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# Favorable Macro Indicators for Commodities Greet March

- Commodities are ripe to cut dollar-supportive equities cord
- Energy peak? Crude oil appears too hot vs. very cold natural gas
- The unusual and unlikely needed to quiet awakening metals bull
- Agriculture prices likely to make vs. break this growing season
- Macro performance shows much room for dollar decline in 2019

## [Gold Outlook Webinar - March 13, 10:00 EDT](#)

Data and outlook as of February 28

Note - Click on graphics to get to the Bloomberg terminal

Mike McGlone – BI Senior Commodity Strategist

[BI COMD](#) (the commodity dashboard)

## Most Commodity Signs Point to Rally, With Crude Oil a Key Risk

Performance: Feb. +1.0%, 2019 +6.5%, Spot +7.5%.  
 (Returns are total return (TR) unless noted)

(Bloomberg Intelligence) -- Broad commodities are on sound footings at a bull-market discount, with dissipating trade tensions and a peaking dollar supporting price gains, in our view. Limited crude upside in a fundamentally bearish oil backdrop is a primary risk, but metals and agriculture should take the bull-market baton in a weak-dollar environment where 2018 panned out as a last gasp for the greenback. Expectations for Federal Reserve interest-rate hikes have switched to easing, leaving U.S. vs. global stocks' outperformance as a final dollar pillar.

Key macroeconomic commodity companions -- emerging-market equities and China's purchasing managers' index -- are positive. Metals should benefit from a peak dollar and warm up with palladium. In agriculture, we think it'd take record U.S. grain yields and/or a weak Brazilian real to prevent a rally.

### [Commodities vs. Peak Dollar](#)

**Commodities Are Ripe to Cut Dollar-Supportive Equities Cord.** Some combination of a stronger dollar, a weaker Chinese purchasing managers' index (PMI) and declining emerging-market (EM) equities is unlikely, giving the broad-commodity recovery room to run, we believe. Continued mean reversion from 2018's extremes in these top companions is more likely, supporting a nascent bull market in commodities.

**Dollar Hanging By a Thread Is Commodity Pillar.** A commodities recovery is highly dependent on a peak dollar, as greenback reversion to a lower mean is more probable than its appreciation potential, in our view. In addition, the S&P 500 is unlikely to continue to double the MSCI World Excluding U.S. Index's return, as it has since 2010. U.S. equity-market outperformance is a final dollar-support pillar following the shift to easing in the fed funds' one-year futures spread.

### Dollar Appears Too Hot, Commodities Cold



Our graphic depicts potential early reversion in the strong-dollar trend. Flat for the fourth year, the ratio of the Bloomberg Commodity Spot Index vs. MSCI World gauge should be a primary beneficiary of a dollar peak. In the past 20 years measured annually, the dollar has a positive 0.73 correlation to the S&P 500 vs. World ratio, and as negative a number vs. the Bloomberg Commodity Index (BCOM).

# Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

**Commodities Poised to Revisit 2018 Peak.** The unusual and unlikely should be necessary in primary commodity companions to prevent further price gains. There's not much downside left in China's PMI, as we see it, near the bottom of its post-financial-crisis range. Mean reversion has the greater potential as trade tensions dissipate. The MSCI Emerging Markets Index has reverted to the midpoint-level of its 2016-18 rally and appears to be back on the bullish track. Continued EM recovery and some mean reversion in China's PMI should give the Bloomberg Commodity Spot Index plenty of fuel to head toward 2018's peak.

## PMI Bottoming, EM Recovering - Commodity Positive



Last year's high is also about the halfway mark of the 2011-16 bear market and the 100-week average. Since 1999, the spot BCOM is about 0.70 correlated (annually) to EM equities and China PMI.

## High Mean-Reversion Risk in Trade-Weighted Dollar.

The primary dollar-strength outlier -- the trade-weighted broad index -- illustrates elevated mean-reversion risk, in our view. Typically a close proxy to the Bloomberg and U.S. dollar (DXY) spot indexes, the Chinese-yuan-heavy trade-weighted broad measure is the most extended above the similarly scaled Bloomberg index since its inception in 2004. Our graphic depicts the DXY and Bloomberg dollar indexes consolidating at the halfway mark of the 2017-18 decline. Reconvergence risk on the way down is elevated, notably as the trade-weighted measure appears to be in its early days of backing away from 2018's 16-year high.

In the two years before the first Federal Reserve rate hike of the cycle in December 2015, all three indexes rallied more than 20%. If the rate-hike cycle is over, this rally should be at risk of reversion.

## Reconvergence Risks Appear on the Way Down



## MACRO PERFORMANCE

### Macro Performance Shows Much Room for Dollar

**Decline in 2019.** The dollar should revert further to a lower mean, based on our commodity-focused macroeconomic monitor. Down about 1% through February, the trade-weighted broad dollar index has limited upside to its highest year-end reading since 1973. U.S. vs. global stock-market outperformance is a final dollar support, yet leaders copper and crude oil appear to be looking beyond, perhaps anticipating a peak greenback.

### Dollar Mean Reversion Appears in Early Days

Security	Chg YTD %	Chg Feb.	Chg QTD Pct	1Yr % Chg	2Yr % Chg
Generic 1st 'CL' Future	+26.1%	+6.5%	+26.1%	-7.1%	6.0%
Generic 1st 'HG' Future	+12.0%	+5.9%	+12.0%	-5.1%	9.0%
S&P 500 Total Return Index	+11.5%	+3.2%	+11.5%	+4.7%	22.6%
S&P 500 Index	+11.1%	+3.0%	+11.1%	+2.6%	17.8%
MSCI World ex USA Net Total Re	+10.2%	+2.9%	+10.2%	-5.0%	12.9%
MSCI Emerging Markets Net Tota	+10.1%	+1.2%	+10.1%	-9.0%	18.8%
Bloomberg Commodity Spot Index	+7.5%	+1.9%	+7.5%	-4.7%	1.0%
Bloomberg Commodity Index Tota	+6.5%	+1.0%	+6.5%	-5.7%	-4.2%
Gold	+2.4%	-0.6%	+2.4%	-0.4%	5.2%
Bloomberg Barclays U.S. Treasu	-2%	-0.9%	-2%	+4.3%	4.4%
Bloomberg Dollar Spot	-5%	+0.8%	-5%	+4.8%	-4.0%
US Trade Wgt Broad Dollar Indx	-1.0%	+0.6%	-1.0%	+7.3%	.8%

The greenback remains the top performer on our graphic on a one-year basis, but there's room for weakness. Alleviation of trade tension and a recovery in the Chinese yuan are headwinds for the trade-weighted dollar. Sustained U.S. equity outperformance and rate hikes should be required for further greenback appreciation, but that's unlikely.

# Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

## SECTOR PERFORMANCE

### Industrial Metals Set to Pass Energy Performance.

About neck and neck through the end of February, industrial metals have the upper hand vs. energy performance, in our view. West Texas Intermediate crude oil appears to be too hot near the peak of its primary \$40-\$60-a-barrel range. On the other hand, copper just breached key resistance and should be among the primary beneficiaries if the dollar has peaked. Crude oil is highly subject to OPEC and Russia supply cuts supporting the market. It's a losing battle in the long term, as we see it.

### Metals Gaining Commodity Sector Leadership

Security	Chg YTD %	Chg Feb.	Chg QTD	Pct	1Yr % Chg	2Yr % Chg
Bloomberg Energy Subindex Tota	+15.2%	+5.4%	+15.2%	+3.6%	7.0%	
Bloomberg Industrial Metals Su	+11.8%	+3.5%	+11.8%	-8.1%	6.0%	
Bloomberg All Metals Total Ret	+7.1%	+1.3%	+7.1%	-5.0%	2.7%	
Bloomberg Precious Metals Subi	+2.1%	-1.1%	+2.1%	-1.9%	-2.2%	
BBG Softs TR	+1.1%	-3.5%	+1.1%	-16.7%	-34.0%	
Bloomberg Agriculture Subindex	-1.0%	-3.9%	-1.0%	-16.8%	-23.7%	
Bloomberg Livestock Subindex T	-1.5%	--	-1.5%	--	3.0%	
Bloomberg Grains Subindex Tota	-3.3%	-5.0%	-3.3%	-16.7%	-22.0%	

Precious metals are set to take the bull-market baton from the dollar, particularly if U.S. stock-market volatility extends last year's recovery process. Grains and agriculture have plenty of upside on the back of reduced trade tension, a bottoming Brazilian real and potential normalization in exceptional Corn Belt yields.

## Energy (Index weight: 29% of BCOM)

Performance: Feb. +5.4%, 2019 +15.2%, Spot +17.1%  
 \*Note index weights are the 2018 average.

## Elevated Peak Risk

**Energy Peak? Crude Oil Appears Too Hot vs. Very Cold Natural Gas.** The energy-sector rally to start 2019 is at an elevated risk of a reversal, in our view, with crude oil's key companions unlikely to lend support, and President Donald Trump making it clear that West Texas Intermediate (approaching \$60 a barrel) is too high. Shorter-term highly correlated indicators -- futures curve, emerging-market equities -- aren't endorsing WTI above \$57. Longer-term demand vs. supply trends remain a price headwind. OPEC and Russia are losing the battle vs. North American production, advancing technology and demographic shifts.

Crude oil is at a high risk of having already stamped the 2019 peak. Natural gas may have done the opposite, with the February low about as cold as November was too hot on increasing exports, declining inventories and the futures curve.

## Best Days Behind Crude Oil?

**Futures, Emerging-Market Stocks Should Keep Lid on WTI Crude Oil.** Key companions, namely the futures curve and emerging-market equities, indicate this year's crude oil rally is overdone, with limited upside to \$57.81-a-barrel WTI, in our view. OPEC and Russia are fighting a losing battle vs. North American production. The "trend is your friend" mantra shines unfavorably on prices in 2019, and maybe longer.

## WTI Crude Oil Has Limited Upside Near \$60



## Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

**It's Been a Good Year Already in Crude Oil.** Crude oil will remain under pressure, we believe, with unfavorable demand vs. supply conditions keeping a lid on prices. WTI's sharp recovery to a high of \$57.81 a barrel is at a steep risk of marking the 2019 peak. Sustained supply reductions from OPEC and Russia should be necessary to support a market that's clearly at a surplus, based on our analysis of IEA and EIA data.

Led by surging U.S. and Canadian production and declining additional demand, the trend in energy prices is down. The 2018 rally that resulted in an average WTI price of \$63.66 appears similar to 2011, when the average per-barrel price was \$95.08. At about \$57 on Feb. 28, there's plenty of incentive for strong North American production..

**Crude Oil's Key Companions Not Endorsing Rally.** The \$57-a-barrel level in WTI appears to be too hot to some key companions, namely the one-year curve, which isn't endorsing higher front-futures prices. Our measure of the curve averages of WTI, Brent, diesel and gasoline, which peaked near 7% in backwardation a little more than a year ago, has been in contango since October. The trend in the curve is what's significant. Moves toward contango are bearish. The MSCI Emerging Markets (EM) Index peaked at the same time as the curve last January. EM is reluctant to endorse the crude-oil rally. Both the curve and EM index remain below the halfway marks from 2018's declines.

### Futures Curve and EM Indicate Crude Oil Too Hot



Last year, crude oil peaked about nine months after these key companions. Since the start of 2016, crude oil is 0.76 correlated to the curve and 0.60 to EM on a quarterly basis.

**Crude Oil, Liquid-Fuel Paradigm to Shift to Exports in December.** Other than lower prices, there's little to stop the accelerating decline in U.S. crude oil and liquid-fuel net imports, with Energy Department estimates indicating a paradigm shift to net exports by December. Our graphic depicts an entrenched trend, with technology boosting output and limiting consumption, along with shifting demographics and biofuel's prominence. The U.S. ethanol mandate lifts total gasoline supplied by biofuel to 15% from 10%.

### Net U.S. Fuel Imports to Shift to Exports in 2019



Though about 40% of U.S. corn production is earmarked for ethanol, U.S. farmers are barely breaking even. The global energy demand vs. supply balance is unfavorable for sustaining higher prices. The Corn Belt's contribution to supply should continue to increase, supporting grain prices.

### North America Supply Far Exceeds Demand.

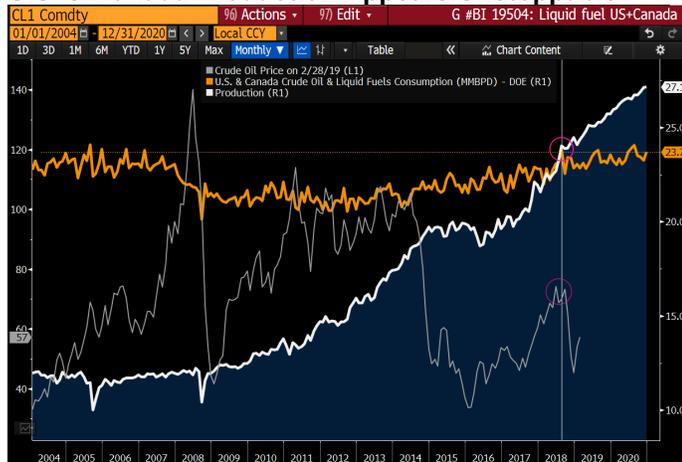
Sustained OPEC and Russia production cuts, while unlikely, are required to relieve the primary pressure on crude-oil prices: accelerating U.S. and Canada supply. Our graphic depicts the key issue: U.S. and Canada crude oil and liquid fuels production surpassed consumption last year. By the end of 2019, the excess supply should be almost 2 million barrels a day, based on Department of Energy estimates. In two years, increasingly cash-strapped global producers will face a North American surplus of 3 million barrels a day.

Incremental demand is a thing of the past, notably in the U.S. and OECD countries. Since 2007, U.S. consumption is flat, yet production has doubled and not just for crude. Corn-based ethanol is on pace to supply 15% of U.S. gasoline in a few years, yet farmers are barely breaking even at current prices.

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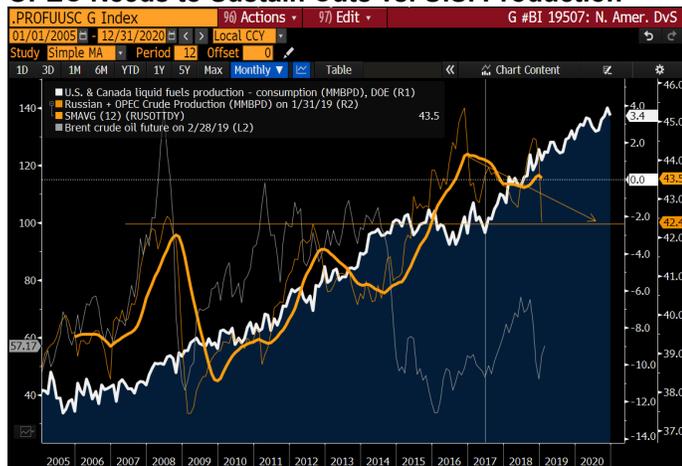
Bloomberg Commodity Index (BCOM)

## U.S. & Canada Production Appears Unstoppable



**OPEC Unlikely to Offset U.S., Canada Output.** Unless a strong force, such as lower prices, curtail the positive trend in U.S. and Canada liquid-fuels production, that output alone should offset any increase in global demand over the next few years. A rise of 1.5 million barrels a day, the DOE estimate of North American supply excess in 2019 and 2020, is about equal to most estimates for global demand growth. For prices to rise, production from OPEC and Russia will likely need to decline. A GDP advance would help, but it's been stuck just above 3% the past few years.

## OPEC Needs to Sustain Cuts vs. U.S. Production



Over the past 10 years, North American liquid-fuels output has exceeded consumption by 1.1 million barrels a day on average. The five-year average increase in North American production is 1.4 million barrels a day, vs. 1.1 million over the previous five-year period and zero for the half-decade before that.

## Natural Gas Rebound Is Likely

**Natural Gas Below \$3 a Million British Thermal Units Is Too Low.** February's low of \$2.54 an MMBtu has a high probability of marking the 2019 trough if declining inventories, increasing U.S. exports and the favorable futures curve are guides. As overheated as U.S. natural gas was in November, it appears to be in an opposite, overly cold condition in February.

**Natural Gas Appears Just Too Cold.** Increasing U.S. natural gas exports should keep a floor under prices. In 2017-18, the U.S. exported about 11% of its production, based on our analysis of Department of Energy estimates, as the price averaged \$3.04 an MMBtu. By the end of 2019, exports are expected to be above 16%, about the same as for corn. Recently revisiting the bottom end of the past two-year range, natural gas prices appear to be too low. With LNG infrastructure coming on rapidly, higher prices are the main threat to stall the trend in rapidly increasing exports.

## There Is Little to Halt This Export Trend



Natural gas prices have backed into a good support zone. In 2015-16, when exports averaged 7%, \$2.59 was the average price. This year's low is \$2.54. Increasing exports and declining inventories indicate the price should gravitate toward a \$4 resistance level.

**The Curve and Inventories: Natural Gas Support.** With conditions almost the opposite of November's, natural gas prices are too low, in our view. The most volatile major commodity has dipped back into a good support zone, with the futures curve and declining inventories indicating higher prices. Based on the past five-year range, the one-year curve (about 6% in backwardation) implies a front price of above \$3.50 an MMBtu vs. \$2.80 on Feb. 28. Since the 2016 bottom, the curve has been trending toward backwardation, indicating that demand is increasing at a greater pace than supply. At less than half the average contango since 2000 (11%), the demand vs.

# Bloomberg Commodity Outlook – March 2019 Edition

## Bloomberg Commodity Index (BCOM)

supply balance is favorable for prices.

### Natural Gas Well Supported at February Low



The annualized measure of inventories is nearing a five-year low but remains in decline. Low inventories helped to spark last year's price spike at the advent of the winter-drawdown season.

## PERFORMANCE DRIVERS

**Crude Oil, Energy Too Hot Now After Its Big Chill in December.** Nearing the top of its primary range leaves crude oil and the energy sector vulnerable to decline. Both West Texas Intermediate and Brent crude oil are up about 25% this year, primarily the result of ending 2018 near the lower end of the \$40-\$60-a-barrel range in WTI. The midpoint of 2018 was near \$60 and the average price from 2016 (the bottom year) was \$43.50. Dependence on supply cuts from OPEC and Russia may only provide the market a shorter-term boost.

### Further Energy Sector Returns Should Be Limited

Security	Chg YTD %	Chg Feb.	Chg QTD	Chg Pct	1Yr % Chg	2Yr % Chg
Bloomberg WTI Crude Oil Subind	+24.4%	+5.6%	+24.4%	-3.8%	6.3%	
Bloomberg Brent Crude Subindex	+22.9%	+9.0%	+22.9%	+6.5%	22.3%	
Bloomberg Petroleum Subindex T	+22.7%	+7.8%	+22.7%	+4%	13.3%	
Bloomberg Heating Oil Subindex	+22.1%	+8.4%	+22.1%	+9.7%	26.0%	
Bloomberg Unleaded Gasoline Su	+18.6%	+12.7%	+18.6%	-12.0%	-3.4%	
BBG Energy Spot	+17.1%	+7.3%	+17.1%	--	9.0%	
Bloomberg Energy Subindex Tota	+15.2%	+5.4%	+15.2%	+3.6%	7.0%	
Bloomberg Natural Gas Subindex	-2.6%	-1.5%	-2.6%	+6.0%	-17.0%	

Natural gas is acting like crude oil did at the end of 2018. It revisited the lower end of its recent multiyear range in February. In an environment with declining U.S. inventories and rapidly increasing exports, the end-of-month level near \$2.80 an MMBtu appears to be too cold vs. the \$3.03 average since 2016.

### Front Energy Futures to Feb. 28

Ticker	Last	Chg YTD %	Chg MTD %	Chg QTD %	1 Yr Ago	2 Yrs Ago	Chg Pct 1Yr	Chg Change 2 Year Percent
+ Generic 1st 'CL' Future	57.3	+26.1%	+6.4%	+26.1%	61.6	54.0	-7.1%	6.0%
+ Generic 1st 'XB' Future	162.9	+23.1%	+19.6%	+23.1%	175.8	151.2	-7.3%	7.8%
+ Generic 1st 'CO' Future	66.0	+22.7%	+6.7%	+22.7%	65.8	55.6	+4%	18.8%
+ Generic 1st 'HO' Future	202.3	+20.4%	+7.7%	+20.4%	191.4	162.1	+5.7%	24.8%
+ Generic 1st 'NG' Future	2.8	-4.6%	-3%	-4.6%	2.7	2.8	+5.2%	1.2%

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

Name	Current Position	1 Yr Ago	1 Yr Change	YTD Change
<b>1 Year Spread % of First Contract</b>				
▶ BCOM	-4.9	-1.9	-3.0	0.1
▶ Sector				
▶ Energy	0.3	4.6	-4.3	2.5
▶ Industrial Metals	-0.7	-1.3	0.6	0.5
▶ Precious Metals	-3.2	-3.1	-0.1	-0.1
▶ Livestock	-9.6	2.9	-12.6	-8.0
▶ Agriculture	-9.9	-5.5	-4.3	-0.9
▶ Single Commodities				
Live Cattle	7.7	7.6	0.1	2.5
Natural Gas	6.6	0.7	5.9	8.6
Palladium	5.0	1.1	3.9	0.9
Zinc	4.1	1.8	2.3	0.7
Brent Crude	1.6	5.6	-4.1	4.7
Unleaded Gas	1.4	4.6	-3.1	4.6
Copper (LME)	0.3	-1.8	2.1	0.3
Gas Oil	-0.3	3.1	-3.4	3.7
Copper (CME)	-0.6	-3.2	2.6	0.2
Platinum	-1.8	-1.5	-0.3	0.2
Heating Oil	-2.1	1.2	-3.4	1.3
Thermal Coal	-2.2	9.5	-11.7	-9.7
Nickel	-2.3	-1.5	-0.8	0.8
Gold	-2.8	-2.8	0.0	0.1
Crude Oil	-2.9	7.6	-10.5	4.2
Silver	-3.6	-3.4	-0.2	-0.3
Cotton	-4.0	5.5	-9.6	-1.2
Aluminum	-5.0	-1.7	-3.3	0.3
Soybean Meal	-5.4	7.5	-12.9	-0.1
Soybean Oil	-5.9	-3.3	-2.5	0.4
Soybean	-6.7	0.8	-7.5	0.5
Wheat	-10.4	-17.4	7.0	-0.4
Sugar	-10.9	-8.9	-2.0	-1.6
Corn	-11.4	-10.0	-1.4	-2.9
HRW Wheat	-14.1	-16.3	2.2	-0.7
Coffee	-17.2	-10.3	-6.9	-1.2
Lean Hogs	-27.0	-1.8	-25.3	-18.5

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).

## Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

### Metals

**All** (Index weight: 35% of BCOM)

Performance: Feb. +1.3%, 2019 +7.1%

**Industrial** (Index weight: 19.0% of BCOM)

Performance: Feb. +3.5%, 2019 11.8%, Spot +11.6%

**Precious** (Index weight: 16.1% of BCOM)

Performance: Feb. -1.1%, 2019 +2.1%, Spot +2.2%

### Metals Bull Requires Unlikely to Halt

**The Unusual and Unlikely Needed to Quiet Awakening Metals Bull.** The foundation for sustained recovery in precious and industrial metals is firm, requiring some unique and unlikely forces to shake, in our view. A key tailwind is a peak U.S. dollar: Last year's 16-year-high appears in early reversion days with a maturing interest rate-hike cycle. Primary industrial metals help comes from recovering emerging markets and mean-reversion potential in China's Purchasing Managers Index. The rabbit, palladium, is about exhausted at \$1,500 an ounce, the highest ever vs. platinum, but lowly silver looks set to hold above \$16.

Gold ETF investors appear unstoppable, collecting ounces last equal to about \$1,460. Potential Federal Reserve easing is a dollar headwind, but so are the increasing twin U.S. deficits and looming election cycle. More hikes would come with mounting inflation, a gold positive.

#### Base Metals Seek 2018 Peak

**Copper to Zinc, Industrial Metals Set Their Sights on 2018 Highs.** It should require something unusual to halt a continued recovery in industrial metals. Prices have formed a good foundation, particularly as the China Purchasing Managers Index (PMI) and the U.S. dollar back away from multiyear extremes. Both appear in early mean-reversion days. A final metals support is recovery in emerging markets.

**Industrial Metals Foundation Is Firming.** Industrial metals are in early recovery days from a solid foundation, in our view. For metals to slump, China's PMI would need to decline below current levels that are already near decade lows, and the trade-weighted broad dollar would have to do the opposite on the upside. The potential for some minor mean reversion in these key companions tips

the scales positive for metals prices, especially on the back of the recovering MSCI Emerging Markets Index.

#### Mean Reversion Supporting Metals Foundation



Our graphic depicts the Bloomberg Industrial Metals Index bottoming from the 48-month average, similar to June 2017. The high from that foundation in 2018, about 17% above the Feb. 28 price, is a good next target resistance. Over the past 20 years, measured annually, industrial metals are about 0.90 correlated to China's PMI and the EM index, and minus 0.70 to the dollar.

**Metals Finally Appear to Be Turning Higher.** Industrial metals appear well-rested for a prolonged rally. Essentially unchanged for the past five years, the Bloomberg Industrial Metals Spot Subindex should follow a primary companion, the MSCI Emerging Markets Index, if history is a guide. Our graphic depicts a similar crossover in the EM index above the metals' 12-month average to what occurred three years ago, when the recovery from a seven-year low was in early days. Key laggard, copper -- down almost 10% over the period -- is breaking above key resistance in February, indicating a firming in this primary support pillar for broad metals.

#### Metals Turning Back Up After Prolonged Pause



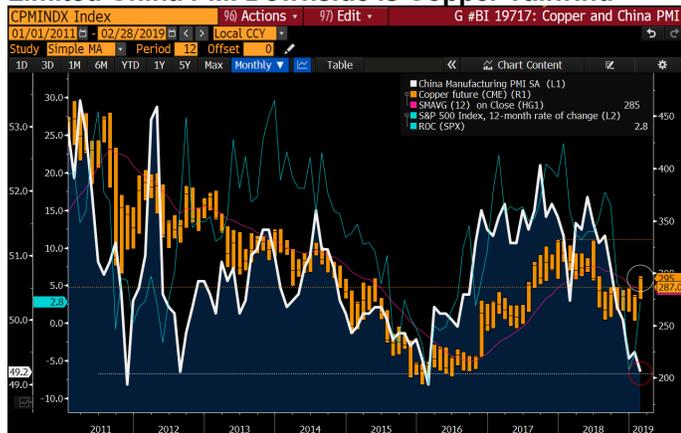
## Bloomberg Commodity Outlook – March 2019 Edition

*Bloomberg Commodity Index (BCOM)*

Key leader zinc should see further catch-up from nickel in what appear to be recoveries from multiple years of declines that reduced supply and increased demand, notably on the back of electric vehicles, technology and battery demand.

**Copper Gaining Upside Potential With Limited China PMI Downside.** Copper's strong February performance indicates a resumption of the bull market, in our view. Despite the lowest reading in three years in one of its primary companions, China PMI, copper ended the month above key resistance and at the highest level since July. Near the bottom of the post financial crisis range, China's PMI has limited downside, which indicates potential upside for copper. The 2018 high near \$3.32 a pound is a next key target resistance. Old resistance and the 12-month mean near \$2.87 is now initial support.

### Limited China PMI Downside is Copper Tailwind



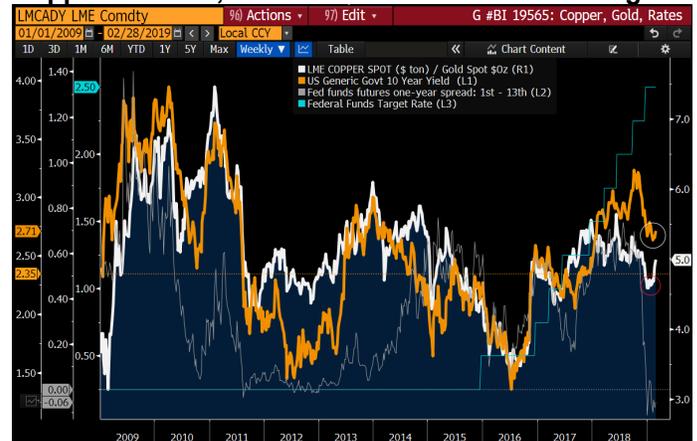
The metal was a good leading indicator last year for the worst correction in the U.S. stock market in seven years. Copper declined 23% from its 2018 high to the August low. The S&P 500 did not peak until September and when it plunged 20%, copper barely budged, forming a double bottom base.

**Copper Needs to Get Game on vs. Gold, or Bond Yields Too High.** A copper-to-gold ratio of about 5.0 is inconsistent with Treasury yields at such lofty levels. Historically speaking, the copper-price recovery needs to accelerate, or bond yields should continue to decline. The per-ton amount of LME copper equivalent to an ounce of gold was last consistent with the U.S. 10-year yield near 2.50%, vs. 2.71% on Feb. 28. As a leading indicator, the gold-to-copper ratio peaked in June, four months before bond yields (3.24%).

Adding credibility to the declining ratio since June is the shift -- for the first time in a decade -- to easing mode, as indicated by the fed funds futures one-year spread, which peaked in July. Measured annually, the copper-to-gold ratio is 0.82 correlated with the 10-year yield.

may be a too-cold indication for the metal. If it holds resistance, it would be a too-hot signal for equities.

### Copper vs. Gold, Too Low or Bond Yields Too High



### Precious Awaken with Palladium

**Precious Metals Gold, Silver, Platinum Set to Follow Palladium.** Long-dormant precious metals are set to follow palladium's bullish lead, we believe. Lowly silver and platinum have the most potential upside, notably if the dollar has peaked. Almost-two-decade lows in gold and silver annual volatility are rally fuel if inflation fears bring on rate hikes, or rate cuts pressure the greenback.

### Disconcerting Implications of Gold ETF Inflows.

Strong gold ETF inflows are set to benefit from the metal's price appreciation, which has disconcerting implications for many other asset classes, in our view. Up almost 60% since the Federal Reserve's first rate hike this cycle, the percentage increase in total known gold ETF holdings is more than double that of the spot price. Such a disparity last occurred about a decade ago, shortly after the inception of gold ETFs (2004) and coincident with the financial crisis.

### ETFs Nearing Where Gold Was Last \$1,460



# Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

Since the end of 2017, when S&P 500 volatility reached multidecade lows, the precious metal is essentially unchanged vs. a 6% increase in gold ETF holdings. Investors appear to be looking ahead to increasing U.S. budget and trade deficits, more stock-market volatility, a potentially peaking dollar and political uncertainty with the election cycle.

**Scenarios Signal Gold Has a Brighter Future Than the Dollar.** The best of the dollar drivers are nearing exhaustion, with positive implications for gold, in our view. Despite nine rate hikes and a 40%-plus S&P 500 total return, the Bloomberg Dollar Spot Index (BBDXY) is unchanged from March 2015. The year prior, in anticipation of higher U.S. rates while most of the rest of the world was easing, the dollar rallied about 20%. Up about the same as the S&P 500 over the period, the percentage increase in per-ounce gold ETF holdings appears to indicate a less rosy scenario for higher U.S. rates and stock-market appreciation.

## Scenario Analysis Pits Gold vs. Exhausted Dollar



Weaker gold prices likely need a stronger dollar and sustained U.S. vs. global equity outperformance, with little inflation. ETF investors appear to be saying that scenario is unlikely to happen. The annual BBDXY dollar-to-gold correlation since 2005 is 0.64.

## Peak Palladium May Be What Precious Metals Need.

The precious metals market is about to resume a rally, in our view, on the back of a surge in the palladium price. For the first time in five years, the Bloomberg Precious Metals Spot Subindex is poking above its 72-month average. It may be a better bullish broad-market indication if the recent visit above \$1,500 an ounce in palladium marks a peak. Platinum, silver and gold embarked on decade-long rallies shortly after a similar parabolic palladium rally and peak in 2001.

## Thanks Palladium, We Can Take It From Here



History is likely to repeat, as we see it. The precious metals index is just recovering from the halfway point of that rally, with platinum the most unloved, similar to 1999. The platinum discount to palladium appears to be unsustainable.

**Time for Platinum Bull to Get Its Game On.** History rarely repeats, but past trends in its relationship with palladium indicate that platinum is ripe to revisit resistance near \$1,500 an ounce. That level is the recent record high in palladium, but only the halfway mark of the 2008-09 bear market for platinum. At the bottom of that range now, with the palladium-to-platinum ratio extending the 2001 peak, we think platinum is ready to take the bull-market baton.

## Low Platinum Price Should Shift Demand vs. Supply



Price is a primary demand vs. supply driver. Platinum is just too low vs. the less-efficient chemical catalyst palladium. In January 2001, the palladium-to-platinum ratio peaked near the same level revisited this February. From the November low that year to the 2008 peak, platinum surged more than 400%. The current 1.8 ratio

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compares with a 0.55 average since 1993.

**Silver Set to Shine Above \$16 an Ounce.** Back near \$16 an ounce and good resistance, silver may back-and-fill awhile, but it's ripe to take aim at the next resistance near \$18, in our view. Just catching up to top companion, copper, leaves \$18 as a next stop, which is also near the top Bollinger Band on the 100-week average. Silver hasn't sustained above this mean in almost two years. What's different now is a potential peak dollar and mean reversion from the extreme at last year's lows. CME silver positions dipped to the greatest net shorts as a percentage of open interest in the database since 2006, as the price revisited support levels near \$13.80 from just before the initial interest-rate hike.

### Silver Should Breach 100-Week Mean Soon



Silver is 0.71 correlated to copper and 0.77 to gold, measured annually over the past 20 years. The negative correlation to the trade-weighted broad dollar is 0.60.

## PERFORMANCE DRIVERS

**Taking Back the Discount, Metals Bull Is in Early Recovery Days.** Industrial metals, the worst-performing major sector in 2018, should be among the best this year, particularly if the dollar continues its descent. Highly sensitive to U.S.-China trade tension, metals appear to be in the early days of erasing last year's discount in a nascent bear market. Up about 12% in 2019, and neck and neck with the S&P 500, industrial metals should have the upper hand vs. the mature stock-market rally.

### Metals 2018 Discount Is Disappearing Rapidly

Security	Chg YTD %	Chg Feb.	Chg QTD	Chg 1Yr %	Chg 2Yr %
Bloomberg Nickel Subindex Tota	+22.1%	+4.5%	+22.1%	-5.5%	17.2%
Bloomberg Zinc Subindex Total	+13.7%	+2.4%	+13.7%	-14.2%	5.7%
Bloomberg Copper Subindex Tota	+12.2%	+5.8%	+12.2%	-6.5%	5.8%
Bloomberg Industrial Metals Su	+11.8%	+3.5%	+11.8%	-8.1%	6.0%
Bloomberg All Metals Total Ret	+7.1%	+1.3%	+7.1%	-5.0%	2.7%
Bloomberg Aluminum Subindex To	+3.4%	-3%	+3.4%	-8.4%	-5%
Bloomberg Gold Subindex Total	+2.6%	-5%	+2.6%	-8%	3.5%
Bloomberg Precious Metals Subi	+2.1%	-1.1%	+2.1%	-1.9%	-2.2%
Bloomberg Silver Subindex Tota	+4%	-3.1%	+4%	-5.6%	-17.2%
US Trade Wgt Broad Dollar Indx	-1.0%	+6%	-1.0%	+7.3%	.8%

The passing of last year's storm for lower metals prices, centering on trade tension and the strong dollar, sets the stage for a longer-duration recovery, with copper a primary driver. Its breach of good resistance in February should transition to a revisit of last year's highs, about 12% above the end-of-month price. Gold is also favored if the greenback has peaked.

## **Agriculture** (Index weight: 30% of BCOM)

Performance: Feb. -3.9%, 2019 -1.0%, Spot -0.1%

### **Grains** (Index Weight: 24% of BCOM)

Performance: Feb. -5.0%, 2019 -3.3%, Spot -2.2%

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

Performance: Feb. -3.5%, 2019 +1.1, Spot +1.8%

## **The Resting Agriculture Bull**

**Agriculture Prices Likely to Make vs. Break This Growing Season.** Nearing the spring Corn Belt growing season, U.S. production is more likely to be price-supportive this year than a headwind, in our view. It may be just a matter of getting past September, when the Bloomberg Agriculture Spot Index reached a two-year low last year. The almost perfect storm for lower prices is rapidly dissipating. Another year of even greater record yields is likely required to suppress this recovery. Despite record corn and soybean yields in 2018 and an 11% decline in broad commodities, grains gained almost 5%.

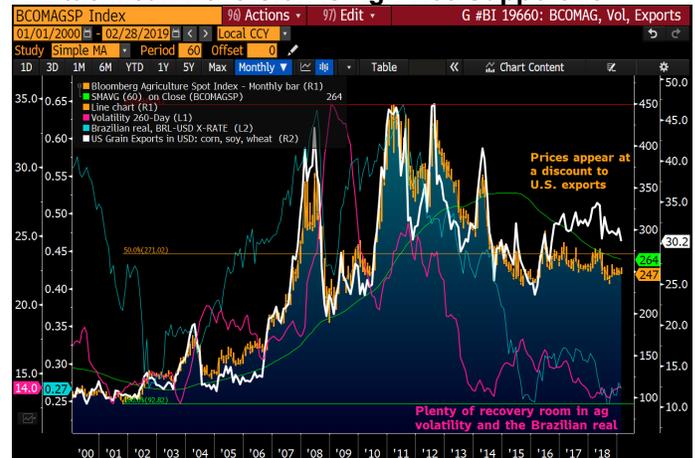
This divergent-strength indicator has support from a potential peak dollar, bottoming Brazilian real and reduced trade tension. Ag-rally fuel is about as ample as stock-market-decline indications in 2018. Annual volatility is near multidecade lows. It typically recovers with higher prices.

### **Ags & Grains Rally Turtle**

**A Little Mean Reversion Should Go a Long Way in Ag Prices.** Divergent strength from last year in grains should carry over this year and into broader agriculture, in our view. Some mean reversion in a combination of record U.S. grain yields, low volatility, trade tension, the strong dollar and a weak Brazilian real should go a long way toward supporting prices.

**Very Low Volatility Is Real-Recovery Indicator.** The agriculture sector's upside far outweighs its downside risks, based on its key companions, in our view. Mean-reversion risks in the recovering Brazilian real and market volatility are quite elevated. The annual volatility measure (260-day) of the Bloomberg Agriculture Spot Index appears to be bottoming from extreme lows. Continued reversion from last year's all-time low in the real would be a strong tailwind for agriculture prices. Our graphic depicts the ags are ripening for about a 20% recovery if they realign with the dollar value of U.S. grain exports, a top companion.

### **A Little Mean Reversion Is Ag-Price Supportive**

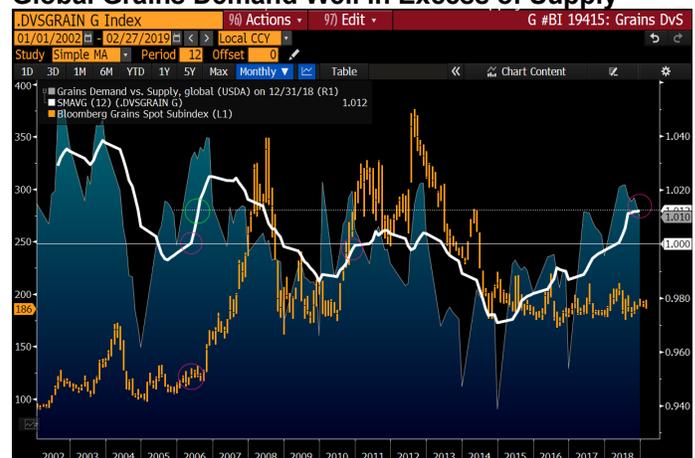


The correlation between the agriculture index and the dollar value of U.S. grain exports is 0.92, measured annually in the past 20 years. Unlike the stock market, volatility in commodities often moves in the same direction as prices.

### **Favorable Demand vs. Supply Supports Grain Prices.**

Absent a sharp and unlikely reversal in global grain demand that exceeds supply, prices should extend 2018's recovery. Our graphic depicts a ratio of USDA estimates of corn, soybean and wheat demand vs. supply that's well above par and the highest in a decade. It's a primary reason that the Bloomberg Grains Spot Subindex increased about 5% last year. Divergent strength is a key takeaway despite U.S.-China trade tensions, the strong dollar and about an 11% decline in broad commodities.

### **Global Grains Demand Well in Excess of Supply**



Updated USDA data may pull the 12-month trend off of highs, but the demand vs. supply ratio is unlikely to dip below par until pressured by increased prices. Adverse weather supported wheat to be last year's leader. Some normalization in the unprecedented run of favorable Corn Belt weather would be a key price support.

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**High U.S. Soybean Stocks vs. Brazil Supports Prices.** Price bottoms typically occur when stockpiles are high, which makes soybeans a prime candidate for a price rebound. Historically elevated U.S. soybean stocks-to-use vs. empty bins in Brazil has helped to bring China back to importing American grain. Our graphic, which marks the probable 2018 peak as U.S. stockpiles hit the highest level in three decades, supports a price recovery. The lowest Brazilian stockpiles in two decades is a prime reason China has few options but to come to the U.S.

## U.S. Stocks-to-Use Historically High vs. Brazil

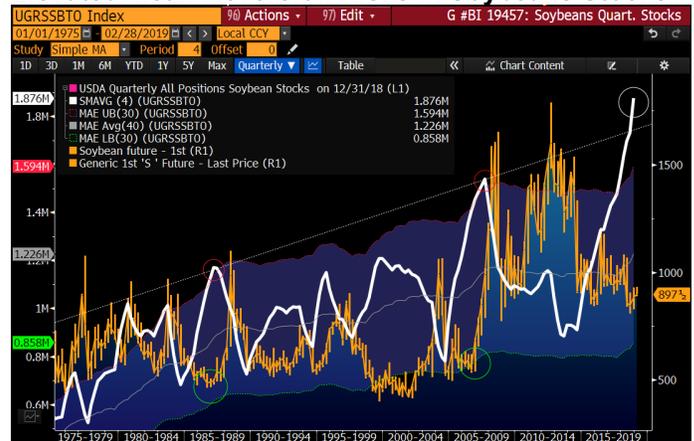


U.S. soybean supply is unlikely to increase until prices do, which is highly subject to exports and a potential peak in the strong-dollar trend. Corn stocks-to-use declined despite another record yield in 2018, indicating that demand will overtake supply gains that are pushing limits.

**U.S. Soybean Stockpiles -- About as Bad as It Gets.** A recovery in soybean prices should be well underway by the time record stockpiles begin to decline, if history is a guide. At a four-quarter average of 1.88 million bushels, stocks are the highest ever, and the most extended above the 40-quarter average since 1980. Once this measure peaks, soybean prices should have begun a recovery. A similar scenario occurred in September 2007, as soybeans rallied more than 80% from lows a year earlier. Prices then peaked about a year later.

In 1988, soybeans rallied about 130% above the 1987 low, which coincided with the extreme level of stockpiles in 1987. Measured annually in the past 30 years, the soybeans-to-stocks correlation is minus 0.74. Comparatively, the highest soybean positive correlation is 0.71 (to wheat). It's 0.62 to corn.

## Elevated Mean-Reversion Risks in Soybeans Stocks



## Softs & Real Recovery

**Sugar, Coffee, Cotton: Ripening Softs Recovery With Brazil Real.** Highly subject to currency fluctuations, particularly in the Brazilian real, soft-commodity prices are poised to continue recovering. The timing of Brazil's new administration favors a remission of the weak-real storm, which is supportive of sugar, coffee and cotton prices.

**Soft-Commodity, Brazilian Real Recovery Likely.** The soft-commodity bear market since 2010 is set to end, particularly if the Brazilian real has bottomed. For the past 10 years, the softs' 0.73 correlation to the dollar-to-real cross (BRLUSD, measured annually) vs. 0.25 in the previous decade emphasizes the increasing significance of Brazil's currency to the Bloomberg Softs Spot Subindex. Brazil's new administration has relative value on its side. The dollar-to-real rate has recovered from the pre-election multidecade low of September, but remains well below most means.

## Softs Likely to Recover With Brazilian Real



## Bloomberg Commodity Outlook – March 2019 Edition

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Our graphic, which depicts a recovery in the BRLUSD rate toward 2017's high of 32 cents, should be enough to get the softs' index back above its 60-month average. The BI Brazil team's view is real-supportive. Low inflation and a sound external position set Brazil apart from other emerging economies.

### BE Primer: Brazil's Growth Hinges on Critical Reforms.

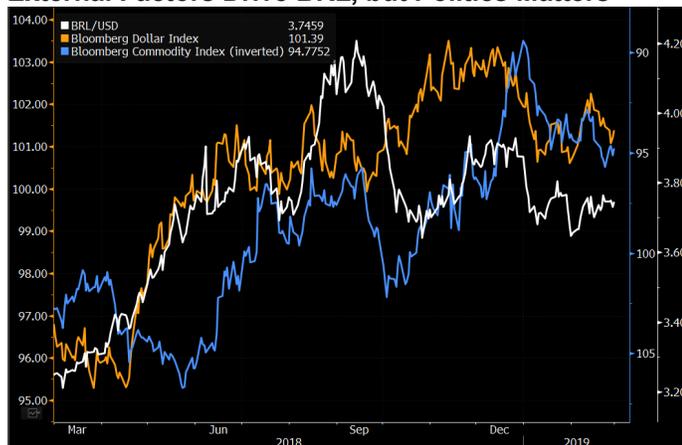
Contributing Analysts Adriana Dupita (Economics)

After four rocky years, Brazil's growth is likely to pick up in 2019 to around 2.5%. Lackluster activity -- around 1% -- in 2017 and 2018 was insufficient to offset the 8% plunge during Brazil's longest and deepest recession in 2015 and 2016. Below-neutral interest rates can provide a short-term boost, but to achieve long-term growth Brazil must tackle two pressing challenges. One is to stabilize the country's soaring public debt. The other? Improving competitiveness.

President Jair Bolsonaro has pledged to deliver on pension reform, privatizations and deregulation. Growth and asset prices will depend on his ability to move that agenda forward, on one hand, and on the global backdrop, on the other. Meanwhile, low inflation and a sound external position set Brazil apart from other emerging economies.

**External Backdrop Versus Domestic Matters.** The highly-liquid Brazilian real is sensitive to external factors (U.S. rates, commodity prices, risk aversion). And it eventually decouples in the presence of country-specific factors (policy/reform outlook, as in 2018 elections). An exchange rate of 3.60 reais per U.S. dollar seems consistent with the country's fundamentals -- assuming sustainable policies and fiscal reforms. For the real to sustainably strengthen beyond this level, a favorable shift in trade terms or substantial productivity-enhancing reforms would be required.

### External Factors Drive BRL, but Politics Matters



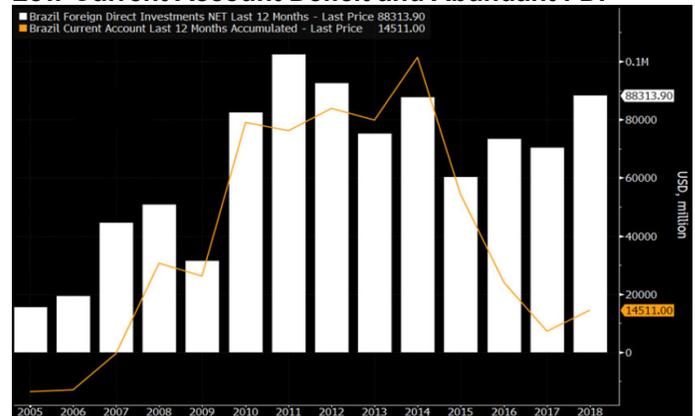
The BCB does not target any level for the Brazilian real,

but it tends to intervene in the market (mostly via derivatives) when faced by sudden, sharp movements in either direction. Depending on market conditions, the BCB could increase or unwind its \$70 billion short future dollar position.

### Free Float and Reserves Limit Brazil's Vulnerability.

The external deficit has been low, below 1% of GDP, on a combination of weak currency and slow domestic demand. The robust trade surplus (around \$50 billion) could be impaired by the woes of its two largest trade partners, China and Argentina. Still, with exports less than 15% of GDP, no major impact on growth is expected. Most of USD flows are not trade-related.

### Low Current Account Deficit and Abundant FDI



External financing has been comfortable and mostly comprised of longer-term capital. Finally, the \$380 billion in international reserves built thanks to a years-long commodity boom and quantitative easing more than cover the outstanding external debt. As long as reserves remain stable and the currency is left to float, external vulnerability should remain low, a desirable trait in a world of changing liquidity conditions. Click on the Text tab for the full report.

## PERFORMANCE DRIVERS

**Spring Grain-Price Discount Supports Uncoiling by Year's End.** Spot grain prices, at about a 6% discount to year-ago levels, provide a more favorable foundation for appreciation later this year, in our view. Last April's 12% premium early in the growing season proved to be too optimistic and could be a lesson for traders in 2019. Toward year-end, we expect some alleviation of 2018's prime price pressures, notably U.S-China trade tension, record Corn Belt yields and the declining Brazilian real.

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### 2018 to 2019 Component Performance Reversal

Security	Chg YTD %	Chg Feb.	Chg QTD Pct	1Yr % Chg	2Yr % Chg
Bloomberg Soybean Oil Subindex	+7.9%	-6%	+7.9%	-9.7%	-16.6%
Bloomberg Sugar Subindex Total	+7.7%	+1.6%	+7.7%	-10.4%	-39.8%
Bloomberg Live Cattle Subindex	+4.3%	+3.0%	+4.3%	+7.0%	14.0%
BBG Softs TR	+1.1%	-3.5%	+1.1%	-16.7%	-34.0%
Bloomberg Soybeans Subindex To	+5%	-1.9%	+5%	-18.4%	-20.2%
Bloomberg Cotton Subindex Tota	-5%	-3.7%	-5%	-11.6%	-2.5%
Bloomberg Agriculture Subindex	-1.0%	-3.9%	-1.0%	-16.8%	-23.7%
Bloomberg Livestock Subindex T	-1.5%	--	-1.5%	--	3.0%
BBG Soybean Meal TR	-2.1%	-2.4%	-2.1%	-24.5%	-15.2%
Bloomberg Grains Spot Subindex	-2.2%	-3.8%	-2.2%	-8.3%	-4.0%
Bloomberg Corn Subindex Total	-2.8%	-3.4%	-2.8%	-13.3%	-21.7%
Bloomberg Grains Subindex Tota	-3.3%	-5.0%	-3.3%	-16.7%	-22.0%
Bloomberg Coffee Subindex Tota	-5.9%	-9.6%	-5.9%	-27.4%	-43.3%
Bloomberg Wheat Subindex Total	-8.8%	-11.3%	-8.8%	-16.5%	-22.0%
Bloomberg Kansas Wheat Subinde	-9.9%	-11.9%	-9.9%	-26.4%	-31.1%
Bloomberg Lean Hogs Subindex T	-13.7%	-7.0%	-13.7%	-14.5%	-17.9%

Mean reversion in last year's component performance has been predominant thus far in 2019, as the Bloomberg Agriculture Spot Index consolidates within the narrowest 48-month range since 1991. Sugar should remain a leader if Brazil's currency continues to recover, which is also a key supportive factor for the broader market.

# Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

## DATA on BI COMD

### Performance - Overview

#### Key Metrics

Name	% Change o... 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
▼ <b>Commodities</b>										
▼ BCOM Index TR	-0.3	-0.9	1.0	1.0	-0.8	6.5	-5.7	-4.2	11.1	-36.9
▶ Energy Index	0.1	0.0	5.4	5.4	-6.4	15.2	3.6	7.0	33.0	-60.9
▼ All Metals Index	-0.3	-0.4	1.3	1.3	7.3	7.1	-5.0	2.7	21.0	-4.8
▶ Industrial Metals Index	-0.1	0.5	3.5	3.5	6.1	11.8	-8.1	6.0	37.1	-1.9
▶ Precious Metals Index	-0.5	-1.5	-1.1	-1.1	7.9	2.1	-1.9	-2.2	3.6	-11.0
▼ Ags & Livestock Index	-0.6	-2.1	-3.3	-3.3	-3.2	-1.1	-14.2	-19.8	-14.7	-41.1
▶ Livestock Index	0.1	0.8	0.0	0.0	-2.4	-1.5	0.0	3.0	-5.0	-21.1
▼ Agriculture Index	-0.7	-2.7	-3.9	-3.9	-3.3	-1.0	-16.8	-23.7	-16.8	-44.6
▶ Grains Index	-0.9	-3.4	-5.0	-5.0	-4.5	-3.3	-16.7	-22.0	-22.0	-48.0
▶ Softs Index	-0.7	-2.3	-3.5	-3.5	-5.2	1.1	-16.7	-34.0	-17.7	-48.8
▶ BCOM EX Indices TR										
▶ BCOM Index Roll Select TR	-0.2	-0.8	1.1	1.1	0.3	6.2	-6.5	-4.4	13.8	-31.7
▶ BCOM Index Forwards TR										
▶ BCOM Index ER	-0.3	-0.9	0.8	0.8	-1.4	6.1	-7.7	-7.2	7.2	-39.3
▶ BCOM Index Spot	-0.3	-0.9	1.9	1.9	-0.8	7.5	-4.7	1.0	28.1	-18.8
▼ <b>Stocks</b>										
▶ S&P 500 Index TR	-0.3	-0.2	3.2	3.2	1.4	11.5	4.7	22.6	53.2	66.0
▼ <b>Bonds</b>										
▶ Barclays U.S. Aggregate	-0.3	-0.1	0.0	0.0	2.9	1.1	3.2	3.8	5.2	12.2
▼ <b>Currencies</b>										
▶ Bloomberg U.S. Dollar Spot Index	0.2	0.0	0.8	0.8	-1.5	-0.5	4.8	-4.0	-3.2	17.0
US Dollar Index	0.0	-0.3	0.6	0.6	-1.1	0.0	6.2	-4.9	-2.1	20.7
US Trade Weighted Broad Dollar	-0.2	-0.6	0.6	-0.4	-1.2	-1.0	7.3	0.8	2.9	23.0

#### Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ <b>Commodities</b>										
▼ BCOM Index TR	6.8%	-11.2%	1.7%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%
▶ Energy Index	15.1%	-12.7%	-4.3%	16.3%	-38.9%	-39.3%	5.2%	-9.4%	-16.0%	-10.5%
▼ All Metals Index	7.4%	-12.6%	20.8%	15.7%	-19.5%	-7.1%	-21.6%	2.9%	-11.5%	25.9%
▶ Industrial Metals Index	12.0%	-19.5%	29.4%	19.9%	-26.9%	-6.9%	-13.6%	0.7%	-24.2%	16.2%
▶ Precious Metals Index	2.6%	-4.6%	10.9%	9.5%	-11.5%	-6.7%	-30.8%	6.3%	4.6%	42.7%
▼ Ags & Livestock Index	-0.5%	-9.4%	-8.1%	0.9%	-16.1%	-6.0%	-12.6%	2.7%	-12.4%	33.9%
▶ Livestock Index	-1.6%	-1.7%	6.4%	-5.6%	-18.8%	11.6%	-3.5%	-3.5%	-2.3%	9.3%
▼ Agriculture Index	-0.3%	-10.8%	-11.0%	2.1%	-15.6%	-9.2%	-14.3%	4.0%	-14.4%	38.5%
▶ Grains Index	-2.4%	-5.5%	-11.3%	-5.9%	-19.4%	-9.4%	-16.9%	18.3%	-14.4%	30.3%
▶ Softs Index	1.9%	-22.3%	-14.8%	13.2%	-9.9%	-10.1%	-16.9%	-22.4%	-14.0%	59.9%
▶ BCOM EX Indices TR										
▶ BCOM Index Roll Select TR	6.5%	-11.7%	3.6%	14.6%	-23.4%	-15.2%	-9.1%	-0.4%	-8.8%	19.5%
▶ BCOM Index Forwards TR										
▶ BCOM Index ER	6.4%	-13.0%	0.7%	11.4%	-24.7%	-17.0%	-9.6%	-1.1%	-13.4%	16.7%
▶ BCOM Index Spot	7.8%	-10.5%	7.6%	23.1%	-18.4%	-17.0%	-8.7%	3.7%	-8.1%	26.4%
▼ <b>Stocks</b>										
▶ S&P 500 Index TR	11.8%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%
▼ <b>Bonds</b>										
▶ Barclays U.S. Aggregate	1.1%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%
▼ <b>Currencies</b>										
▶ Bloomberg U.S. Dollar Spot Index	-0.7%	3.1%	-8.5%	2.8%	9.0%	11.0%	3.3%	-0.7%	1.8%	-1.8%
US Dollar Index	-0.1%	4.4%	-9.9%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%
US Trade Weighted Broad Dollar	-0.5%	7.2%	-6.0%	4.5%	10.7%	8.4%	2.8%	-1.4%	0.7%	-1.3%

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### Performance – Commodity Total Returns

#### Key Metrics

Name	MTD % Change	3 Mth % Change	YTD % Change	1Y Yr % Change	2 Yr % Change
<b>▼ BCOM Total Return Indices</b>					
Heating Oil Index	8.4	12.7	22.1	9.7	26.0
Live Cattle Index	3.0	7.4	4.3	7.0	14.0
Brent Crude Index	9.0	11.2	22.9	6.5	22.3
Natural Gas Index	-1.5	-34.7	-2.6	6.0	-17.0
Gold Index	-0.5	7.4	2.6	-0.8	3.5
WTI Crude Index	5.6	11.0	24.4	-3.8	6.3
Nickel Index	4.5	16.4	22.1	-5.5	17.2
Silver Index	-3.1	9.9	0.4	-5.6	-17.2
Copper Index	5.8	6.1	12.2	-6.5	5.8
Aluminum Index	-0.3	-3.1	3.4	-8.4	-0.5
Soybean Oil Index	-0.6	6.3	7.9	-9.7	-16.6
Sugar Index	1.6	1.1	7.7	-10.4	-39.8
Platinum Index	6.3	9.3	9.8	-11.5	-15.5
Cotton Index	-3.7	-8.8	-0.5	-11.6	-2.5
Gasoline Index	12.7	9.9	18.6	-12.0	-3.4
Corn Index	-3.4	-3.3	-2.8	-13.3	-21.7
Zinc Index	2.4	10.4	13.7	-14.2	5.7
Lean Hogs Index	-7.0	-21.9	-13.7	-14.5	-17.9
Wheat Index	-11.3	-10.8	-8.8	-16.5	-22.0
Soybeans Index	-1.9	-0.6	0.5	-18.4	-20.2
Soybean Meal Index	-2.4	-3.4	-2.1	-24.5	-15.2
HRW wheat Index	-11.9	-11.7	-9.9	-26.4	-31.1
Coffee Index	-9.6	-10.7	-5.9	-27.4	-43.3

#### Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>▼ BCOM Total Return Indices</b>										
WTI Crude Index	23.9%	-20.5%	5.1%	7.1%	-44.3%	-41.7%	6.8%	-11.8%	-3.6%	3.8%
Brent Crude Index	23.4%	-14.9%	14.2%	25.4%	-45.6%	-47.6%	7.2%	7.6%	16.8%	11.5%
Nickel Index	22.1%	-16.4%	25.6%	11.8%	-42.6%	7.3%	-20.1%	-10.2%	-24.7%	32.2%
Heating Oil Index	21.9%	-15.7%	15.0%	33.5%	-42.8%	-38.8%	0.4%	5.5%	10.7%	8.3%
Gasoline Index	19.1%	-28.3%	2.8%	6.4%	-12.6%	-43.8%	1.9%	25.7%	14.5%	13.1%
Copper Index	12.8%	-21.2%	29.2%	15.7%	-25.1%	-16.6%	-8.8%	5.0%	-24.4%	29.5%
Zinc Index	12.3%	-21.4%	29.7%	57.5%	-28.0%	3.5%	-7.0%	9.0%	-27.8%	-8.8%
Sugar Index	9.3%	-26.1%	-25.4%	22.8%	-4.7%	-30.9%	-20.0%	-13.0%	-11.9%	24.0%
Platinum Index	9.1%	-14.8%	3.0%	0.8%	-26.5%	-12.3%	-11.8%	8.7%	-21.8%	19.3%
Soybean Oil Index	7.4%	-19.2%	-7.0%	7.3%	-7.7%	-20.6%	-22.4%	-9.8%	-15.2%	33.8%
Live Cattle Index	4.4%	2.6%	9.1%	-7.4%	-14.3%	22.1%	-5.0%	-3.9%	-1.0%	15.0%
Aluminum Index	4.0%	-16.9%	31.2%	9.7%	-22.9%	-3.1%	-20.7%	-4.0%	-21.7%	5.4%
Gold Index	3.0%	-2.8%	12.8%	7.7%	-10.9%	-1.7%	-28.7%	6.1%	9.6%	28.7%
Soybeans Index	1.3%	-11.7%	-8.1%	14.8%	-14.6%	-5.5%	10.5%	24.0%	-16.4%	34.9%
Silver Index	1.2%	-10.2%	5.8%	14.0%	-12.7%	-20.4%	-36.6%	7.1%	-10.1%	81.8%
Soybean Meal Index	-1.1%	-4.4%	-4.8%	18.1%	-18.0%	11.8%	20.0%	49.1%	-18.1%	38.9%
Cotton Index	-1.1%	-7.3%	12.5%	10.5%	3.0%	-21.2%	9.0%	-12.7%	-21.7%	98.2%
Corn Index	-2.0%	-4.6%	-12.1%	-9.8%	-19.2%	-13.3%	-30.3%	19.0%	1.1%	30.7%
Natural Gas Index	-2.9%	-0.1%	-36.4%	10.3%	-39.9%	-30.7%	5.0%	-30.6%	-47.1%	-40.6%
Coffee Index	-5.4%	-26.5%	-16.0%	-1.3%	-31.5%	37.8%	-30.5%	-41.6%	-11.2%	67.0%
Wheat Index	-7.4%	3.5%	-12.5%	-24.1%	-22.2%	-9.4%	-27.2%	9.8%	-34.0%	21.2%
HRW Wheat Index	-9.7%	-3.1%	-14.9%	-25.3%	-32.7%	-4.7%	-26.2%	5.6%	-22.9%	42.1%
Lean Hogs Index	-14.1%	-11.0%	2.8%	-2.9%	-26.1%	-4.4%	-2.0%	-2.9%	-4.6%	0.3%

## Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

### Performance – Prices

#### Key Metrics

Name	MTD % Change	3 Mth % Change	YTD % Change	1Y Yr % Change	2 Yr % Change
▼ BCOM Single Commodity Price					
Palladium	17.6	30.8	27.7	46.0	98.4
Gas Oil	7.0	13.5	22.4	8.4	27.8
Heating Oil	7.7	9.6	20.4	5.7	24.8
Live Cattle	4.0	11.1	4.8	5.3	10.1
Natural Gas	-0.3	-39.2	-4.6	5.2	1.1
Brent Crude	6.7	12.5	22.7	0.4	18.8
Gold	-0.4	7.7	2.6	-0.3	4.8
Corn	-3.9	-1.2	-3.5	-3.3	-1.3
Silver	-3.2	10.3	0.1	-4.7	-15.6
Copper (CME)	5.9	6.1	12.0	-5.1	9.0
Copper (LME)	6.0	4.9	9.6	-5.4	9.5
Nickel	4.6	16.5	22.3	-5.5	18.8
Sugar	0.0	-0.9	5.8	-5.6	-34.1
Soybean Oil	-0.7	7.7	8.7	-6.3	-11.1
Wheat	-12.4	-12.3	-10.1	-6.6	6.5
WTI Crude	6.5	12.4	26.1	-7.1	6.0
Gasoline	19.6	13.0	23.1	-7.3	7.8
Aluminum	-0.3	-3.7	4.0	-11.0	-1.4
Platinum	5.9	9.2	9.7	-11.6	-15.3
Cotton	-3.6	-7.0	-0.6	-12.1	-4.8
HRW Wheat	-11.6	-9.4	-9.8	-13.2	-2.3
Soybeans	-1.9	0.3	1.7	-14.1	-12.4
Lean Hogs	-0.7	-3.5	-8.4	-16.9	-17.3
Zinc	2.4	8.1	13.0	-18.9	-0.6
Coffee	-10.1	-7.8	-6.5	-21.4	-32.3
Soybean Meal	-2.5	-1.9	-1.3	-23.3	-9.1

#### Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ BCOM Single Commodity Price										
Palladium	29.1%	12.8%	55.3%	21.6%	-29.6%	11.2%	2.1%	7.2%	-18.3%	96.5%
WTI Crude	25.6%	-24.8%	12.5%	45.0%	-30.5%	-45.9%	7.2%	-7.1%	8.2%	15.1%
Gasoline	24.0%	-26.4%	8.1%	31.4%	-11.7%	-48.5%	-0.9%	4.7%	9.5%	19.5%
Brent Crude	23.0%	-19.5%	17.7%	52.4%	-35.0%	-48.3%	-0.3%	3.5%	13.3%	21.6%
Gas Oil	22.4%	-14.9%	19.8%	53.6%	-36.3%	-45.8%	1.9%	0.3%	21.2%	20.0%
Nickel	22.3%	-16.5%	27.5%	13.5%	-41.8%	9.0%	-18.6%	-9.2%	-24.2%	33.8%
Heating Oil	20.8%	-19.0%	21.8%	54.8%	-40.4%	-40.0%	1.1%	3.8%	15.4%	20.1%
Copper (CME)	12.4%	-20.3%	31.7%	17.4%	-24.4%	-16.8%	-7.0%	6.3%	-22.7%	32.9%
Zinc	11.5%	-25.6%	30.1%	60.2%	-26.2%	6.0%	-0.5%	12.2%	-25.2%	-3.5%
Platinum	9.7%	-14.8%	3.6%	1.1%	-26.2%	-11.8%	-10.9%	9.9%	-21.1%	21.5%
Copper (LME)	9.6%	-17.4%	30.6%	17.3%	-25.8%	-13.9%	-6.8%	4.2%	-21.2%	31.2%
Soybean Oil	8.7%	-16.7%	-3.9%	12.7%	-4.4%	-17.6%	-21.0%	-5.6%	-9.8%	43.1%
Sugar	6.7%	-20.6%	-22.3%	28.0%	5.0%	-11.5%	-15.9%	-16.3%	-27.5%	19.2%
Live Cattle	4.7%	1.9%	4.7%	-15.2%	-16.4%	21.5%	1.8%	8.9%	12.1%	25.9%
Aluminum	4.5%	-19.3%	33.3%	12.5%	-17.9%	4.1%	-13.9%	2.5%	-18.8%	11.6%
Gold	3.1%	-2.1%	13.7%	8.6%	-10.5%	-1.5%	-28.3%	7.0%	10.2%	29.7%
Soybeans	2.3%	-7.3%	-4.5%	14.4%	-14.5%	-22.3%	-7.5%	18.4%	-14.0%	34.0%
Silver	0.3%	-9.4%	7.2%	15.8%	-11.5%	-19.5%	-35.9%	8.3%	-9.8%	83.7%
Cotton	-0.6%	-8.2%	11.3%	11.6%	5.0%	-28.8%	12.6%	-18.1%	-36.6%	91.5%
Soybean Meal	-0.8%	-2.0%	-0.1%	18.4%	-27.5%	-16.7%	4.1%	35.9%	-16.4%	18.0%
Corn	-3.1%	6.9%	-0.4%	-1.9%	-9.6%	-5.9%	-39.6%	8.0%	2.8%	51.7%
Natural Gas	-3.8%	-0.4%	-20.7%	59.3%	-19.1%	-31.7%	26.2%	12.1%	-32.1%	-20.9%
Coffee	-7.0%	-19.3%	-7.9%	8.2%	-23.9%	50.5%	-23.0%	-36.6%	-5.7%	76.9%
Lean Hogs	-8.0%	-15.0%	8.5%	10.6%	-26.4%	-4.9%	-0.3%	1.7%	5.7%	22.3%
Wheat	-9.0%	17.9%	4.7%	-13.2%	-20.3%	-2.6%	-22.2%	19.2%	-17.8%	46.7%
HRW Wheat	-9.2%	14.4%	2.1%	-10.7%	-25.2%	-2.2%	-22.9%	15.9%	-15.7%	58.7%

## Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

### Performance – Volatility

Name	Current	% Change o... 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
▼ BCOM 3M Implied Volatility											
Palladium	31.3	-4.8	2.8	16.7	7.7	28.7	19.9	37.0	24.5	-2.1	112.1
Unlead Gas	29.9	3.2	-0.5	-8.3	-11.1	-36.0	-21.4	35.6	18.1	-30.7	68.7
Lean Hogs	29.6	-2.0	0.6	0.6	-1.7	-13.0	4.2	33.6	19.3	42.2	91.6
Brent Crude	29.4	-3.4	0.9	-9.1	-13.3	-27.5	-31.1	30.3	12.5	-46.3	83.7
Crude Oil	29.3	3.8	0.7	-13.8	-15.2	-36.4	-39.6	29.0	16.3	-39.2	68.2
Gas Oil	27.9	-1.5	2.8	-3.9	-10.9	-30.8	-35.3	30.5	11.3	-38.5	90.5
Nickel	27.5	1.8	-1.1	2.9	9.1	-12.3	-8.3	6.1	-29.8	-34.4	47.6
Coffee	26.9	2.1	5.5	-8.5	-13.8	-3.5	4.9	27.9	1.1	-5.7	-42.3
Heating Oil	25.7	-4.3	0.2	-12.5	-14.2	-26.1	-28.8	21.9	4.3	-43.8	60.5
HRW Wheat	24.0	1.1	-0.4	13.0	5.3	20.1	21.5	-13.9	6.5	12.0	8.0
Corn	23.2	43.9	36.1	41.1	39.7	59.6	48.5	41.2	6.5	26.9	11.3
Sugar	22.8	1.1	0.9	-6.6	-4.1	-5.7	5.6	-2.7	-7.1	-22.6	-16.2
Wheat	22.4	-0.9	-1.6	9.0	3.2	14.4	18.4	-8.1	-4.2	-0.2	-8.0
NaturalGas	21.2	0.9	-7.2	-11.6	-15.9	-76.9	-37.5	-17.2	-44.0	-47.8	-27.1
Zinc	20.5	-7.7	-2.7	-23.0	55.8	-22.2	-15.9	-14.6	-34.8	-24.1	18.4
Cotton	19.5	0.2	-0.2	-4.2	-6.1	-4.1	-1.6	-8.0	-5.3	-2.9	-9.4
Copper (LME)	18.7	4.5	5.6	-2.4	11.4	-15.6	-5.4	-18.8	-11.9	-7.4	43.2
Copper (COMEX)	17.2	-0.2	-4.8	-6.0	-2.4	-11.9	-4.5	-4.6	-22.9	-25.8	19.2
Aluminum	16.9	-0.7	-5.9	-18.6	12.6	-3.1	-11.8	-14.9	168.9	-2.1	2.1
Platinum	15.6	-4.5	-11.9	-13.3	-4.7	0.8	-9.7	-4.1	-6.0	-32.6	-6.1
Silver	15.4	-4.9	-2.9	-8.8	-7.8	-19.8	-21.8	-12.3	-28.3	-38.5	-39.9
Soybean Meal	14.4	0.1	-4.5	-11.6	-11.5	-13.3	-1.8	-45.2	-38.4	-9.1	-34.2
Soybean Oil	14.3	0.4	-2.7	-2.9	0.7	-17.8	-0.2	0.0	-26.5	-15.0	-11.0
Soybeans	13.2	-1.2	-7.9	-14.2	-17.1	-25.0	-2.5	-19.3	-24.2	0.7	-26.3
Live Cattle	12.6	-2.6	1.0	-6.5	-3.3	-9.6	-1.7	-31.4	-28.4	-28.4	24.8
Gold	8.8	-1.9	-5.5	-11.2	-17.7	-11.5	-28.9	-15.8	-33.5	-53.2	-40.0
▼ BCOM 60 Day Historical Volatility											
Natural Gas	77.8	0.0	-3.2	-22.2	-22.1	14.5	-13.5	44.1	36.5	32.3	5.7
Lean Hogs	46.4	-0.2	1.6	11.0	11.3	-15.4	-22.8	77.1	37.1	62.8	49.0
Crude Oil	42.9	0.5	0.5	-13.2	-12.1	24.4	-6.1	109.2	72.6	-37.6	162.1
Unlead Gas	42.4	0.8	1.8	-6.9	-5.3	25.9	-1.9	76.1	47.9	-28.8	136.1
Brent Crude	39.3	0.4	-1.2	-15.6	-14.5	19.7	-11.0	95.3	63.1	-37.1	180.5
Gas Oil	30.6	-0.2	-3.9	-11.3	-9.6	39.0	-3.8	51.0	39.4	-49.2	133.4
Coffee	30.2	-3.9	-2.6	-11.7	-12.0	-18.0	-20.0	33.6	22.1	5.5	-34.9
Heating Oil	29.4	0.3	1.0	-12.5	-10.5	13.9	-5.1	34.0	19.8	-50.3	14.0
Sugar	27.2	0.0	-2.3	-1.1	0.0	-31.7	15.7	-1.7	-6.0	-23.5	19.2
Palladium	26.6	0.1	0.2	-4.6	-3.4	27.9	-1.3	13.7	-18.4	-23.5	83.2
Live Cattle	24.7	-6.3	-2.8	3.4	3.2	-2.4	-2.9	8.9	9.1	7.5	178.6
HRW Wheat	24.7	-6.3	-2.8	3.4	3.2	-2.4	-2.9	8.9	9.1	7.3	18.0
Nickel Gas	23.0	0.1	-2.0	15.3	16.5	-5.5	14.7	-29.5	-24.7	-27.6	22.0
Zinc	21.3	-1.3	-4.9	-13.9	-14.5	-28.4	-18.2	13.5	-28.2	-28.5	31.5
Wheat	20.8	-7.2	1.6	2.5	2.2	-20.0	-10.3	-12.0	-23.3	1.3	0.4
Copper (CME)	20.8	0.1	-4.7	-5.5	-9.4	0.9	-0.1	-2.4	-10.9	-12.2	66.7
Cotton	20.5	-0.1	-1.1	-6.8	-10.0	-4.5	-11.5	4.2	29.5	10.6	20.4
Aluminum	19.7	-0.1	-0.8	1.4	7.8	-3.0	31.2	-9.1	37.1	1.3	17.4
Platinum	18.9	-3.8	-4.1	3.5	-0.9	14.1	5.0	13.2	-24.1	-34.1	22.5
Copper (LME)	17.4	-1.4	-1.5	0.1	-7.3	-13.5	2.4	-14.5	-29.1	-18.2	53.9
Silver	15.1	-0.6	-2.5	-5.7	-14.6	-11.3	-18.2	-15.9	-35.3	-47.1	-47.6
Soybean Oil	14.5	1.2	-1.2	-3.0	-2.8	-5.8	-6.4	8.2	-13.1	-28.4	0.1
Corn	13.8	-2.8	-0.4	2.9	3.3	-27.2	-2.2	16.9	-24.0	-16.3	-19.5
Soybeans	12.9	-0.9	-3.4	-14.0	-22.2	-30.5	-27.8	5.8	-29.3	-8.3	-14.9
Soybean Meal	11.8	0.2	-0.7	-5.8	-12.1	-38.8	-29.4	-41.0	-49.7	-33.5	-55.8
Gold	8.9	-0.1	-0.9	1.8	-8.3	-21.1	-21.8	-16.2	-28.0	-56.2	-47.2

# Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

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

### Key Metrics

Name	Current Position	1 Yr Ago	1 Yr Change	YTD Change	MTD Change	1 Mth Change	3 Mth Change	2 Yr Change
▼ 1 Year Spread % of First Contract								
▶ BCOM	-4.9	-1.9	-3.0	0.1	0.0	-0.5	-1.7	-2.2
▼ Sector								
▶ Energy	0.3	4.6	-4.3	2.5	2.7	2.5	-3.4	2.8
▶ Industrial Metals	-0.7	-1.3	0.6	0.5	0.0	0.1	-0.4	0.2
▶ Precious Metals	-3.2	-3.1	-0.1	-0.1	-0.1	0.0	0.3	-1.4
▶ Livestock	-9.6	2.9	-12.6	-8.0	-3.2	-6.3	-6.4	-19.1
▶ Agriculture	-9.9	-5.5	-4.3	-0.9	-1.6	-1.7	-1.5	-4.1
▼ Single Commodities								
Live Cattle	7.7	7.6	0.1	2.5	1.1	0.8	5.8	-10.6
Natural Gas	6.6	0.7	5.9	8.6	10.6	6.2	-23.6	8.8
Palladium	5.0	1.1	3.9	0.9	1.2	1.2	3.3	5.4
Zinc	4.1	1.8	2.3	0.7	-0.8	-0.5	-1.5	3.2
Brent Crude	1.6	5.6	-4.1	4.7	1.0	1.3	3.1	2.2
Unleaded Gas	1.4	4.6	-3.1	4.6	7.9	8.2	4.7	2.0
Copper (LME)	0.3	-1.8	2.1	0.3	1.0	1.1	-0.6	0.8
Gas Oil	-0.3	3.1	-3.4	3.7	1.2	2.6	0.8	2.3
Copper (CME)	-0.6	-3.2	2.6	0.2	0.4	0.5	0.8	1.2
Platinum	-1.8	-1.5	-0.3	0.2	0.0	0.0	-0.1	-0.7
Heating Oil	-2.1	1.2	-3.4	1.3	0.4	0.4	-0.5	2.6
Thermal Coal	-2.2	9.5	-11.7	-9.7	-0.7	-0.7	-7.7	
Nickel	-2.3	-1.5	-0.8	0.8	0.2	0.3	0.6	-0.5
Gold	-2.8	-2.8	0.0	0.1	0.0	0.1	0.3	-1.3
Crude Oil	-2.9	7.6	-10.5	4.2	-1.4	-0.2	-0.5	-1.5
Silver	-3.6	-3.4	-0.2	-0.3	-0.2	-0.1	0.3	-1.4
Cotton	-4.0	5.5	-9.6	-1.2	-3.1	-2.4	-4.2	-4.8
Aluminum	-5.0	-1.7	-3.3	0.3	-0.6	-1.0	-1.4	-4.0
Soybean Meal	-5.4	7.5	-12.9	-0.1	-0.6	-1.0	-0.3	-5.3
Soybean Oil	-5.9	-3.3	-2.5	0.4	-0.5	-0.3	0.2	-2.0
Soybean	-6.7	0.8	-7.5	0.5	-0.7	-1.0	0.4	-6.5
Wheat	-10.4	-17.4	7.0	-0.4	-2.1	-2.1	-1.5	9.3
Sugar	-10.9	-8.9	-2.0	-1.6	-0.2	-0.1	-2.3	-10.3
Corn	-11.4	-10.0	-1.4	-2.9	-2.7	-3.1	-1.5	-1.1
HRW Wheat	-14.1	-16.3	2.2	-0.7	-2.7	-3.3	3.9	2.3
Coffee	-17.2	-10.3	-6.9	-1.2	-1.9	-2.2	-3.1	-8.0
Lean Hogs	-27.0	-1.8	-25.3	-18.5	-7.5	-13.3	-18.6	-27.6

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

### Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ 1 Year Spread % of First Contract										
▶ BCOM	-4.9	-5.0	-1.7	-2.2	-7.1	-4.4	0.3	-0.9	-2.0	2.3
▼ Sector										
▶ Energy	0.3	-2.2	4.3	0.4	-14.0	-11.3	3.5	-1.3	-2.5	-2.1
▶ Industrial Metals	-0.7	-1.2	-0.8	-0.8	-1.5	-0.8	-1.8	-2.5	-2.1	0.5
▶ Precious Metals	-3.2	-3.1	-2.3	-1.7	-1.0	-0.8	-0.7	-0.7	-0.7	-0.9
▶ Livestock	-9.6	-1.7	6.5	8.1	0.6	8.3	4.1	-0.7	-0.2	-1.8
▶ Agriculture	-9.9	-8.9	-5.9	-4.2	-5.5	-5.6	-1.5	-2.3	-1.8	12.2
▼ Single Commodities										
Live Cattle	7.7	5.2	6.3	13.3	8.1	7.0	2.5	-3.3	-4.5	-3.8
Natural Gas	6.6	-2.0	-3.7	-0.1	-22.6	-22.2	-3.2	-20.7	-29.9	-18.4
Palladium	5.0	4.1	1.5	-0.5	-0.2	-0.1	-0.5	-0.2	-0.4	0.0
Zinc	4.1	3.4	3.4	0.2	-2.8	-1.4	-2.3	-4.5	-3.9	-1.7
Brent Crude	1.6	-3.1	6.3	-3.1	-22.1	-16.4	4.9	6.3	4.0	-0.4
Unleaded Gas	1.4	-3.2	4.7	2.8	1.0	-12.3	7.0	9.8	7.9	3.7
Copper (LME)	0.3	0.0	-1.3	-0.3	0.3	1.6	1.1	-0.7	-0.3	2.7
Gas Oil	-0.3	-4.0	6.2	-4.8	-23.8	-12.0	3.1	2.9	3.0	-4.2
Copper (CME)	-0.6	-0.8	-1.8	-0.8	-1.1	-0.2	1.3	-1.1	-0.8	2.5
Platinum	-1.8	-2.0	-1.4	-1.1	-0.4	-0.4	-0.5	-0.7	-1.0	-0.5
Thermal Coal	-2.0	7.5	5.4	18.4	14.0	1.7	1.9	-8.3	-6.2	11.2
Heating Oil	-2.1	-3.4	5.9	-4.5	-24.5	-4.5	3.2	2.1	2.1	-3.4
Nickel	-2.3	-3.1	-2.0	-1.9	-1.4	-1.1	-1.8	-1.4	-0.1	1.1
Gold	-2.8	-2.9	-2.2	-1.5	-0.5	-0.3	-0.4	-0.7	-0.9	-0.9
Crude Oil	-2.9	-7.1	5.0	-5.9	-20.4	-13.5	7.3	-1.3	1.4	-3.2
Silver	-3.6	-3.3	-2.5	-2.0	-1.4	-1.2	-0.9	-0.7	-0.5	-0.9
Cotton	-4.0	-2.9	6.1	1.7	-2.7	-8.6	6.7	-5.7	3.6	34.6
Aluminum	-5.0	-5.3	-2.3	-1.0	-2.7	-3.1	-7.5	-5.0	-5.2	-2.3
Soybean Meal	-5.4	-5.3	-3.4	-0.4	-5.7	9.8	19.9	12.5	-2.4	9.9
Soybean Oil	-5.9	-6.2	-1.1	-1.2	-3.1	-0.9	-3.8	-2.8	-1.6	-0.9
Soybean	-6.7	-7.2	-3.3	0.4	-2.0	0.9	13.1	7.7	-1.2	5.9
Wheat	-10.4	-10.0	-15.5	-17.1	-10.5	-5.0	-7.2	-6.9	-12.4	-8.7
Sugar	-10.9	-9.3	-3.5	4.8	0.9	-13.1	-8.2	-5.5	-0.3	26.0
Corn	-11.4	-8.5	-12.1	-10.5	-9.5	-8.1	-9.2	12.7	7.2	9.4
HRW Wheat	-14.1	-13.5	-19.1	-16.1	-14.9	-6.3	-5.5	-5.7	-7.9	-3.1
Coffee	-17.2	-16.0	-10.9	-9.2	-8.4	-7.4	-11.2	-11.5	-4.9	6.1
Lean Hogs	-27.0	-8.6	6.7	2.9	-7.0	9.6	5.7	2.0	4.2	0.2

# Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

## Curve Analysis – Gross Roll Yield

### Key Metrics

Name	Current 1Yr Yld	Yld 6 Months Ago	Yld 1 Yr Ago	Change from 1 Yr Ago	Yld 2 Yr Ago	Change from 2 Yr Ago
<b>1 Year Gross Yield</b>						
<b>Sector Roll Yield</b>						
BCOM Energy	5.8	-0.4	-6.6	12.4	-28.4	34.2
BCOM Industrial Metals	2.1	-0.3	-2.3	4.5	-2.8	5.0
BCOM Livestock	1.8	0.2	-1.2	2.9	2.5	-0.8
BCOM Precious Metals	-0.7	-0.9	-0.7	0.0	-2.6	1.9
BCOM	-0.9	-2.7	-4.5	3.5	-10.8	9.9
BCOM Softs	-5.4	-3.3	-3.1	-2.3	-7.2	1.8
BCOM Grains	-8.5	-10.8	-12.4	3.9	-7.8	-0.6
BCOM Agriculture		-7.3	-7.7			
<b>Commodities Roll Yield</b>						
Brent Crude	7.2	12.5	-1.1	8.3	-22.5	29.8
Gas Oil	7.1	6.7	1.0	6.0	-17.5	24.5
Lean Hogs	5.6	7.8	-2.8	8.4	-8.5	14.2
Zinc	5.5	4.0	-0.1	5.6	-2.6	8.1
Heating Oil	3.5	4.4	-1.1	4.6	-19.4	22.9
Crude Oil	3.4	3.8	-3.1	6.5	-32.8	36.2
Aluminum	3.1	3.1	-3.3	6.3	-3.5	6.6
Cotton	0.8	0.6	0.3	0.4	3.0	-2.3
Nickel	0.4	2.1	-0.9	1.3	-2.3	2.6
Natural Gas	0.3	-14.0	-18.4	18.7	-46.8	47.1
Platinum	-0.2	-0.3	-0.4	0.2	0.2	-0.4
Gold	-0.8	-1.9	-0.7	-0.1	-0.6	-0.2
Silver	-0.9	-0.6	-0.9	0.0	-1.6	0.7
Soybean Meal	-1.5	-3.0	-5.7	4.2	-1.3	-0.2
Copper (CME)	-1.6	-1.4	-1.4	-0.1	-1.7	0.1
Soybean Oil	-2.7	-2.4	-6.6	3.9	-4.8	2.1
Unlead Gas	-4.3	7.7	-5.7	1.4	-28.2	23.9
Soybean	-4.9	-3.1	-5.4	0.5	-2.1	-2.8
Coffee	-6.8	-4.8	-8.7	1.9	-11.0	4.3
Sugar	-8.3	-4.7	-3.6	-4.7	-9.8	1.5
Corn	-10.8	-11.4	-13.2	2.4	-7.9	-2.9
Wheat	-14.7	-17.2	-20.5	5.8	-11.5	-3.3
HRW Wheat	-16.0	-18.4	-19.5	3.5	-16.8	0.8

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

### Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>1 Year Gross Yield</b>										
<b>Sector Roll Yield</b>										
BCOM Energy	5.8	3.6	-7.7	-32.5	-12.6	1.6	-5.1	-11.7	-11.0	-13.8
BCOM Industrial Metals	2.1	0.7	-3.0	-2.0	-1.8	-2.1	-3.9	-3.3	-2.2	-4.1
BCOM Livestock	1.8	1.8	0.5	0.2	1.1	-0.2	-4.5	-9.8	-12.3	-14.8
BCOM Precious Metals	-0.7	-0.7	-0.2	-1.1	-0.6	-0.4	-0.5	-0.9	-0.6	-1.1
BCOM	-0.9	-0.7	-5.9	-11.4	-6.3	0.0	-0.9	-4.7	-6.6	-9.5
BCOM Softs	-5.4	-4.5	-4.2	-5.6	-7.4	-12.5	-4.9	0.9	9.0	0.5
BCOM Grains	-8.5	-10.1	-10.7	-7.0	-4.7	0.7	8.2	3.6	-5.8	-12.6
BCOM Agriculture	-8.6	-7.1	-8.0	-6.1	-4.1	-1.0	4.9	1.9	-1.9	-9.6
<b>Commodities Roll Yield</b>										
Brent Crude	7.2	4.7	-4.9	-27.7	-23.3	0.3	6.9	4.2	8.3	-12.5
Gas Oil	7.1	3.9	-0.9	-22.7	-11.0	-1.6	2.1	7.4	2.1	-12.3
Lean Hogs	5.6	4.1	-8.2	-13.6	0.3	0.6	-1.7	-4.5	-9.6	-23.8
Zinc	5.5	4.2	-3.1	-2.7	-2.5	-4.6	-8.8	-3.1	-3.0	-5.3
Heating Oil	3.5	3.4	-6.4	-25.3	-3.0	1.1	-1.3	1.0	-2.9	-11.7
Crude Oil	3.4	4.4	-7.3	-38.2	-14.0	4.3	-0.3	-4.5	-9.7	-11.3
Aluminum	3.1	2.4	-3.2	-2.9	-6.0	-9.1	-8.4	-6.2	-3.3	-6.0
Live Cattle	1.5	0.6	4.4	7.8	2.0	0.6	-6.8	-12.8	-12.5	-12.2
Cotton	0.8	0.9	1.0	-1.1	-2.1	7.7	-3.6	5.2	15.5	14.3
Nickel	0.4	0.1	-0.6	-1.7	0.5	-2.9	-2.3	-1.0	-1.7	-1.6
Natural Gas	0.3	0.3	-14.0	-52.6	-19.8	0.8	-22.3	-42.7	-13.8	-16.1
Platinum	-0.2	0.0	-1.1	-0.4	-0.2	-0.5	-0.8	-1.2	0.9	-2.7
Gold	-0.8	-0.7	-0.3	-0.9	-0.4	-0.2	-0.4	-0.9	2.9	-1.0
Silver	-0.9	-0.8	0.1	-1.8	-1.2	-0.9	-0.7	-1.1	4.5	-5.1
Soybean Meal	-1.5	-2.3	-4.8	-0.5	9.6	28.7	16.5	13.0	-1.3	20.7
Copper (CME)	-1.6	-1.0	-3.5	-1.6	-0.7	0.3	-1.7	-1.3	-0.1	-3.6
Soybean Oil	-2.7	-2.5	-2.9	-5.4	-3.2	-2.9	-1.3	-4.2	-4.2	-8.5
Unlead Gas	-4.3	-0.6	-4.0	-27.2	1.1	4.7	1.3	18.9	4.5	-6.9
Soybean	-4.9	-4.4	-3.0	0.2	-0.2	17.0	18.5	5.5	-1.8	0.5
Coffee	-6.8	-7.2	-9.2	-9.7	-7.8	-12.6	-7.2	-5.0	-3.4	-8.5
Sugar	-8.3	-5.4	-3.2	-5.2	-9.9	-19.5	-4.1	3.1	18.7	4.6
Corn	-10.8	-11.5	-12.4	-7.9	-9.6	-7.4	9.4	10.8	0.4	-20.9
Wheat	-14.7	-14.3	-18.0	-10.9	-1.9	-7.0	-5.1	-9.4	-14.6	-23.8
HRW Wheat	-16.0	-17.5	-17.8	-14.7	-7.6	-2.5	-3.3	-4.1	-7.6	-9.9

**Bloomberg Commodity Outlook – March 2019 Edition**  
*Bloomberg Commodity Index (BCOM)*

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

Name	2/2019	1/2019	12/2018	11/2018	10/2018	9/2018	8/2018	7/2018	6/2018	5/2018	4/2018	3/2018
<b>▼ 1 Yr Spread ((Forward-Forecast)/ Forecast)</b>												
<b>▼ Energy</b>												
Natural Gas Spread %	-2.6											
WTI Crude Spread %	-3.3	-8.9	-2.8	-3.1	-0.9	2.4	1.2	2.6	6.1	4.3	7.3	3.6
Brent Crude Spread %	-1.6	-8.0	-1.1	-1.8	1.3	4.1	3.8	5.7	7.1	8.9	9.8	4.6
ULS Diesel Spread %	-4.3	-12.6	-1.5	-0.8	1.7	2.2	1.1	0.2	8.4	9.6	6.1	2.6
Unleaded Gasoline Spread %	-5.5	-17.4	-2.0	-1.8	-1.4	2.8	-0.1	-0.3	-0.1	1.4	3.5	1.3
<b>▼ Soft</b>												
Sugar Spread %	4.8	2.9	-3.0	-1.2	3.3	-3.6	-2.0	-5.8	-2.3	0.7	-6.2	-6.9
Coffee Spread %	-15.1	-10.3	-9.2	-5.8	-4.8	-6.8	-9.0	-5.6	-5.6	-2.5	-1.3	-4.0
Cotton Spread %	-5.7	-2.5	-1.2	-1.7	-2.8	-2.5	-1.9	3.1	-0.2	9.9	2.5	5.1
<b>▼ Industrial Metals</b>												
Copper Spread % (LME)	-0.9	-6.0	-0.8	-1.1	-1.9	-1.7	-3.4	-5.2	-2.9	-1.3	-2.5	-3.5
Aluminum Spread %	-4.8	-4.8	-0.8	-1.5	-1.5	-1.0	0.6	-0.4	0.2	3.9	3.3	-3.9
Zinc Spread %	0.0	-2.2	-2.2	-2.5	-2.9	-4.9	-7.2	-7.3	-4.2	-0.4	-2.1	2.8
Nickel Spread %	1.8	-1.7	-3.9	-3.8	-3.4	-3.1	-0.8	1.9	8.4	10.8	5.1	10.3
<b>▼ Precious Metals</b>												
Gold Spread %	3.7	3.8	0.0	-0.5	-0.3	-1.7	-1.7	-2.5	-2.2	0.3	1.1	1.5
Silver Spread %	-1.2	1.6	-1.2	-1.8	-2.4	-4.3	-4.5	-2.5	-4.1	-2.3	-2.6	-3.2
<b>▼ Grain</b>												
Corn Spread %	-2.3	1.1	-1.2	-2.3	-3.2	-3.4	-5.1	-3.5	-5.9	2.4	4.4	3.6
Soybeans Spread %	-3.3	-1.8	-2.7	-2.6	-3.4	-3.3	-5.4	-7.1	-8.0	0.6	2.6	4.4
Wheat Spread %	-5.1	4.3	-0.7	-2.3	-2.5	-1.4	1.0	5.2	0.0	10.3	8.6	2.7

**Data Set**

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>▼ Data Set</b>										
<b>▼ 1 Yr Spread</b>										
<b>▼ Energy</b>										
Natural Gas Forward	2.92	3.15	2.95	3.72	2.34	2.89	4.23	3.35	2.99	4.34
Natural Gas Forecast	3.00									
WTI Crude Forward	58.0	64.4	60.4	53.7	37.0	53.3	98.4	91.8	98.8	91.4
WTI Crude Forecast	60.0	66.3	50.6	43.2	50.0	93.6	98.2	95.0	94.0	79.0
Brent Crude Forward	65.8	71.7	66.9	56.8	37.3	57.3	110.8	111.1	107.4	94.8
Brent Crude Forecast	66.9	72.5	54.0	44.9	54.0	100.0	108.0	111.9	110.7	80.0
ULS Diesel Forward	2.02	2.09	2.08	1.70	1.10	1.85	3.08	3.05	2.94	2.54
ULS Diesel Forecast	2.12	2.13	1.56	1.34	1.69	2.79	2.98	3.05	2.87	2.13
Unleaded Gasoline Forward	1.67	1.93	1.80	1.67	1.27	1.44	2.79	2.81	2.69	2.45
Unleaded Gasoline Forecast	1.76	1.97	1.56	1.39	1.64	2.65	2.86	2.95	2.91	2.12
<b>▼ Soft</b>										
Sugar Forward	0.13	0.12	0.15	0.20	0.15	0.15	0.16	0.20	0.23	0.32
Sugar Forecast	0.13	0.12	0.16	0.18	0.13	0.17	0.18	0.22	0.27	0.21
Coffee Forward	1.02	1.04	1.26	1.37	1.27	1.67	1.11	1.44	2.27	2.40
Coffee Forecast	1.21	1.15	1.35	1.37	1.34	1.79	1.26	1.78	2.53	1.60
Cotton Forward	0.73	0.81	0.79	0.71	0.63	0.60	0.85	0.75	0.92	1.45
Cotton Forecast	0.77	0.82	0.73	0.65	0.64	0.76	0.84	0.79	1.34	0.90
<b>▼ Industrial Metals</b>										
Copper Forward (LME)	6,472	6,510	7,219	5,526	4,713	6,349	7,373	7,913	7,595	9,644
Copper Forecast (LME)	6,531	6,562	6,129	4,826	5,575	6,871	7,334	7,958	8,855	7,460
Aluminum Forward	1,927	2,113	2,258	1,694	1,506	1,834	1,762	2,047	1,997	2,459
Aluminum Forecast	2,025	2,130	1,968	1,600	1,693	1,883	1,883	2,038	2,450	2,167
Zinc Forward	2,708	2,860	3,335	2,564	1,600	2,168	2,045	2,055	1,831	2,447
Zinc Forecast	2,707	2,925	2,861	2,043	1,961	2,170	1,930	1,963	2,210	2,192
Nickel Forward	12,990	13,019	12,714	9,975	8,788	15,088	13,843	17,008	18,731	24,715
Nickel Forecast	12,766	13,552	10,322	9,594	12,170	17,000	15,124	17,602	22,997	21,814
<b>▼ Precious Metals</b>										
Gold Forward	1,331	1,268	1,309	1,152	1,060	1,184	1,202	1,676	1,567	1,421
Gold Forecast	1,284	1,268	1,258	1,262	1,165	1,265	1,420	1,677	1,575	1,211
Silver Forward	15.90	15.60	17.15	15.99	13.80	15.57	19.34	30.17	27.88	30.91
Silver Forecast	16.09	15.78	17.13	17.11	15.84	19.10	24.00	31.40	35.50	19.68
Platinum Forecast	900	885	951	1,000	1,076	1,390	1,514	1,556	1,752	1,616
Palladium Forecast	1,148.8	1,000.0	855.0	616.6	700.0	803.0	734.0	643.0	733.0	520.0
<b>▼ Grain</b>										
Corn Forward	3.8	3.7	3.5	3.5	3.6	4.0	4.2	7.0	6.5	6.3
Corn Forecast	3.9	3.7	3.6	3.6	3.8	4.1	5.9	7.0	6.9	4.9
Soybeans Forward	9.3	9.1	9.5	10.0	8.7	10.2	13.1	14.2	12.0	13.9
Soybeans Forecast	9.6	9.4	9.8	9.9	9.5	12.4	14.0	14.7	13.5	10.5
Wheat Forward	4.8	5.0	4.3	4.1	4.7	5.9	6.1	7.8	6.5	7.9
Wheat Forecast	5.1	5.0	4.4	4.4	5.1	5.8	6.9	7.5	7.4	6.2

# Bloomberg Commodity Outlook – March 2019 Edition

Bloomberg Commodity Index (BCOM)

## Market Flows – Open Interest

### Key Metrics

Name	Current	MTD % Change	3 Mth % Change	YTD % Change	1Y Yr % Change	2 Yr % Change	2 Year High
▼ Open Interest (Aggregate - 1,000s)							
▼ Single Commodities							
Coffee	307	-0.3	27.9	12.9	32.9	76.4	341
Lean Hogs	249	15.3	9.7	18.0	8.7	12.7	282
Live Cattle	403	3.9	17.5	8.9	6.9	23.2	432
Corn	1,662	-2.0	-1.2	5.1	1.8	18.0	2,007
Aluminum	493	0.4	4,830.0	4.2	1.4	0.4	547
Wheat	459	-1.7	1.6	5.5	1.3	12.2	581
Soybean Oil	491	-2.8	-11.9	3.2	0.2	32.0	606
Sugar	840	-9.3	4.1	-4.1	-3.1	7.8	1,062
Soybean Meal	449	-2.8	-8.6	4.7	-3.2	22.0	538
Platinum	82	0.0	17.1	0.0	-3.5	17.1	94
Copper (LME)	172	3.6	514.3	6.8	-4.4	-16.1	219
HRW Wheat	290	-3.0	-4.6	-1.0	-4.9	33.6	342
Brent Crude	2,240	-3.6	-2.0	3.8	-6.3	-7.2	2,704
Palladium	27	0.0	0.0	3.9	-6.9	-3.6	40
Nickel	152	0.7	6.3	8.6	-7.3	-5.6	188
Silver	175	0.0	-19.0	0.6	-8.9	-16.3	244
Gas Oil	918	-0.8	5.9	12.4	-10.1	-5.1	1,138
Cotton	220	-5.2	0.0	3.3	-15.1	-16.4	322
Copper (CME)	219	-0.9	-2.7	0.5	-15.4	-20.1	338
Soybean	651	-6.5	-13.3	-2.0	-17.8	-6.3	976
Zinc	166	14.5	15.3	16.9	-20.2	-17.0	225
Unlead Gas	256	-34.4	-38.2	-37.3	-38.6	-36.3	501
Heating Oil	251	-31.6	-31.8	-32.0	-39.4	-39.7	491
Natural Gas	781	-25.2	-41.1	-35.8	-41.5	-39.6	1,700
Crude Oil	1,425	-17.3	-28.8	-31.7	-41.9	-32.3	2,714
Gold	129	-71.4	-75.3	-70.9	-75.8	-71.5	598

### Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ Open Interest (Aggregate - 1,000s)	12,308	13,647	14,623	12,965	11,965	10,881	11,033	10,367	9,282	10,206
▶ BCOM										
▼ Sector										
▶ Energy	5,871	7,055	7,931	7,084	6,057	5,033	5,346	4,980	4,230	4,262
▶ Agriculture	5,368	5,239	5,168	4,493	4,563	4,211	4,090	3,876	3,418	4,399
▶ Industrial Metals	1,202	1,134	1,354	1,319	1,178	1,224	1,104	1,006	1,159	1,105
▶ Livestock	652	581	572	501	431	481	591	578	552	534
▶ Precious Metals	413	724	786	667	673	620	613	658	585	783
▼ Single Commodities										
Brent Crude	2,240	2,158	2,322	2,159	2,031	1,513	1,443	1,285	886	873
Corn	1,662	1,582	1,540	1,236	1,334	1,237	1,203	1,128	1,151	1,549
Crude Oil	1,425	2,087	2,460	2,051	1,671	1,468	1,616	1,473	1,328	1,430
Gas Oil	918	817	865	802	700	435	477	512	458	619
Sugar	840	876	753	805	879	836	830	754	559	613
Natural Gas	781	1,216	1,448	1,243	957	939	1,291	1,165	1,011	772
Soybean	651	664	705	632	646	599	576	546	460	629
Aluminum	493	473	520	541	551	595	539	495	682	546
Soybean Oil	491	476	444	372	384	355	340	306	273	358
Wheat	459	435	523	448	368	371	411	456	384	492
Soybean Meal	449	429	376	329	402	341	262	212	194	192
Live Cattle	403	370	333	306	265	266	327	329	317	327
Coffee	307	272	218	191	172	160	142	144	105	140
HRW Wheat	290	293	330	239	193	132	154	158	139	219
Unlead Gas	256	408	387	400	355	332	239	282	277	267
Heating Oil	251	369	449	429	342	346	279	263	269	301
Lean Hogs	249	211	239	194	166	215	264	248	235	207
Cotton	220	213	279	242	185	178	172	171	152	207
Copper (CME)	219	218	280	224	166	160	167	147	121	167
Silver	175	174	194	164	168	151	132	141	106	136
Copper (LME)	172	161	203	209	146	155	132	130	143	196
Zinc	166	142	200	184	167	182	184	166	148	135
Nickel	152	140	150	160	148	132	81	69	65	61
Gold	129	443	472	416	415	372	380	428	419	585
Platinum	82	82	83	63	65	64	62	60	42	39
Palladium	27	26	37	24	24	33	39	29	18	23

## Market Flows – Commitment of Traders Key Metrics

Name	Current	5 Day Change	1 Mth Change	3 Mth Change	YTD Change	1 Yr Change	2 Yr Change
<b>▼ Net - Managed Money Total/Disagg</b>							
<b>▼ Single Commodities</b>							
Brent Crude	275,449	9,392	102,544	60,617	113,200	-247,846	-232,160
Aluminum (Pre- MiFID II)	163,475	6,307	-3,292	21,105	3,315	-10,481	115,362
Aluminum (Post- MiFID II)	153,217	2,444	11,960	-10,566	19,328	22,137	
Natural Gas	152,780	-30,814	-37,717	-90,061	-40,330	34,997	50,380
WTI Crude	135,810	-11,171	54,298	-24,481	18,209	-314,831	-254,528
Live Cattle	111,082	3,608	15,343	47,954	24,823	19,268	13,782
Zinc (Pre MiFID II)	79,906	-1,121	-6,682	3,640	-471	-8,898	44,606
Gold	64,494	-2,038	14,546	101,980	7,545	-115,217	-3,488
Gasoline	57,298	1,832	4,080	60	4,182	-33,936	7,924
Zinc (Post MiFID II)	50,142	2,370	2,814	3,136	13,630	-14,112	
Silver	43,070	-5,636	262	63,404	34,494	51,006	-27,676
Nickel	42,230	-664	-1,792	12,113	13,772	5,041	22,602
Copper (LME) (Pre MiFID II)	37,448	-917	-16,651	-27,111	-31,597	-34,385	25,052
Soybean Oil	34,459	5,899	84,640	93,625	85,961	48,089	-34,159
Copper (LME) (Post MiFID II)	33,580	2,613	14,278	-13,028	1,389	-9,429	
Palladium	13,802	370	-89	1,223	587	-1,913	-3,003
Heating Oil	1,101	2,025	1,405	-38,176	-1,275	-47,714	-30,460
Copper (CME)	-5,064	12,810	31,028	-2,864	15,132	-41,183	-93,372
Lean Hogs	-9,892	-6,902	-23,403	-39,407	-34,631	-30,689	-69,111
Soybeans	-10,038	-16,027	-8,818	35,040	507	-52,907	-180,706
Cotton	-14,141	-7,479	-9,161	-58,489	-30,144	-83,519	-117,478
Corn	-14,693	-29,063	-89,887	-41,322	-112,505	-4,079	-100,053
Wheat	-16,053	-6,910	426	25,090	951	40,778	23,994
Platinum	-19,567	-8,915	-12,326	-30,142	-15,003	-45,709	-45,680
HRW Wheat	-24,046	-12,002	-20,362	-35,189	-26,481	-38,772	-51,471
Soybean Meal	-29,629	-14,879	-55,639	-49,150	-29,015	-100,620	-96,216
Sugar	-40,527	301	30,237	-109,210	-1,155	78,970	-202,452
Coffee	-54,725	-5,589	1,702	-32,524	1,621	-8,407	-71,333

## Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>▼ Net - Managed Money Total/Disagg</b>										
BCOM	656,735.0	911,257.0	1.2M	1.8M	107,932.0	1.1M	835,105.0	791,313.0	637,042.0	1.6M
<b>▼ Sector</b>										
Energy	622,438.0	528,452.0	1.1M	1.0M	95,835.0	278,790.0	623,230.0	258,739.0	230,666.0	224,236.0
Precious Metals	101,799	74,176	124,419	101,310	-239	153,310	70,026	171,032	134,710	232,650
Livestock	101,190	110,998	136,667	147,051	24,525	117,295	137,611	110,898	104,018	133,520
Agriculture	-169,393	-59,133	-449,709	225,844	-75,733	383,375	-1,048	281,653	188,257	962,170
Industrial Metals		302,863	437,560	423,576	90,351	218,292	35,635	14,988	-4,018	39,105
<b>▼ Single Commodities</b>										
Brent Crude	275,449	162,249	561,284	454,585	163,672	115,571	136,611	125,397	81,537	
Aluminum (Post- MiFID II)	153,217	133,889								
Natural Gas	152,780	193,110	-52,446	174,043	-161,686	-53,308	134,994	-89,820	-124,269	-96,119
WTI Crude	135,810	117,601	411,972	307,909	100,797	199,388	270,386	134,834	192,466	217,046
Live Cattle	111,082	86,259	82,710	92,516	11,081	80,102	96,771	59,569	68,105	104,412
Gold	64,494	56,949	109,919	41,247	-24,263	98,391	34,104	101,922	111,919	169,987
Gasoline	57,298	53,116	79,450	50,091	28,391	44,226	54,637	64,383	61,288	67,205
Zinc (Post MiFID II)	50,142	36,512								
Silver	43,070	8,576	-7,105	39,098	6,282	17,051	5,573	23,113	6,200	26,836
Soybean Oil	34,459	-51,502	3,406	85,522	60,895	35,047	-46,649	-42,424	-2,103	56,961
Copper (LME) (Post MiFID II)	33,580	32,191								
Palladium	13,802	13,215	25,815	12,742	8,690	19,970	15,660	16,769	5,212	13,034
Heating Oil	1,101	2,376	81,824	33,541	-35,339	-27,087	26,602	23,945	19,644	36,104
Copper (CME)	-5,064	-20,196	99,520	72,131	-25,964	-4,455	35,635	14,988	-4,018	39,105
Lean Hogs	-9,892	24,739	53,957	54,535	13,444	37,193	40,840	51,329	35,913	29,108
Soybeans	-10,038	-10,545	-69,091	107,075	-63,515	39,446	136,683	109,007	23,683	164,287
Cotton	-14,141	16,003	102,402	76,052	51,307	11,005	43,288	25,828	6,683	40,645
Corn	-14,693	97,812	-206,624	-113,648	-136,111	239,704	-94,812	140,109	148,653	396,782
Wheat	-16,053	-17,004	-145,735	-108,927	-83,120	20,481	-71,468	-11,899	-29,252	36,542
Platinum	-19,567	-4,564	-4,210	8,223	9,052	17,898	14,689	29,228	11,379	22,793
HRW Wheat	-24,046	2,435	-34,422	9,085	-14,975	24,999	8,022	23,619	9,128	49,108
Soybean Meal	-29,629	-614	31,257	19,537	-40,843	54,132	57,931	41,489	-15,232	40,129
Sugar	-40,527	-39,372	-73,056	138,442	165,810	-66,824	-25,626	19,000	43,792	141,534
Coffee	-54,725	-56,346	-57,846	12,706	-15,181	25,385	-8,417	-23,076	2,905	36,182
Copper (LME) (Pre MiFID II)		37,448	69,045	67,384	9,065	25,215				
Aluminum (Pre- MiFID II)		163,475	160,160	145,790	71,738	118,175				
Nickel		42,230	28,458	57,232	15,372	29,631				
Zinc (Pre MiFID II)		79,906	80,377	81,039	20,140	49,726				

**Bloomberg Commodity Outlook – March 2019 Edition**  
*Bloomberg Commodity Index (BCOM)*

**Market Flows – ETF Flows (annual)**

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>ETFs (\$ Billion AUM)</b>										
<b>Total ETF Assets Under Management (\$ ...)</b>	135.47	135.96	141.73	120.35	86.92	101.22	110.91	195.29	171.16	166.48
<b>Precious Metals</b>	111.33	109.30	109.98	90.30	62.95	77.79	84.93	164.56	142.19	130.39
Gold	98.97	96.79	95.36	76.91	51.78	62.75	68.70	143.55	120.89	105.90
Silver	8.93	9.02	10.11	9.41	7.24	8.64	10.60	16.18	16.38	18.41
Platinum	1.67	1.92	2.39	2.26	2.22	3.32	3.46	2.48	2.49	2.83
Palladium	1.00	0.83	1.28	1.07	1.24	2.30	1.40	1.37	1.32	2.12
Precious Metals Basket	0.66	0.65	0.70	0.57	0.40	0.64	0.68	0.92	1.07	1.13
Other	0.09	0.09	0.15	0.08	0.06	0.13	0.10	0.06	0.02	
<b>Broad Commodity</b>	13.69	16.26	17.20	14.78	10.84	14.55	17.70	19.57	18.21	19.74
Energy	7.58	7.34	11.13	12.26	10.72	5.40	4.61	6.72	5.79	9.65
Industrial Metals	1.47	1.25	1.63	1.17	0.64	1.09	1.02	1.27	0.99	1.38
Agriculture	1.40	1.78	1.78	1.82	1.75	2.37	2.61	3.11	3.90	5.23
Livestock	0.01	0.03	0.01	0.02	0.02	0.03	0.03	0.06	0.08	0.10
<b>ETFs Fund Flows (\$ Billion)</b>										
<b>Total ETF Fund Flows (\$ Billion)</b>	0.90	0.75	8.73	23.49	10.67	3.31	-40.94	19.41	1.63	16.32
Precious Metals	1.94	3.60	8.60	22.61	-3.83	-2.45	-36.86	17.69	5.93	14.94
Industrial Metals	0.20	-0.05	0.05	0.33	-0.14	0.18	-0.17	0.26	-0.14	0.18
Livestock	0.00	0.00	-0.03	0.01	-0.01	-0.02	-0.04	-0.05	0.03	-0.02
Agriculture	-0.04	-0.09	0.32	0.12	-0.14	-0.21	0.03	-0.84	-0.58	-0.54
Energy	-0.60	-3.01	-1.20	-1.97	13.94	4.17	-3.30	1.85	-2.57	-0.42
Broad Commodity	-0.60	0.30	0.99	2.39	0.85	1.64	-0.60	0.50	-1.04	2.18
<b>DELTA WEIGHTED:</b>										
<b>ETFs (\$ Billion AUM) (DW)</b>										
<b>Total ETF Assets Under Management (\$ ...)</b>	140.89	138.14	146.22	123.03	88.63	101.61	110.16	197.39	171.70	168.44
Precious Metals	112.53	110.51	111.21	91.00	62.94	77.80	85.03	166.20	142.69	131.34
Broad Commodity	13.99	16.62	17.44	14.80	10.87	14.55	17.70	19.57	18.21	19.75
Energy	11.46	7.84	13.99	14.13	12.28	5.71	3.72	7.20	5.84	10.63
Industrial Metals	1.48	1.27	1.66	1.19	0.68	1.06	0.99	1.20	0.90	1.35
Agriculture	1.43	1.87	1.91	1.90	1.85	2.46	2.69	3.17	3.97	5.28
Livestock	0.01	0.03	0.01	0.02	0.02	0.03	0.03	0.06	0.08	0.10
<b>ETFs Fund Flows (\$ Billion) (DW)</b>										
<b>Total ETF Fund Flows (\$ Billion)</b>	0.86	-0.37	11.41	19.59	20.77	8.97	-42.11	21.45	1.50	16.50
Precious Metals	1.79	4.13	8.75	22.83	-3.35	-1.85	-36.12	18.57	5.76	14.43
Industrial Metals	0.20	-0.03	0.02	0.30	-0.04	0.20	-0.11	0.27	-0.16	0.13
Livestock	0.00	0.00	-0.03	0.01	-0.01	-0.02	-0.04	-0.05	0.03	-0.02
Agriculture	-0.04	-0.14	0.40	0.12	-0.10	-0.20	0.10	-0.86	-0.50	-0.59
Energy	-0.39	-4.80	1.10	-6.05	23.41	9.20	-5.34	3.02	-2.59	0.37
Broad Commodity	-0.70	0.48	1.16	2.38	0.85	1.64	-0.60	0.50	-1.04	2.18

# PERFORMANCE: Bloomberg Commodity Indices

## Composite Indices

\* Click hyperlinks to open in Bloomberg

Index Name	Ticker	2019									
		Feb	YTD	1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
Bloomberg Commodity ER	<a href="#">BCOM</a>	0.82%	6.09%	-7.66%	7.17%	-39.25%	-23.21%	9.63%	-5.85%	-14.08%	421.84%
Bloomberg Commodity TR	<a href="#">BCOMTR</a>	1.01%	6.51%	-5.67%	11.10%	-36.94%	-19.90%	56.95%	127.89%	424.90%	5803.41%
Bloomberg Commodity Spot	<a href="#">BCOMSP</a>	1.87%	7.54%	-4.74%	28.12%	-18.84%	41.23%	309.61%			
Bloomberg Roll Select	<a href="#">BCOMRST</a>	1.14%	6.23%	-6.54%	13.82%	-31.73%	-3.95%	230.45%			
1 Month Forward	<a href="#">BCOMF1T</a>	1.34%	7.14%	-5.17%	14.03%	-32.46%	-7.76%	176.32%			
2 Month Forward	<a href="#">BCOMF2T</a>	1.32%	7.05%	-2.31%	18.91%	-29.27%	-5.56%	232.98%			
3 Month Forward	<a href="#">BCOMF3T</a>	1.38%	6.99%	-4.00%	17.21%	-28.83%	-2.75%	242.48%			
4 Month Forward	<a href="#">BCOMF4T</a>	1.43%	7.00%	-3.74%	20.08%	-25.27%	5.71%				
5 Month Forward	<a href="#">BCOMF5T</a>	1.62%	7.12%	-3.38%	20.71%	-24.61%	6.47%				
6 Month Forward	<a href="#">BCOMF6T</a>	1.57%	7.03%	-2.73%	21.82%	-23.11%	8.78%				
Energy	<a href="#">BCOMENTR</a>	5.44%	15.17%	3.61%	33.01%	-60.90%	-65.26%	-2.73%	73.41%		
Petroleum	<a href="#">BCOMPETR</a>	7.84%	22.71%	0.42%	45.40%	-56.83%	-30.34%	229.65%			
Agriculture	<a href="#">BCOMAGTR</a>	-3.90%	-0.98%	-16.76%	-16.80%	-44.63%	-18.65%	-30.92%	-22.63%	31.04%	1525.99%
Grains	<a href="#">BCOMGRTR</a>	-5.03%	-3.25%	-16.65%	-21.98%	-47.95%	-30.41%	-40.03%	-49.50%	-28.30%	446.80%
Industrial Metals	<a href="#">BCOMINTR</a>	3.51%	11.84%	-8.14%	37.07%	-1.89%	39.12%	183.44%			
Precious Metals	<a href="#">BCOMPRTTR</a>	-1.14%	2.06%	-1.93%	3.64%	-10.95%	27.37%	271.18%	217.34%	317.55%	
Softs	<a href="#">BCOMSOTR</a>	-3.53%	1.15%	-16.66%	-17.73%	-48.85%	-21.78%	-54.98%	-29.12%	62.09%	2744.12%
Livestock	<a href="#">BCOMLITR</a>	-0.02%	-1.52%	-0.01%	-5.01%	-21.08%	-21.08%	-46.75%	-13.95%		
Ex-Energy	<a href="#">BCOMXETR</a>	-1.00%	2.94%	-9.79%	1.69%	-25.24%	9.92%	49.13%			
Ex-Petroleum	<a href="#">BCOMXPET</a>	-1.04%	2.37%	-7.81%	1.66%	-33.17%	-21.68%				
Ex-Natural Gas	<a href="#">BCOMXNGT</a>	1.22%	7.35%	-7.09%	11.93%	-31.76%	3.70%				
Ex-Agriculture	<a href="#">BCOMXAGT</a>	3.03%	9.77%	-0.62%	24.89%	-34.48%	-23.66%				
Ex-Grains	<a href="#">BCOMXGRT</a>	2.15%	8.51%	-3.39%	19.01%	-34.84%	-20.45%				
Ex-Industrial Metals	<a href="#">BCOMXIMT</a>	0.46%	5.31%	-5.34%	5.66%	-42.86%	-31.77%				
Ex-Precious Metals	<a href="#">BCOMXPMT</a>	1.42%	7.39%	-6.35%	12.41%	-41.37%	-27.27%				
Ex-Softs	<a href="#">BCOMXSOT</a>	1.35%	6.92%	-4.82%	13.33%	-36.33%	-20.97%				
Ex-Livestock	<a href="#">BCOMXLIT</a>	1.07%	7.06%	-6.05%	11.87%	-37.95%	-19.95%				
Ex-Agriculture & Livestock	<a href="#">BCOMXALT</a>	3.30%	10.91%	-0.76%	27.32%	-35.93%	-24.35%				
Bloomberg Dollar Spot	<a href="#">BBDXY</a>	0.77%	-0.50%	4.79%	-3.23%	17.03%	5.35%				
S&P 500 Total Return	<a href="#">SPXT</a>	3.21%	11.48%	4.68%	53.20%	66.00%	367.39%	229.61%	1742.89%		
US Aggregate	<a href="#">LBUSTRUU</a>	-0.06%	1.00%	3.17%	5.16%	12.13%	43.97%	148.49%	491.88%	1587.32%	
US Treasury	<a href="#">LUATTRUU</a>	-0.27%	0.20%	3.23%	1.38%	8.89%	27.44%	130.52%	441.09%	1456.42%	
US Corporate	<a href="#">LUACTRUU</a>	0.22%	2.57%	2.63%	11.62%	17.16%	85.14%	188.88%	622.98%	1985.25%	
US High Yield	<a href="#">LF98TRUU</a>	1.66%	6.26%	4.31%	32.40%	24.81%	197.06%	274.86%	910.69%		

## Single Commodity Indices

Index Name	Ticker	2019									
		Feb	YTD	1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
Natural Gas	<a href="#">BCOMNGTR</a>	-1.50%	-2.57%	6.03%	-5.37%	-75.62%	-95.71%	-98.81%			
Low Sulfur Gas Oil	<a href="#">BCOMGOT</a>	6.75%	21.71%	11.89%	78.19%	-45.51%	6.41%	549.43%			
WTI Crude	<a href="#">BCOMCLTR</a>	5.55%	24.44%	-3.78%	35.68%	-65.47%	-53.66%	106.66%	299.46%		
Brent Crude	<a href="#">BCOMCOT</a>	9.03%	22.94%	6.46%	63.09%	-56.78%	-6.99%	661.49%			
ULS Diesel	<a href="#">BCOMHOTR</a>	8.39%	22.11%	9.68%	67.23%	-44.47%	-1.09%	367.74%	460.60%		
Unleaded Gasoline	<a href="#">BCOMRBTR</a>	12.70%	18.59%	-12.02%	13.20%	-54.37%	15.02%	483.18%	938.35%		
Corn	<a href="#">BCOMCNTR</a>	-3.38%	-2.80%	-13.28%	-25.08%	-52.45%	-40.87%	-79.19%	-84.35%	-77.11%	-26.04%
Soybeans	<a href="#">BCOMSYTR</a>	-1.89%	0.54%	-18.44%	-5.59%	-31.64%	62.12%	241.95%	200.02%	244.59%	3818.83%
Wheat	<a href="#">BCOMWHTR</a>	-11.34%	-8.81%	-16.54%	-34.38%	-55.62%	-74.96%	-87.87%	-92.13%	-86.02%	-28.44%
Soybean Oil	<a href="#">BCOMBOTR</a>	-0.62%	7.88%	-9.73%	-12.75%	-39.83%	-36.98%	-21.57%	-35.23%	-18.76%	2801.51%
Soybean Meal	<a href="#">BCOMSMT</a>	-2.38%	-2.15%	-24.47%	7.21%	-15.62%	191.31%	1171.05%			
HRW Wheat	<a href="#">BCOMKWT</a>	-11.89%	-9.85%	-26.44%	-41.89%	-66.59%	-73.43%	-76.08%			
Copper	<a href="#">BCOMHGTR</a>	5.82%	12.23%	-6.53%	32.41%	-12.12%	64.56%	397.85%	704.30%		
Aluminum	<a href="#">BCOMALTR</a>	-0.26%	3.38%	-8.43%	19.05%	-3.65%	-9.37%	-0.49%			
Zinc	<a href="#">BCOMZSTR</a>	2.36%	13.70%	-14.25%	67.10%	34.97%	95.41%	89.44%			
Nickel	<a href="#">BCOMNITR</a>	4.55%	22.08%	-5.53%	48.75%	-16.61%	14.71%	359.80%			
Gold	<a href="#">BCOMGCTR</a>	-0.50%	2.60%	-0.82%	4.06%	-3.43%	30.84%	312.58%	229.46%	375.52%	
Silver	<a href="#">BCOMSITR</a>	-3.15%	0.38%	-5.55%	0.71%	-31.01%	6.76%	139.96%	118.32%	47.64%	
Sugar	<a href="#">BCOMSBTR</a>	1.57%	7.70%	-10.40%	-23.01%	-54.47%	-40.10%	3.92%	54.25%	-46.61%	147.94%
Coffee	<a href="#">BCOMKCTR</a>	-9.64%	-5.85%	-27.36%	-35.74%	-66.26%	-63.38%	-91.39%	-88.01%	-59.75%	
Cotton	<a href="#">BCOMCTTR</a>	-3.66%	-0.51%	-11.59%	29.58%	-8.96%	107.00%	-65.68%	-27.18%	230.90%	1139.64%
Live Cattle	<a href="#">BCOMLCTR</a>	3.00%	4.30%	6.96%	8.69%	5.25%	10.68%	12.50%	108.88%	806.22%	4474.74%
Lean Hogs	<a href="#">BCOMLHTR</a>	-7.05%	-13.66%	-14.46%	-28.58%	-54.06%	-57.85%	-85.03%	-83.96%		

## PERFORMANCE: Bloomberg Commodity Roll Select Indices

Composite Roll Select Indices \* [Click hyperlinks to open in Bloomberg](#)

Index Name	Ticker	2019		1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
		Feb	YTD								
BCOM Roll Select	<a href="#">BCOMRST</a>	1.14%	6.23%	-6.54%	13.82%	-31.73%	-3.95%	230.45%			
Roll Select Agriculture	<a href="#">BCOMRAGT</a>	-3.88%	-1.16%	-15.19%	-12.20%	-41.37%	-8.60%	28.68%			
Roll Select Ex-Ags & Livestock	<a href="#">BBURXALT</a>	3.25%	10.45%	-2.27%	30.12%	-29.14%	-5.89%				
Roll Select Grains	<a href="#">BCOMRGRT</a>	-4.76%	-3.21%	-14.83%	-16.98%	-45.30%	-24.66%	17.19%			
Roll Select Softs	<a href="#">BCOMRSOT</a>	-4.07%	0.28%	-17.39%	-16.14%	-46.92%	-5.83%	-17.77%			
Roll Select Livestock	<a href="#">BCOMRLIT</a>	2.89%	0.49%	-7.27%	-16.26%	-24.32%	-12.59%	55.21%			
Roll Select Energy	<a href="#">BCOMRENT</a>	5.34%	14.25%	1.71%	39.07%	-50.73%	-44.88%	280.96%			
Roll Select Ex-Energy	<a href="#">BCOMRXET</a>	-0.76%	2.91%	-10.07%	3.04%	-23.50%	18.39%	152.56%			
Roll Select Petroleum	<a href="#">BCOMRPET</a>	8.00%	21.56%	2.59%	53.46%	-46.30%	0.93%	808.77%			
Roll Select Industrial Metals	<a href="#">BCOMRINT</a>	3.48%	11.61%	-9.57%	36.83%	-1.43%	46.20%	320.49%			
Roll Select Precious Metals	<a href="#">BCOMRPRT</a>	-1.12%	2.04%	-1.99%	4.02%	-10.53%	28.60%	286.54%			

## Single Commodity Roll Select Indices

Index Name	Ticker	2019		1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
		Feb	YTD								
Natural Gas RS	<a href="#">BCOMRNGT</a>	-2.47%	-3.54%	-3.24%	0.02%	-66.16%	-89.54%	-80.77%			
Low Sulfur Gas Oil RS	<a href="#">BCOMRGOT</a>	6.75%	21.71%	10.78%	70.40%	-42.14%	5.17%	566.22%			
WTI Crude RS	<a href="#">BCOMRCLT</a>	7.05%	23.59%	0.77%	47.43%	-50.01%	-12.36%	824.05%			
Brent Crude RS	<a href="#">BCOMRCOT</a>	8.68%	20.47%	5.39%	61.59%	-47.61%	7.27%	1037.74%			
ULS Diesel RS	<a href="#">BCOMRHOT</a>	8.39%	22.11%	6.75%	59.44%	-44.44%	-4.35%	632.43%			
Unleaded Gasoline RS	<a href="#">BCOMRRBT</a>	10.19%	18.29%	-3.84%	43.15%	-40.05%	47.37%	790.27%			
Corn RS	<a href="#">BCOMRCNT</a>	-2.41%	-1.73%	-9.84%	-18.91%	-48.99%	-34.43%	-59.90%			
Soybeans RS	<a href="#">BCOMRSYT</a>	-1.73%	0.81%	-13.59%	7.13%	-22.55%	80.70%	416.47%			
Wheat RS	<a href="#">BCOMRWHT</a>	-11.76%	-10.22%	-20.87%	-38.29%	-59.49%	-72.77%	-59.88%			
Soybean Oil RS	<a href="#">BCOMRBOT</a>	-0.53%	7.99%	-10.15%	-12.23%	-37.67%	-29.59%	14.66%			
Soybean Meal RS	<a href="#">BCOMRSMT</a>	-2.33%	-1.84%	-18.20%	17.59%	-7.11%	235.96%	1645.17%			
HRW Wheat RS	<a href="#">BCOMRKWT</a>	-12.95%	-11.66%	-27.08%	-40.24%	-64.59%	-70.65%	-42.67%			
Copper RS	<a href="#">BCOMRHGT</a>	5.77%	12.18%	-7.45%	33.74%	-11.78%	71.83%	606.19%			
Aluminium RS	<a href="#">BCOMRALT</a>	0.10%	3.19%	-11.27%	16.40%	-4.08%	-4.40%	47.80%			
Zinc RS	<a href="#">BCOMRZST</a>	1.87%	13.15%	-16.25%	66.00%	34.74%	107.83%	199.46%			
Nickel RS	<a href="#">BCOMRNIT</a>	4.55%	21.85%	-5.36%	49.33%	-14.59%	21.72%	636.74%			
Gold RS	<a href="#">BCOMRGCT</a>	-0.50%	2.57%	-0.86%	4.52%	-2.99%	31.47%	317.90%			
Silver RS	<a href="#">BCOMRSIT</a>	-3.11%	0.40%	-5.71%	0.93%	-30.51%	9.50%	170.99%			
Sugar RS	<a href="#">BCOMRSBT</a>	-0.05%	5.80%	-14.70%	-23.90%	-53.11%	-27.16%	119.04%			
Coffee RS	<a href="#">BCOMRKCT</a>	-9.09%	-5.70%	-26.52%	-34.80%	-64.51%	-58.47%	-85.60%			
Cotton RS	<a href="#">BCOMRCTT</a>	-3.36%	-0.59%	-8.56%	35.46%	-5.02%	156.10%	-40.73%			
Live Cattle RS	<a href="#">BCOMRLCT</a>	3.82%	3.03%	1.55%	2.22%	0.02%	16.05%	90.98%			
Lean Hogs RS	<a href="#">BCOMRLHT</a>	1.23%	-3.76%	-22.63%	-41.03%	-54.57%	-48.85%	-11.30%			

## BCOM Constituent Weights

[BCOM Index MEMB <GO>](#)

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Group	Commodity	Ticker	Feb 2019 Contrib to Return %	Feb 28 2019 Weight %	Jan 31 2019 Weight %	Feb 2019 Weight% Change	2019 Target Weight
Energy	Natural Gas	<a href="#">NG</a>	-0.13	7.80	7.92	↓ (0.12)	8.26%
	Low Sulfur Gas Oil	<a href="#">QS</a>	0.18	2.84	2.73	↑ 0.11	2.62%
	WTI Crude	<a href="#">CL</a>	0.45	8.61	8.19	↑ 0.42	7.66%
	Brent Crude	<a href="#">CO</a>	0.67	8.09	7.57	↑ 0.52	7.34%
	ULS Diesel	<a href="#">HO</a>	0.18	2.35	2.22	↑ 0.13	2.16%
	Gasoline	<a href="#">XB</a>	0.31	2.85	2.26	↑ 0.58	2.29%
	<b>Subtotal</b>			<b>1.65</b>	<b>32.53</b>	<b>30.89</b>	<b>↑ 1.64</b>
Grains	Corn	<a href="#">C</a>	-0.20	5.44	5.63	↓ (0.19)	5.89%
	Soybeans	<a href="#">S</a>	-0.12	5.65	5.79	↓ (0.14)	6.03%
	Wheat	<a href="#">W</a>	-0.35	2.66	3.05	↓ (0.39)	3.14%
	Soybean Oil	<a href="#">BO</a>	-0.03	3.14	3.19	↓ (0.05)	3.10%
	Soybean Meal	<a href="#">SM</a>	-0.08	3.11	3.21	↓ (0.10)	3.44%
	HRW Wheat	<a href="#">KW</a>	-0.15	1.09	1.25	↓ (0.16)	1.29%
	<b>Subtotal</b>			<b>-0.93</b>	<b>21.09</b>	<b>22.11</b>	<b>↓ (1.02)</b>
Industrial Metals	Copper	<a href="#">HG</a>	0.42	7.79	7.50	↑ 0.29	7.32%
	Aluminum	<a href="#">LA</a>	-0.02	4.25	4.34	↓ (0.09)	4.41%
	Zinc	<a href="#">LX</a>	0.07	3.40	3.40	↑ 0.00	3.21%
	Nickel	<a href="#">LN</a>	0.12	3.02	2.94	↑ 0.08	2.71%
	<b>Subtotal</b>			<b>0.59</b>	<b>18.47</b>	<b>18.17</b>	<b>↑ 0.29</b>
Precious Metals	Gold	<a href="#">GC</a>	-0.08	11.90	12.20	↓ (0.31)	12.24%
	Silver	<a href="#">SI</a>	-0.13	3.67	3.85	↓ (0.17)	3.89%
	<b>Subtotal</b>			<b>-0.21</b>	<b>15.57</b>	<b>16.05</b>	<b>↓ (0.48)</b>
Softs	Sugar	<a href="#">SB</a>	0.04	3.03	3.07	↓ (0.04)	3.15%
	Coffee	<a href="#">KC</a>	-0.25	2.26	2.48	↓ (0.22)	2.48%
	Cotton	<a href="#">CT</a>	-0.05	1.35	1.41	↓ (0.06)	1.42%
	<b>Subtotal</b>			<b>-0.26</b>	<b>6.64</b>	<b>6.96</b>	<b>↓ (0.32)</b>
Livestock	Live Cattle	<a href="#">LC</a>	0.11	4.11	4.07	↑ 0.04	4.09%
	Lean Hogs	<a href="#">LH</a>	-0.13	1.59	1.75	↓ (0.16)	1.85%
	<b>Subtotal</b>			<b>-0.01</b>	<b>5.70</b>	<b>5.81</b>	<b>↓ (0.12)</b>
<b>Total</b>			<b>0.82</b>	<b>100.00</b>	<b>100.00</b>		<b>100.00%</b>

# BLOOMBERG INTELLIGENCE: COMMODITY DASHBOARDS

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

## Crude Oil Production: BI OILS <GO>

View	12 Ann	Growth	None	2015	2014	2013	2012	2011
<b>IEA World Crude Oil Demand and Supply</b>								
Demand (**BPD)								
OECD				45.6	45.6	46.1	45.9	46.4
Americas				24.2	24.1	24.1	23.6	24.0
United States				19.2	19.0	18.8	18.7	18.9
Canada				2.4	2.4	2.4	2.4	2.3
Chile				0.3	0.3	0.3	0.3	0.3
Mexico				2.0	2.0	2.0	2.1	2.1
Europe				13.4	13.5	13.7	13.4	14.0
Pacific				6.0	6.1	6.3	6.5	6.2
Non-OECD				47.9	46.9	45.7	44.6	43.1
Asia				47.7	46.9	45.7	44.8	43.5
Europe				0.7	0.7	0.7	0.7	0.7
China				10.7	10.4	10.1	9.8	9.4
Other Asia				12.5	12.1	11.9	11.6	11.2
Latin America				6.9	6.8	6.6	6.4	6.2
Middle East				6.3	6.1	7.0	7.8	7.5
Africa				4.1	3.9	3.8	3.8	3.6
<b>Total World Crude Oil Demand</b>				<b>93.5</b>	<b>92.5</b>	<b>91.8</b>	<b>90.6</b>	<b>89.5</b>

## Natural Gas Production: BI NGAS <GO>

	Current	Prev Week	1 Week % Chg	1 Week % Chg	Prev Year
<b>Natural Gas Inventories</b>					
US Working Storage (BCF)					
East	559.00	581.00	-22.00	-3.79	356.00
West	244.00	239.00	4.00	1.70	164.00
Producing	576.00	548.00	28.00	5.11	376.00
<b>Total</b>	<b>1,479.00</b>	<b>1,467.00</b>	<b>12.00</b>	<b>0.82</b>	<b>896.00</b>
Net Injections/Withdrawals					
Consensus (Bloomberg Survey)	1,474.00	1,463.00	11.00	0.75	901.00
Demand Working Storage (BCF)					
East	219.76	219.77	-0.01	-0.00	113.79
West	49.53	49.52	-0.98	-1.99	22.76
<b>Total</b>	<b>269.29</b>	<b>269.28</b>	<b>-0.99</b>	<b>-0.37</b>	<b>136.46</b>

## Precious Metal Mining: BI PMET <GO>

Key Indicators	Latest
Avg Gold Spot Price	1,220
Known ETF Gold Hold	52,128
IMF Global Gold Reser	1,036
Sales Growth (YoY)	-8.90
EBITDA Margin (%)	70.89
T12M Sales Growth (%)	83
Return on Equity (%)	2.91
Est P/E Current Yr	61.79
Price/Book	1.84

## Agricultural Chemicals: BI AGCH <GO>

Key Indicators	Latest
Agricultural Price Ind	1.25
U.S. Farm Net Cash In	0.40
U.S. Corn Price Future	3.60
Sales Growth (YoY)	2.63
EBITDA Margin (%)	15.30
EPS Growth (YoY)	-11.17
ROIC (%)	7.83
Est P/E Current Yr	15.00
Price/Book Ratio	1.00

## Copper: BI COPP <GO>

Key Indicators	Latest
China GDP YoY (%)	7.30
YTD Copper Surplus/	-201.15k
Major Exch Copper Inv	599.99k
Sales Growth (YoY)	-1.59
EBITDA Margin (%)	26.52
T12M Sales Growth (%)	-2.59
Return on Equity (%)	2.71
Est P/E Current Yr	17.46
Price/Book	1.09

## Aluminum: BI ALUM <GO>

Key Indicators	Latest
China Industrial Prod	7.60
Global Primary Alumi	4.28M
Global Primary Alumi	4.17M
Sales Growth (YoY)	2.18
EBITDA Margin (%)	8.70
T12M Sales Growth (%)	1.46
Return on Equity (%)	4.95
Est P/E Current Yr	15.05
Price/Book	1.38

## COMMODITY CHEAT SHEET FOR THE BLOOMBERG PROFESSIONAL® SERVICE

The data provided in this report can be easily accessed on the Bloomberg Professional® service along with numerous news and analytical tools to help you stay on top of the commodity markets.

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Refinery outages	<a href="#">REFO</a>
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Oil versus inflation expectations	<a href="#">SWIF</a>

### Metals

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

### Agriculture

Top agriculture news	<a href="#">YTOP</a>
Agriculture calendar	<a href="#">AGRI</a>
Agriculture spot prices	<a href="#">AGGP</a>
Agriculture supply & demand	<a href="#">AGSD</a>
Crop calendar	<a href="#">CCAL</a>

## 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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