Tables & Charts - February 2017 Edition

Metals Recovery Offsets Energy Decline

- Up slightly in 2017 as of February, March may set the BCOM tone for 1H
- Narrowing crude oil and U.S. dollar ranges suggest a volatility pick-up soon
- Reviving precious metals lead all sectors with industrials close behind, but appearing extended
- Grains grind higher anticipating planting and the potential for some production normalization
- Energy is largest index drag due to extended positions and plunging natural gas
- Strong metals indicate reflation, but industrials outperforming is more favorable economically

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

Broad Commodities Mark Time as Gold & Oil Battle for Leadership

Performance: February +0.2%, YTD +.3, Spot 2.4%. (returns are total return (TR) unless noted)

The Bloomberg Commodity Index, flat in 2017 on a total return basis and up 2.4% spot can be considered reflationary due to strong metals, but may have negative economic implications if precious continue to outperform. Precious metals, due to snap back from 4Q weakness, are up 10.5% in 2017 vs. 9.9% for industrial metals. Some reversion of position and price extremes is at play, notably in energy, down 10.1%. Excessive optimism for further energy-price gains accompanied by record open interest and managed-money net positions has limited appreciation.

Energy is likely to be BCOM's prominent driver in March, as extremely low volatility is due for some mean reversion. Grains led agriculture higher, but March is typically a bad month. Similar to crude oil, the dollar is also ripe for movement in March, which may set the tone for 1H.



S&P 500 Is Top Performer in 2017

Security	Chg YTD %	1 (Chg	Chg 6M	1Yr %	2Yr %
100000000000000000000000000000000000000		F	eb.	Pct	Chg	Chg
S&P 500 Total Return Index	+6.2%	H	4.2%	+10.3%	+25.3%	17.5%
MSCI World NETR USD Index	+5.4%		2.9%	+7.9%	+21.4%	8.1%
Bloomberg Barclays US Corporat	+2.8%		1.3%	+5.3%	+21.7%	11.6%
Bloomberg Barclays U.S. Treasu	+1.7%		1.3%	-12.2%	-4.9%	-1.4%
Bloomberg Commodity Index Tota	+.3%		+.2%	+6.2%	+16.0%	-14.8%
Bloomberg Dollar Spot	-2.2%		+.4%	+4.3%	+.8%	5.7%

Market Commentary

PERFORMANCE:

Prices, Volatility
CURVE ANALYSIS:

Roll Yields, Forwards/Forecasts MARKET FLOWS:

COT, ETFs

DATA

Overview, Commodity TR,

Contango/Backwardation,

Open Interest, Volume,

Energy

Metals

Agriculture

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5

11

15

18

MACRO OUTLOOK

Industrial Metals Lagging Precious Indicates Similar in Yields. Weaker gains for industrial metals than precious metals may signal that rising bond yields and normalizing economic trends are overextended. Typically coincident with yields -- sometimes leading, sometimes lagging -- the Bloomberg Industrial Metals Subindex vs. Precious ratio is down slightly in 2017 to 0.68. It peaked at 0.73 on Dec. 15. Yields on the U.S. 10-year note have since declined to 2.39% from 2.60%. The U.S. dollar's pullback from multiyear highs has helped to support gold and silver.

A declining Bloomberg Dollar Spot index (off 2.2% in 2017) is good for precious metals, but for the last 10 years industrial metals have been more negatively correlated. Relative value and position normalization appear to be the metals drivers in February, though fundamentals should prevail longer term.

Precious Metals Recover, Energy Declines

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Security	Chg YTD %	Chg Feb.	Chg 6M Pct	1Yr % Chq	2Yr % Chq
Bloomberg Precious Metals Subi	+10.5%	+3.9%	-4.0%	+5.9%	3.8%
Bloomberg Industrial Metals Su	+9.9%	+2.2%	+22.7%	+29.3%	.7%
Bloomberg Grains Subindex Tota	+4.0%	+1.6%	+9.7%		
Bloomberg Agriculture Subindex	+3.0%		+5.2%	+9.1%	-7.9%
BBG Softs TR	+1.5%	-4.7%	-3.0%	+24.6%	9.2%
Bloomberg Livestock Subindex T	1%	+1.3%	+4.8%	-7.8%	-14.0%
Bloomberg Energy Subindex Tota	-10.1%	-2.7%	+3.5%	+24.3%	-36.8%

Tables & Charts – February 2017 Edition

Stock Strength Leaves Commodities to Wayside, But for How Long? Supported by a weaker dollar in 2017, commodities appear increasingly subject to the direction of stocks. On a one-year total return basis, the Bloomberg Commodity Index, up 16%, compares with a 25% rally in the S&P 500 and 0.8% gain in the Bloomberg Dollar spot index. If the dollar's rally is done, metals may be a notable beneficiary among commodities. As happened in 1Q16, a stock-market correction could be a driver of a weaker dollar and reduced expectations of Federal Reserve rate tightening.

A year ago, Fed funds futures indicated a one-year rate that bottomed near 0.4% as stocks swooned, a month after BCOM hit its low. At an expected one-year rate of 1.26% at the end of February, markets have come a long way, rapidly. Commodities and rates moving in tandem is more normal relationship.

SECTOR PERFORMANCE

Gold Recovery Offsetting Extended Oil Among Commodities in 2017. Broad commodity rallies are rare without energy. Yet the Bloomberg Commodity Index is positioned well if energy, comprising just one-third of the index, continues to falter. Crude oil, the predominant commodity for about the past 80 years, appears to be getting pushed aside by gold. Up 10.5% in 2017, the Bloomberg Precious Metals Subindex is the mirror opposite of energy's decline. Precious metals have benefited from a weaker dollar and position and price reversion.

Extended prices with record open interest and managedmoney net long positions, along with mild winter weather, are pressuring energy. Absent some unforeseen bullish catalyst, energy may lag until excessive positions are reduced. Metals may be the primary beneficiaries if the dollar continues lower.

CURVES & FLOWS

BCOM One-Year Futures Curves (larger table in data section)

Name	Current	l Yr Ago	1 Yr Change	Change	Change	1 Mth Change	3 Mth Change	2 Yr Change
■ 1 Year Spread % of First Contract							-	
■ BCOM	-2.5	-7.9	5.4	-0.2	0.1	0.1	2.1	1.5
■ Sector								
■ Energy	-1.6	-21.5	19.8	1.0	2.8	2.5	6.0	5.1
■ Precious Metals	-1.8	-0.7	-1.0	0.0	0.0	0.0	0.1	-1.0
■ Industrial Metals	-0.8	-0.8	0,0	-0.1	0,2	0.2	-0.2	0.1
■ Agriculture	-4.8	-6.4	1.6	-0.6	-1.0	-1.1	-1.3	1.2
* Livestock	5.8	7.8	-2.0	-2.3	-3.1	-1.4	9.1	5.3
Single Commodities								
Crude Oil	-2.1	-24.6	22.6	3.9	3.0	2.5	7.8	22.4
Brent Crude	(0,0)	-17.7	17.7	3.1	1.3	1.5	10,4	11,6
Gas Oil	-3.4	-19.0	15.6	1.4	1.0	1.9	4.6	0.2
Soybean Meal	0.5	-5.5	6.0	0.9	-2.4	-2.5	0.4	-6.8
Corn	-9.7	-9.2	-0.4	0.8	0.1	-0.2	1.7	1.1
Zinc	0.9	-0.6	1.5	0.6	0.7	0.6	0.6	3.1
Heating Oil	-3.9	-21.9	18.0	0.6	1.3	2.5	4.2	-15.2
HRW Wheat	-15.5	-15.8	0.3	0.6	1.5	0.7	2.3	-5.7
Coffee	-9.0	-8.9	-0.1	0.1	-0.4	-0.5	-0.8	3.0
Palladium	-0.4	-0.4	0.0	0.1	-0.1	0.0	0.3	-0.1
Natural Gas	0.0	-32.3	32.2	0.1	10.0	5.9	6.8	12.3
Platinum	-1.1	-0.3	-0.8	0.1	0.0	0.0	0.1	-0.5
Nickel	-1.8	-1.3	-0.5	0.1	0.3	0.5	-0.4	-0.6
Aluminum	-1.0	-1.7	0.7	0.0	0.6	0.5	-0.2	1.9
Gold	-1.5	-0.4	-1.1	0.0	0.0	0.0	0.0	-1.1
Silver	-2.0	-1.1	-0.9	-0.1	0.1	0.0	0.2	-0.8
Copper (LME)	-0.4	0.5	-0.9	-0.1	0.1	0.2	-0.2	-1.2
Soybean	0.0	-3.2	3.3	-0.3	-2.0	-2.2	-1.9	-2.4
Cotton	1.0	-0.1	1.1	-0.7	-2.7	-3.0	-2.9	2.7
Copper (CME)	-1.8	-0.9	-0.9	-1.0	-0.6	-0.9	-0.8	-2.8
Live Cattle	12.0	11.6	0.4	-1.3	-1.1	-1.1	2.4	4.3
Soybean Oil	-3.1	-3.8	0.7	-1.9	-1.6	-1.9	-3.1	-1.6
Wheat	-19.0	-12.5	-6.5	-1.9	-2.2	-1.5	4.0	-13.0
Sugar	2.5	-4.5	7.0	-2.2	0.3	0.6	-5.8	15.7
Unleaded Gas	-0.1	-13.2	13.0	-2.9	0.4	0.8	2.5	-0.6
Lean Hogs	-0.4	3.9	-4.3	-3.4	-5.0	-1.8	15.9	6.2

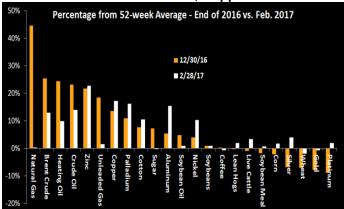
Curve-Steepening in Gas and Copper Counters Crude Oil Flattening. Weather can be blamed for a slight 2017 commodity move steeper into contango, but the trend remains quite positive year-over-year. Led by natural gas, the average of Bloomberg Commodity Index one-year futures curves dipped 20 bps steeper into contango in 2017 as of the end of February, to 2.5% vs. 7.9% a year ago. A mild North American winter and increased California hydroelectricity production, due to ample rain, spurred the sharp correction in natural gas prices and the curve shift steeper into contango.

Reflecting OPEC's commitment to cut production, WTI and Brent crude oil lead backwardation drivers in 2017. The Brent one-year curve reached backwardation in February for the first time since August 2014. Copper moving steeper into contango is a notable warning, though distorted by mine strikes.

HOT-COLD OUTLOOK

Zinc and Copper, Hotter Commodities; Gold, Bean Oil Still Cold. Analysis of relative price values can enhance decision-making in a market of commodities that appears to be bottoming and may take time to gain some momentum. A 4Q high flyer, natural gas has stumbled in 1Q, returning to relative value at its 52-week mean, vs. 45% above at the end of 2016. Gold remains 1% below its 52-week mean, despite its 9% rally in 2017. Industrial metals may be getting a bit too hot, with zinc and copper averaging about 20% above their 52-week means.

Gas Passes Hot Status to Zinc, Copper and Crude



Platinum, gold, wheat, silver and corn, which were duds at the end of 2016, are top performers in 2017 and may indicate markets that are more about positioning and relative value in the shorter-term. Industrial metals and oil, with record open interest and long positions, appear more at risk.

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Energy (Index weight: 30.4% of BCOM. Performance: Feb. -2.7%, YTD -10.1, Spot -6.5%) *Note index weights are the YTD average

Extended Prices, Positions Weigh on Energy

PERFORMANCE DRIVERS

Best Likely Over for Energy as Extended Positions Limit Gains. With a 2016 bottom-to-top recovery of 87% in its rearview mirror, the spot Bloomberg Energy Subindex has likely seen the best of its recovery period. Record open interest and net-long positions have replaced extreme negative sentiment, likely leaning a bit too optimistic -- as it was too pessimistic a year ago. The overhang of long positions may continue to suppress energy, the largest drag on broad indexes in 2017, with a total return of minus 10.1% -- the opposite of precious metals.

Long liquidation risk remains high in energy, notably vs. less extended sectors such as precious metals. Fundamentals will drive in the longer term, which doesn't favor energy, highly subject to advancing technology. Natural gas is the biggest drag on energy in 2017, and for much of the index's history.

Energy May Be Running on Fumes, Pressured by Natural Gas. Mean reversion in natural gas has been the primary energy drag in 2017. The sharp decline may also be indicative of the limits of the recovering sector. Down 25.4% in 2017, the Bloomberg Natural Gas Subindex represents the worst-performing BCOM commodity. At the end of 2016, it was among the hottest commodities, 45% above its 52-week moving average. Weather can be partially blamed, notably the mild North American winter. Unleaded gas is the next-worst performer with a 2017 decline of 9.5%.

All Energy Components Decline in 2017, Led by Gas

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Security	Chg YTD %	Chg	Chg	1Yr %	2Yr %
		Feb.	6M Pct	Chg	Chg
Bloomberg WTI Crude Oil Subind	-2.1%	+1.2%	+11.7%	+27.6%	-37.5%
Bloomberg Brent Crude Subindex	-2.3%	+1.1%	+11.6%	+33.3%	-35.5%
Bloomberg Heating Oil Subindex	-6.1%	+.1%	+9.0%	+32.7%	-33.8%
Bloomberg Unleaded Gasoline Su	-9.5%	-1.6%	+12.7%	+17.1%	-25.2%
Bloomberg Energy Subindex Tota	-10.1%		+3.5%	+24.3%	-36.8%
Bloomberg Natural Gas Subindex	-25.4%	-11.9%	-15.5%	+14.0%	-47.1%

Record U.S. gasoline inventories are weighing on prices. WTI crude oil is up over 100% from the year-ago low of \$26 a barrel vs. a Bloomberg Energy Subindex total

return of 36%. With the average of the energy curves at 1.6% in contango compared with 21.5% a year ago, negative roll yields should improve.

ENERGY – OUTLOOK

Next Stop for Crude Oil, \$47 or \$60 as Positions Lean for Higher. Crude oil is ripe for a breakout soon, sustaining within the narrowest 10-week range in 30 years and with open interest and managed money net positions at record highs. The 10-week crude oil Bollinger band is the narrowest since 1985. June 2015 marked the most recent similar low in this standard deviation measure -- crude locked on \$60 a barrel before collapsing to the 2016 bottom at \$26. Now, \$60 is a good resistance level with the approximate 52-week moving average of \$47 likely to provide key support.

Narrowest 10-Week Bollinger Band Since 1985



Record WTI and Brent open interest and managedmoney net positions appear to be limiting price gains in 2017. Oil may have similar liquidation risks as gold in 4Q. Reduction of record gold positions, which peaked in July, contributed to its 17% 4Q drop. A similar decline in oil would put it near \$45.

Energy Sector Futures Curve May Have Flattened Out for Awhile. With crude oil more than double 2016's 13-year low, energy returns may be capped for awhile. The average of the Bloomberg Energy Subindex one-year curves has returned to the 2015 narrow contango, and Brent's initial foray in backwardation may top the recovery. Reflecting a sector that was extended at the end of 2016, led by spiking natural gas, the Bloomberg Energy Subindex ended February as 2017's worst-performing sector, down 10.1%. Precious metals are a mirror image, up 10.5%.

Over the past year, energy one-year curves have shifted the most away from steep contangos, to 1.6% vs. 21.5%.

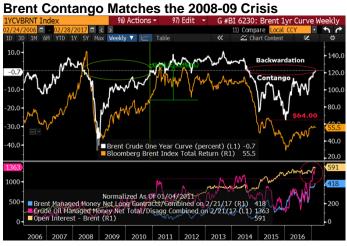
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Precious metals have moved the most the other way, 1.8% contango vs. 0.7% a year ago. Aggressive long positions a year earlier in energy paid off, but it may be awhile before similar relative values return.



BRENT IN BACKWARDATION

Brent May Be Finally Out of Woods, Back to Futures Backwardation. For Brent crude, if history repeats the last time its one-year futures curve emerged from as prolonged a steep contango period as February's, prices may have another 40% or so to recover in the next four months. That's what Brent did from early December 2010 through the April 2011 peak of \$126.70 a barrel. A 40% rally from \$56 currently would put Brent near the 50% retracement of the 2011 high to 2016 low of about \$78, though that appears unlikely, absent unforeseen events.

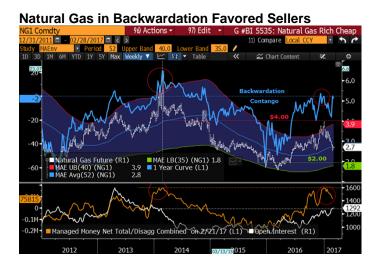


Brent and WTI crude open interest and managed-money net positions remain at records, a suppression factor for price appreciation. It could signal there are too many long positions. At the end of February, gold is up 9% in 2017 vs. a 2.6% decline in Brent. Gold is much less extended since the July peak.

Front Energy	/ Futi	ures							
Ticker	Last	Chg YTD %	Chg MTD %	1 Yr Ago		Pct 1Yr	Change 2 Year Percent	High	Diff From 2yr High
+ Generic 1st 'CL' Future	54.0	+.4%	+2.18%	33.8	49.8	+59.9%	8.4%	61.4	-7.5%
+ Generic 1st 'CO' Future	55.6	-2.2%	20%	36.0	62.6	+54.5%	-11.2%	67.8	
+ Generic 1st 'HO' Future	162.1	-4.9%	+.56%	107.6	229.9	+50.6%	-29.5%	201.6	-39.5%
+ Generic 1st 'XB' Future	151.2	-9.2%	89%	105.0	176.8	+44.0%	-14.5%	214.6	-63.4%
+ Generic 1st 'NG' Future	2.8	-25.8%	-11.32%	1.7	2.7	+61.5%	1.1%	3.9	-1.2%

SAME OLD NATURAL GAS

Signals Are Similar, But Natural Gas Risk Not the Same as 2014. Relative value indications for the bullishly inclined may take some time for natural gas. Its one-year curve's brief return to backwardation at the end of 2016 turned out to be a sell signal, as prices peaked near \$4 per MMBtu. At \$2.77 at the end of February, \$2 support may be at risk as winter wanes open interest and managed-money net positions remain high. Further liquidation risks appear elevated. The curve's moves may provide some guidance.



Natural gas appears at similar risk as 2014's high at \$6. Favoring the bullishly inclined, prices are more than 50% off that peak, with supply and demand more in balance in a market that appears to have scraped bottom, along with the entire energy sector.

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Metals

Industrial (Index weight: 15.1% of BCOM. Performance: February +2.2, YTD +9.9, Spot 10.2%)

Precious (Index weight: 14.8% of BCOM. Performance: February +3.9%, YTD +10.5%, Spot +10.7%)

Building the Commodity Recovery Foundation

Precious Metals Just Catching Up to Industrials or More Serious? Relative values have normalized for some metals in 2017. The Bloomberg Precious Metals Subindex leads all sectors, up 10.5% at the end of February, and bests industrials, up 9.9%. Precious metals have recovered almost the entire post-U.S. election plunge and are off 1.5% since Nov. 8 vs. a 10.5% rally in the Bloomberg Industrial Metals Subindex and 3% gain in the Bloomberg Dollar spot index. The dollar backing up 2.2% in 2017 has favored precious metals, but so has some reversion in positions and sentiment.

Sustained industrials outperformance vs. precious metals is a more desirable economic indicator. Sharp 4Q liquidation of precious metals positions has turned, supporting price reversion. Record longs in industrial metals, notably copper, has weighed on further appreciation, despite mine disruptions.

PERFORMANCE DRIVERS

Silver Leading All Commodities in 2017

Security	Chg YTD %	Chg Feb.	Chg 6M Pct	1Yr % Chg	2Yr % Chg
Bloomberg Silver Subindex Tota	+15.2%	+4.9%	-2.1%	+21.6%	8.2%
Bloomberg Aluminum Subindex To	+13.3%	+5.6%	+18.6%	+19.7%	-1.9%
Bloomberg Precious Metals Subi	+10.5%	+3.9%	-4.0%	+5.9%	3.8%
Bloomberg Industrial Metals Su	+9.9%	+2.2%	+22.7%	+29.3%	.7%
Bloomberg Zinc Subindex Total	+9.7%		+21.3%	+58.1%	31.7%
Bloomberg Nickel Subindex Tota	+9.3%	+10.2%	+11.6%	+26.9%	-24.4%
Bloomberg Gold Subindex Total	+8.7%	+3.6%	-4.7%	+.6%	2.0%
Bloomberg Copper Subindex Tota	+7.9%	-1.0%	+29.7%	+25.1%	-1.9%

Uniquely Positioned, Silver Takes the Gold to Lead Commodities. Silver, uniquely situated as a quasicurrency, may be a prime candidate to lead the commodities recovery. Benefiting from the tug between being both an industrial (50% of silver demand) and precious metal, silver leads all Bloomberg Commodity Index components in 2017, up 15.1%, just ahead of its 14% 2016 return. That occurred despite a 2.8% gain in

the Bloomberg Dollar Spot index. Among the commodities with the highest negative correlation, silver has been supported by a 2.2% decline in the dollar in 2017.

Also considered "leveraged gold," silver has recovered on the back of gold's 9% rebound in 2017. Down 13% in 4Q, some mean reversion has been at play, notably in positions. Record copper open interest and net longs have been a suppression factor, up 8%, but it's been the worst-performing metal.

Gold Performance Passing Copper May Be More About Positioning. As the end of February, spot gold has taken the 2017 performance lead back from copper, up 9% vs. 8%. Gold outperforming copper has negative implications for global economic recovery, but it may be more about potentially extended positions at risk of some liquidation. Copper futures open interest and managedmoney net positions are at record highs, with the metal's price near a two-year peak. Copper positions may be a bit too extended to allow further price gains, at least in the shorter term.

Copper Positions Record Long vs. Subdued Gold



Gold futures open interest and managed-money net positions are near the lowest in a year after declining from record highs in July. Copper enthusiasm, as measured by futures positions, appears similar to gold's in July.

PRECIOUS OUTLOOK

Accelerating Supply Plunge Likely to Help Support Silver Prices. At 9.6%, the 36-month rate of decline is the steepest since the World Bureau of Metal Statistics began to track silver-ore production in 1995. Low prices can be blamed. Near \$18.4 an ounce, silver is over 40% below 2012's average of \$31, one of the starkest declines in 30 years. As silver-ore production shifts with a significant lag, recycling could help to fill the void. Yet Metals Focus data indicate that higher prices would be

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needed to bring on more recycling, covering just 11% of 2015-16 demand vs. 15% in 2012.

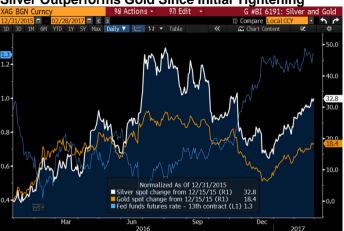
Supply Shifts Downward, Prices Begin to Recover



Silver is increasingly used in small quantities, notably in electronics applications, which aren't cost effective to recycle. In 2015-16, the silver supply/demand balance shifted to one of the highest deficits on record. Most silver is as a byproduct of lead-zinc, copper and gold mining.

Silver Tends to Benefit in Federal Reserve Tightening Cycles. Silver has been a better Fed-tightening companion than gold. During the last Federal Reserve rate-tightening cycle from June 2004 through June 2006, gold increased 56%, but silver jumped more than 90%. In the three tightening cycles since 1990, silver nearly doubled the return of gold, up 60% vs. 32%. Silver's unique attribute as a quasi-currency commodity, with over 50% of its demand from industrial sources and rising, should make it increasingly likely to outperform when the Fed is tightening.

Silver Outperforms Gold Since Initial Tightening



The primary currency that's not associated with a specific country, gold at times has been the nemesis of governments and central bankers. Silver is often the

better leading indicator for monetary policy. Since the initial tightening on Dec. 15, 2015, silver has gained 33% vs. 18% for gold.

Steepening Precious Curves a Consistent Fed-Tightening Indicator. Steepening precious-metals futures curves have been a consistent indicator of Federal Reserve tightening. Despite reduced expectations early last year of tightening, silver and gold shifted steeper into contango as front futures lagged back-month contract gains. At 1.8% average contango at the end of February, gold and silver one-year curves were unchanged from mid-August, when federal funds futures indicated a rate near 0.60% in one year. With an expected one-year rate near 1.26%, fed funds have caught up some.

Gold & Silver Curves Flatline, Fed Funds Catch-Up



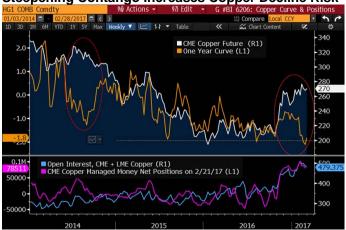
November 2008 was the last time that gold and silver one-year futures curves were in steeper contango than the end of February. A leading tightening indicator in recent years, the unchanged average precious metals one-year curve, since August, may indicate less-aggressive rate tightening than expected.

INDUSTRIALS OUTLOOK

Copper Contango Shift May Indicate Rally Pushing on a String. Copper price-correction risks may be quite elevated on the back of the futures curve shifting more steeply into contango. Recent strike-related supply disruptions may have overly extended the price rally, with CME copper up 8% at the end of February, despite the one-year futures curve reversing into the steepest contango since 2013. Moving more sharply into contango is typically a sign of a market experiencing more bearishly inclined supply/demand forces.

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Steepening Contango Increases Copper Decline Risk



Combined with record open interest and managedmoney net positions, CME copper futures at \$2.70 a pound appear at high long-liquidation risk to potentially retrace some of the high-velocity, 22% rally since the end of 3Q. Momentum remains positive but the steepening contango may be a warning sign.

Agriculture (Index weight: 27.1% of BCOM. Performance: February -0.3%, YTD +3.0%, Spot +4.5)

Grains (Index Weight: 19.9% of BCOM. Performance: February +1.6%, YTD +4.0%, Spot +5.8%)

Softs (Weight: 7.2% of BCOM.

Performance: February -4.7%, YTD +1.5%, Spot +2.4%)

Warming Too Rapidly Likely to Spur Ag Volatility

PERFORMANCE DRIVERS

The Ides of March May Shift Gears for the Agriculture Sector. Perhaps anticipating volatility in March, the Bloomberg Agriculture Subindex 2017 total return remained roughly unchanged at 3.0%. Wheat short covering and coffee, cotton and soybean meal lead the gainers. In February, a slight grain gain was offset by a 4.7% decline in soft commodities. For the past 10 years, March has been among the worst months for agricultural commodities, off 2.4% on average. Warming patterns

should accelerate spring planting yet may also coincide with more volatility.

Mean-Reverting Wheat Driving 2017 Ag Returns

Security	Chg	YTD % I	Chg Feb.	Chg 6M Pct	1Yr % Chg	2Yr % Chg
					ulig	ung
Bloomberg Kansas Wheat Subinde	+7.8%		+5.0%	+9.0%	-15.7%	-36.8%
Bloomberg Cotton Subindex Tota	+6.4%		+.3%	+13.8%	+32.9%	12.9%
Bloomberg Wheat Subindex Total	+5.8%		+2.6%	+6.7%		-28.1%
BBG Soybean Meal TR	+5.0%		7%	+6.7%	+26.4%	1.1%
Bloomberg Corn Subindex Total	+4.2%		+1.9%	+13.5%	-4.3%	-21.7%
Bloomberg Grains Subindex Tota	+4.0%		+1.6%	+9.7%		-17.2%
Bloomberg Agriculture Subindex	+3.0%			+5.2%	+9.1%	-7.9%
Bloomberg Coffee Subindex Tota	+2.4%		-6.2%		+13.2%	-16.5%
Bloomberg Live Cattle Subindex	+2.4%		+3.3%	+9.4%		-13.2%
Bloomberg Soybeans Subindex To	+2.2%		+.1%	+7.0%	+18.3%	1%
BBG Softs TR	+1.5%				+24.6%	9.2%
Bloomberg Sugar Subindex Total	-1.2%		-5.8%		+28.0%	21.6%
Bloomberg Soybean Oil Subindex	-2.8%			+1.0%	+4.6%	-5.5%
Bloomberg Lean Hogs Subindex T	-3.8%		-2.3%	-2.3%		-15.4%

With temperatures akin to the 2011-12 winter in the U.S. grain belt, the 2012 drought-year rally started with the warmest March on record in Illinois. Too much moisture in March-April can hamper planting and boost prices. The greatest risk is too little rain in July-August.

Just Short Covering or Bottoming? Wheat Finally Steps Up. Hard red winter wheat and primary wheat are the best-performing Bloomberg Grain Subindex commodities in 2017, gaining about 7% on average. No longer the net-short standout among managed-money positions, the record negative sentiment, position and price extremes of 2016 may mark a longer-term wheat bottom. Indicating underlying demand that exceeds supply, meal leads gainers in the soybean complex, up 5% in 2017, for a one-year Bloomberg Soybean Meal Subindex total return of 26%.

Soybeans, the highest-weighted BCOM agriculture commodity, are the grain stalwart. They've been bested, notably by sugar, the highest-weighted soft commodity, up 28% in the past year, but off 6% in February on lower import expectations from India as the global price rally appears extended vs. local markets.

MACRO OUTLOOK

Peak Risks Elevated as Grains Stocks-to-Use Near 38-Year High. Unlikely further appreciation in the grains stocks-use-ratio should favor recovery in prices. The last time the average of USDA estimated U.S. stocks-to-use ratio for corn, soybeans and wheat reached the current level of 26.6 was 1999. That high took awhile to leave behind, but soybeans did peak 230% higher four years later. More-recent peaks in the ratio in 2006 and 2010 were from lower levels, but resulted in more-rapid price increases -- both peaks were about two years later.

Tables & Charts - February 2017 Edition

If the stocks-to-use ratio is near a peak, prices could see similar high-velocity rallies as in more-recent years. If stocks extend above the 1999 peak, prices should see pressure, but likely more limited. Grains make up about 77% of the Bloomberg Agriculture Subindex and 24% of the broad index.

Grains Stocks-to-Use at 1999 Peak



Grain-Market Outlook May Be Heating Up Too Rapidly With Temps. The most probable catalyst to grain-price gains may be a turn in the favorable weather that has been conducive to record-setting bumper crops. Illinois and Indiana, big producers of corn and beans, have averaged record-high temperatures this winter. Despite factoring in normal patterns, which markets typically do, and with Southern Hemisphere production looking fine, prices continue to recover from 2016's multiyear lows, led by soybeans.

Grains, Approaching Some Longer-Term Resistance



The grains are nearing trendline resistance from the 2012 peak into one of the worst months of the year, March, coinciding with the Southern Hemisphere's harvest and early planting in the North. Optimistic April isn't far behind, one of the best months, with an average Bloomberg Grain Subindex gain of 2.3% in the past 10 years.

Sugar, Soybeans Could Feed Recovery in Agriculture Futures Curve. Essentially unchanged near 6% contango since September 2014, the Bloomberg Agriculture Subindex constituent average one-year futures curve may be ripe to follow sugar and soybeans toward backwardation. Led by 0.6% contango in sugar and 0.2% in soybeans, vs. 5% and 3% contango a year ago, the world's most widely traded soft commodity (sugar) and overall agriculture future (soybeans) should lead. Wheat, well supplied, remains in the steepest contango, 19% at the end of February.

Agriculture Curves May Be Ripe for Recovery



Northern Hemisphere growing-season conditions will likely be the primary driver of agriculture returns in 2017. Soybeans one-year curve near backwardation at the end of February may indicate a continuation of the past few years' bumper crops might not be sufficient to meet record demand.

CORN, SOYBEANS, WHEAT

Just Short Covering or Longer-Term Bottoming?



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Wheat May Be Gaining Some Giddy-Up, Running Away From Sub-\$4. As successive bumper crops have pressured wheat prices and reduced production incentive, \$6 a bushel could be possible, with sub-\$4 in the rearview mirror if wheat gains some momentum. A \$5.70 price would mark 24% retracement of the 2008 high-to-2016 low, while \$6.50 is 50% retracement from 2012's high. Short covering has been at play in 2017, with combined primary and hard red winter wheat open interest down 4% at the end of February and as record net short managed-money combined positions have normalized from last year. Some estimates of U.S. winter wheat planting indicate the lowest acreage in 100 years. The U.S. accounts for about 15% of global wheat exports, the majority from the winter crop. Higher prices may be necessary to encourage further production, also at risk of some normalization in the bumper-crop trend.

Wheat's Drag on Its Ratio to Corn Getting a Bit Overripe. The last time wheat was a primary driver of a declining wheat-to-corn ratio similar to the current trend, it abruptly ended in 2010 as wheat rallied 100% to the 2011 peak. That pattern lasted about three years. The current run is entering its fourth year. When livestock producers substitute wheat for corn in animal feed, it's a good indication of higher demand responding to relatively low prices, often indicating a bottom in wheat prices. Wheat-to-corn may have bottomed at the 2016 low near 1.1.

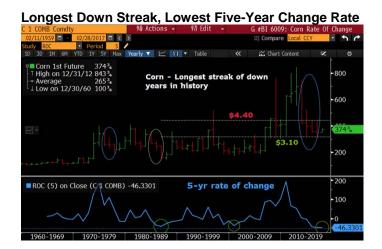
Wheat is primarily consumed by humans. Corn is the primary feed grain for animals, but has less protein. Wheat can also remain for extended periods near or below the price of corn, as in 2011-13, when unfavorable weather reduced corn production, supporting a strong rally relative to wheat.

If History Is a Guide, Corn Could Stalk \$4 a Bushel Awhile. If the last two years of failed spikes into June-July where corn topped out near \$4.50 a bushel are a guide, an indication of a more sustained recovery may

involve laying low near \$4 awhile. Farmers will soon plant in the U.S., the largest corn producer. Greeting the season, new-crop December corn returned to the \$4 handle in February for the first time since July. It's likely to take subpar growing conditions to hold above \$4.50 by late July, though supply and demand trends indicate bottoming.



Supported by low prices, corn consumption is exceeding production at the greatest amount in about eight years. Coincident with recent price gains, futures open interest reached the highest level since 2011, but managed-money net positions aren't as extended as past levels that marked price peaks.



Record Corn-Price Downward Run May Be
Approaching Exhaustion. Corn prices have never
declined more, nor has mean-reversion risk been higher,
with 2016 marking the fourth-straight annual decline in
the longest such stretch in the history of modern cornfutures trading. In 57 years of tracking, futures have never
fallen more than three years in a row. Despite 8% global
production growth in 2016, corn prices dropped only
1.9%. Since 1990, the beta of the change in annual corn

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price to global production is minus 2.2, meaning that corn prices could have declined more than 17%. About \$3 a bushel was effectively corn's high before the Renewal Fuel Standard program inflated ethanol demand. That price has been a support level since 2006 with a \$8.31 high and \$4.80 mean. Initial key support and resistance levels are likely \$3.10-\$4.40.

More-Profitable Beans Likely to Meet Resistance Relative to Corn. Soybeans may face reversion pressure relative to corn, bringing prices and net revenue more inline with their historic relationship. With a front-contract ("old crop") soybean-to-corn ratio of 2.8, plus a potential fourth straight year of soybean net revenue per acre exceeding corn's, movement is likely toward 2.4, the 10-year average and approximate net revenue break-even. The "new-crop" end-of-2017 futures ratio of 2.6 is due to contango in corn and backwardation in soybeans.





Soybeans typically take a back seat in their relationship to corn. For the past 15 years, the correlation of corn prices to the ratio is minus 0.6 vs. plus 0.3 for beans. Corn and soybeans, the world's primary grains, often compete for acreage and are rotated to optimize yields.

Potential Peak in Soybeans Stocks-to-Use Should Support Prices. Risks may be elevated with near-peak soybeans stocks relative to demand. For the last three years, the global average soybean yield per acre has averaged 20% above the five-year mean. The last year this extreme was exceeded was 2002; prices increased 39% in 2003. Despite record production, stocks-to-use may be peaking, due to even greater record demand. The primary profitable U.S. grain in 2016, more acres of soybeans are likely to be planted in 2017. Despite this, prices continue to rally. Soybeans should require continued extreme bumper crops to hold below \$9 a bushel, or an unexpected decline in demand. USDAestimated U.S. soybean production was 27% above the five-year average in 2016, the most since 32% in 1994. In 1995, soybean prices rallied 33%.

Soybean Stocks-to-Use, Prices May Be Turning



SOFTS - OUTLOOK

Sugar, the Soft-Commodities Driver, May Lead Broader Agriculture. If the last few sugar spurts are a guide, the broader agriculture sector may play catch-up to the 28% one-year return of the Bloomberg Sugar Subindex. From December 2008 through January 2010's peak, sugar gained over 150%, with only a slight rise in broad agriculture. From May 2010 to February 2011's peak, the Bloomberg Agriculture Subindex caught up, jumping 80%. Sugar has more than doubled its August 2015 low. It's about 50% of the soft commodities subindex and 3% of the broader Bloomberg Commodity Index.

Sugar May Be Taking Over Agriculture Leadership



Sugar's leadership is likely linked to more than just rising ethanol production, coincident with corn. Primarily produced in the Southern Hemisphere, sugar prices may be reflecting weather patterns related to El Nino or La Nina, with differing cyclical effects in the south than the north.

Tables & Charts – February 2017 Edition

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Performance - Overview

Key Metrics

Name	% Change on Day	WTD % Change	MTD % Change	1 Mth % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change	3 Yr % Change	5 Yr % Change
■ Commodities										
■ BCOM Index TR	0.7	0,3	0.2	0.2	2.2	0.3	16.0	-14.8	-34.2	-40.3
■ Energy Index	0.7	0.1	-2.7	-2.7	-2.0	-10.1	24.3	-36.8	-63.5	-63.5
■ Grains Index	1.4	0.5	1.6	1.6	3.3	4.0	0.0	-17.2	-33,3	-32.5
■ Industrial Metals Index	0.6	1.0	2.2	2.2	4.3	9.9	29.3	0.7	-7.5	-30.2
■ Precious Metals Index	-0.2	-0.2	3.9	3.9	8.1	10.5	5.9	3.8	-9.0	-34.6
■ Softs Index	0.6	-2.2	-4.7	-4.7	-2.3	1.5	24.6	9.2	-22.5	-40.3
Livestock Index	1.1	1.4	1.3	1.3	9.9	-0.1	-7.8	-14.0	-23.4	-23.0
Agriculture Index	1.3	0.1	-0.3	-0.3	0.7	3.0	9.1	-7.9	-27.4	-30.2
■ BCOM EX Indices TR										
■ BCOM Index Roll Select TR	0.8	0.4	0.6	0.6	3.4	1.7	19.0	-10.3	-28.6	-35.1
■ BCOM Index Forwards TR										-
■ BCOM Index ER	0.7	0.3	0.2	0.2	2.0	0.3	15.5	-15.2	-34.5	-40.7
BCOM Index Spot	0.7	0.3	1.7	1.7	4.8	2.4	26.8	2.2	-19.7	-24.3
 Agriculture Index 	1.3	0.1	1.2	1.2	2.6	4.5	16.2	3.3	-17.5	-26.7
Energy Index	0.7	0.1	0.7	0.7	2.9	-6.5	50.9	-3.3	-42.1	-34.7
 Industrial Metals Index 	0.6	1.0	2.6	2.6	4.7	10.2	31.5	5.1	-1.7	-19.7
■ Precious Metals Index	-0.2	-0.2	4.0	4.0	8.2	10.7	7.2	5.7	-6.8	-32.0
 Livestock Index 	1.1	1.4	1.2	1.2	11.8	1.6	-9.9	-14.2	-24.9	-13.7
Petroleum Index	-0.1	0.1	3.7	3.7	9.6	-0.5	48.8	-6.2	-45.4	-49.6

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Name	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ Commodities										
■ BCOM Index TR	0.3%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%	18.9%	-35.6%
■ Energy Index	-10.1%	16.3%	-38.9%	-39.3%	5.2%	-9.48	-16.0%	-10.5%	-5.3%	-47.3%
■ Grains Index	4.0%	-5.9%	-19.4%	-9.4%	-16.9%	18.3%	-14.4%	30.3%	-1.6%	-26.3%
■ Industrial Metals Index	9.98	19.9%	-26.9%	-6.9%	-13.6%	0.7%	-24.2%	16.2%	80.08	-48.3%
■ Precious Metals Index	10.5%	9.5%	-11.5%	-6.78	-30.8%	6.3%	4.6%	42.7%	29.2%	-4.1%
■ Softs Index	1.5%	13.2%	-9.98	-10.1%	-16.9%	-22.48	-14.0%	59.9%	44.2%	-28.4%
■ Livestock Index	-0.1%	-5.6%	-18.8%	11.6%	-3.5%	-3.5%	-2.3%	9.3%	-15.1%	-28.4%
Agriculture Index	3.0%	2.1%	-15.6%	-9.28	-14.3%	4.0%	-14.4%	38.5%	13.7%	-27.5%
■ BCOM EX Indices TR										
■ BCOM Index Roll Select TR	1.7%	14.6%	-23.4%	-15.2%	-9.1%	-0.4%	-8.8%	19.5%	23.1%	-29.8%
■ BCOM Index Forwards TR			-	10000000		10000			7000	
■ BCOM Index ER	0.3%	11.4%	-24.78	-17.0%	-9.6%	-1.1%	-13.4%	16.78	18.7%	-36.6%
■ BCOM Index Spot	2.4%	23.1%	-18.4%	-17.0%	-8.7%	3.7%	-8.1%	26.48	41.2%	-28.9%
■ Agriculture Index	4.5%	8.1%	-11.6%	-8.2%	-19.2%	2.1%	-12.5%	47.5%	21.9%	-18.2%
■ Energy Index	-6.5%	47.98	-26.3%	-40.9%	10.2%	2.7%	-5.0%	3.7%	42.5%	-41.0%
■ Industrial Metals Index	10.2%	21.9%	-25.0%	-4.8%	-9.6%	4.1%	-22.1%	20.4%	89.3%	-46.9%
▼ Precious Metals Index	10.7%	10.6%	-10.8%	-6.3%	-30.3%	7.3%	5.1%	43.8%	30.3%	-2.5%
■ Livestock Index	1.6%	-5.9%	-19.9%	11.8%	1.0%	6.3%	9.7%	24.2%	3.0%	-5.0%
Petroleum Index	-0.5%	44.8%	-29.7%	-45.3%	3.4%	-1.7%	8.8%	16.4%	65.7%	-49.6%
■ Ex Indices										
■ Stocks										
■ S&P 500 Index TR	5.9%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%
■ Bonds										
■ Barclays U.S. Aggregate	0.9%	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	-2.2%	2.8%	9.0%	11.0%	3.3%	-0.7%	1.8%	-1.8%	-4.8%	8.9%
US Dollar Index	-1.1%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%	-4.28	6.0%
Pound Index	0.1%	-30.3%	-5.7%	-4.3%	3.9%	8.7%	-0.5%	-6.6%	17.3%	-45.5%

Tables & Charts – February 2017 Edition

Performance – Commodity Total Returns

Key Metrics

Name	% Change on Day	WTD % Change	MTD % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change
■ BCOM Total Return Indices							
Silver Index	0.3	0.3	4.9	11.8	15.2	21.6	8.2
Platinum Index	-0.8	0.2	3.5	13.0	13.9	9.7	-13.9
Aluminum Index	1.2	2.1	5.6	10.8	13.3	19.7	-1.9
Zinc Index	0.7	-0.2	-1.2	4.4	9.7	58.1	31.7
Nickel Index	-0.6	1.1	10.2	-2.7	9.3	26.9	-24.4
Gold Index	-0.4	-0.3	3.6	6.7	8.7	0.6	2.0
Copper Index	0.6	0.7	-1.0	2.7	7.9	25.1	-1.9
HRW Wheat Index	1.4	-0.7	5.0	10.0	7.8	-15.7	-36.8
Cotton Index	0.3	-0.3	0.3	5.1	6.4	32.9	12.9
Wheat Index	1.1	-0.9	2.6	7.3	5.8	-15.9	-28.1
Soybean Meal Index	0.2	0.2	-0.7	3.1	5.0	26.4	1.1
Corn Index	1.5	0.8	1.9	5.2	4.2	-4.3	-21.7
Coffee Index	1.1	-2.5	-6.2	-6.7	2.4	13.2	-16.5
Live Cattle Index	2.1	2.6	3.3	6.2	2.4	-4.7	-13.2
Soybeans Index	1.3	1.1	0.1	-1.6	2.2	18.3	-0.1
Sugar Index	0.4	-2.9	-5.8	-2.7	-1.2	28.0	21.6
WTI Crude Index	0.0	0.2	1.2	4.3	-2.1	27.6	-37.5
Brent Crude Index	0.2	0.4	1.1	5.7	-2.3	33.3	-35.5
Soybean Oil Index	4.0	3.9	-0.5	-9.6	-2.8	4.6	-5.5
Lean Hogs Index	-0.8	-0.6	-2.3	15.3	-3.8	-13.1	-15.4
Heating Oil Index	-0.4	-0.4	0.1	2.1	-6.1	32.7	-33.8
Gasoline Index	-0.6	-0.3	-1.6	0.4	-9.5	17.1	-25.2
Natural Gas Index	3.3	0.1	-11.9	-17.0	-25.4	14.0	-47.1

Name	2017 1	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ BCOM Total Return Indices										
Silver Index	15.2%	14.0%	-12.7%	-20.4%	-36.6%	7.1%	-10.1%	81.8%	47.6%	-25.4%
Platinum Index	13.9%	0.8%	-26.5%	-12.3%	-11.8%	8.7%	-21.8%	19.3%	54.0%	-38.2%
Aluminum Index	13.3%	9.7%	-22.9%	-3.1%	-20.7%	-4.0%	-21.7%	5.4%	33.8%	-40.1%
Nickel Index	9.3%	11.8%	-42.6%	7.3%	-20.1%	-10.2%	-24.7%	32.2%	54.9%	-56.2%
Zinc Index	9.0%	57.5%	-28.0%	3.5%	-7.0%	9.0%	-27.8%	-8.8%	98.3%	-51.0%
Gold Index	8.7%	7.7%	-10.9%	-1.7%	-28.7%	6.1%	9.6%	28.7%	22.9%	3.9%
Copper Index	7.9%	15.7%	-25.1%	-16.6%	-8.8%	5.0%	-24.4%	29.5%	130.0%	-53.1%
HRW Wheat Index	7.8%	-25.3%	-32.7%	-4.7%	-26.2%	5.6%	-22.9%	42.1%	-23.8%	-36.5%
Cotton Index	6.4%	10.5%	3.0%	-21.2%	9.0%	-12.7%	-21.7%	98.2%	30.1%	-42.8%
Wheat Index	5.8%	-24.1%	-22.2%	-9.4%	-27.2%	9.8%	-34.0%	21.2%	-26.0%	-38.5%
Soybean Meal Index	5.0%	18.1%	-18.0%	11.8%	20.0%	49.1%	-18.1%	38.9%	34.7%	-8.6%
Corn Index	4.2%	-9.8%	-19.2%	-13.3%	-30.3%	19.0%	1.1%	30.7%	-10.1%	-21.9%
Coffee Index	2.4%	-1.3%	-31.5%	37.8%	-30.5%	-41.6%	-11.2%	67.0%	10.3%	-26.2%
Live Cattle Index	2.4%	-7.4%	-14.3%	22.1%	-5.0%	-3.9%	-1.0%	15.0%	-9.8%	-26.2%
Soybeans Index	2.2%	14.8%	-14.6%	-5.5%	10.5%	24.0%	-16.4%	34.9%	22.9%	-21.2%
Sugar Index	-1.2%	22.8%	-4.7%	-30.9%	-20.0%	-13.0%	-11.9%	24.0%	86.3%	-19.9%
WTI Crude Index	-2.1%	7.1%	-44.3%	-41.7%	6.8%	-11.8%	-3.6%	3.8%	4.4%	-53.2%
Brent Crude Index	-2.3%	25.4%	-45.6%	-47.6%	7.2%	7.6%	16.8%	11.5%	28.6%	-51.2%
Soybean Oil Index	-2.8%	7.3%	-7.7%	-20.6%	-22.4%	-9.8%	-15.2%	33.8%	14.2%	-36.5%
Lean Hogs Index	-3.8%	-2.9%	-26.1%	-4.4%	-2.0%	-2.9%	-4.6%	0.3%	-22.5%	-31.9%
Heating Oil Index	-6.1%	33.5%	-42.8%	-38.8%	0.4%	5.5%	10.7%	8,3%	20.5%	-47.2%
Gasoline Index	-9.5%	6.4%	-12.6%	-43.8%	1.9%	25.7%	14.5%	13.1%	74.7%	-61.4%
Natural Gas Index	-25,48	10.3%	-39.9%	-30.7%	5.0%	-30.6%	-47.1%	-40.6%	-51.6%	-37.1%

Tables & Charts – February 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					100		
Silver	-0.3	-0.2	4.3	11.5	14.4	22.8	10.8
Platinum	-1.3	-0.3	2.9	12.7	13.7	9.7	-13.5
Aluminum	1.1	1.9	6.3	10.8	13.4	22.2	6.2
Palladium	-2.0	-0.5	1.8	-0.5	12.4	55.0	-6.2
Zinc	0.7	-0.2	-1.0	4.9	10.1	60.1	37.6
Nickel	-0.6	1.1	10.4	-2.4	9.6	28.7	-22.1
Gold	-0.8	-0.7	3.4	6.7	8.5	1.2	3.0
Copper (CME)	0.7	1.0	-0.7	3.3	8.1	27.2	-0.3
Copper (LME)	0.7	0.8	-0.3	2.6	7.9	26.8	0.8
HRW Wheat	1.6	-0.6	5.1	15.3	7.8	1.4	-15.6
Cotton	0.5	-0.1	0.5	4.0	6.6	29.9	16.4
Soybean Meal	0.5	0.4	-0.6	5.1	6.3	28.3	-6.0
Corn	1.8	0.8	1.9	8.9	4.2	3.7	-4.6
Wheat	1.4	-1.5	1.0	11.6	4.1	-4.6	-17.9
Soybeans	1.4	1.1	0.0	-0.7	2.9	20.2	-0.6
Coffee	1.2	-2.6	-5.9	-4.6	2.7	24.9	2.9
Lean Hogs	-0.8	-0.6	-2.1	32.5	2.2	-3.4	0.2
Live Cattle	2.1	2.6	2.0	6.5	1.6	-13.9	-22.3
WTI Crude	-0.3	-0.2	2.0	9.0	0.3	59.6	8.3
Sugar	1.2	-2.5	-5.6	-2.5	-1.0	32.6	38.6
Gas Oil	-0.6	-0.1	0.1	10.3		52.3	-16.8
Soybean Oil	4.1	4.0	-0.5	-8.4	-2.1	10.0	2.7
Brent Crude	-0.6	-0.7	-0.2	10.1	-2.2	54.5	-11.2
Heating Oil	-1.2	-1.2	0.6	3.2	-4.9	50.6	-29.5
Gasoline	-1.4	-0.2	-0.9	1.4	-9.2	44.0	-14.5
Natural Gas	2.6	5.2	-11.3	-17.5	-25.8	61.5	1.1

motorioai	2017	2016	2015	2014	2012	2012	2011	2010	2000	2000
Name	2017 1	2016	2015	2014	2013	2012	2011	2010	2009	2008
BCOM Single Commodity Price	700000	2044		-	10000		-	-		477.00
Silver	14.7%	15.8%	-11.5%	-19.5%	-35.9%	8.3%	-9.8%	83.7%	49.1%	-24.3%
Platinum	13.5%	1.1%	-26.2%	-11.8%	-10,9%	9.9%	-21.1%	21.5%	55.9%	-38.7%
Aluminum	13.4%	12.5%	-17.9%	4.1%	-13.9%	2.5%	-18.8%	11.6%	45.6%	-36.0%
Palladium	13.2%	21.6%	-29.6%	11.2%	2.1%	7.2%	-18.3%	96.5%	116.7%	-50.1%
Nickel	9.6%	13.5%	-41.8%	9.0%	-18.6%	-9.2%	-24.2%	33.8%	58.8%	-55.4%
Zinc	9.4%	60.2%	-26.2%	6.0%	-0.5%	12.2%	-25.2%	-3.5%	113.5%	-49.6%
Copper (CME)	9.28	17.4%	-24.4%	-16.8%	-7.0%	6.3%	-22.7%	32.9%	137.3%	-53.6%
Gold	8.0%	8.6%	-10.5%	-1.5%	-28.3%	7.0%	10.2%	29.7%	24.0%	5.5%
Copper (LME)	7.9%	17.3%	-25.8%	-13.9%	-6.8%	4.2%	-21.2%	31.2%	141.1%	-54.2%
HRW Wheat	7.8%	-10.7%	-25.2%	-2.2%	-22.9%	15.9%	-15.7%	58.7%	-14.9%	-31.0%
Cotton	6.6%	11.6%	5.0%	-28.8%	12.6%	-18.1%	-36.6%	91.5%	54.2%	-27.9%
Soybean Meal	6.3%	18.4%	-27.5%	-16.7%	4.1%	35.9%	-16.4%	18.0%	4.5%	-9.4%
Corn	4.2%	-1.9%	-9.6%	-5.9%	-39.6%	8.0%	2.8%	51.7%	1.8%	-10.6%
Wheat	4.1%	-13.2%	-20.3%	-2.6%	-22.2%	19.2%	-17.8%	46.78	-11.3%	-31.0%
Soybeans	2.9%	14.4%	-14.5%	-22.3%	-7.5%	18.4%	-14.0%	34.0%	6.98	-18.9%
Coffee	2.7%	8.2%	-23.9%	50.5%	-23.0%	-36.6%	-5.7%	76.9%	21.3%	-17.7%
Lean Hogs	2.2%	10.6%	-26.4%	-4.9%	-0.3%	1.7%	5.7%	22.3%	7.1%	5.2%
Live Cattle	1.6%	-15.2%	-16.4%	21.5%	1.8%	8.9%	12.1%	25.9%	80.0	-10.5%
WTI Crude	0.4%	45.0%	-30.5%	-45.9%	7.2%	-7.1%	8.2%	15.1%	77.9%	-53.5%
Sugar	-1.0%	28.0%	5.0%	-11.5%	-15.9%	-16.3%	-27.5%	19.2%	128.2%	9.1%
Soybean Oil	-2.1%	12.7%	-4.4%	-17.6%	-21.0%	-5.6%	-9.8%	43.1%	21.2%	-31.9%
Brent Crude	-2.2%	52.4%	-35.0%	-48.3%	-0.3%	3.5%	13.3%	21.6%	70.9%	-51.4%
Gas Oil	-2.3%	53.6%	-36.3%	-45.8%	1.9%	0.3%	21.2%	20.0%	51.9%	-50.1%
Heating Oil	-3.6%	54.8%	-40.4%	-40.0%	1.1%	3.8%	15.4%	20.1%	50.7%	-46.8%
Gasoline	-9.2%	31.4%	-11.7%	-48.5%	-0.9%	4.7%	9.5%	19.5%	103.6%	-59.3%
Natural Gas	-25.7%	59.3%	-19.1%	-31.7%	26.2%	12.1%	-32.1%	-20.9%	-0.9%	-24.9%

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

Performance – Volatility

renomiance -	VUIA	unity									
Name	Current	% Change on Day	WTD % Change	MTD % Change	1 Mth % Change	3 Mth % Change	YTD 1 Change	1 Yr % Change	2 Yr % Change	3 Yr % Change	5 Yr 1 Change
■ BCOM 3M Implied Volatility										-	
Corn	22.7	3.9	4.8	25.6	25.1	27.1	14.8	23.8	-9.6	8.8	-18.7
Soybean Oil	21.5	10.6	12.2	12.0	13.2	-9.4	10.9	27.9	6.3	28.7	9.9
Soybean Meal	23.7	1.8	-0.7	10.2	8.2	1.7	9.5	50.1	-8.6	8.2	11.1
Wheat	24.1	2.8	2.3	10.4	8.4	10.8	8.4	7.2	-6.7	-4.7	-22.4
Soybeans	18.3	4.6	2.8	7.3	6.7	-5.6	8.0	39.0	-18.8	0.6	-11.5
HRW Wheat	23.2	3.1	0.6	11.0	7.7	10.7	4.3	8.4	-4.5	1.6	-17.2
Zinc	29.9	-4,9	-0.1	48.1	-16.0	-22.2	4.3	10.6	23.3	132.6	-11.4
NaturalGas	38.3	1.1	0.7	1.1	3.6	-14.7	3.9	-5.8	-12.6	35.7	-6.5
Unlead Gas	26.0	2.7	-0.2	-0.9	-3.1	-29.0	3,5	-39.8	-20.6	35.8	-10.6
Cotton	19.7	-4.3	-5.6	-12.6	-7.1	-10.6	3.4	-1.8	-6.8	-2.4	-23.2
Lean Hogs	24.8	0.0	-0.8	-0.1	-1.6	-5.1	1.5	19.2	2.1	36.1	43.8
Copper (LME)	20.7	-2.5	-5.0	-8.2	-14.0	518.3	-1.1	2.4	-4.2	53.1	-20.1
Live Cattle	17.6	-0,1	-3.4	-6.6	0.5	-10.7	-2.8	-0.2	11.1	76.2	26.7
Aluminum	16.6	-100.0	164.0	-11.7	-18.0	-29.4	-5.8	-3.9	-14.6	-18.5	-31.1
Gold	13.6	3.0	-2.1	-0.3	2.6	-5,8	-7.6	-27.7	-9.3	-7.3	-27.1
Coffee	27.2	2.5	0.9	-8.2	-10.6	-8.5	-8,3	-4.4	-27.4	-44.8	-13.0
Heating Oil	24.8	0,6	-0.2	-11.2	-9.8	-34.5	-8,8	-45.8	-31.6	56.2	-9.1
Copper (COMEX)	21.9	-1.6	0.4	-6.8	-6.5	-17.4	-9.3	-5.4	-10.1	48.6	-25.1
Gas Oil	25.9	3,3	2.1	-4.6	-9.0	-35.5	-9.9	-42.9	-15.3	80.0	-5.7
Brent Crude Silver	25.9 22.5	-0.8	-3.1 4.9	-13.8	-11.0 4.0	-40.1	-11.2	-52.6 -9.8	-35.5 -19.9	61.9	-15.4
Crude Oil	25.0	5.2 -0.7	-3.0	-16.1	-12.5	-7.2 -41.4	-11.5 -12.3	-48.1	-44.9	-10.6 45.3	-35.5 -19.6
Palladium	25.1	-0.7	0.7	-8.7	-9.4	-9.8	-15.7	-21.7	22.6	66.4	-21.2
Sugar	24.8	1.0	0.0	-9.3	-8.6	-7.8	-17.7	-15.9	6.2	-9.0	-15.4
Nickel	28.5	-27.0	13.6	-17.3	-21.9	-26.3	-17.8	-31.8	-4.1	30.4	-25.8
Platinum	15.5	-6.2	-9.8	-22.9	-21.2	-15.3	-26.6	-32.8	-16.6	-5.7	-35.8
BCOM 60 Day Historical Volatility											
Palladium	32.3	-0.9	-0.6	-6.4	-7.4	13.0	19.9	-7.2	41.5	122.4	+4.4
Sugar	28.7	-1.0	2.5	1.7	0.0	3.9	10.0	-19.5	10.6	11.1	-3.7
Soybeans	18.5	1.3	0.7	-4.2	-0.4	1.6	6.6	31.4	-8.5	19.8	-3.4
Copper (LME)	24.5	0.0	-0.1	-4.7	-1.5	27.2	5.9	15.4	3.3	133.6	-10.1
Copper (CME)	23.3	0.1	-0.3	-4.6	-1.6	17.8		-1.4	-3.4	88.0	-12.7
			-2.5				5.3				
Soybean Meal	23.2	-1.3		-7.6	-5.5	1.2	3.1	30.4	-28.3	-13.4	-0.5
Live Cattle	22.4	-1.1	-0.6	-0.8	0.6	-1.2	3.0	-2.6	37.0	148.9	62.1
HRW Wheat	22.4	-1.1	-0.6	-0.8	0.6	-1.2	3.0	-2.8	-13.0	4.7	-18.5
Natural Gas	56.5	-0.9	-0.4	-1.5	0.0	14.6	-0.7	-3.9	-12.0	-23.3	5.0
Platinum	25.0	0.3	-0.2	-11.4	-11.0	9.1	-2.7	-12.9	37.8	61.9	6.0
Wheat	26.6	-1.6	1.1	3.7	4.6	0.6	-2.7	30.0	-6.1	23.4	-7.5
Nickel Gas	30.2	-1.1	-0.4	-12.9	-11.1	-0.7	-4.9	-4.9	18.3	58.9	1.7
Cotton	15.7	-0.7	-0.3	-4.0	-3.1	-26.7	-8.3	-15.3	-9.9	-8.0	-35.4
Aluminum	14.5	0.7	0.5	-10.6	-9.8	-8.5	-9.1	-25.6	-23.6	-11.8	-41.1
Gold	12.3	0.1	-3.3	-18.9	-19.4	-17.6	-14.2	-39.2	-29.0	-27.1	-35.6
Unlead Gas	27.7	-3.3	-16.1	-20.1	-20.9	-23.0	-14.5	-53.5	-41.9	56.3	17.7
Zinc	29.2	-1.4	-1.3	-17.8	-17.9	8.8	-17.5	-1.7	46.0	81.6	6.3
Coffee	23.4	-5.1	-1.1	-15.2	-15.9	-14.9	-18.8	-18.0	-31.9	-49.4	-11.5
			100 1000			-		100000			
Silver	23.3	0.0	-1.2	-21.4	-21.2	-20.0	-20.2	-18.3	-35.5	-18.7	-36.8
Corn	18,1	0.0	0.9	-12.5	-12,0	-20.5	-20.7	10.2	-21.8	4.0	-21.7
Soybean Oil	18.2	9.2	7.6	-19.3	-17.9	-30.0	-27.0	-10.1	-19.4	24.6	6.0
Heating Oil	22.5	-8.2	-21.4	-29.8	-31.6	-30.7	-29.0	-61.9	-50.9	-12.7	18.5
Gas Oil	22.0	0.4	0.5	-28.4	-28.0	-30.8	-32.7	-63.4	-32.9	68.2	33.4
Crude Oil	24.0	-3,5	-22.4	-33.6	-34.9	-35.1	-34.2	-65.1	-57.6	52.9	-3.2
Brent Crude	23.8	-1.2	-1.5	-35.9	-35.9	-32.2	-34.8	-61.9	-54.4	71.0	14.4
Lean Hogs	33.6	-0.5	-0.6	4.1	2.8	-44.3	-44.3	18.1	9.9	7.3	103.2

Tables & Charts - February 2017 Edition

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

Name	Current	1 Yr Ago	1 Yr Change	Change	Change	1 Mth Change	3 Mth Change	2 Yr Change
■ 1 Year Spread % of First Contract				100000000000000000000000000000000000000	100000000	100000000000000000000000000000000000000	ti-licining of	
■ BCOM	-2.5	-7.9	5.4	-0.2	0.1	0.1	2.1	1.5
■ Sector	7.50			2000		5000	1000	
* Energy	-1.6	-21.5	19.8	1.0	2.8	2.5	6.0	5.1
■ Precious Metals	-1.8	-0.7	-1.0	0.0	0.0	0.0	0.1	-1.0
■ Industrial Metals	-0.8	-0.8	0.0	-0.1	0.2	0.2	-0.2	0.1
■ Agriculture	-4.8	-6.4	1.6	-0.6	-1.0	-1.1	-1.3	1.2
■ Livestock	5.8	7.8	-2.0	-2.3	-3.1	-1.4	9.1	5.3
■ Single Commodities								
Crude Oil	-2.1	-24.6	22.6	3.9	3.0	2.5	7.8	22.4
Brent Crude	0.0	-17.7	17.7	3.1	1.3	1.5	10.4	11.6
Gas Oil	-3.4	-19.0	15.6	1.4	1.0	1.9	4.6	0.2
Soybean Meal	0.5	-5.5	6.0	0.9	-2.4	-2.5	0.4	-6.8
Corn	-9.7	-9.2	-0.4	0.8	0.1	-0.2	1.7	1.1
Zinc	0.9	-0.6	1.5	0.6	0.7	0.6	0,6	3.1
Heating Oil	-3.9	-21.9	18.0	0.6	1.3	2.5	4.2	-15.2
HRW Wheat	-15.5	-15.8	0.3	0.6	1.5	0.7	2.3	-5.7
Coffee	-9.0	-8.9	-0.1	0.1	-0.4	-0.5	-0.8	3.0
Palladium	-0.4	-0.4	0.0	0.1	-0.1	0.0	0.3	-0.1
Natural Gas	0.0	-32.3	32.2	0.1	10.0	5.9	6.8	12.3
Platinum	-1.1	-0.3	-0.8	0.1	0.0	0.0	0.1	-0.5
Nickel	-1.8	-1.3	-0.5	0.1	0.3	0.5	-0.4	-0.6
Aluminum	-1.0	-1.7	0.7	0.0	0.6	0.5	-0.2	1.9
Gold	-1.5	-0.4	-1.1	0.0	0.0	0.0	0.0	-1.1
Silver	-2.0	-1.1	-0.9	-0.1	0.1	0.0	0.2	-0.8
Copper (LME)	-0.4	0.5	-0.9	-0.1	0.1	0.2	-0.2	-1.2
Soybean	0.0	-3.2	3.3	-0.3	-2.0	-2.2	-1.9	-2.4
Cotton	1.0	-0.1	1.1	-0.7	-2.7	-3.0	-2.9	2.7
Copper (CME)	-1.8	-0.9	-0.9	-1.0	-0.6	-0.9	-0.8	-2.8
Live Cattle	12.0	11.6	0.4	-1.3	-1.1	-1.1	2.4	4.3
Soybean Oil	-3.1	-3.8	0.7	-1.9	-1.6	-1.9	-3.1	-1.6
Wheat	-19.0	-12.5	-6.5	-1.9	-2.2	-1.5	4.0	-13.0
Sugar	2.5	-4.5	7.0	-2.2	0.3	0.6	-5.8	15.7
Unleaded Gas	-0.1	-13.2	13.0	-2.9	0.4	0.8	2.5	-0.6
Lean Hogs	-0.4	3.9	-4.3	-3.4	-5.0	-1.8	15.9	6.2

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

Historical										
Name	2017 †	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ 1 Year Spread % of First Contract							1			
■ BCOM	-2,6	-2.3	-7.7	-4.8	0.6	-0.9	-1.9	2.1	-4.2	-14.0
■ Sector		1200		10.100.0	20.00	20000	12794		V100 11	
■ Livestock	5.8	8.1	0.6	8.3	4.1	-0.7	-0.2	-1.8	-4.8	-10.4
■ Industrial Metals	-0.8	-0.8	-1.5	-0.8	-1.8	-2.5	-2.1	0.5	-2.3	-5.0
■ Energy	-1.8	-2.6	-18.7	-13.5	3.7	-0.1	-1.9	-4.3	-9.7	-30.2
■ Precious Metals	-1.8	-1.7	-1.0	-0.8	-0.7	-0.7	-0.7	-0.9	-0.9	-0.6
* Agriculture	-5.0	-4.2	-5.5	-5.6	-1.5	-2.3	-1.8	12.2	-0.3	-12.2
■ Single Commodities					11/11	1000				
Live Cattle	12.0	13.3	8.1	7.0	2.5	-3.3	-4.5	-3.8	-4.3	-5.6
Sugar	2.5	4.8	0.9	-13.1	-8.2	-5.5	-0.3	26.0	21.9	-19.3
Zinc	0.9	0.2	-2.8	-1.4	-2.3	-4.5	-3.9	-1.7	-3.2	-7.0
Cotton	0.7	1.7	-2.7	-8.6	6.7	-5.7	3.6	34.6	-2.6	-18.5
Soybean Meal	0,5	-0.4	-5.7	9.8	19.9	12.5	-2.4	9.9	9.5	-1.9
Natural Gas	0.0	-0.1	-22.6	-22.2	-3.2	-20.7	-29.9	-18.4	-21.1	-31.6
Soybean	-0.2	0.4	-2.0	0.9	13.1	7.7	-1.2	5.9	1.7	-4.1
Copper (LME)	-0.4	-0.3	0.3	1.6	1.1	-0.7	-0.3	2.7	-0.9	-3.0
Palladium	-0.4	-0.5	-0.2	-0.1	-0.5	-0.2	-0.4	0.0	-0.3	-20.5
Lean Hogs	-0.4	2.9	-7.0	9.6	5.7	2.0	4.2	0.0	-5.3	-15.2
Unleaded Gas	-0.6	2.8	1.0	-12.3	7.0	9.8	7.9	3.7	-2.9	-30.8
Brent Crude	-0.7	-3.1	-22.1	-16.4	4.9	6.3	4.0	-0.4	-8.3	-35.3
Aluminum	-1.0	-1.0	-2.7	-3.1	-7.5	-5.0	-5.2	-2.3	-5.0	-9.5
Platinum	-1.1	-1.1	-0.4	-0.4	-0.5	-0.7	-1.0	-0.5	-1.2	-54.1
Gold	-1.5	-1.5	-0.5	-0.3	-0.4	-0.7	-0.9	-0.9	-1.0	-0.9
Copper (CME)	-1.8	-0.8	-1.1	-0.2	1.3	-1.1	-0.8	2.5	-1.2	-2.6
Nickel	-1.8	-1.9	-1.4	-1.1	-1.8	-1.4	-0.1	1.1	-1.1	-3.0
Crude Oil	-2.1	-5.9	-20.4	-13.5	7.3	-1.3	1.4	-3.2	-6.7	-35.1
Silver	-2.1	-2.0	-1.4	-1.2	-0.9	-0.7	-0.5	-0.9	-0.8	-0.4
Gas Oil	-2.7	-4.8	-23.8	-12.0	3.1	2.9	3.0	-4.2	-11.0	-25.1
Soybean Oil	-3.1	-1.2	-3.1	-0.9	-3.8	-2.8	-1.6	-0.9	-5.3	-6.0
Heating Oil	-4.8	-4.5	-24.5	-4.5	3.2	2.1	2.1	-3.4	-8.0	-23.2
Coffee	-9.3	-9.2	-8.4	-7.4	-11.2	-11.5	-4.9	6.1	-5.7	-10.8
Corn	-9.7	-10.5	-9.5	-8.1	-9.2	12.7	7.2	9.4	-8.5	-14.0
HRW Wheat	-15.5	-16.1	-14.9	-6.3	-5.5	-5.7	-7.9	-3.1	-12.7	-10.6
Wheat	-19.7	-17.1	-10.5	-5.0	-7.2	-6.9	-12.4	-8.7	-15.3	-12.5

Tables & Charts – February 2017 Edition

Curve Analysis – Gross Roll Yield Key Metrics

Ney Metrics						
Name	Current 1Yr Yld	Months Ago	Yld 1 Yr Ago	from 1 Yr Ago	Yld 2 Yr Ago	from 2 Y
Sector Roll Yield						
BCOM Livestock	1.8	1.7	-2.0	3.8	1.6	0.3
BCOM Precious Metals	-0.8	-1.1	-0.6	-0.2	-0.5	-0.3
BCOM Industrial Metals	-3.1	-2.2	-2.0	-1.1	-1.7	-1.4
BCOM Softs	-7.2	-10.1	-6.9	-0.3	-8.6	1.4
BCOM Agriculture	-7.6	-5.7	-4.7	-2.9	-0.2	-7.4
ВСОМ	-10.9		-7.0	-3.9	-1.4	-9.5
BCOM Energy	-27.8		-13.1	-14.7	-2.0	-25.8
Commodities Roll Yield						
Cotton	3.9	1.3	-3.0	6.9	7.9	-4.0
Platinum	0.1	-0.2	-0.3	0.4	-0.3	0.4
Gold	-0.4	-0.5	-0.4	0.0	-0.2	-0.1
Silver	-1.3		-1.2	-0.1	-0.9	-0.3
Soybean	-2.1		1.7	-3.8	12.9	-15.0
Copper (CME)	-2.2		0.2	-2.3	0.8	-2.9
Aluminum	-2.4		-5.6	3.2	-8.7	6.3
Soybean Meal	-2.6		6.7	-9.3	22.8	-25.4
Zinc	-4.0		-2.9	-1.0	-1.6	-2.3
Nickel	-4.2		-2.0	-2.2	-1.4	-2.8
Soybean Oil	-4.2		-3.2	-1.0	-2.6	-1.6
Sugar	-4.4		-7.2	2.9	-22.3	18.0
Corn	-7.6	-7.3	-9.8	2.3	-6.5	-1.1
Wheat	-10.0	-4.1	-0.4	-9.6	-7.3	-2.7
Lean Hogs	-10.2	-5.2	-6.5	-3.7	3.0	-13.2
Coffee	-11.4		-8.8	-2.5	-4.8	-6.6
Unlead Gas	-13.1		5.1	-18.2	-0.3	-12.8
HRW Wheat	-15.6		-8.3	-7.3	-2.3	-13.3
Heating Oil	-16.7		2.9	-19.6	-7.8	-8.9
Gas Oil	-19.1		-5.7	-13.4	-5.1	-14.0
Brent Crude	-20.9		-13.1	-7.8	-3.1	-17.8
Crude Oil	-31.2		-18.3	-13.0	3.4	-34.7
Natural Gas	-46.9	-36.4	-17.4	-29.5	-3.8	-43.1

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

i ii Stoi icai										
Name	2017 1	2016	2015	2014	2013	2012	2011	2010	2009	2008
Sector Roll Yield			723503519	- 1000000	-1160 4.7					
BCOM Livestock	1.8	0.2	1.1	-0.2	-4.5	-9.8	-12.3	-14.8	-20.2	-22.5
BCOM Precious Metals	-0.8	-1.1	-0.6	-0.4	-0.5	-0.9	-0.6	-1.1	-1.1	-2.6
BCOM Industrial Metals	-3.1	-2.0	-1.8	-2.1	-3.9	-3.3	-2.2	-4.1	-16.7	-3.3
BCOM Softs	-7.2	-5.6	-7.4	-12.5	-4.9	0.9	9.0	0.5	-24.7	-18.2
BCOM Agriculture	-7.6	-7.0	-4.7	0.7	8.2	3.6	-5.8	-12.6	-2.5	-7.8
ВСОМ	-10.8	-11.4	-6.3	0.0	-0.9	-4.7	-6.6	-9.5	-21.8	-6.5
BCOM Energy	-27.8	-32.5	-12.6	1.6	-5.1	-11.7	-11.0	-13.8	-51.8	-5.6
Commodities Roll Yield	Maria Cara	11-1-11-1	-	-	-	-	11111	4.0	-	
Cotton	3.9	-1.1	-2.1	7.7	-3.6	5.2	15.5	14.3	-24.1	-14.5
Platinum	0.1	-0.4	-0.2	-0.5	-0.8	-1.2	0.9	-2.7	-6.2	-0.7
Gold	-0.4	-0.9	-0.4	-0.2	-0.4	-0.9	2.9	-1.0	-1.1	-1.6
Silver	-1.3	-1.8	-1.2	-0.9	-0.7	-1.1	4.5	-5.1	-1.5	-1.1
Soybean	-2.1	0.2	-0.2	17.0	18.5	5.5	-1.8	0.5	16.1	-2.2
Copper (CME)	-2.2	-1.6	-0.7	0.3	-1.7	-1.3	-0.1	-3.6	-7.1	0.5
Nickel	-2.3	-1.7	0.5	-2.9	-2.3	-1.0	-1.7	-1.6	-7.3	-1.8
Aluminum	-2.4	-2.9	-6.0	-9.1	-8.4	-6.2	-3.3	-6.0	-13.6	-5.0
Soybean Meal	-2.6	-0.5	9.6	28.7	16.5	13.0	-1.3	20.7	30.2	0.4
Zinc	-4.0	-2.7	-2.5	-4.6	-8.8	-3.1	-3.0	-5.3	-11.2	-2.6
Soybean Oil	-4.2	-5.4	-3.2	-2.9	-1.3	-4.2	-4.2	-8.5	-6.9	-4.3
Sugar	-4.4	-5.2	-9.9	-19.5	-4.1	3.1	18.7	4.6	-41.8	-28.3
Corn	-7.6	-7.9	-9.6	-7.4	9.4	10.8	0.4	-20.9	-11.8	-11.0
Lean Hogs	-8.5	-13.6	0.3	0.6	-1.7	-4.5	-9.6	-23.8	-30.8	-38.1
Wheat	-10.0	-10.9	-1.9	-7.0	-5.1	-9.4	-14.6	-23.8	-14.7	-7.1
Coffee	-11.4	-9.7	-7.8	-12.6	-7.2	-5.0	-3.4	-8.5	-11.1	-8.5
Unlead Gas	-13.1	-27.2	1.1	4.7	1.3	18.9	4.5	-6.9	-16.9	-2.0
HRW Wheat	-15.6	-14.7	-7.6	-2.5	-3.3	-4.1	-7.6	-9.9	-4.7	-4.7
Heating Oil	-16.7	-25.3	-3.0	1.1	-1.3	1.0	-2.9	-11.7	-25.3	-0.3
Gas Oil	-19.1	-22.7	-11.0	-1.6	2.1	7.4	2.1	-12.3	-20.5	-3.0
Brent Crude	-20.9	-27.7	-23.3	0.3	6.9	4.2	8.3	-12.5	-55.6	-3.1
Crude Oil	-32.8	-38.2	-14.0	4.3	-0.3	-4.5	-9.7	-11.3	-70.3	0.3
Natural Gas	-46.8	-52.6	-19.8	0.8	-22.3	-42.7	-13.8	-16.1	-47.6	-11.8

Tables & Charts – February 2017 Edition

Curve Analysis – Forwards / Forecasts Spread %

Name	2/2017	1/2017	12/2016	11/2016	10/2016	9/2016	8/2016	7/2016	6/2016	5/2016	4/2016	3/2016	2/2016
■ 1 Yr Spread ((Forward-Forecast)/ Forecast													
■ Energy													
Natural Gas Spread %	-7.1	2.9	49.0	34.1	25.1	26.6	26.7	28.6	12.2	3.8	4.7	-4.7	-16.4
WTI Crude Spread %	-0.8	-0.7	24.3	15.5	9.9	13.8	6.3	-1.9	3.1	9.2	9.4	0.0	-4.2
Brent Crude Spread %	1.5	0.5	26.6	14.3	9.8	12.8	6.2	-1.8	2.8	5.7	9.2	1.6	0.0
ULS Diesel Spread %	1.5	3.9	28.1	18.3	13.3	16.1	8.6	1.9	5.6	7.8	12.1	2.5	-14.3
Unleaded Gasoline Spread %	-1.4	-0.5	20.1	7.2	3.0	4.6	-3.5	-12.0	-2.3	0.0	9.6	-1.8	-12.3
■ Soft													
Sugar Spread %	0.1	4.1	8.4	10.1	20.8	33.9	19.5	16.6	13.0	14.6	8.9	5.8	-1.1
Coffee Spread %	-3.1	3.2	0.0	10.3	22.8	15.1	12.4	16.9	7.3	-1.6	-3.4	2.5	-5.7
Cotton Spread %	6.8	5.7	8.3	12.8	7.8	7.5	4.0	18.0	0.3	-0.2	-0.8	-6.9	-9.3
■ Industrial Metals													
Copper Spread %	11.9	13.4	14.5	22.2	2.0	2.3	-3.7	2.6	-0.2	-3.5	2.3	-1.0	-2.0
Aluminum Spread %	12.7	8.7	5.9	9.2	9.3	5.3	1.0	5.0	2.5	-0.6	4.8	-2.5	0.9
Zinc Spread %	11.0	15.3	25.5	34.3	22.5	19.2	16.8	18.4	5.1	1.9	4.9	2.1	3.0
Nickel Spread %	-0.5	-9.5	4.0	19.5	11.4	12.7	3.7	17.2	0.6	-6.1	1.6	-6.4	-9.4
■ Precious Metals													
Gold Spread %	1.2	-3.0	-8.7	-8.2	-0.3	2.9	2.3	6.2	3.3	-0.2	7.5	6.5	11.2
Silver Spread %	6.7	-2.7	-6.6	-6.4	1.4	9.6	6.1	19.9	6.0	1.4	13.1	3.9	0.8
■ Grain													
Corn Spread %	1.6	1.5	-1.9	-5.8	-0.6	-4.5	-13.7	-10.3	-1.8		3.1	-0.1	_
Soybeans Spread %	2.1	2.4	0.8	4.8	2.2	-2.7	-4.3	-1.3	9.3	9.0	8.9	2.3	-1.3
Wheat Spread %	5.3	0.6	-7.9	-13.4	-5.9	-9.4	-16.2	-9.1	-3.6	-2.3	2.6	4.8	-6.2

Data Set

Dala Sel													
Name	2/2017 1	1/2017	12/2016	11/2016	10/2016	9/2016	8/2016	7/2016	6/2016	5/2016	4/2016	3/2016	2/2016
■ 1 Yr Spread													
■ Energy													
Brent Crude Forward	56.7	56.3	56.8	51.2	48.7	50.3	47.4	44.2	46.0	46.1	44.8	41.6	40.0
Brent Crude Forecast	55.9	56.0	44.9	44.8	44.4	44.6	44.6	45.0	44.8	43.7	41.0	41.0	40.0
WTI Crude Forecast	55.0		43.2	43.0	43.0	43.0	43.0	44.0	43.6		39.9	39.5	39.0
WTI Crude Forward	54.6		53.7	49.7	47.3	48.9	45.7	43.2	44.9		43.6	39.5	37.4
Natural Gas Forecast	3.2	3.2	2.5	2.5	2.5	2.5	2.5	2.4	2.3		2.3	2.5	2.5
Natural Gas Forward	3.0		3.7	3.4	3.1	3.1	3.1	3.1	2.6		2.4	2.4	2.1
ULS Diesel Forward	1.7		1.7	1.6	1.5	1.5	1.4	1.3	1.4		1.3	1.2	1.2
Unleaded Gasoline Forecast	1.7		1.4	1.4	1.4	1.4	1.4	1.4	1.4		1.3	1.3	1.4
ULS Diesel Forecast	1.7		1.3	1.3	1.3	1.3	1.3	1.3	1.3		1.2	1.2	1.4
Unleaded Gasoline Forward	1.7	1.7	1.7	1.5	1.4	1.5	1.3	1.3	1.4		1.4	1.3	1.2
■ Soft	A.F.	10,000		410	11000	- And	410	And		40.0	***	And.	
Coffee Forecast	1.5	1.5	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Coffee Forward	1.5		1.4	1.5	1.6	1.5	1.5	1.5	1.4		1.2	1.3	1.2
Cotton Forward	0.8		0.7	0.7	0.7	0.7	0.7	0.7	0.6		0.6	0.6	0.6
Cotton Forecast	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	1000	0.6	0.6	0.6
Sugar Forward	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2		0.2	0.0	0.1
Sugar Forecast	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		0.1	0.1	0.1
■ Industrial Metals	0,2	0,2	0.2	0,2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	.0,1	0.1
Nickel Forecast	11 023 0	11,063.0	9,594.0	9,385.0	9,385.0	9,367.0	9,404.0	9.069.0	9 019 0	9,072.0	9.041.5	9,099.5	9,406.5
Nickel Forward		10,010.6		11,213.6				10,630.0		8,517.1		8,516.2	8,522.2
Copper Forward	5,925.8		5,526.0	5,815.3	4,847.6	4,861.5	4,614.1	4,925.8		4,691.3	4,943.6	4,803.2	4,665.8
Copper Forecast	5,297.0		4,825.5	4,760.0	4,752.0	4,750.0	4,792.0			4,861.5	4,831.5	4,850.0	4,762.5
Zinc Forward	2,800.4	2,850.0	2,563.5	2,692.3	2,456.6	2,376.1	2,311.6	2,244.9		1.855.3	1.871.1	1,786.0	1,744.0
Zinc Forecast	2,522.4	2,472.0	2,043.0	2,005.0	2,005.0	1,993.5	1,979.0	1,895.5		1,821.0		1,750.0	1,693.5
Aluminum Forward	1,912.5	1,821.4	1,694.0	1,732.3	1,733.9	1,670.5	1,609.3	1,644.6		1,548.4	1,630.5	1,524.4	1,568.7
Aluminum Forecast	1,697.7		1,600.0		1,586.8	1,586.4	1,594.0			1,558.0		1,563.0	1,555.0
■ Precious Metals	1,07711	1,000	2,000.0	4,500.0	2,000,0	4,000,1	1,071.0	1,500.0	*********	4,000.0	4,000,00	4,505.0	1,000,0
Gold Forward	1,253.0	1,215.2	1,151.7	1,170.9	1,273.3	1.315.3	1,309.8	1,353.3	1.274.2	1,216.5	1,263.0	1,224.6	1,222.7
Gold Forecast	1,238.0	1,253.0	1,262.0	1,276.0	1,277.0	1,278.5	1,280.0	1,274.0		1,219.0	1,175.0	1,150.0	1,099.8
Platinum Forecast	1,012.5	1,025.0	1,000.0	1,013.0	1,013.0	1,016.5	1,006.5	998.0	990.0		970.0	960.0	967.0
Palladium Forecast	725.0	725.0	616.6	610.0	610.0	610.0	598.0	580.0	580.0		585.0	590.0	626.0
Silver Forward	18.3	17.6	16.0	16.4	17.8	19.2	18.7	20.4	17.3	15.9	17.0	15.4	14.9
Silver Forecast	17.2	18.1	17.1	17.5	17.5	17.5	17.6	17.0	16.3		15.1	14.8	14.8
₩ Grain													
Soybeans Forward	10.2	10.2	10.0	10.3	10.1	9.6	9.5	10.1	10.7	10.1	9.8	9.1	8.7
Soybeans Forecast	10.0	10.0	9.9	9.9	9.9	9.8	9.9	10.3	9.8	9.3	9.0	8.9	8.8
Wheat Forward	4.6		4.1	3.8	4.2	4.1	3.8	4.3	4.6		4.9	5.0	4.7
Wheat Forecast	4.4	4.5	4.4	4.4	4.5	4.5	4.5	4.7	4.8	4.9	4.8	4.8	5.0
Corn Forward	3.8	3.8	3.5	3.4	3.6	3.4	3.1	3.4	3.7	3.9	3.8	3.7	3.7
Corn Forecast	3.7	3.7	3.6	3.6	3.6	3.5	3.6	3.8	3.8	3.8	3.7	3.7	3.8

Tables & Charts – February 2017 Edition

Market Flows – Open Interest Key Metrics

Name	Current	MTD % Change	3 Mth % Change	YTD & Change	1 Yr % Change	2 Yr % Change
■ Open Interest (Aggregate - 1,000s)				-		
Single Commodities			71.075110			
Silver	200	10.5	20.5	22.0	22.7	25.0
Gas Oil	969	5.1	17.7	20.8	18.9	50.7
Copper (CME)	268	-6.0	16.5	19.6	66.5	63.4
Palladium	28	0.0	7.7	16.7	3.7	-15.2
Lean Hogs	220	1.9	-1.8	13.4	11.7	10.0
Platinum	71	10.9	6.0	12.7	9.2	2.9
Brent Crude	2,418	1.5	8.2	12.0	9.6	31.6
Soybean Meal	363	-3.7	-2.7	10.3	-8.1	3.7
Cotton	264	-3.7	3.9	9.1	34.7	42.7
Zinc	200	2.0	5.8	8.7	32.5	18.3
Gold	452	15.6	8.7	8.7	3.0	12.4
Corn	1,342	-0.5	3.5	8.6	1.6	7.8
Live Cattle	328	-7.1	14.3	7.2	19.7	35.0
Soybean	673	-7.2	-3.2	6.5	-3.2	0.2
Natural Gas	1,308	11.2	13.3	5.2	26.0	33.5
Crude Oil	2,119	-2.7	5.4	3.3	21.0	23.9
Nickel	161	-0.6	-3.0	0.6	-8.0	24.8
Soybean Oil	370	-8.4	-14.6	-0.5	-4.6	3.6
Unlead Gas	395	-6.0	5.3	-1.3	-2.2	12.2
Copper (LME)	205	-3.3	-2.4	-1.9	31.4	29.8
Sugar	772	-7.5	-6.2	-4.1	2.1	-6.4
Heating Oil	411	-0.2	3.0	-4.2	13.5	10.8
Coffee	176	-5.4	-5.9	-7.9	-5.4	-2.2
Aluminum	498	-2.2	-4.4	-8.0	-15.5	-18.4
Wheat	402	-17.3	-13.9	-10.3	-6.1	0.5
HRW Wheat	207	-11.2	-18.2	-13.4	-3.3	27.0

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Name	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Open Interest (Aggregate - 1,000s)										
₩ BCOM	13,546	12,965	11,965	10,881	11,033	10,367	9,282	10,206	8,524	6,715
■ Sector							1122			
■ Energy	6,641	6,282	5,357	4,598	4,868	4,468	3,772	3,643	3,167	2,880
■ Agriculture	4,576	4,493	4,563	4,211	4,090	3,876	3,418	4,399	3,447	2,352
■ Industrial Metals	1,325	1,319	1,178	1,224	1,104	1,006	1,159	1,105	1,016	861
■ Precious Metals	733	643	649	587	574	629	567	760	646	411
■ Livestock	547	501	431	481	591	578	552	534	443	369
■ Single Commodities										
Brent Crude	2,418	2,159	2,031	1,513	1,443	1,285	886	873	728	595
Crude Oil	2,119	2,051	1,671	1,468	1,616	1,473	1,328	1,430	1,193	1,189
Corn	1,342	1,236	1,334	1,237	1,203	1,128	1,151	1,549	1,002	810
Natural Gas	1,292	1,243	957	939	1,291	1,165	1,011	772	708	680
Sugar	779	805	879	836	830	754	559	613	834	357
Soybean	673	632	646	599	576	546	460	629	418	278
Aluminum	491	541	551	595	539	495	682	546	487	474
Gold	452	416	415	372	380	428	419	585	490	307
Heating Oil	411	429	342	346	279	263	269	301	304	225
Wheat	402	448	368	371	411	456	384	492	362	251
Unlead Gas	402	400	355	332	239	282	277	267	235	191
Soybean Oil	370	372	384	355	340	306	273	358	211	208
Soybean Meal	363	329	402	341	262	212	194	192	162	116
Live Cattle	327	306	265	266	327	329	317	327	265	213
Copper (CME)	268	224	166	160	167	147	121	167	155	75
Cotton	264	242	185	178	172	171	152	207	187	126
Lean Hogs	220	194	166	215	264	248	235	207	178	156
Silver	209	164	168	151	132	141	106	136	124	86
HRW Wheat	207	239	193	132	154	158	139	219	145	83
Copper (LME)	205	209	146	155	132	130	143	196	163	140
Zinc	200	184	167	182	184	166	148	135	149	125
Coffee	176	191	172	160	142	144	105	140	126	123
Nickel	161	160	148	132	81	69	65	61	62	47
Platinum	71	63	65	64	62	60	42	39	33	18

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

Market Flows – Commitment of Traders Kev Metrics

Name	Current	5 Day Change	1 Mth Change	3 Mth Change	TD Change1	Yr Change2	Yr Change
■ Net - Managed Money Total/Disagg							
■ Single Commodities							
Corn	92,216	8	279	208	205,864	169	15
WTI Crude	413,637	6	18	153	105,728	274	104
Wheat	-27,385	32	68	79	81,542	72	15
Soybean Meal	73,465	10	48	425	53,928	257	126
Brent Crude	507,609	5	10	100	53,024	58	178
Soybeans	154,307	-10	17	57	47,232	800	54,233
Gold	82,464	21	38	-38	41,217	-33	-20
Silver	75,475	7	49	55	36,377	58	158
Aluminum	178,883	6	10	6	33,093	267	50
Sugar	164,646	2	2	-24	26,204	864	544
HRW Wheat	34,370	25	28	1,635	25,285	227	481
Cotton	98,155	-5	16	59	22,103	3,633	109
Platinum	25,763	-1	48	162	17,540	40	79
Zinc	88,467	0	1	16	7,428	152	77
Coffee	19,398	17	-12	-63	6,692	286	138
Copper (CME)	78,511	-11	5	11	6,380	3,848	22,990
Lean Hogs	60,298	2	6	78	5,763	37	92
Live Cattle	96,920	0	-8	121	4,404	500	94
Palladium	16,937	1	17	82	4,195	238	-4
Copper (LME)	70,488	-2	1	-3	3,104	445	355
Heating Oil	32,955	4	-5	8,486	-586	245	316
Gasoline	40,969	-17	-36	59	-9,122	101	-1
Nickel	37,227	-9	-21	-34	-20,005	101	113
Soybean Oil	44,898	-35	-47	-54	-40,624	-11	81
Natural Gas	75,815	-26	-53	324	-98,228	147	213

Ilistorioai										
Name	2017 †	2016	2015	2014	2013	2012	2011	2010	2009	2008
■ Net - Managed Money Total/Disagg										
■ BCOM	2.4M	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	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	38,894.0
■ Agriculture	654,070	225,844	-75,733	383,375	-1,048	281,653	188,257	962,170	594,114	119,945
■ Industrial Metals	453,576	423,576	90,351	218,292	35,635	14,988	-4,018	39,105	15,752	-17,586
■ Precious Metals	200,639	101,310	-239	153,310	70,026	171,032	134,710	232,650	252,599	118,482
■ Livestock	157,218	147,051	24,525	117,295	137,611	110,898	104,018	133,520	83,521	9,221
■ Single Commodities		THE PERSON NAMED IN			000.000	100000000000000000000000000000000000000		000000000000000000000000000000000000000	0.000	-
Brent Crude	507,609	454,585	163,672	115,571	136,611	125,397	81,537			
WTI Crude	413,637	307,909	100,797	199,388	270,386	134,834	192,466	217,046	133,742	82,331
Aluminum	178,883	145,790	71,738	118,175						
Sugar	164,646	138,442	165,810	-66,824	-25,626	19,000	43,792	141.534	167,357	52,014
Soybeans	154,307	107,075	-63,515	39,446	136,683	109,007	23,683	164,287	69,606	31,518
Cotton	98,155	76,052	51,307	11,005	43,288	25,828	6,683	40,645	61,292	5,638
Live Cattle	96,920	92,516	11,081	80,102	96,771	59,569	68,105	104,412	49,281	16,394
Corn	92,216	-113,648	-136,111	239,704	-94,812	140,109	148,653	396,782	205,427	28,794
Zinc	88,467	81,039	20,140	49,726	71,012	110,107	110,000	370,702	200,127	20,77
Gold	82,464	41,247	-24,263	98,391	34,104	101,922	111,919	169,987	197,560	100,925
Copper (CME)	78,511	72,131	-25,964	-4,455	35,635	14,988	-4,018	39,105	15,752	-17,586
Natural Gas	75,815	174,043	-161,686	-53,308	134,994	-89,820	-124,269	-96,119	-27,225	-85,920
Silver	75,475	39,098	6,282	17,051	5,573	23,113	6,200	26,836	26,631	11,742
Soybean Meal	73,465	19,537	-40,843	54,132	57,931	41,489	-15,232	40,129	35,586	7,668
Copper (LME)	70,488	67,384	9,065	25,215	100000000000000000000000000000000000000	CIVICAL SECTION	Actor Water	10000000	Section 1	0.00000000
Lean Hogs	60,298	54,535	13,444	37,193	40,840	51,329	35,913	29,108	34,240	-7,173
Soybean Oil	44,898	85,522	60,895	35,047	-46,649	-42,424	-2,103	56,961	29,956	-7,171
Gasoline	40,969	50,091	28,391	44,226	54,637	64,383	61,288	67,205	50,763	42,337
Nickel	37,227	57,232	15,372	29,631						
HRW Wheat	34,370	9,085	-14,975	24,999	8,022	23,619	9,128	49,108	9,943	8,438
Heating Oil	32,955	33,541	-35,339	-27,087	26,602	23,945	19,644	36,104	27,912	146
Platinum	25,763	8,223	9,052	17,898	14,689	29,228	11,379	22,793	16,782	5,815
Coffee	19,398	12,706	-15,181	25,385	-8,417	-23,076	2,905	36,182	23,630	-16,072
Palladium	16,937	12,742	8,690	19,970	15,660	16,769	5,212	13,034	11,626	
Wheat	-27,385	-108,927	-83,120	20,481	-71,468	-11,899	-29,252	36,542	-8,683	9,118

Tables & Charts – February 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 (\$	177.78	163.09	118.85	112.90	126.68	226.49	201.12	189.73	118.83	55.75
■ Precious Metals	144.41	130.13	93.08	87.26	97.82	191.77	168.93	152.12	84.90	43.48
■ Broad Commodity	17.43	16.69	11.74	16.19	20.12	22.92	20.62	20.12	15.01	5.56
■ Energy	12.45	13.04	11.49	5.78	4.89	7.13	6.27	10.30	12.72	4.67
■ Agriculture	2.06	2.00	1.90	2.49	2.73	3.31	4.14	5.56	4.84	1.85
■ Industrial Metals	1.38	1.18	0.62	1.14	1.08	1.31	1.07	1.56	1.27	0.10
■ Livestock	0.03	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)	5.09	24.61	9.59	1.39	-43.36	20.97	5.24	18.46	39.53	15.66
■ Precious Metals	3.90	23.49	-3.90	-3.79	-39.82	19.30	9.45	17.14	21.52	9.41
■ Energy	0.46	-1.79	13.81	3.80	-3.10	1.72	-2.71	-0.50	8.17	4.73
■ Broad Commodity	0.43	2.40	0.00	1.46	-0.35	0.53	-0.89	2.23	6.48	0.91
■ Agriculture	0.19	0.16	-0.13	-0.26	0.01	-0.80	-0.56	-0.52	2.61	0.43
■ Industrial Metals	0.11	0.34	-0.18	0.19	-0.09	0.25	-0.09	0.15	0.73	0.04
■ Livestock	0.00	0.02	-0.01	-0.02	-0.01	-0.03	0.04	-0.04	0.02	0.14
DELTA WEIGHTED:										
■ ETFs (\$ Billion AUM) (DW)										
■ Total ETF Assets Under Management (\$	183.24	165.40	120.17	113.23	125.80	228.34	201.52	191.49	120.11	56.24
▼ Precious Metals	145.82	130.81	93.03	87.39	98.04	193.28	169.39	153.02	85.19	43.80
■ Broad Commodity	17.43	16.69	11.74	16.19	20.12	22.92	20.62	20.12	15.01	5.56
■ Energy	16,46	14.60	12.78	5.92	3.71	7.40	6.14	11.12	13.68	4.83
■ Agriculture	2.11	2.06	1.97	2.54	2.80	3.36	4.20	5.60	4.86	1.85
■ Industrial Metals	1.40	1.20	0.63	1.15	1.09	1.31	1.08	1.56	1.27	0.10
Livestock	0.03	0.04	0.02	0.03	0.05	0.06	0.10	0.06	0.10	0.09
= Elyestock	0.05	0.01	0.02	0.05	0.05	0.00	0.10	0.00	0.10	0.07
ETFs Fund Flows (\$ Billion) (DW)										
■ Total ETF Fund Flows (\$ Billion)	6.79	20.37	19.14	7.35	-44.70	23,07	5.27	18.96	40.58	16.88
■ Precious Metals	3.90	23.75	-3.59	-3.19	-38.99	20.11	9.29	16.75	21.66	9.45
■ Energy	2.18	-6.30	23.01	9.20	-5.31	3.01	-2.59	0.40	9.06	5.91
■ Broad Commodity	0.43	2.40	0.00	1.46	-0.35	0.53	-0.89	2.23	6.48	0.91
■ Agriculture	0.18	0.16	-0.09	-0.29	0.06	-0.81	-0.49	-0.53	2.63	0.43
■ Industrial Metals	0.11	0.34	-0.17	0.19	-0.08	0.25	-0.09	0.15	0.74	0.04
■ Livestock	0.00	0.02	-0.01	-0.02	-0.01	-0.03	0.04	-0.04	0.02	0.14

Monthly

Monthly													
Name	2/2017 1	1/2017	12/2016	11/2016	10/2016	9/2016	8/2016	7/2016	6/2016	5/2016	4/2016	3/2016	2/2016
■ ETFs (\$ Billion AUM)													
■ Total ETF Assets Under Management (\$	176.96	168.58	161.81	168.20	181.31	190.19	183.24	186.79	181.47	160.69	164.66	154.99	147.32
■ Precious Metals	143.60	135.49	129.65	134.92	149.96	157.69	152.11	155.71	149.01	128.81	133.67	127.15	120.60
■ Broad Commodity	17.43	17.21	16.13	15.44	15.44	15.24	15.13	15.60	15.07	14.24	13.35	11.83	11.09
■ Energy	12.44	12.53	12.98	14.72	12.79	14.16	12.97	12.37	14.43	14.74	14.84	13.54	13.30
■ Agriculture	2.06	2.00	1.86	1.91	2.07	2.14	2.08	2.12	2.20	2.17	2.00	1.85	1.74
■ Industrial Metals	1.38	1.33	1.16	1.18	1.04	0.95	0.94	0.97	0.75	0.72	0.79	0.62	0.58
■ Livestock	0.03	0.04	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
■ ETFs Fund Flows (\$ Billion)													
■ Total ETF Fund Flows (\$ Billion)	4.11	0.98	-6.93	-3.64	0.55	1.43	0.59	6.12	5.96	4.02	-0.48	2.87	9.81
■ Precious Metals	3.63	0.29	-3.88	-4.67	1.35	1.61	1.41	3.78	5.74	4.17	0.36	3.66	8.08
■ Broad Commodity	0.23	0.19	0.44	-0.17	0.00	-0.45	-0.33	1.25	0.40	0.79	0.29	0.37	-0.06
■ Energy	0.11	0.35	-3.49	1.25	-0.89	0.29	-0.53	0.85	-0.13	-1.07	-1.34	-1.21	1.87
■ Agriculture	0.10	0.08	-0.01	-0.09	0.01	0.01	0.04	0.05	-0.04	0.13	0.09	0.05	-0.04
■ Industrial Metals	0.04	0.08	0.02	0.03	0.07	-0.03	0.01	0.19	-0.02	-0.01	0.12	0.00	-0.03
■ Livestock	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
DELTA WEIGHTED: ETFs (\$ Billion AUM) (DW)													
■ Total ETF Assets Under Management (\$	180.29	171.70	164.20	173.21	184.44	194.05	185.75	189.84	185.76	163.67	167.71	156.55	148.16
■ Precious Metals	144.72	136.44	130.29	135.54	150.88	158.71	153.03	156.97	150.06	129.27	134.47	127.55	120.98
■ Broad Commodity	17.43	17.21	16.13	15.44	15.44	15.24	15.13	15.60	15.07	14.24	13.35	11.83	11.09
■ Energy	14.57	14.60	14.67	19.03	14.91	16.91	14.49	14.07	17.59	17.19	17.01	14.61	13.68
■ Agriculture	2.14	2.08	1.92	1.97	2.14	2.21	2.14	2.19	2.26	2.23	2.06	1.92	1.80
■ Industrial Metals	1.40	1.35	1.17	1.20	1.06	0.97	0.95	0.99	0.77	0.73	0.81	0.63	0.60
■ Livestock	0.03	0.04	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
■ ETFs Fund Flows (\$ Billion) (DW)				-				-					
■ Total ETF Fund Flows (\$ Billion)	4.86	2.68	-10.58	-1.92	0.96	1.56	-1.13	7.79	6.59	3.27	-3.34	1.25	14.06
■ Precious Metals	3.60	0.33	-3.77	-4.63	1.59	1.61	1.44	3.67	5.83	4.21	0.29	3.58	7.99
■ Energy ■ Broad Commodity	0.87 0.23	2.00 0.19	-7.26 0.44	2.93 -0.17	-0.72 0.00	0.41 -0.45	-2.28 -0.33	2.61 1.25	0.42	-1.86 0.79	-4.14 0.29	-2.74 0.37	6.21 -0.06
Agriculture	0.23	0.19	-0.01	-0.17	0.00	0.45	0.04	0.06	-0.05	0.79	0.29	0.37	-0.06
■ Industrial Metals	0.12	0.09	0.02	0.03	0.01	-0.03	0.00	0.00	-0.03	-0.01	0.09	0.04	-0.04
Livestock	0.00	0.00	0.02	0.03	0.07	0.00	0.00	0.00	0.02	0.00	0.00	0.00	-0.01
a	0.00		0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

COMMODITY CHEAT SHEET FOR THE BLOOMBERG PROFESSIONAL® SERVICE

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Broad Commodities

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

Commodity Indices

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

Weather

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

Energy

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

Metals

Top metal news	METT_
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LME warehouse inventories	<u>LMEI</u>

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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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