.6	-3.2	-2.5	-1.3	-1.3	-0.8	-1.3
■ Livestock	3.7	1.0	2.7	-4.5	-7.4	-7.4	6.1	0.4
- 5004								
■ BCOM	-3.0	-4.9	1.8	-0.9	-0.6	-0.6	0.8	0.5
■ Single Commodities								
Crude Oil	-0.7	-13.6	12.9	5.3	4.3	4.3	1.9	12.9
Heating Oil	1.3	-13.2	14.5	5.8	5.5	5.5	6.2	9.7
Gas Oil	1.5	-14.8	16.3	6.3	5.1	5.1	5.8	11.6
Natural Gas	-0.4	-7.2	6.8	-0.3	-5.7	-5.7	-10.9	11.2
Unleaded Gas	3.0	-10.1	13.1	0.2	6.2	6.2	7.5	-5.1
Brent Crude	-1.6	-13.4	11.9	1.5	3.5	3.5	0.2	11.5
Silver	-2.4	-1.7	-0.7	-0.4	0.1	0.1	0.2	-1.1
Palladium	2.1	-0.4	2.5	2.6	-0.1	-0.1	2.3	2.3
Platinum	-1.4	-0.5	-0.9	-0.2	-0.3	-0.3	-0.2	-1.1
Gold	-1.6	-1.6	0.0	-0.1	0.0	0.0	0.0	-1.2
Copper (LME)	-1.5	-0.7	-0.8	-1.2	-0.4	-0.4	-0.3	-0.5
Copper (CME)	-2.2	-1.5	-0.8	-1.4	-0.4	-0.4	-0.1	-0.3
Nickel	-2.1	-1.4	-0.8	-0.2	0.1	0.1	0.3	-0.8
Zinc	0.3	0.1	0.2	0.1	-1.3	-1.3	0.5	2.0
Aluminum	-2.7	-2.1	-0.6	-1.7	-0.9	-0.9	-1.1	2.4
Wheat	-16.4	-20.7	4.2	0.7	-4.8	-4.8	2.4	-11.0
Soybean	-3.2	5.4	-8.7	-3.6	0.5	0.5	-1.0	-7.8
Soybean Meal	-3.4	6.7	-10.1	-2.9	0.4	0.4	-1.9	-14.6
Soybean Oil	-2.3	-4.5	2.3	-1.1	0.2	0.2	1.3	1.1
HRW Wheat	-18.3	-19.0	0.8	-2.2	-4.6	-4.6	0.3	-5.3
Corn	-10.6	-9.7	-0.9	-0.1	0.7	0.7	1.4	-4.6
Cotton	3.6	2.1	1.6	2.0	-5.1	-5.1	-3.9	5.2
Sugar	-7.2	4.8	-12.0		0.3	0.3	-3.1	7.3

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.

i ilotoi ioai										
Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ 1 Year Spread % of First Contract										
■ BCOM	-3.0	-2.2	-7.1	-4.4	0.3	-0.9	-2.0	2.3	-4.1	-13.1
■ Sector										
▼ Livestock	3.7	8.1	0.6	8.3	4.1	-0.7	-0.2	-1.8	-4.8	-10.4
■ Energy	0.5	-2.6	-18.7	-13.5	3.7	-0.1	-1.9	-4.3	-9.7	-30.2
■ Industrial Metals	-1.6	-0.8	-1.5	-0.8	-1.8	-2.5	-2.1	0.5	-2.3	-5.0
■ Precious Metals	-2.0	-1.7	-1.0	-0.8	-0.7	-0.7	-0.7	-0.9	-0.9	-0.6
■ Agriculture	-6.7	-4.2	-5.5	-5.6	-1.5	-2.3	-1.8	12.2	-0.3	-12.2
■ Single Commodities										
Lean Hogs	4.5	2.9	-7.0	9.6	5.7	2.0	4.2	0.2	-5.3	-15.2
Cotton	3.6	1.7	-2.7	-8.6	6.7	-5.7	3.6	34.6	-2.6	-18.5
Unleaded Gas	3.0	2.8	1.0	-12.3	7.0	9.8	7.9	3.7	-2.9	-30.8
Live Cattle	2.8	13.3	8.1	7.0	2.5	-3.3	-4.5	-3.8	-4.3	-5.6
Palladium	2.1	-0.5	-0.2	-0.1	-0.5	-0.2	-0.4	0.0	-0.3	-20.5
Gas Oil	1.5	-4.8	-23.8	-12.0	3.1	2.9	3.0	-4.2	-11.0	-25.1
Heating Oil	1.3	-4.5	-24.5	-4.5	3.2	2.1	2.1	-3.4	-8.0	-23.2
Zinc	0.3	0.2	-2.8	-1.4	-2.3	-4.5	-3.9	-1.7	-3.2	-7.0
Natural Gas	-0.4	-0.1	-22.6	-22.2	-3.2	-20.7	-29.9	-18.4	-21.1	-31.6
Crude Oil	-0.7	-5.9	-20.4	-13.5	7.3	-1.3	1.4	-3.2	-6.7	-35.1
Platinum	-1.4	-1.1	-0.4	-0.4	-0.5	-0.7	-1.0	-0.5	-1.2	-54.1
Copper (LME)	-1.5	-0.3	0.3	1.6	1.1	-0.7	-0.3	2.7	-0.9	-3.0
Brent Crude	-1.6	-3.1	-22.1	-16.4	4.9	6.3	4.0	-0.4	-8.3	-35.3
Gold	-1.6	-1.5	-0.5	-0.3	-0.4	-0.7	-0.9	-0.9	-1.0	-0.9
Nickel	-2.1	-1.9	-1.4	-1.1	-1.8	-1.4	-0.1	1.1	-1.1	-3.0
Copper (CME)	-2.2	-0.8	-1.1	-0.2	1.3	-1.1	-0.8	2.5	-1.2	-2.6
Soybean Oil	-2.3	-1.2	-3.1	-0.9	-3.8	-2.8	-1.6	-0.9	-5.3	-6.0
Silver	-2.4	-2.0	-1.4	-1.2	-0.9	-0.7	-0.5	-0.9	-0.8	-0.4
Aluminum	-2.7	-1.0	-2.7	-3.1	-7.5	-5.0	-5.2	-2.3	-5.0	-9.5
Soybean	-3.2	0.4	-2.0	0.9	13.1	7.7	-1.2	5.9	1.7	-4.1
Soybean Meal	-3.4	-0.4	-5.7	9.8	19.9	12.5	-2.4	9.9	9.5	-1.9
Sugar	-7.2	4.8	0.9	-13.1	-8.2	-5.5	-0.3	26.0	21.9	-19.3
Coffee	-9.6	-9.2	-8.4	-7.4	-11.2	-11.5	-4.9	6.1	-5.7	-10.8
Corn	-10.6	-10.5	-9.5	-8.1	-9.2	12.7	7.2	9.4	-8.5	-14.0

Tables & Charts – July 2017 Edition

Curve Analysis – Gross Roll Yield Key Metrics

Name	Current 1Yr Yld	Yld 6 Months Ago	Yld 1 Yr Ago			Change from 2 Yr Ago
■ 1 Year Gross Yield				, igo		/igc
Sector Roll Yield						
BCOM	-7.9	-12.1	-9.7	1.8	-3.8	-4.1
BCOM Precious Metals	-1.5	-2.4	-1.0	-0.4	-0.6	-0.9
BCOM Industrial Metals	-1.7	-1.8	-2.4	0.7	-1.5	-0.2
BCOM Agriculture	-7.8	-6.6	-5.0	-2.8	-6.1	-1.8
BCOM Livestock	4.0	1.9	1.8	2.2	2.7	1.3
BCOM Softs	-4.1	-7.2	-9.6	5.5	-7.3	3.2
BCOM Energy	-12.4	-24.3	-20.5	8.1	-5.2	-7.2
■ Commodities Roll Yield						
Aluminum	-1.0	-1.9	-5.7	4.6	-1.0	-0.1
Brent Crude	-12.5	-24.6	-16.3	3.8	-5.8	-6.7
Coffee	-6.7	-12.7	-11.0	4.3	-6.1	-0.6
Copper (CME)	-2.4	-1.6	-1.2	-1.2	-0.4	-2.0
Corn	-8.8	-7.8	-7.0	-1.8	-12.4	3.6
Cotton	-2.3	-2.5	-1.1	-1.2	-0.5	-1.8
Crude Oil	-15.1	-42.0	-25.3	10.2	-4.0	-11.1
Gas Oil	-11.1	-22.2	-12.2	1.1	-2.7	-8.3
Gold	-1.1	-0.9	-0.2	-0.9	-0.5	-0.6
Heating Oil	-12.5	-18.4	-10.0	-2.5	0.7	-13.2
Lean Hogs	-11.1	-16.8	-0.4	-10.7	-1.3	-9.7
HRW Wheat	-20.0	-15.0	-11.7	-8.3	-4.3	-15.7
Natural Gas	-23.2	-42.8	-35.8	12.6	-9.5	-13.7
Nickel	-2.3	0.5	-4.1	1.8	-0.7	-1.6
Platinum	-0.7	-1.1	-0.2	-0.5	-0.4	-0.3
Silver	-1.5	-2.1	-1.5	0.0	-1.0	-0.5
Soybean	4.3	-1.4	1.1	3.2	8.5	-4.3
Soybean Meal	-2.2	-1.7	9.0	-11.2	14.9	-17.1
Soybean Oil	-2.6	-5.4	-4.9	2.2	-2.4	-0.3
Sugar	-1.9	-2.6	-14.6	12.8	-10.4	8.6
Unlead Gas	-9.7	-26.1	-5.9	-3.9	-6.0	-3.7
Wheat	-18.2	-11.2	-4.7	-13.5	-4.7	-13.6

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

Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ 1 Year Gross Yield										
■ Sector Roll Yield										
BCOM Livestock	4.0	0.2	1.1	-0.2	-4.5	-9.8	-12.3	-14.8	-20.2	-22.5
BCOM Precious Metals	-1.5	-1.1	-0.6	-0.4	-0.5	-0.9	-0.6	-1.1	-1.1	-2.6
BCOM Industrial Metals	-1.7	-2.0	-1.8	-2.1	-3.9	-3.3	-2.2	-4.1	-16.7	-3.3
BCOM Softs	-4.1	-5.6	-7.4	-12.5	-4.9	0.9	9.0	0.5	-24.7	-18.2
BCOM Agriculture	-7.8	-7.0	-4.7	0.7	8.2	3.6	-5.8	-12.6	-2.5	-7.8
BCOM	-7.9	-11.4	-6.3	0.0	-0.9	-4.7	-6.6	-9.5	-21.8	-6.5
BCOM Energy	-12.4	-32.5	-12.6	1.6	-5.1	-11.7	-11.0	-13.8	-51.8	-5.6
■ Commodities Roll Yield										
Live Cattle	11.0	8.0	1.0	-0.3	-6.8	-12.9	-11.1	-11.2	-10.9	-14.5
Soybean	4.3	0.2	-0.2	17.0	18.5	5.5	-1.8	0.5	16.1	-2.2
Platinum	-0.7	-0.4	-0.2	-0.5	-0.8	-1.2	0.9	-2.7	-6.2	-0.7
Aluminum	-1.0	-2.9	-6.0	-9.1	-8.4	-6.2	-3.3	-6.0	-13.6	-5.0
Gold	-1.1	-0.9	-0.4	-0.2	-0.4	-0.9	2.9	-1.0	-1.1	-1.6
Silver	-1.5	-1.8	-1.2	-0.9	-0.7	-1.1	4.5	-5.1	-1.5	-1.1
Sugar	-1.9	-5.2	-9.9	-19.5	-4.1	3.1	18.7	4.6	-41.8	-28.3
Soybean Meal	-2.2	-0.5	9.6	28.7	16.5	13.0	-1.3	20.7	30.2	0.4
Cotton	-2.3	-1.1	-2.1	7.7	-3.6	5.2	15.5	14.3	-24.1	-14.5
Nickel	-2.3	-1.7	0.5	-2.9	-2.3	-1.0	-1.7	-1.6	-7.3	-1.8
Copper (CME)	-2.4	-1.6	-0.7	0.3	-1.7	-1.3	-0.1	-3.6	-7.1	0.5
Soybean Oil	-2.6	-5.4	-3.2	-2.9	-1.3	-4.2	-4.2	-8.5	-6.9	-4.3
Zinc	-2.8	-2.7	-2.5	-4.6	-8.8	-3.1	-3.0	-5.3	-11.2	-2.6
Coffee	-6.7	-9.7	-7.8	-12.6	-7.2	-5.0	-3.4	-8.5	-11.1	-8.5
Corn	-8.8	-7.9	-9.6	-7.4	9.4	10.8	0.4	-20.9	-11.8	-11.0
Unlead Gas	-9.7	-27.2	1.1	4.7	1.3	18.9	4.5	-6.9	-16.9	-2.0
Gas Oil	-11.1	-22.7	-11.0	-1.6	2.1	7.4	2.1	-12.3	-20.5	-3.0
Lean Hogs	-11.1	-13.6	0.3	0.6	-1.7	-4.5	-9.6	-23.8	-30.8	-38.1
Brent Crude	-12.5	-27.7	-23.3	0.3	6.9	4.2	8.3	-12.5	-55.6	-3.1
Heating Oil	-12.5	-25.3	-3.0	1.1	-1.3	1.0	-2.9	-11.7	-25.3	-0.3
Crude Oil	-15.1	-38.2	-14.0	4.3	-0.3	-4.5	-9.7	-11.3	-70.3	0.3
Wheat	-18.2	-10.9	-1.9	-7.0	-5.1	-9.4	-14.6	-23.8	-14.7	-7.1
HRW Wheat	-20.0	-14.7	-7.6	-2.5	-3.3	-4.1	-7.6	-9.9	-4.7	-4.7
Natural Gas	-23.2	-52.6	-19.8	0.8	-22.3	-42.7	-13.8	-16.1	-47.6	-11.8

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Curve Analysis – Forwards / Forecasts Spread %

Name	7/2017	6/2017	5/2017	4/2017	3/2017	2/2017	1/2017	12/2016	11/2016	10/2016	9/2016
■ 1 Yr Spread ((Forward-Forecast)/ Forecast											
■ Energy											
WTI Crude Spread %	-1.6	-9.2	-7.9	-6.2	-4.2	-0.5	-0.7	24.3	15.5	9.9	13.8
Brent Crude Spread %	-2.0	-7.1	-6.0	-4.7	-2.6	1.3	0.5	26.6	14.3	9.8	12.8
ULS Diesel Spread %	5.2	-7.1		-6.7	-3.9	1.2	-0.2	27.0	18.3	13.3	16.1
Unleaded Gasoline Spread %	-0.1	-7.2		-7.5	-3.3	-1.4	-0.5	19.8	7.2	3.0	4.6
■ Soft											
Sugar Spread %	-10.1	-11.4	-8.4	-7.0	-7.7	0.2	4.1	8.4	10.1	20.8	33.9
Coffee Spread %	0.3	-9.2	-9.1	-7.7	-3.2	-2.2	3.2	0.0	10.3	22.8	15.1
Cotton Spread %	-4.6	-0.2	2.5	5.9	6.5	7.1	5.7	8.3	12.8	7.8	7.5
■ Industrial Metals											
Copper Spread % (LME)	11.2	2.1	-0.1	0.9	2.0	10.5	13.2	14.5	22.2	2.0	2.3
Aluminum Spread %	3.6	3.1	6.0	6.3	10.7	12.1	8.1	5.9	9.2	9.3	5.3
Zinc Spread %	4.6	2.2	-2.0	-1.1	4.2	10.2	13.7	25.5	34.3	22.5	19.2
Nickel Spread %	1.5	-4.8	-10.7	-10.2	-6.2	0.5	-9.1	4.0	19.5	11.4	12.7
■ Precious Metals											
Gold Spread %	3.0	0.2	1.4	1.4	0.7	1.1	-3.0	-8.7	-8.2	-0.3	2.9
Silver Spread %	-1.9	-3.8	-1.3	-1.7	5.8	6.9	-2.0	-6.6	-6.4	1.4	9.6
■ Grain											
Corn Spread %	1.9	1.6	1.7	0.4	1.5	2.8	1.5	-1.9	-5.8	-0.6	-4.5
Soybeans Spread %	3.2	-0.8	-3.9	-1.9	-3.3	3.2	2.4	0.8	4.8	2.2	-2.7
Wheat Spread %	8.2	8.1	0.6	1.2	2.6	5.3	0.6	-7.9	-13.4	-5.9	-9.4

Data Set

Name	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
■ Data Set												
■ 1 Yr Spread												
■ Energy												
Natural Gas Forward	2.96	3.72	2.34	2.89	4.23	3.35	2.99	4.34	5.57	5.62	7.48	6.30
WTI Crude Forward	50.4	53.7	37.0	53.3	98.4	91.8	98.8	91.4	79.4	44.6	96.0	61.0
WTI Crude Forecast	50.9	43.2	50.0	93.6	98.2	95.0	94.0	79.0	61.4	101.5	69.6	60.0
Brent Crude Forward	52.9	56.8	37.3	57.3	110.8	111.1	107.4	94.8	77.9	45.6	93.8	60.9
Brent Crude Forecast	53.3	44.9	54.0	100.0	108.0	111.9	110.7	80.0	62.0	99.1	71.0	57.9
ULS Diesel Forward	1.67	1.70	1.10	1.85	3.08	3.05	2.94	2.54	2.12	1.41	2.64	1.60
ULS Diesel Forecast	1.58	1.34	1.69	2.79	2.98	3.05	2.87	2.13		2.96		
Unleaded Gasoline Forward	1.58	1.67	1.27	1.44	2.79	2.81	2.69	2.45	2.05	1.01	2.48	1.60
Unleaded Gasoline Forecast	1.58	1.39	1.64	2.65	2.86	2.95	2.91	2.12	1.47	2.49		
■ Soft												
Sugar Forward	0.15	0.20	0.15	0.15	0.16	0.20	0.23	0.32	0.27	0.12	0.11	0.12
Sugar Forecast	0.17	0.18	0.13	0.17	0.18	0.22	0.27	0.21	0.17	0.13	0.10	
Coffee Forward	1.42	1.37	1.27	1.67	1.11	1.44	2.27	2.40	1.36	1.12	1.36	1.26
Coffee Forecast	1.41	1.37	1.34	1.79	1.26	1.78	2.53	1.60	1.23	1.36		
Cotton Forward	0.70	0.71	0.63	0.60	0.85	0.75	0.92	1.45	0.76	0.49	0.68	0.56
Cotton Forecast	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)	6,368	5,526	4,713	6,349	7,373	7,913	7,595	9,644	7,352	3,049	6,651	6,318
Copper Forecast (LME)	5,727	4,826	5,575	6,871	7,334	7,958	8,855	7,460	5,100	6,973	6,750	5,000
Aluminum Forward	1,915	1,694	1,506	1,834	1,762	2,047	1,997	2,459	2,204	1,514	2,366	2,838
Aluminum Forecast	1,848	1,600	1,693	1,883	1,883	2,038	2,450	2,167	1,675	2,607	2,550	2,094
Zinc Forward	2,794	2,564	1,600	2,168	2,045	2,055	1,831	2,447	2,535	1,187	2,356	4,291
Zinc Forecast	2,671	2,043	1,961	2,170	1,930	1,963	2,210	2,192	1,641	1,905	2,775	2,775
Nickel Forward	10,216	9,975	8,788	15,088	13,843	17,008	18,731	24,715	18,467	11,629	26,060	34,025
Nickel Forecast	10,065	9,594	12,170	17,000	15,124	17,602	22,997	21,814	14,672	21,229	28,263	18,625
■ Precious Metals												
Gold Forward	1,270	1,152	1,060	1,184	1,202	1,676	1,567	1,421	1,096	884	838	638
Gold Forecast	1,234	1,262	1,165	1,265	1,420	1,677	1,575	1,211	960	872	747	650
Silver Forward	16.85	15.99	13.80	15.56	19.34	30.17	27.88	30.91	16.82	11.27	14.80	12.82
Silver Forecast	17.20	17.11	15.84	19.10	24.00	31.40	35.50	19.68	14.65	15.00	13.46	12.50
Platinum Forecast	978	1,000	1,076	1,390	1,514	1,556	1,752	1,616	1,184	1,575	1,350	1,013
Palladium Forecast	789.5	616.6	700.0	803.0	734.0	643.0	733.0	520.0	255.0	350.5	330.0	347.5
■ Grain	3.0	3.5		4.0								
Corn Forward	3.8	3.5	3.6	4.0	4.2	7.0	6.5	6.3	4.1	4.1	4.6	3.9
Corn Forecast	3.7	3.6	3.8	4.1	5.9 13.1	7.0	6.9	4.9 13.9	3.8 10.4	5.4	3.6 12.0	
Soybeans Forward	10.1	10.0	8.7	10.2	13.1	14.2	12.0			9.7	9.9	6.8
Soybeans Forecast	9.8	9.9	9.5 4.7	12.4 5.9		14.7	13.5	10.5	10.4	12.4	8.9	5.0
Wheat Forward Wheat Forecast	4.9 4.6	4.1 4.4	5.1	5.9	6.1	7.8 7.5	7.4	7.9 6.2	5.4 5.4	6.1 8.4	6.2	3.7
WHEAT FOLECAST	4.0	4.4	5.1	5.8	0.9	7.5	7.4	0.2	5.4	5.4	0.2	3./

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Market Flows – Open Interest Key Metrics

Name	Current	MTD % Change				2 Yr % Change
■ Open Interest (Aggregate - 1,000s)						
■ Single Commodities						
Copper (CME)	312	20.5	26.3	39.3		81.4
Live Cattle	362	-5.0	-14.8	18.3	43.7	49.0
Natural Gas	1,317	-0.8	-10.8	6.0	32.2	35.4
Crude Oil	2,211	2.4	0.6	7.8	25.3	28.3
Palladium	34	-2.9	-2.9	41.7	21.4	-10.5
Lean Hogs	269	3.5	22.8	38.7	20.1	30.6
Gas Oil	919	-1.4	2.5	14.6	18.7	8.9
Copper (LME)	210	4.0	7.7	0.5	17.3	42.9
Coffee	218	-2.2	5.8	14.1	15.3	12.4
Soybean Oil	408	10.6	0.3	9.7	13.3	7.9
HRW Wheat	270	6.3	8.0	13.0	12.5	34.3
Corn	1,405	5.6	4.9	13.7	6.6	3.0
Brent Crude	2,295	-2.1	-4.9	6.3	5.9	21.2
Heating Oil	397	-5.5	-5.7	-7.5	3.4	-1.5
Zinc	199	-0.5	2.6	8.2	0.5	12.4
Unlead Gas	393	-2.7	-3.0	-1.8	-0.3	10.1
Soybean Meal	343	-8.3	-4.7	4.3	-5.5	-10.2
Silver	207	3.0	3.5	26.2	-7.2	11.3
Cotton	216	6.9	-14.6	-10.7	-7.7	20.7
Sugar	767	-5.3	-1.3	-4.7	-8.5	-6.6
Platinum	72	0.0	7.5	14.3	-8.9	-8.9
Nickel	149	0.0	0.0	-6.9	-9.2	16.4
Soybean	620	-6.6	-3.6	-1.9	-10.0	-3.4
Wheat	428	7.0	-9.3	-4.5	-11.0	3.6
Aluminum	469	0.9	-7.9	-13.3	-15.7	-28.7
Gold	440	-2.9	-7.4	5.8	-22.7	1.2

Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ Open Interest (Aggregate - 1,000s)										
■ BCOM	13,692	12,965	11,965	10,881	11,033	10,367	9,282	10,206	8,524	6,715
■ Sector										
■ Energy	6,612	6,282	5,357	4,598	4,868	4,468	3,772	3,643	3,167	2,880
■ Agriculture	4,674	4,493	4,563	4,211	4,090	3,876	3,418	4,399	3,447	2,352
■ Industrial Metals	1,339	1,319	1,178	1,224	1,104	1,006	1,159	1,105	1,016	861
■ Precious Metals	719	643	649	587	574	629	567	760	646	411
■ Livestock	631	501	431	481	591	578	552	534	443	369
■ Single Commodities										
Brent Crude	2,295	2,159	2,031	1,513	1,443	1,285	886	873	728	595
Crude Oil	2,211	2,051	1,671	1,468	1,616	1,473	1,328	1,430	1,193	1,189
Corn	1,405	1,236	1,334	1,237	1,203	1,128	1,151	1,549	1,002	810
Natural Gas	1,317	1,243	957	939	1,291	1,165	1,011	772	708	680
Sugar	767	805	879	836	830	754	559	613	834	357
Soybean	620	632	646	599	576	546	460	629	418	278
Aluminum	469	541	551	595	539	495	682	546	487	474
Gold	440	416	415	372	380	428	419	585	490	307
Wheat	428	448	368	371	411	456	384	492	362	251
Soybean Oil	408	372	384	355	340	306	273	358	211	208
Heating Oil	397	429	342	346	279	263	269	301	304	225
Unlead Gas	393	400	355	332	239	282	277	267	235	191
Live Cattle	362	306	265	266	327	329	317	327	265	213
Soybean Meal	343	329	402	341	262	212	194	192	162	116
Copper (CME)	312	224	166	160	167	147	121	167	155	75
HRW Wheat	270	239	193	132	154	158	139	219	145	83
Lean Hogs	269	194	166	215	264	248	235	207	178	156
Coffee	218	191	172	160	142	144	105	140	126	123
Cotton	216	242	185	178	172	171	152	207	187	126
Copper (LME)	210	209	146	155	132	130	143	196	163	140
Silver	207	164	168	151	132	141	106	136	124	86
Zinc	199	184	167	182	184	166	148	135	149	125
Nickel	149	160	148	132	81	69	65	61	62	47
Platinum	72	63	65	64	62	60	42	39	33	18
Palladium	34	24	24	33	39	29	18	23	23	12

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Market Flows – Commitment of Traders Key Metrics

Name	Current	5 Day Change	1 Mth Change	3 Mth Change	YTD Change	1 Yr Change	
■ Net - Managed Money Total/Disagg							
■ Single Commodities							
Corn	106,815	2,145	160,640	303,072	220,463	172,353	-135,986
Wheat	27,850	-8,076	48,821	190,177	136,777	158,034	22,751
HRW Wheat	60,655	-10,263	22,954	77,888	51,570	89,923	61,168
Gold	75,048	46,228	-30,309	-90,233	33,801	-181,882	86,382
Lean Hogs	77,302	-2,597	10,867	66,645	22,767	31,682	55,356
Live Cattle	110,702	-2,593	-21,011	-27,653	18,186	82,396	83,236
Copper (CME)	85,623	11,390	36,338	45,736	13,492	56,295	111,369
Palladium	22,026	32	-2,729	329	9,284	6,745	14,838
Copper (LME)	70,415	8,298	7,508	14,516	3,031	23,782	68,726
Aluminum	138,499	-2,909	2,165	-30,622	-7,291	16,695	81,978
Zinc	72,501	-3,351	-5,522	7,349	-8,538	-2,709	39,612
Platinum	-7,668	1,945	1,077	-14,157	-15,891	-45,033	-14,640
Gasoline	28,630	13,273	49,503	8,135	-21,461	33,708	15,026
Soybean Oil	62,628	13,680	57,859	99,642	-22,894	79,846	63,858
Soybean Meal	-4,381	-3,745	40,729	-2,575	-23,918	-60,817	-62,243
Nickel	32,363	2,040	1,419	11,560	-24,869	-29,951	20,817
Silver	8,888	15,343	-17,892	-71,313	-30,210	-87,693	19,335
Coffee	-21,765	7,756	15,741	-12,996	-34,471	-56,177	964
Heating Oil	-1,035	11,023	25,536	-25,634	-34,576	-13,777	19,033
Soybeans	50,885	12,534	138,025	99,160	-56,190	-70,804	-11,410
Cotton	18,655	1,292	-26,689	-77,941		-48,869	-27,559
WTI Crude	238,501	23,013	103,759	-16,920		117,945	139,568
Natural Gas	73,538		18,396	-107,272	-100,505	116,582	164,414
Brent Crude	288,571	26,919	59,576	-69,695		35	112,669
Sugar	-99,720	12,330	-9,168	-113,376	-238,162	-349,232	-40,200

Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ Net - Managed Money Total/Disagg										
■ BCOM	1.4M	1.8M	107,932.0	1.1M	835,105.0	791,313.0	637,042.0	1.6M	1.1M	263,141.0
■ Sector										
■ Energy	628,205.0	1.0M	95,835.0	278,790.0	623,230.0	258,739.0	230,666.0	224,236.0	185,192.0	38,894.0
■ Industrial Metals	399,401	423,576	90,351	218,292	35,635	14,988	-4,018	39,105	15,752	-17,586
■ Agriculture	201,622	225,844	-75,733	383,375	-1,048	281,653	188,257	962,170	594,114	119,945
■ Livestock	188,004	147,051	24,525	117,295	137,611	110,898	104,018	133,520	83,521	9,221
■ Precious Metals	98,294	101,310	-239	153,310	70,026	171,032	134,710	232,650	252,599	118,482
■ Single Commodities										
Brent Crude	288,571	454,585	163,672	115,571	136,611	125,397	81,537			
WTI Crude	238,501	307,909	100,797	199,388	270,386	134,834	192,466	217,046	133,742	82,331
Aluminum	138,499	145,790	71,738	118,175						
Live Cattle	110,702	92,516	11,081	80,102	96,771	59,569	68,105	104,412	49,281	16,394
Corn	106,815	-113,648	-136,111	239,704	-94,812	140,109	148,653	396,782	205,427	28,794
Copper (CME)	85,623	72,131	-25,964	-4,455	35,635	14,988	-4,018	39,105	15,752	-17,586
Lean Hogs	77,302	54,535	13,444	37,193	40,840	51,329	35,913	29,108	34,240	-7,173
Gold	75,048	41,247	-24,263	98,391	34,104	101,922	111,919	169,987	197,560	100,925
Natural Gas	73,538	174,043	-161,686	-53,308	134,994	-89,820	-124,269	-96,119	-27,225	-85,920
Zinc	72,501	81,039	20,140	49,726						
Copper (LME)	70,415	67,384	9,065	25,215						
Soybean Oil	62,628	85,522	60,895	35,047	-46,649	-42,424	-2,103	56,961	29,956	-7,171
HRW Wheat	60,655	9,085	-14,975	24,999	8,022	23,619	9,128	49,108	9,943	8,438
Soybeans	50,885	107,075	-63,515	39,446	136,683	109,007	23,683	164,287	69,606	31,518
Nickel	32,363	57,232	15,372	29,631						
Gasoline	28,630	50,091	28,391	44,226	54,637	64,383	61,288	67,205	50,763	42,337
Wheat	27,850	-108,927	-83,120	20,481	-71,468	-11,899	-29,252	36,542	-8,683	9,118
Palladium	22,026	12,742	8,690	19,970	15,660	16,769	5,212	13,034	11,626	
Cotton	18,655	76,052	51,307	11,005	43,288	25,828	6,683	40,645	61,292	5,638
Silver	8,888	39,098	6,282	17,051	5,573	23,113	6,200	26,836	26,631	11,742
Heating Oil	-1,035	33,541	-35,339	-27,087	26,602	23,945	19,644	36,104	27,912	146
Soybean Meal	-4,381	19,537	-40,843	54,132	57,931	41,489	-15,232	40,129	35,586	7,668
Platinum	-7,668	8,223	9,052	17,898	14,689	29,228	11,379	22,793	16,782	5,815
Coffee	-21,765	12,706	-15,181	25,385	-8,417	-23,076	2,905	36,182	23,630	-16,072
Sugar	-99,720	138,442	165,810		-25,626	19,000	43,792	141,534	167,357	52,014

Tables & Charts – July 2017 Edition

Market Flows – ETF Flows (annual)

Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
ETFs (\$ Billion AUM)										
■ Total ETF Assets Under Management (\$	180.90	163.01	119.31	113.29	127.15	226.87	201.41	191.21	118.85	55.76
■ Precious Metals	148.13	130.13	93.08	87.26	97.82	191.77	168.93	152.12	84.90	43.48
■ Broad Commodity	16.28	16.58	12.17	16.57	20.54	23.23	20.90	21.60	15.03	5.56
■ Energy	12.82	13.07	11.52	5.80	4.93	7.20	6.27	10.30	12.72	4.67
■ Agriculture	2.05	2.00	1.90	2.49	2.73	3.31	4.14	5.56	4.84	1.85
■ Industrial Metals	1.60	1.19	0.62	1.14	1.08	1.31	1.07	1.56	1.27	0.10
■ Livestock	0.02	0.04	0.02	0.03	0.05	0.06	0.10	0.06	0.10	0.09
■ ETFs Fund Flows (\$ Billion)										
■ Total ETF Fund Flows (\$ Billion)	6.65	24.58	9.61	1.44	-43.32	20.94	5.20	18.55	39.54	15.68
■ Precious Metals	4.64	23.49	-3.90	-3.79	-39.82	19.30	9.45	17.14	21.52	9.41
■ Energy	2.04	-1.79	13.81	3.80	-3.10	1.72	-2.71	-0.50	8.17	4.73
■ Industrial Metals	0.25	0.34	-0.18	0.19	-0.09	0.25	-0.09	0.15	0.73	0.04
■ Agriculture	0.20	0.16	-0.13	-0.26	0.01	-0.80	-0.56	-0.52	2.61	0.43
■ Livestock	-0.02	0.02	-0.01	-0.02	-0.01	-0.03	0.04	-0.04	0.02	0.14
■ Broad Commodity	-0.46	2.37	0.02	1.52	-0.31	0.51	-0.94	2.32	6.49	0.93
Name	2017↓	2016	2015	2014	2013	2012	2011	2010	2009	2008
DELTA WEIGHTED:										
■ ETFs (\$ Billion AUM) (DW)										
■ Total ETF Assets Under Management (\$	185.26	165.39	120.70	113.71	126.37	228.86	201.91	193.03	120.16	56.26
■ Precious Metals	149.18	130.84	93.06	87.44	98.11	193.43	169.50	153.08	85.22	43.81
■ Broad Commodity	16.28	16.58	12.17	16.57	20.54	23.23	20.90	21.60	15.03	5.56
■ Energy	16.01	14.67	12.84	5.97	3.79	7.47	6.14	11.12	13.68	4.83
■ Agriculture	2.15	2.06	1.97	2.54	2.80	3.36	4.20	5.60	4.86	1.85
■ Industrial Metals	1.61	1.20	0.63	1.15	1.09	1.31	1.08	1.56	1.27	0.10
■ Livestock	0.02	0.04	0.02	0.03	0.05	0.06	0.10	0.06	0.10	0.09
■ ETFs Fund Flows (\$ Billion) (DW)										
■ Total ETF Fund Flows (\$ Billion)	11.22	20.84	19.46	7.45	-44.66	23.07	5.26	19.05	40.61	16.90
■ Energy	6.49	-5.80	23.30	9.26	-5.30	3.00	-2.59	0.40	9.06	5.91
■ Precious Metals	4.72	23.75	-3.60	-3.20	-39.01	20.15	9.33	16.75	21.68	9.45
■ Industrial Metals	0.25	0.34	-0.17	0.19	-0.08	0.25	-0.09	0.15	0.74	0.04
■ Agriculture	0.24	0.16	-0.09	-0.29	0.06	-0.81	-0.49	-0.53	2.63	0.43
■ Livestock	-0.02	0.02	-0.01	-0.02	-0.01	-0.03	0.04	-0.04	0.02	0.14
■ Broad Commodity	-0.46	2.37	0.02	1.52	-0.31	0.51	-0.94	2.32	6.49	0.93

Quarterly

e dar terry											
Name	2017 Q3↓	2017 Q2	2017 Q1	2016 Q4	2016 Q3	2016 Q2	2016 Q1	2015 Q4	2015 Q3	2015 Q2	2015 Q1
■ ETFs (\$ Billion AUM)											
■ Total ETF Assets Under Management (\$	178.27	179.82	178.45	161.94	190.91	182.17	155.57	119.31	104.92	116.93	117.90
■ Precious Metals	145.50	146.93	145.37	129.85	157.69	149.06	127.15	93.08	77.74	85.44	87.62
■ Broad Commodity	16.28	16.07	17.17	16.02	15.90	15.67	12.36	12.17	13.12	16.27	14.92
■ Energy	12.82	13.47	12.51	13.01	14.20	14.46	13.56	11.52	11.24	11.79	12.27
■ Agriculture	2.05	1.98	1.94	1.86	2.14	2.20	1.85	1.90	2.07	2.46	2.08
■ Industrial Metals	1.60	1.34	1.43	1.17	0.97	0.77	0.63	0.62	0.75	0.94	0.98
■ Livestock	0.02	0.02	0.03	0.04	0.01	0.01	0.01	0.02	0.02	0.02	0.02
■ ETFs Fund Flows (\$ Billion)											
■ Total ETF Fund Flows (\$ Billion)	-3.73	4.46	5.93	-10.03	8.14	9.48	16.98	2.37	1.25	-2.51	8.51
■ Industrial Metals	0.18	-0.07	0.14	0.12	0.16	0.10	-0.05	-0.05	-0.09	0.06	-0.10
■ Agriculture	0.03	0.06	0.11	-0.09	0.10	0.18	-0.03	-0.14	-0.10	0.25	-0.13
■ Livestock	0.00	-0.01	0.00	0.02	0.00	0.00	-0.01	0.00	0.00	0.00	-0.01
■ Broad Commodity	-0.48	-0.40	0.41	0.26	0.48	1.46	0.18	0.48	-0.53	0.57	-0.51
■ Energy	-1.67	2.53	1.18	-3.13	0.61	-2.53	3.26	4.73	3.96	-2.74	7.86
■ Precious Metals	-1.79	2.35	4.09	-7.20	6.79	10.27	13.63	-2.65	-1.99	-0.65	1.39
Name	2017 Q3↓	2017 Q2	2017 Q1	2016 Q4	2016 Q3	2016 Q2	2016 Q1	2015 Q4	2015 Q3	2015 Q2	2015 Q1
DELTA WEIGHTED:											
■ ETFs (\$ Billion AUM) (DW)											
■ Total ETF Assets Under Management (\$	184,29	184.82	181.93	164,41	194.84	186,55	157,21	120,70	107.38	120.15	119.35
Precious Metals	146.85	147.83	146.39	130.51	158.76	150.17	127.60	93.06	77.95	85.78	87.96
■ Precious Metats ■ Energy	17.43	17.45	14.88	130.51	16.98	17.66	14.67	12.84	13.39	14.58	13.31
■ Broad Commodity	16.28	16.07	17.17	16.02	15.90	15.67	12.36	12.04	13.12	16.27	14.92
Agriculture	2.10	2.08	2.02	1.92	2.21	2.26	1.92	1.97	2.14	2.55	2.14
■ Agriculture ■ Industrial Metals	1.61	1.36	1.44	1.19	0.99	0.78	0.64	0.63	0.76	0.95	0.99
■ Industriat metats ■ Livestock	0.02	0.02	0.03	0.04	0.99	0.78	0.04	0.03	0.76	0.95	0.99
■ Livestock	0.02	0.02	0.03	0.04	0.01	0.01	0.01	0.02	0.02	0.02	0.02
■ ETFs Fund Flows (\$ Billion) (DW)											
■ Total ETF Fund Flows (\$ Billion)	-4.70	7.96	8.34	-13.08	8.59	7.35	17.98	6.19	5.24	-2.92	10.94
■ Industrial Metals	0.18	-0.07	0.15	0.12	0.16	0.10	-0.05	-0.05	-0.09	0.06	-0.09
■ Agriculture	0.02	0.08	0.14	-0.08	0.11	0.17	-0.04	-0.14	-0.09	0.26	-0.11
■ Livestock	0.00	-0.01	0.00	0.02	0.00	0.00	-0.01	0.00	0.00	0.00	-0.01
■ Broad Commodity	-0.48	-0.40	0.41	0.26	0.48	1.46	0.18	0.48	-0.53	0.57	-0.51
■ Precious Metals	-1.74	2.50	4.00	-6.81	6.72	10.34	13.51	-2.63	-1.87	-0.49	1.39
■ Energy	-2.69	5.85	3.64	-6.58	1.11	-4.72	4.39	8.53	7.83	-3.32	10.26

PERFORMANCE: Bloomberg Commodity Indices

Composite Indices

* Click hyperlinks to open in Bloomberg

				2017						
Index Name	Ticker	Jul	Jun	Q2	Q1	1-Year	3-Year	5-Year	10-Year	20-Year
Bloomberg Commodity ER	BCOM	2.17%	-0.27%	-3.22%	-2.47%	0.13%	-34.02%	-41.46%	-51.06%	-31.05%
Bloomberg Commodity TR	BCOMTR	2.26%	-0.19%	-3.00%	-2.33%	0.77%	-33.45%	-40.88%	-48.80%	3.70%
Bloomberg Commodity Spot	BCOMSP	1.89%	0.36%	-1.60%	-0.30%	8.52%	-16.61%	-24.16%	5.28%	186.40%
Bloomberg Roll Select	BCOMRST	2.46%	-0.01%	-2.57%	-0.82%	3.46%	-28.17%	-33.86%	-29.15%	147.21%
1 Month Forward	BCOMF1T	2.31%	-0.11%	-2.83%	-1.88%	1.44%	-30.77%	-36.43%	-38.07%	91.12%
2 Month Forward	BCOMF2T	2.39%	-0.09%	-2.76%	-1.15%	2.73%	-29.64%	-36.29%	-37.35%	126.06%
3 Month Forward	BCOMF3T	2.37%	-0.03%	-2.74%	-0.94%	2.50%	-28.53%	-34.58%	-31.65%	144.79%
4 Month Forward	BCOMF4T	2.46%	0.04%	-2.53%	-0.22%	4.95%	-25.04%	-30.68%	-23.79%	
5 Month Forward	BCOMF5T	2.57%	0.08%	-2.42%	-0.28%	4.64%	-24.91%	-31.34%	-22.35%	
6 Month Forward	BCOMF6T	2.51%	0.05%	-2.41%	-0.17%	4.99%	-24.03%	-30.32%	-19.83%	
Energy	BCOMENTR	4.56%	-3.74%	-9.68%	-11.41%	-0.20%	-64.03%	-62.73%	-85.57%	-61.19%
Petroleum	BCOMPETR	9.19%	-4.46%	-9.83%	-9.26%	10.16%	-64.21%	-59.81%	-71.68%	22.31%
Agriculture	BCOMAGTR	0.85%	3.08%	-0.40%	-2.97%	-5.28%	-21.58%	-43.65%	-16.32%	-40.03%
Grains	BCOMGRTR	-2.31%	6.18%	4.46%	-1.43%	-2.10%	-23.19%	-50.89%	-25.70%	-50.19%
Industrial Metals	BCOMINTR	4.12%	3.37%	-1.19%	7.62%	18.55%	-14.60%	-16.23%	-46.84%	77.54%
Precious Metals	BCOMPRTR	1.75%	-3.12%	-3.18%	9.77%	-10.66%	-7.77%	-29.22%	61.82%	278.37%
Softs	BCOMSOTR	7.31%	-6.64%	-14.25%	-4.84%	-16.30%	-27.47%	-42.47%	-23.06%	-56.07%
Livestock	BCOMLITR	-4.85%	-1.88%	11.21%	0.14%	10.99%	-22.15%	-12.06%	-55.17%	-61.15%
Ex-Energy	BCOMXETR	1.39%	1.21%	-0.22%	2.83%	0.32%	-16.08%	-31.23%	-15.55%	20.77%
Ex-Petroleum	BCOMXPET	0.53%	0.93%	-1.16%	0.05%	-2.46%	-23.99%	-36.71%	-44.52%	
Ex-Natural Gas	BCOMXNGT	3.07%	-0.06%	-2.44%	-0.65%	3.29%	-29.09%	-37.19%	-30.12%	
Ex-Agriculture	BCOMXAGT	2.90%	-1.57%	-4.11%	-1.86%	3.39%	-38.73%	-40.15%	-60.53%	
Ex-Grains	BCOMXGRT	3.37%	-1.60%	-4.62%	-2.40%	1.23%	-35.62%	-38.40%	-54.90%	
Ex-Industrial Metals	BCOMXIMT	1.83%	-0.98%	-3.40%	-4.35%	-2.73%	-36.97%	-45.29%	-51.38%	
Ex-Precious Metals	BCOMXPMT	2.36%	0.40%	-2.97%	-4.34%	2.98%	-37.90%	-43.55%	-57.34%	
Ex-Softs	BCOMXSOT	1.95%	0.23%	-2.21%	-2.18%	2.14%	-34.24%	-41.13%	-51.46%	
Ex-Livestock	BCOMXLIT	2.76%	-0.07%	-3.94%	-2.48%	0.08%	-34.23%	-42.41%	-48.62%	
Ex-Agriculture & Livestock	BCOMXALT	3.70%	-1.54%	-5.60%	-2.00%	2.55%	-40.33%	-42.41%	-61.66%	
Bloomberg Dollar Spot	BBDXY	-2.57%	-1.24%	-3.21%	-3.50%	-2.32%	12.86%	14.66%	15.43%	
S&P 500 Total Return	<u>SPXT</u>	2.06%	0.62%	3.09%	6.07%	16.04%	36.29%	99.22%	110.73%	276.53%
US Aggregate	LBUSTRUU	0.43%	-0.10%	1.45%	0.82%	-0.51%	8.37%	10.52%	54.35%	171.83%
US Treasury	<u>LUATTRUU</u>	0.17%	-0.16%	1.19%	0.67%	-2.55%	6.51%	5.67%	46.66%	154.80%
US Corporate	<u>LUACTRUU</u>	0.73%	0.31%	2.54%	1.22%	1.55%	12.11%	18.92%	76.39%	213.45%
US High Yield	<u>LF98TRUU</u>	1.11%	0.14%	2.17%	2.70%	10.95%	16.89%	38.46%	119.39%	278.98%

Single Commodity Indices

				2017						
Index Name	Ticker	Jul	Jun	Q2	Q1	1-Year	3-Year	5-Year	10-Year	20-Year
Natural Gas	BCOMNGTR	-7.73%	-1.78%	-9.39%	-17.02%	-24.24%	-67.45%	-71.50%	-98.01%	-99.32%
WTI Crude	BCOMCLTR	8.48%	-5.11%	-10.48%	-8.98%	6.12%	-70.59%	-66.59%	-81.95%	-19.72%
Brent Crude	BCOMCOT	7.19%	-4.46%	-10.20%	-7.71%	8.17%	-67.88%	-63.11%	-62.29%	175.85%
ULS Diesel	BCOMHOTR	11.96%	-3.02%	-7.25%	-10.26%	15.74%	-54.70%	-53.31%	-57.05%	46.68%
Unleaded Gasoline	BCOMRBTR	11.70%	-4.65%	-10.31%	-12.18%	17.58%	-53.60%	-46.22%	-37.55%	190.31%
Corn	BCOMCNTR	-2.60%	0.49%	0.76%	1.57%	-0.66%	-24.27%	-62.42%	-37.25%	-83.01%
Soybeans	BCOMSYTR	5.60%	3.63%	-0.69%	-6.60%	-3.59%	-10.49%	-13.66%	88.77%	207.88%
Wheat	BCOMWHTR	-9.71%	18.81%	16.21%	1.78%	-2.29%	-32.74%	-64.75%	-77.63%	-91.85%
Soybean Oil	BCOMBOTR	5.47%	4.90%	2.82%	-8.92%	9.44%	-14.92%	-44.84%	-43.55%	-26.10%
Soybean Meal	BCOMSMT	4.66%	2.95%	-1.66%	-3.66%	-11.15%	-0.05%	11.46%	298.22%	810.41%
HRW Wheat	BCOMKWT	-10.26%	18.19%	18.09%	-2.12%	-4.20%	-49.04%	-67.27%	-70.86%	-79.07%
Copper	BCOMHGTR	6.76%	4.72%	1.40%	5.48%	27.75%	-13.74%	-19.99%	-29.92%	199.38%
Alumnium	BCOMALTR	-0.48%	-0.55%	-2.71%	15.38%	14.27%	-14.00%	-22.29%	-60.56%	-30.68%
Zinc	BCOMZSTR	1.17%	6.02%	-0.83%	7.44%	22.72%	11.38%	29.76%	-43.93%	29.46%
Nickel	BCOMNITR	8.68%	4.55%	-6.69%	-0.35%	-5.39%	-47.33%	-40.56%	-72.00%	134.83%
Gold	BCOMGCTR	2.00%	-2.51%	-0.77%	8.22%	-7.17%	-2.96%	-23.54%	75.17%	261.82%
Silver	BCOMSITR	1.05%	-4.81%	-9.48%	13.92%	-18.99%	-21.28%	-43.68%	14.21%	239.79%
Sugar	BCOMSBTR	8.06%	-8.35%	-18.58%	-13.87%	-24.57%	-32.42%	-59.22%	-28.59%	-29.75%
Coffee	BCOMKCTR	10.88%	-4.46%	-12.59%	0.13%	-13.10%	-46.52%	-50.83%	-49.83%	-87.85%
Cotton	BCOMCTTR	0.49%	-7.12%	-9.23%	7.86%	-6.79%	9.76%	0.48%	-3.46%	-75.12%
Live Cattle	BCOMLCTR	-3.83%	-4.36%	8.84%	5.17%	12.25%	-11.40%	2.07%	-32.88%	-13.59%
Lean Hogs	BCOMLHTR	-6.32%	2.03%	14.70%	-6.93%	8.11%	-38.58%	-32.26%	-78.21%	-90.54%

PERFORMANCE: Bloomberg Commodity Roll Select Indices

Composite Roll Select Indices * Click hyperlinks to open in Bloomberg

Index Name Ticker				2017							
index Name	licker	Jul	Jun	Q2	Q1	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
BCOM Roll Select	BCOMRST	2.46%	-0.01%	-2.57%	-0.82%	-1.00%	3.46%	-28.17%	-33.86%	-29.15%	147.21%
Roll Select Agriculture	BCOMRAGT	1.58%	2.98%	-0.23%	-1.95%	-0.63%	-2.29%	-19.65%	-39.56%	6.14%	13.49%
Roll Select Ex-Ags & Livestock	BBURXALT	3.67%	-1.25%	-4.76%	-0.33%	-1.59%	5.96%	-33.32%	-33.76%	-45.46%	
Roll Select Grains	BCOMRGRT	-1.08%	6.02%	4.69%	-0.67%	2.87%	0.60%	-20.98%	-48.07%	-7.00%	-1.55%
Roll Select Softs	BCOMRSOT	6.92%	-6.78%	-15.05%	-2.84%	-11.75%	-13.97%	-26.41%	-35.97%	5.08%	-17.06%
Roll Select Livestock	BCOMRLIT	-4.69%	-1.79%	8.97%	3.02%	7.00%	2.33%	-26.38%	-14.18%	-30.73%	36.40%
Roll Select Energy	BCOMRENT	4.28%	-3.12%	-8.01%	-8.47%	-12.21%	5.71%	-54.16%	-50.13%	-71.16%	113.97%
Roll Select Ex-Energy	BCOMRXET	1.77%	1.22%	-0.35%	3.57%	5.04%	1.32%	-15.02%	-28.50%	1.78%	113.49%
Roll Select Petroleum	BCOMRPET	7.83%	-3.46%	-7.77%	-8.68%	-9.18%	12.67%	-56.10%	-49.92%	-46.78%	355.58%
Roll Select Industrial Metals	BCOMRINT	4.44%	3.38%	-1.09%	8.10%	11.67%	19.88%	-12.92%	-13.33%	-39.67%	175.11%
Roll Select Precious Metals	BCOMRPRT	1.73%	-3.12%	-3.17%	9.79%	8.15%	-10.70%	-7.40%	-28.88%	62.23%	291.90%

Single Commodity Roll Select Indices

				2017							
Index Name	Ticker	Jul	Jun	Q2	Q1	YTD	1-Year	3-Year	5-Year	10-Year	20-Year
Natural Gas RS	BCOMRNGT	-4.47%	-2.13%	-8.58%	-8.09%	-19.73%	-10.21%	-53.13%	-53.24%	-94.08%	-83.58%
WTI Crude RS	BCOMRCLT	8.09%	-3.58%	-8.84%	-8.90%	-10.24%	9.74%	-58.79%	-52.51%	-52.41%	371.76%
Brent Crude RS	BCOMRCOT	6.10%	-3.13%	-7.33%	-7.95%	-9.48%	10.99%	-60.35%	-54.62%	-46.36%	390.54%
ULS Diesel RS	BCOMRHOT	8.76%	-4.28%	-7.86%	-9.78%	-9.59%	11.48%	-53.74%	-51.74%	-50.04%	218.93%
Unleaded Gasoline RS	BCOMRRBT	10.09%	-3.09%	-6.47%	-8.73%	-6.02%	25.14%	-43.85%	-31.34%	-18.06%	491.87%
Corn RS	BCOMRCNT	-1.25%	0.34%	1.02%	2.03%	1.79%	1.54%	-21.22%	-61.76%	-26.47%	-65.99%
Soybeans RS	BCOMRSYT	6.10%	4.06%	0.31%	-4.60%	1.53%	3.40%	-5.59%	-3.05%	114.66%	316.65%
Wheat RS	<u>BCOMRWHT</u>	-7.39%	17.61%	14.84%	0.96%	7.38%	-5.93%	-35.54%	-64.26%	-63.33%	-66.97%
Soybean Oil RS	BCOMRBOT	5.42%	4.90%	2.57%	-8.66%	-1.24%	9.90%	-13.85%	-42.25%	-33.18%	17.97%
Soybean Meal RS	BCOMRSMT	5.13%	2.79%	0.34%	-3.10%	2.21%	-6.06%	-0.68%	26.65%	361.10%	967.43%
HRW Wheat RS	BCOMRKWT	-8.59%	17.46%	17.37%	-2.09%	5.05%	-2.48%	-46.49%	-64.42%	-58.27%	-44.50%
Copper RS	<u>BCOMRHGT</u>	6.95%	4.73%	1.27%	6.36%	15.21%	28.99%	-13.52%	-19.56%	-22.92%	346.96%
Alumnium RS	BCOMRALT	0.00%	-0.39%	-2.28%	15.40%	12.77%	15.38%	-10.30%	-16.49%	-54.16%	9.07%
Zinc RS	BCOMRZST	1.76%	5.83%	-0.61%	7.84%	9.07%	25.34%	14.19%	35.87%	-34.78%	108.23%
Nickel RS	BCOMRNIT	8.68%	4.58%	-6.62%	-0.14%	1.34%	-4.96%	-46.53%	-39.00%	-68.11%	286.18%
Gold RS	BCOMRGCT	1.98%	-2.52%	-0.77%	8.23%	9.52%	-7.26%	-2.56%	-23.25%	74.85%	267.43%
Silver RS	BCOMRSIT	1.03%	-4.79%	-9.36%	13.98%	4.38%	-18.86%	-20.84%	-43.07%	16.45%	276.27%
Sugar RS	BCOMRSBT	7.30%	-8.65%	-19.59%	-10.57%	-22.84%	-20.83%	-29.98%	-50.03%	15.44%	57.92%
Coffee RS	BCOMRKCT	10.52%	-4.46%	-12.45%	0.15%	-3.10%	-12.57%	-44.57%	-49.08%	-41.81%	-77.72%
Cotton RS	BCOMRCTT	0.49%	-7.12%	-10.76%	9.58%	-1.74%	-7.25%	5.50%	3.86%	20.81%	-60.85%
Live Cattle RS	BCOMRLCT	-3.83%	-4.36%	8.84%	6.08%	11.03%	11.89%	-11.32%	-2.76%	-10.86%	74.26%
Lean Hogs RS	BCOMRLHT	-6.19%	3.04%	9.01%	-2.24%	-0.04%	-10.80%	-46.01%	-31.14%	-58.01%	-31.23%

BCOM Constituent Weights

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Group	Commodity	Ticker	Jul 2017 Contrib to Return %	Jul 31 2017 Weight	Jun 30 2017 Weight	Jul 2017 Weight Change	2017 Target Weight
	Natural Gas	<u>NG</u>	-0.58	6.8%	7.5%	-0.7%	8.0%
	WTI Crude	<u>CL</u>	0.52	6.6%	6.2%	1 0.4%	7.2%
Energy	Brent Crude	CO	0.49	7.2%	6.8%	1 0.4%	7.8%
Ellergy	ULS Diesel	<u>HO</u>	0.40	3.7%	3.4%	1 0.3%	3.8%
	Gasoline	<u>XB</u>	0.40	3.8%	3.5%	1 0.3%	3.8%
	Subtotal		1.23	28.1%	27.3%	1 0.8%	30.6%
	Corn	<u>C</u>	-0.22	7.7%	8.0%	-0.4%	7.4%
	Soybeans	<u>s</u>	0.31	5.9%	5.7%	1 0.2%	5.8%
	Wheat	W	-0.42	3.7%	4.2%	-0.5%	3.3%
Grains	Soybean Oil	<u>BO</u>	0.15	2.8%	2.7%	1 0.1%	2.8%
	Soybean Meal	SM	0.14	3.0%	3.0%	1 0.1%	2.9%
	HRW Wheat	KW	-0.15	1.3%	1.5%	-0.2%	1.2%
	Subtotal		-0.19	24.4%	25.1%	-0.7%	23.5%
	Copper	HG	0.55	8.6%	8.2%	0.4%	7.6%
Industrial	Aluminum	<u>LA</u>	-0.03	5.1%	5.2%	-0.1%	4.6%
	Zinc	LX	0.03	2.9%	2.9%	- 0.0%	2.7%
Metals	Nickel	LN	0.21	2.5%	2.4%	0.2%	2.5%
	Subtotal		0.76	19.1%	18.7%	1 0.4%	17.4%
Precious	Gold	<u>GC</u>	0.23	12.1%	12.0%	0.1%	11.2%
	Silver	<u>SI</u>	0.04	4.2%	4.2%	- 0.0%	4.1%
Metals	Subtotal		0.27	16.3%	16.3%	1 0.0%	15.3%
	Sugar	SB	0.18	2.4%	2.3%	0.1%	3.4%
Cofte	Coffee	<u>KC</u>	0.23	2.3%	2.1%	1 0.2%	2.4%
Softs	Cotton	CT	0.01	1.4%	1.4%	0.0%	1.4%
	Subtotal		0.42	6.1%	5.8%	1 0.3%	7.2%
	Live Cattle	<u>LC</u>	-0.16	3.9%	4.1%	-0.2%	4.0%
Livestock	Lean Hogs	<u>LH</u>	-0.16	2.2%	2.8%	-0.6%	2.1%
	Subtotal		-0.32	6.0%	6.9%	-0.9%	6.1%
Total			2.17	100%	100%		100%

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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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