

Bloomberg Commodity Outlook – February 2019 Edition
Bloomberg Commodity Index (BCOM)

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Good Start, Fresh Legs

- January's commodity recovery is enduring, with a peak greenback
- Stocks appear too hot vs. basing commodities
- Crude oil is near resistance with stocks; natural gas has support
- Base metals in early recovery; gold potential is disconcerting
- Upside potential outweighs downside risks in agriculture prices

Note - Click on graphics to get to the Bloomberg terminal

Data and outlook as of January 31

Mike McGlone – BI Senior Commodity Strategist

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

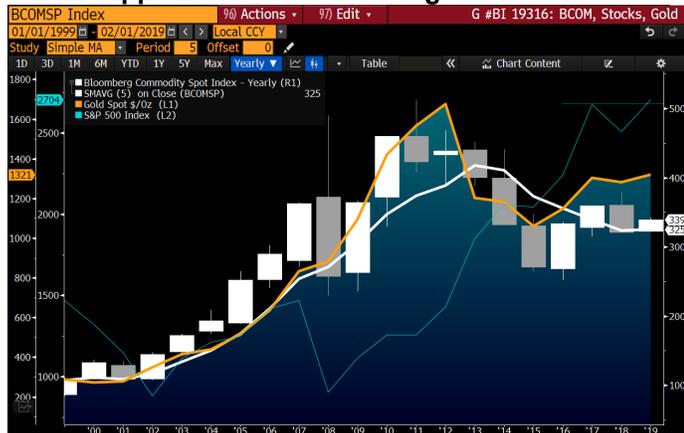
Too Hot Crude Oil, Gold Support: Commodities Favored vs. Dollar

Performance: Jan. +5.4%, 2019 +5.4%, Spot +5.6%.
 (Returns are total return (TR) unless noted)

(Bloomberg Intelligence) -- The biggest risks to this year's good start for commodities are a sharp stock-market decline and a dollar rally, though both are unlikely. We expect equity-market volatility to continue recovering moderately, which is a dollar headwind and commodity tailwind, along with reduced trade tensions and China stimulus. Industrial metals appear to be at a discount and near good support in a nascent bull market. U.S. equities are the opposite, approaching good resistance, which makes crude oil more vulnerable. Oversupplied oil should draw responsive sellers.

Trend-ready gold is attracting buyers. We expect the metal to regain the upper hand vs. crude oil, potentially following oil's almost 20% advance this year. Dormant agriculture is starting to ripen with a bottoming Brazilian real.

Stocks Appear Too Hot vs. Basing Commodities



Commodities Vs. Peak Dollar

January's Commodity Recovery Is Enduring, With a Peak Greenback. This will be a pivotal year for commodities, as we expect a peak dollar to provide support. Inevitable recovery from extremely low gold-market volatility should have the opposite, supportive sway on prices as mean-reverting VIX volatility did for U.S. stocks last year.

Commodities Poised to Retrace 2018 and Then Some. Unchanged since its 2016 recovery, the well-rested spot Bloomberg Commodity Index (BCOM) is poised to revisit 2018's high, particularly with a peak dollar. Reflecting an inverse greenback and the most BCOM weight, gold is a potential leading indicator. The metal is set to resume the rally that began with the initial Federal Reserve rate hike of the cycle in late 2015. A primary commodity-recovery catalyst is the trade-weighted broad dollar continuing to back away from a 16-year high. This stipulates an end of U.S. stock outperformance vs. global equities.

Our graphic depicts commodities in the early recovery days from the base established at the end of 2016 vs. the S&P 500 looking extended near the end-of-2017 level. That year, the CBOE SPX Volatility Index (VIX) reached its record low.

Primary Dollar Driver: U.S. Stock Market. The primary dollar pressure factor in 4Q, a declining U.S. stock market, is vulnerable, having recovered near the inflection point that shifted rate-change expectations to easing. That level in the S&P 500 is about 2,650. Indicating that the Fed rate hike of Dec. 19 may be the last, the index declined below this level the week before, coincident with a peak in the Bloomberg Dollar Spot Index. A week later, the fed-funds futures one-year spread indicated easing for the first time since 2008.

Dollar weakness is a primary factor for commodity strength, which points to continued weakness in U.S. equities as a primary commodity support factor. The

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greatest risk for commodities is likely a high-velocity stock-market plunge, which lowers the tide for most risk assets and supports gold and Treasury bonds.

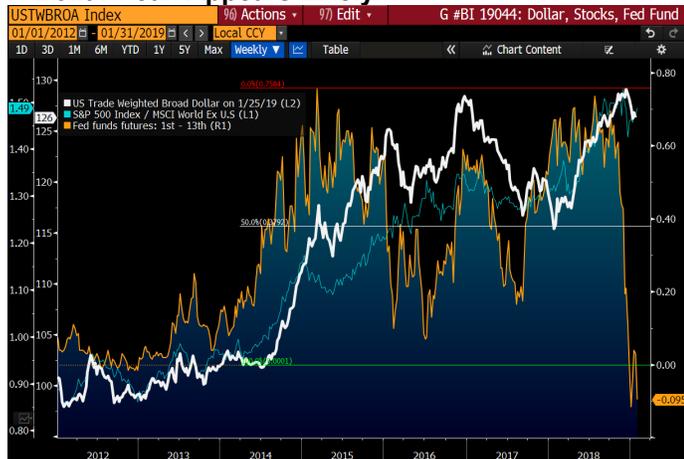
Key Dollar Driver Returns to Inflection Point



Dollar Mean-Reversion Risks Historically Elevated.

Half of the dollar's primary companions indicate a greenback peak. If U.S. vs. global stock-market outperformance has ended, with the one-year fund-futures spread dipping into negative territory, it's highly likely the greenback will decline in 2019. It shouldn't take much to spark mean reversion in the trade-weighted broad measure from multiyear highs. Thawing U.S.-China trade tension and expectations of a rate-hike shift should be enough to halt the rally.

A Dollar Peak Appears Likely



Further pressure on the dollar back toward the midpoint of the 2014-18 rally and 2018 low should require the end of the U.S. stock-market outperformance trend. The trade-weighted broad dollar index is 22% exposed to China vs. much lower allocations in most greenback measures. The Bloomberg Dollar Spot Index is 3% China-weighted.

Futures Signal Ease in First Time Since 2008; Dollar Vulnerable. The steepest plunge in the one-year Fed Fund futures spread since the financial crisis portends similar for the elevated greenback. Priced for 10 bps of rate cuts in a year, the Fed Funds futures one-year spread has declined to its lowest point since April 2008. A final pillar for dollar strength -- the outperformance of the U.S. stock market vs. the world -- appears on shaky ground. Despite the recent correction, the ratio of the S&P 500 vs. the MSCI World Ex-U.S. Index near 1.49 is above the 2018 average of 1.41.

U.S. Dollar and Stocks Appear Too Hot



Sustaining below this level should be viewed as the final crack in the strong-dollar foundation. Futures indicate that the Dec. 19 Federal Reserve rate increase was a mistake.

History Indicates Higher VIX Average in 2019.

Indications favor additional increases in the VIX's annual average in 2019, rather than a repeat of the extremes of 2008-09, notably as the presidential campaign cycle approaches. This has negative macroeconomic ramifications, in our view. The history of the stock market's volatility gauge suggests it should continue to recover from the subdued levels in 2017, when it hit the lowest annual average (11.1) since 1990. The 130% rebound in 2018 was significant, marking the VIX's largest annual gain.

We draw a comparison to 2006, when the 12.8 average was a precursor to a surge to the highest annual averages (near 32) in 2008-09. Last year was similar to 2007, when the index began to revert higher toward the mean from historic lows. The 16.6 average of 2018 was similar to 2007's (17.5).

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Volatility in Early Recovery Days



MACRO PERFORMANCE

Macro-Role Reversal Favors Commodities in 2019.

Emerging-market equities and commodities will endure as this year's top performers, in our view, as the dollar brings up the rear. A reversal of 2018 appears to be in its early days on the back of reduced U.S.-China trade tension and a peaking greenback. A continuation of the bottoming process in U.S. stock-market volatility should be an integral driver. Diminishing U.S. vs. global equity outperformance is a dollar headwind and a commodity tailwind.

Last year, the trade-weighted broad dollar was among the best performers, advancing almost 8%. The setup is for a longer-term dollar peak, in our view.

Reversal of 2018 Performance Has Endurance

Security	Chg YTD %	Chg Jan.	Chg QTD	1Yr % Chg	2Yr % Chg
S&P 500 Total Return Index	+8.0%	+8.0%	+8.0%	-2.3%	23.5%
S&P 500 Index	+8.0%	+8.0%	+8.0%	-4.1%	18.8%
MSCI Emerging Markets Net Tota	+7.4%	+7.4%	+7.4%	-15.3%	19.4%
MSCI World Net Total Return US	+6.8%	+6.8%	+6.8%	-7.4%	16.6%
Bloomberg Commodity Spot Index	+5.6%	+5.6%	+5.6%	-7.4%	.9%
Bloomberg Commodity Index Tota	+5.4%	+5.4%	+5.4%	-8.2%	-4.9%
Gold	+3.0%	+3.0%	+3.0%	-1.8%	9.1%
Bloomberg Barclays U.S. Treasu	-2%	-2%	-2%	+1.1%	6.1%
Bloomberg Dollar Spot	-1.3%	-1.3%	-1.3%	+5.5%	-4.3%
US Trade Wgt Broad Dollar Indx	-1.3%	-1.3%	-1.3%	+9.6%	-2%

SECTOR PERFORMANCE

Metals Poised to Follow Strong Energy. The January commodity-performance board indicates energy is too optimistic and metals are ripe to catch up. The Bloomberg Energy Subindex Total Return took back most of 2018's 13% decline in just one month. Oversupplied WTI crude oil, which depends on production cuts for support and is nearing resistance (similar to the S&P 500) at \$55 a

barrel, is vulnerable to pullbacks. Conditions for metals are the opposite -- early recovery from good support, particularly with a peak greenback.

Vulnerable Energy, Metals Recovery Ripening

Security	Chg YTD %	Chg Jan.	Chg QTD	1Yr % Chg	2Yr % Chg
Bloomberg Energy Subindex Tota	+9.2%	+9.2%	+9.2%	-8.8%	-1.3%
Bloomberg Industrial Metals Su	+8.0%	+8.0%	+8.0%	-13.2%	4.7%
Bloomberg All Metals Total Ret	+5.7%	+5.7%	+4.9%	-9.1%	3.7%
BBG Softs TR	+4.9%	+4.9%	+4.9%	-12.3%	-34.8%
Bloomberg Precious Metals Subi	+3.2%	+3.2%	+3.2%	-3.3%	2.8%
Bloomberg Agriculture Subindex	+3.0%	+3.0%	+3.0%	-9.3%	-20.9%
Bloomberg Grains Subindex Tota	+1.9%	+1.9%	+1.9%	-7.7%	-16.6%
Bloomberg Livestock Subindex T	-1.5%	-1.5%	-1.5%	-1.9%	4.4%

Industrial metals are better positioned than U.S. equities as volatility recovers. The lowest volatility for gold in about two decades indicates a trend-ready market with an upside bias on a weaker dollar. Agriculture is beginning to rebound along with the Brazilian real and reduced trade tension.

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

Name	Current Position	1 Yr Ago	1 Yr Change
1 Year Spread % of First Contract			
BCOM	-4.9	-1.6	-3.3
Sector			
Industrial Metals	-0.8	-0.8	-0.1
Energy	-2.6	5.9	-8.4
Precious Metals	-3.1	-2.8	-0.4
Livestock	-5.2	6.9	-12.1
Agriculture	-8.5	-7.1	-1.4
Single Commodities			
Live Cattle	6.6	6.6	0.0
Zinc	4.5	3.0	1.5
Palladium	3.5	1.5	2.0
Brent Crude	0.7	6.5	-5.9
Copper (LME)	-0.6	-1.6	0.9
Copper (CME)	-1.0	-2.5	1.5
Cotton	-1.3	3.3	-4.6
Crude Oil	-1.5	7.9	-9.4
Thermal Coal	-1.5	7.2	-8.7
Platinum	-1.8	-1.6	-0.2
Gas Oil	-2.2	4.2	-6.4
Nickel	-2.5	-1.5	-1.0
Heating Oil	-2.7	3.6	-6.3
Gold	-2.8	-2.4	-0.4
Silver	-3.4	-3.1	-0.3
Natural Gas	-4.0	4.0	-8.0
Soybean Meal	-4.5	-0.5	-4.0
Aluminum	-4.6	-1.3	-3.2
Soybean Oil	-5.4	-2.5	-2.8
Soybean	-5.7	-2.0	-3.6
Unleaded Gas	-6.7	7.7	-14.5
Corn	-8.3	-11.1	2.9
Wheat	-8.5	-16.2	7.7
HRW Wheat	-11.5	-16.0	4.5
Sugar	-11.7	-10.6	-1.0
Coffee	-16.2	-11.3	-4.9
Lean Hogs	-17.0	7.2	-24.2

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

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Energy (Index weight: 29% of BCOM)

Performance: Jan. +9.2%, 2019 +9.2, Spot +9.2%

*Note index weights are the 2018 average.

Sellers Expected to Respond

Crude Oil Near Resistance With Stocks; Natural Gas Has Support.

Divergent weakness is a key takeaway for crude oil, which is vulnerable to oversupply and greater equity-market volatility. West Texas Intermediate has had a good year already, recovering almost 20% to the January high, yet remains below a level that was initial support but is now resistance from 2018's plunge. About \$55 a barrel was the first stop on the way down in November. This price is unlikely to be breached, particularly with the S&P 500 vulnerable after getting back about half of last year's retreat.

The two markets are closely linked. Oversupplied crude oil is increasing dependent on production cuts from OPEC and Russia to support prices. The U.S. equity bull market appears too extended. Natural gas should be well supported below \$3 a MMBtu.

Crude Oil - Responsive Sellers

Nearing \$55 Resistance May Be Best That Crude Oil Sees in 2019. WTI's 2019 average of \$51.55 a barrel to Jan. 31 is vulnerable to decline, in our view, especially with sellers responsive to oil approaching \$55-a-barrel resistance on tension in Venezuela and as the S&P 500 reaches its own crossroad. The oversupplied oil market's need for production cuts limits its rally potential.

Crude Vulnerable With S&P 500 Near Resistance

Unless the S&P 500 can hold above 2,600, West Texas Intermediate is likely to revisit 2019's low of \$44.35 a barrel. We expect a range-trading 2019 that gravitates toward \$50, but the sharp recovery toward a key resistance level in the S&P 500 makes both markets increasingly vulnerable. Crude oil shows divergent weakness. Despite the S&P 500 achieving the midpoint of last year's range, 2019's crude oil peak of \$55.37 is far below similar resistance near \$60.

Crude oil should trade toward the low end of its \$40-\$60 range if stock-market volatility further recovers from 2017's record lows, as we expect. Our graphic depicts the near-simultaneous oil and S&P 500 peaks and troughs of 2018. Oversupplied crude oil is the more vulnerable, and increasingly so with equities near good retracement-resistance levels.

Unless Equities Advance, Crude Oil Peak Likely



Crude Oil's Bullish Dilemma: It Has Already Been a Good Year. Crude oil's rally of almost 20% to start 2019 leaves it vulnerable to decline for the rest of this year, in our view. Ending 2018 near the lower end of the two-year range is a prime factor to support prices, but the swift recovery along with the stock market into layers of good resistance indicates position squaring and a potential peak. West Texas Intermediate's 2019 high of \$55.37 a barrel coincided with an 8% gain in the S&P 500 -- already a good start as well.

The Sharp Crude Oil Rally Appears Vulnerable



Indicative of an oil market that's under increasing pressure from advancing technology and oversupply, and despite topping the list of positive correlations, the MSCI Emerging Markets Index has jumped almost 80% since 2008 vs. just 20% for crude. This year's average price near \$51.65 a barrel appears to be vulnerable to a decline.

Natural Gas Overbought Alleviated

Natural Support Backing Up to \$3, Oversold Alleviated, Bias Up. U.S. natural gas prices are back on sound footing, having backed up into good support, reducing the overbought condition with primary drivers positive, in our view. Declining inventories and increasing exports have shifted the demand favorably vs. supply.

Overbought Reduced Natural Gas Bias Remains Up. Front natural gas futures appear well-supported near the 52-week mean and the price of the one-year back future. The overbought condition has been alleviated, and prices should be buoyed by these rising support levels, averaging almost \$3.07 MMBtu on Jan. 31. Near \$4 is initial resistance. The extreme backwardation reached in 4Q was an impediment for sustained higher front prices, due to rolling down the curve to much lower prices. That's been alleviated, as indicated by the one-year curve declining to flat for the first time since March.

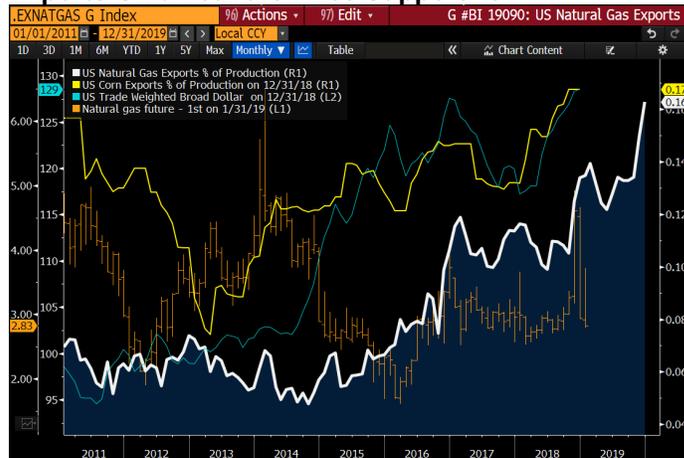
Natural Gas Appears Base Building Near \$3



Moving toward backwardation is a bullish indicator, but November reached a multiyear extreme. Current flat one-year curve levels are initial support. Shifting toward contango is less bearish than most commodities, as it's more normal for the commodity that's most expensive to store.

Higher Prices Likely Needed to Stall This Trend. A predominant bullish price trend in natural gas that's set to accelerate is for U.S. exports. As a percentage of production, natural gas exports remain on a tear and are closing in on corn. At 16%, DOE estimates of natural gas exports-to-production in 2019 are set to almost match the 17% pegged for corn from the USDA. Both export measures are increasing, but gas has more than doubled in the past five years, notably on the back of LNG. Thawing U.S.-China tension and a potential peak in the China heavy trade-weighted broad dollar should accelerate this trend.

Exports On a Tear are Price Supportive

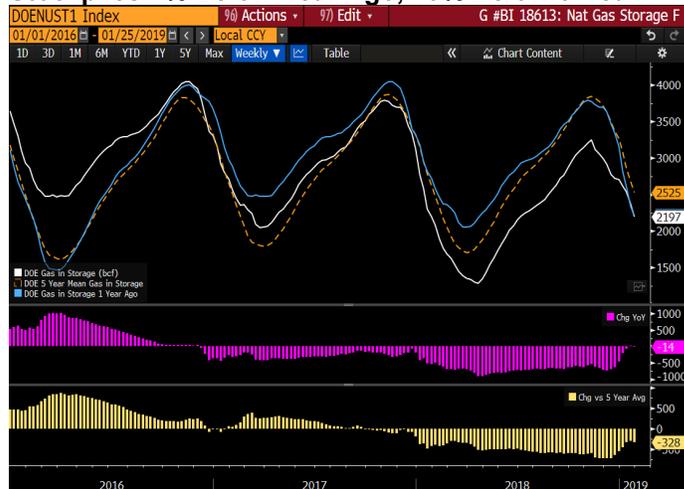


Improving LNG infrastructure and rapidly advancing technology are also key factors supporting exports. DOE estimates for U.S. production are expected to peak in August, yet pipeline and LNG exports are slated to increase 20% in 2019 on the back of 2018's 35%.

Natural Gas Storage Should've Brought Smiles, But Sentiment Soft. *Contributing Analysts Vincent G Piazza (Energy)*

A lower-than-expected pull from natural gas storage of 173 billion cubic feet (bcf) in the week ended Jan. 25 was disappointing, as the combined effect of higher heating demand and softer production should have drawn more gas. Warmer weather in early February will affect sentiment and expectations have retreated somewhat, but front-month prices are still hovering close to \$2.90 p/MMBtu after spiking earlier in January. Well freeze-offs and curtailments remain transitory issues for production trends, yet our longer-term views point to a more constructive fundamental backdrop after winter season ends.

Stockpiles 1% Below Year Ago, 13% Below 5-Year



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This week's whisper estimate of 242 bcf could rise, given cooler temperatures across much of the East Coast and Midwest. January did its part to move the pricing needle and February has to perform as well.

PERFORMANCE DRIVERS

Oversupplied and Vulnerable: Crude, Unleaded Gas.

It's only the first month, but the best of 2019's crude-oil recovery appears to be over, due to stock-market resistance and the latest, typically fleeting geopolitical boost. Crude oil recouped much of last year's decline, but U.S.-Venezuela risk is similar to the failed 2018 rally amid U.S.-Iran tension. WTI should be capped by \$55-a-barrel resistance and with the S&P 500 near a 2,650 level. The trend into contango in unleaded gasoline, plus the steepest one-year curve in three years, indicates an oversupplied market.

Crude Oil Unlikely to Gain Much More in 2019

Security	Chg YTD %	Chg Jan.	Chg QTD Pct	1Yr % Chg	2Yr % Chg
Bloomberg WTI Crude Oil Subind	+17.9%	+17.9%	+17.9%	-12.6%	2.0%
Bloomberg Petroleum Subindex T	+13.8%	+13.8%	+13.8%	-12.2%	5.6%
Bloomberg Brent Crude Subindex	+12.8%	+12.8%	+12.8%	-7.7%	13.4%
Bloomberg Heating Oil Subindex	+12.7%	+12.7%	+12.7%	-6.2%	16.3%
Bloomberg Energy Subindex Tota	+9.2%	+9.2%	+9.2%	-8.8%	-1.3%
BBG Energy Spot	+9.2%	+9.2%	+9.2%	-12.3%	2.3%
Bloomberg Unleaded Gasoline Su	+5.2%	+5.2%	+5.2%	-27.8%	-15.6%
Bloomberg Natural Gas Subindex	-1.1%	-1.1%	-1.1%	-4.3%	-25.7%

Definitive and sustained OPEC and Russia production cuts should be necessary to keep WTI above \$55. It's likely to migrate below \$50, particularly if resistance holds in the U.S. stock market. Ending the month near \$3 a MMBtu boosts the recovery prospects for natural gas.

Front Energy Futures to Jan. 31

Monitor	View	Indicators	News	Link To	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	54.0	+18.9%	+18.9%	+18.9%	64.7	52.8	-16.6%	2.3%
					+ Generic 1st 'CO' Future	61.9	+15.0%	+15.0%	+15.0%	69.1	55.7	-10.4%	11.1%
					+ Generic 1st 'HO' Future	187.9	+1.8%	+11.8%	+11.8%	206.9	161.2	-9.2%	16.6%
					+ Generic 1st 'XB' Future	136.3	+2.9%	+2.9%	+2.9%	190.8	152.6	-28.6%	-10.7%
					+ Generic 1st 'NG' Future	2.8	-3.7%	-3.7%	-3.7%	3.0	3.1	-5.5%	-9.2%

Metals

All (Index weight: 35% of BCOM)

Performance: Jan. +5.7%, 2019 +5.7%

Industrial (Index weight: 19.0% of BCOM)

Performance: Jan. +8.0%, 2019 +8.0, Spot +7.8%)

Precious (Index weight: 16.1% of BCOM)

Performance: Jan. +3.2%, 2019 +3.2, Spot +3.4%)

Metals' Strengthening Foundation

Aluminum to Zinc in Early Recovery; Gold Potential Disconcerting. A peak dollar gives January's metal-price recovery endurance, in our view, though a sharp increase in equity-market volatility -- a greenback headwind -- is a primary risk. Base metals have barely recovered from critical support levels, which should give them the upper hand vs. U.S. stocks, as the rebound in equities -- swiftly retracing half of 2018's range -- appears optimistic. At apparent discounts in a nascent bull market, copper, aluminum, nickel, zinc and silver should benefit from diminishing trade tension and China's stimulus.

Gold's potential upside is disconcerting, with 180-day volatility buried in a similar fashion as the S&P 500 measure a year ago, just before stocks reverted to a lower mean. Reversion risks favor a higher gold price.

Precious Paused & Refreshed

Gold, Silver Surge Potential Driven by Stock

Volatility, Dollar. Historically tight ranges, coupled with buried volatility and increasingly favorable drivers (a peaking dollar, rising VIX index), are a recipe for higher precious-metals prices. Early reversion days from multidecade extremes in these gold and silver companions solidify the metals' foundation..

Gold Is Set for Longer Duration Breach of \$1,300.

Gold's pause in early 2019 has refreshed its recovery as other markets -- oil, equities and bitcoin -- are more susceptible to resuming their 4Q18 downturns, in our view. Back near \$1,300 an ounce, gold appears in an opposite situation as the breakdown from this level in June, with the strengthening dollar. A top-performing major asset class last year, the dollar is near the bottom in January. Greenback mean reversion is likely on the back of increasing U.S. stock-market volatility, reduced rate-hike expectations and an election cycle ramping up.

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Crude oil and the S&P 500 are up nearly 19% and 8% through Jan. 31 vs. 3% for gold. Upside is limited for a well-supplied oil market, particularly with the S&P 500 back in the key resistance zone from last year's range. Gold's notably difference is the lowest volatility in decades.

Gold Turning Up as Other Markets Turn Down



Gold's Volatility Fuel Tank Is Full vs. Equities. The historically low level of gold volatility indicates a trend-ready market that is similar -- but with the opposite directional bias -- as U.S. stock volatility last year. Gold's 180-day volatility is the lowest since 1999. It's an indication of plenty of fuel for a trend. Our bias for price is up, notably if the dollar continues to back away from 2018's peak, along with mean reversion for stock-market volatility. A year ago, S&P 500 volatility reached the lowest since 1966. Our graphic depicts this market-risk measure breaking out higher.

Ready for a Trend? Buried Gold Volatility



The ratio of the per-ounce price of gold vs. the S&P 500 index appears in early days of recovery. Gold is recovering from levels vs. the S&P 500 last seen in 2007,

just prior to the global financial crisis, when S&P 500 volatility declined to nearly the current levels of gold.

Big Gold Bull Looks Rested and Refreshed. Gold is set to resume the almost two-decade-long bull market on the back of the increasing U.S. budget deficit and peaking dollar. The appreciating deficit as a percentage of GDP appears unstoppable, notably as the economic expansion reaches a historical duration extreme and U.S. stock-market volatility recovers from similar lows. Appearing in early days of backing away from the 16-year high reached in 2018, some simple mean reversion in the trade-weighted broad dollar should be a powerful tailwind for gold prices.

Increasing Deficit & Peak Dollar Support Gold



The gold uptrend resumed with the 2015-16 transition as the Federal Reserve commenced tightening and declining deficits reversed. A clear trend in a declining dollar is likely to join with increasing trends in U.S. budget deficits and stock market volatility as the election cycle kicks in, supporting gold.

Gold ETF Inflows Appear Unstoppable. Patience is an understatement for steadfast gold ETF investors anticipating higher prices. Known gold ETF holdings of about 73 million ounces mark the highest level in six years. Since April 2013, the price of gold has declined about 11% vs. gains of 27% in the trade-weighted broad dollar and 91% in the S&P 500 total return. ETF holdings, typically highly correlated to gold prices, signal investors are undaunted by the metal's moribund price. They appear more focused on gold's diversification attributes in an environment of elevated stock and bond prices and surging sovereign-debt levels.

The Fed's interest-rate increase in December 2015 marked the bottom for gold and ETF holdings. Diminishing rate-hike expectations in 2016 marked a disengagement between gold's rising ETF flows and an

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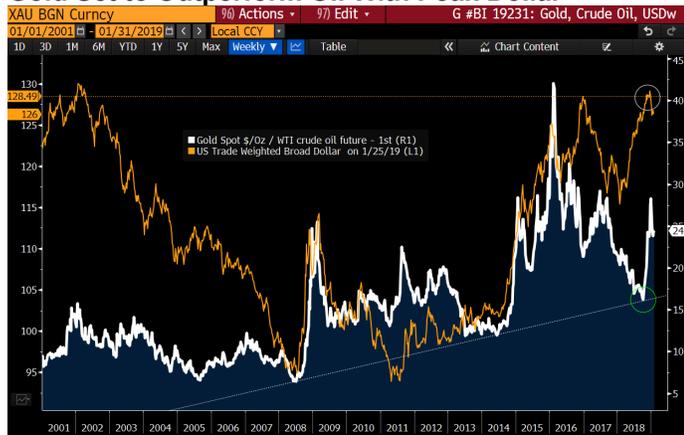
end to its price gains.

Total Gold ETF Holdings Reach Six-Year High



Gold Set to Take Upper Hand From Crude Oil. The gold vs. crude-oil recovery process appears to be in its early days. Up swiftly from October's four-year low, the ratio of an ounce of gold vs. a barrel of West Texas Intermediate (WTI) has essentially returned to the mean and median of the range since 2015. More-volatile crude oil has been the driver, but moribund gold is set to assume leadership, in our view. Gold is ripe to exit its increasingly narrowing cage, while crude oil should be entering one.

Gold Set to Outperform Oil With Peak Dollar



Gold will gain a strong tailwind if the trade-weighted broad dollar index continues to back away from December's 16-year high, as we expect. Oversupplied crude oil is increasingly subject to production cuts from OPEC and Russia to support prices.

This Palladium-Dollar Rhyme Supports Gold. Strong palladium prices and a peak dollar are typically a potent combination for gold appreciation. Both gold-price catalysts appear to be playing out in 2019. The trade-weighted broad dollar has limited upside from its 16-year

high at the end of 2018 and may be forming a longer-term peak as U.S. stocks wobble and Fed rate expectations shift to easing. For the first time since 2002, the per-ounce price of palladium tops gold's.

The palladium squeeze has similarities to 1999-2001 in terms of velocity and trading at a premium to platinum and gold. It has the markings of some of the greatest metal squeezes ever, such as silver's in 1979-80. Gasoline-vehicle emissions control is the primary palladium-demand source, but at such an extreme premium, its sister metal platinum is gaining luster.

Strong Palladium, Weak Dollar Are Gold-Positive



Weary Bears Set to Give Way to Silver Bulls. Silver is gaining support for a recovery after withstanding severe selling. Its 2H price plunge was the most extreme since the 2014-15 bear market. Despite dollar strengthening into year-end, managed-money positions that reached record net-short levels were unable to keep pressuring the metal. Snapping back to the first resistance level near the 52-week mean, silver is poised to revisit the top Bollinger Band, and has more endurance this time, in our view. Such extremes can often form bottoms.

Record Shorts Fail to Spark Bear Market



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Our graphic depicts silver recovering from the most extreme period on its bottom 52-week band since 2014 and, to a lesser extent, near the 2015 nadir.

Silver to Shine Above Key Resistance in 2019. Silver is poised in 2019 to move above a resistance level that has held the market in check for three years, in our view. A primary companion of higher silver prices -- a weakening dollar -- is likely to join the recovery in gold and industrial-metals prices. Since silver's nadir in December 2015, rallies have been checked by the 50-month average. This level, about \$16.40 an ounce, is initial resistance vs. the Jan. 31 price of \$16.06. Silver was poised to breach this mark in 2018, until the trade-weighted broad dollar rallied to a 16-year high.

Silver Poised to Breach Resistance Line



The 2018 low, near \$13.90, is initial support. In the past 20 years, measured annually, silver's correlations are 0.77 to gold, 0.70 to the Bloomberg Industrial Metals Spot Subindex and minus 0.59 to the trade-weighted broad dollar.

Peaking Ratio to Gold Supports Silver Leadership.

Silver should be in an early recovery stage vs. gold, in our view, if the dollar is peaking. The amount of silver needed to buy an ounce of gold is likely to decline from its highest level in 23 years. The failed bear raid, via the shortest net position in 12 years (as a percentage of open interest) in 2H, greatly increases the odds of marking a longer-term bottom for silver. Mean-reversion risks in the gold-to-silver ratio and stock-market volatility are about as extreme as ever. A recovering VIX is both a headwind for the dollar and a tailwind for silver, often dubbed "leveraged gold".

February 1995 was the last time the gold-to-silver ratio reached levels seen recently. It hasn't sustained higher since 1993. Commodities will find demand when prices are low, and vice versa when they're relatively high.

Silver-to-Gold Mean Reversion Risks Reach Extreme



Base Favored vs. Equities

Copper, Industrial Metals Favored in Standoff With U.S. Stocks. The macroeconomic implications of further industrial-metals price weakness are quite negative, in our view, tipping the scales for recovery to their side vs. potentially overoptimistic equities. Metals have barely budged from good support and last year's lows, while the S&P 500 has already taken back half of its plunge.

High-Alert Status Favors Base Metals vs. Equities.

Industrial metals have superior recovery prospects than U.S. stocks near Jan. 31 levels, in our view. The macroeconomic backlash for metals declining further is more significant and thus less likely. The Bloomberg Industrial Metals Spot Subindex is only slightly above the halfway mark of its range since the Federal Reserve's first rate increase this cycle. Metals have rebounded about 9% from their lows vs. 15% for the S&P 500. Appearing too optimistic, the S&P 500 has retraced over 50% of 2018's range. Metals would need to gain back another 6% to do similar.

Stocks Look Too Optimistic vs. Base Metals



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The lack of a metals recovery despite strong equities and a peaking dollar is becoming disconcerting. Our graphic depicts the primary outliers -- low metals prices and high rates. The latter should decline if metals and equities resume their 4Q trends.

Base Metals Likely to Extend Recovery vs. Stocks. A potential dollar peak supports industrial metals' bid to outperform U.S. equities. The ratio of the Bloomberg Industrial Metals Spot Subindex vs. the S&P 500 is just starting to recover. U.S. stocks are the primary driver of this relationship. A continued equity-volatility increase would be a dollar headwind and help dollar-denominated metals prices. The 16-year high in the dollar and the three-year low in the metals-to-stocks ratio, both achieved in 2018, appear to be more prone to mean reversion.

Base Metals Prevail vs. Stocks With Peak Dollar



In 1H18, the metals-to-stocks ratio and the trade-weighted broad dollar visited the halfway mark of their ranges since 2014. A dollar peak should get the greenback back to this level, potentially in 2019, which supports a similar move in metals vs. stocks, but for a longer duration.

Copper Is Favored in Its Support Battle. Returning to the midpoint of its 2016-17 bull market, copper is poised for price recovery, particularly if the dollar is peaking. Having briefly extended the 2016 high, the trade-weighted broad dollar is backing away. More endurance in this peaking process supports a copper rebound, perhaps coincident with emerging-market stocks. Since a 23% correction to the August low, copper CME futures have been building a potential base near the 200-week mean and the halfway mark of the 2016-17 rally. Sustaining a price below the low of about \$2.55 a pound (\$5,770 a ton, LME) would indicate foundation failure and further weakness, with related macroeconomic implications.

Copper Poised to Recover With Peak Dollar



In the past 20 years, measured annually, copper's correlations are 0.85 to the MSCI Emerging Markets Index and minus 0.71 to the trade-weighted broad dollar.

Aluminum Should Rebound From Good Support Zone

Aluminum's recovery potential outweighs downside risks, as sustaining below levels reached in early 2019 would have significantly negative macroeconomic implications. The market has returned to its 48-month average and near old resistance from the end of 2016 that's now good support. The 2019 aluminum-futures bottom of \$1,782 a ton is the lowest in two years. In January 2017, the market breached resistance near \$1,750.

Aluminum Bull Has Little Tolerance for Lower



This is a good support zone. Sustaining below would indicate bear-market resumption and macroeconomic issues, which makes it unlikely. Aluminum prices have declined with U.S.-China trade tension, Rusal sanctions, weak emerging-market stocks and the strong dollar. Most of these should be alleviated in 2019. Our graphic depicts favorable demand vs. supply and the one-year curve near good support.

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PERFORMANCE DRIVERS

Metals Bull Is Refreshed vs. Tired Dollar. If the dollar continues to back away from 2018's extreme, as we expect, metals should be primary beneficiaries. The process is just starting, in our view. A trend reversal in the trade-weighted broad dollar -- last year's top performer -- is needed for metals leadership. Industrial metals and silver appear to be in the early days of recovering from good support levels reached in 4Q. Macroeconomic implications of sustaining much lower are significant, and unlikely.

Metals Should Stay on Top With a Peak Greenback

Security	Chg YTD %	Chg Jan.	Chg QTD	Chg Pct	1Yr % Chg	2Yr % Chg
Bloomberg Nickel Subindex Total	+16.8%	+16.8%	+16.8%	-8.4%	23.6%	
Bloomberg Zinc Subindex Total	+11.1%	+11.1%	+11.1%	-18.3%	2.1%	
Bloomberg Industrial Metals Su	+8.0%	+8.0%	+8.0%	-13.2%	4.7%	
Bloomberg Copper Subindex Total	+6.1%	+6.1%	+6.1%	-13.8%	-9%	
Bloomberg All Metals Total Ret	+5.7%	+5.7%	+5.7%	-8.4%	4.4%	
Bloomberg Aluminum Subindex To	+3.7%	+3.7%	+3.7%	-11.7%	5.3%	
Bloomberg Silver Subindex Total	+3.6%	+3.6%	+3.6%	-7.6%	-10.3%	
Bloomberg Precious Metals Subi	+3.2%	+3.2%	+3.2%	-3.3%	2.8%	
Bloomberg Gold Subindex Total	+3.1%	+3.1%	+3.1%	-2.1%	7.7%	
US Trade Wgt Broad Dollar Indx	-1.3%	-1.3%	-1.3%	+9.6%	-2%	

Diminishing trade tension supports a return of an industrial-metals bull market. They're better positioned than the U.S. stock market, near halfway-resistance of last year's decline. Gold is the outlier, with the most potential upside vs. possible dollar and U.S. stock-market peaks.

Agriculture (Index weight: 30% of BCOM)
Performance: Jan. +3.0%, 2019 +3.0%, Spot +2.8%)

Grains (Index Weight: 24% of BCOM)
Performance: Jan. +1.9%, 2019 +1.9%, Spot +1.6%)

Softs (Weight: 6% of BCOM)
Performance: Jan. +4.9%, 2019 +4.9, Spot +4.7%)

Agriculture Mean Reversion Higher

Upside Potential Outweighs Downside Risks in Agriculture Prices. Caged agricultural-commodity prices are likely to spring higher, with a recovering Brazilian real and U.S. yields -- overdue for normalization -- the primary drivers, in our view. The return of USDA data should confirm a nascent bull market on the back of diminishing U.S.-China trade tension, a peaking dollar and corn stocks-to-use.

Grain-Price Rise Potential Is Disconcerting. Grain prices resemble a tight spring that's ready to uncoil. Over the past 48 months, the Bloomberg Grains Spot Subindex has never had narrower Bollinger Bands for longer (since 1991). Corn's range is the most compressed since 1965. Such an unsustainable condition heightens the potential for a price surge. Comparisons can be drawn to 2002, as grains escaped a compressed range, initially rallying about 40%. The wide point of the bands was achieved in 2008, coincident with an index gain about 3x the pre-breakout level from 2002.

Higher Grain Prices -- A Matter of Time and Real



A recovery in the Brazilian real coincided with the 2002-08 grain rally. As the currency's recent level is similar to 2002's bottom, we think there's far greater upside potential than downside risks with the change in Brazil's

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administration.

Even Record Production May Not Restrain Corn. The backdrop for corn appears potentially explosive. On a 24-month basis, prices are the most compressed in 54 years. The market is really ready to move, with primary drivers turning positive. U.S. stocks-to-use are declining despite a record run of increasing Corn Belt yields. Indicating the path of least resistance, prices advanced 7% in 2018 despite another year of record yields, a stronger dollar and U.S.-China trade tensions. Two-thirds of these pressure factors are likely to ease in 2019.

Coiled to Move With Drivers Turning Bullish

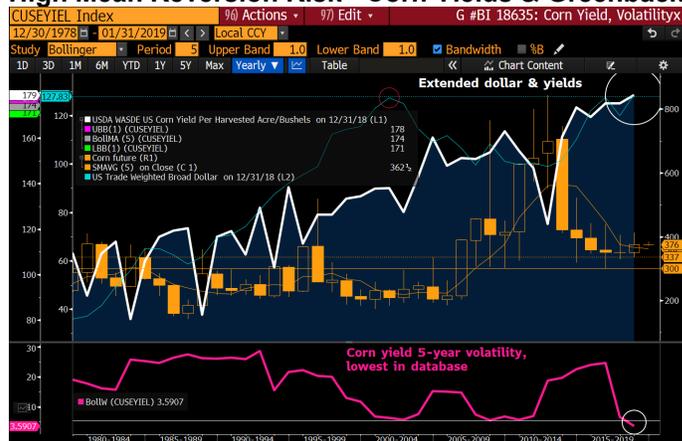


With the focus on more planted acres and production in 2019, yields should be the primary price determinant. The marketplace appears comfortable with pricing in more of the same march to successively higher yields. The lowest five-year volatility in USDA yields since 1973 tips risks toward some mean reversion.

Comfort With the Unusual Supports Corn Prices. Corn has potential for upside, based on the likelihood of some mean reversion in U.S. yields and the dollar, in our view. Despite another record year for corn-belt yields, and the trade-weighted record dollar advancing to almost a 16-year high, corn prices have been stalwart. Divergent strength is a key takeaway. Increasing yield-reversion risks are historically elevated. Five-year volatility of USDA yields has reached the lowest in the database since 1973.

There is little room for yields to accelerate. A pull-back in the trend is the typical outcome when volatility declines to these levels. Despite the strong dollar and yields, corn has held support near \$3.40 a bushel, and 2018 marks the first extension above the previous year's high since 2012. The 2014 peak near \$5 is good initial target resistance.

High Mean Reversion Risk - Corn Yields & Greenback



Brazilian Real Showing Bottom Supports Beans. If the Brazilian real continues to recover, so should soybean prices and the agriculture sector. Up about 6% in 2019 to Dec. 31, the value of the real vs. the dollar is about the same as the change in CME-traded soybean futures. Our graphic depicts the real/dollar cross rate recovering from a potential inverted head-and-shoulders bottom pattern and nearing the post-election peak from November. Sustaining above this 28-cent resistance level would solidify a foundation indication in the currency.

A Bottoming Real Portends the Same for Soybeans



With the highest U.S. soybean stocks-to-use in decades vs. the opposite in Brazil, the window is open for further easing of U.S.-China trade tensions supporting U.S.-traded soybean prices. The real-to-soybean price annual correlation since 2005 is 0.63, and to the Bloomberg Agriculture Spot Subindex, it's 0.72.

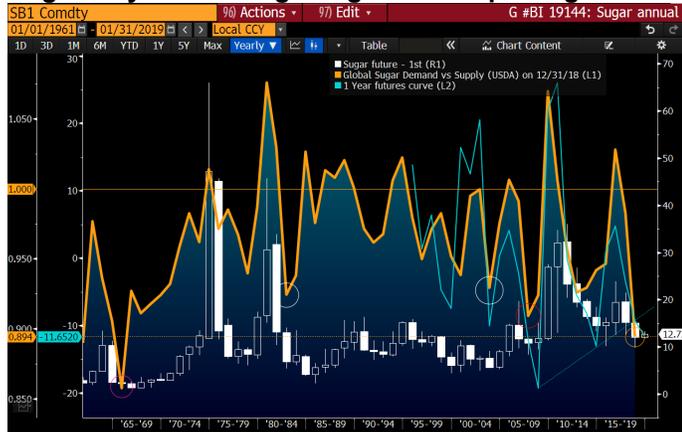
Sugar Demand vs. Supply History Is Explosive. The worst should be over for sugar-price pressure, based on USDA demand vs. supply estimates. Last year had the most unfavorable demand vs. supply balance in 53 years. Prices stayed under pressure in 1966 following the sugar glut in 1965, but marked the beginning of an eight-year bull market, with almost a ninefold increase. The most

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recent similar example was in 2007, when the demand vs. supply ratio reached 0.91 on a 1-to-1 scale. Prices bottomed that year and peaked in 2011 almost 4x higher.

Sugar May Be Starting Longer-Term Upswing



Our analysis of USDA data places the ratio of global sugar demand vs. supply estimates at 0.89 in 2018. Mean-reversion risks far outweigh further downside in this ratio and prices. The one-year futures curve indicates a more favorable demand vs. supply outlook since the depths of 2008.

Sugar Is Building a Real Foundation. The setup for a sugar-price bottom mirrors the early days of the last rally three years ago. Sugar has recovered above its 52-week mean following an extended period below that level, along with a strengthening Brazilian real. At similar levels in the commodity and currency, this recovery has longer-duration potential than in 2016, notably due to Brazil's new administration and an end to depreciation of the real.

Sugar Appears to Be Bottoming Similar to 2015



Since October, ICE-traded raw-sugar futures have shown comfort above the downtrending 52-week mean. Sugar has limited upside with a weakening real, but it appears to be in an early-recovery phase from the multidecade low in September. Indicating the increasing relationship, sugar

is 0.61 and 0.76 correlated (annual basis) to the real in the past 15- and 10-year periods.

PERFORMANCE DRIVERS

Mean Reversion for Agriculture Just Starting.

Agriculture's worst 2018 price performers -- soybean oil and sugar -- top the January leader board, emphasizing the potential for reversion to higher means in 2019. A recovering Brazilian real, and the trade-weighted broad dollar continuing to back away from a 16-year high reached in December, should solidify a longer-term ag-price bottom. Some normalization in the exceptional trend of increasing U.S. grain yields would add rally fuel.

Early Indication? 2018 Worst Performers Lead 2019

Security	Chg YTD %	Chg Jan.	Chg QTD Pct	1Yr % Chg	2Yr % Chg
Bloomberg Soybean Oil Subindex	+8.6%	+8.6%	+8.6%	-11.9%	-16.5%
Bloomberg Sugar Subindex Total	+6.0%	+6.0%	+6.0%	-10.3%	-44.2%
BBG Softs TR	+4.9%	+4.9%	+4.9%	-12.3%	-34.8%
Bloomberg Coffee Subindex Tota	+4.2%	+4.2%	+4.2%	-20.8%	-41.1%
Bloomberg Cotton Subindex Tota	+3.3%	+3.3%	+3.3%	-2.7%	1.5%
Bloomberg Agriculture Subindex	+3.0%	+3.0%	+3.0%	-9.3%	-20.9%
Bloomberg Wheat Subindex Total	+2.8%	+2.8%	+2.8%	+5%	-9.7%
Bloomberg Soybeans Subindex To	+2.5%	+2.5%	+2.5%	-12.7%	-18.6%
Bloomberg Kansas Wheat Subinde	+2.3%	+2.3%	+2.3%	-9.4%	-17.8%
Bloomberg Grains Subindex Tota	+1.9%	+1.9%	+1.9%	-7.7%	-16.6%
Bloomberg Live Cattle Subindex	+1.3%	+1.3%	+1.3%	+4.3%	14.4%
Bloomberg Corn Subindex Total	+0.6%	+0.6%	+0.6%	-7.0%	-17.5%
BBG Soybean Meal TR	+0.2%	+0.2%	+0.2%	-10.2%	-13.7%
Bloomberg Livestock Subindex T	-1.5%	-1.5%	-1.5%	-1.9%	4.4%
Bloomberg Lean Hogs Subindex T	-7.1%	-7.1%	-7.1%	-14.3%	-13.7%

The almost-6% gain in the Brazilian real to start 2019 is largely responsible for about a 3% increase in the Bloomberg Agriculture Spot Subindex. Mean-reversion-recovery potential in the Brazilian real from the multidecade low reached just before last year's election outweighs the risk of further decline, in our view.

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DATA on BI COMD

Performance - Overview

Key Metrics

Name	MTD % Change	1 Mth % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change	3 Yr % Change	5 Yr % Change
Commodities								
BCOM Index TR	5.4	5.4	-2.4	5.4	-8.2	-4.9	8.2	-33.7
Energy Index	9.2	9.2	-14.2	9.2	-8.8	-1.3	14.5	-62.0
All Metals Index	5.7	5.7	7.0	5.7	-8.4	4.4	26.7	-1.5
Industrial Metals Index	8.0	8.0	4.4	8.0	-13.2	4.7	36.9	-3.4
Precious Metals Index	3.2	3.2	9.4	3.2	-3.3	2.8	14.2	-3.0
Ags & Livestock Index	2.3	2.3	0.8	2.3	-8.2	-17.1	-13.7	-32.5
Livestock Index	-1.5	-1.5	-0.1	-1.5	-1.9	4.4	-4.1	-15.7
Agriculture Index	3.0	3.0	1.0	3.0	-9.3	-20.9	-15.8	-35.7
Grains Index	1.9	1.9	2.7	1.9	-7.7	-16.6	-21.7	-40.7
Softs Index	4.9	4.9	-5.2	4.9	-12.3	-34.8	-13.0	-37.0
BCOM EX Indices TR								
BCOM Index Roll Select TR	5.0	5.0	-2.6	5.0	-9.1	-4.9	11.6	-28.4
BCOM Index Forwards TR								
BCOM Index ER	5.2	5.2	-3.0	5.2	-10.1	-7.8	4.5	-36.0
BCOM Index Spot	5.6	5.6	-2.5	5.6	-7.4	0.9	26.8	-15.8
Stocks								
S&P 500 Index TR	8.0	8.0	0.3	8.0	-2.3	23.5	48.2	68.2
Bonds								
Barclays U.S. Aggregate	0.7	0.7	3.1	0.7	1.8	4.0	5.5	12.3
Currencies								
Bloomberg U.S. Dollar Spot Index	-1.3	-1.3	-2.5	-1.3	5.5	-4.3	-5.7	14.5
US Dollar Index	-0.6	-0.6	-1.6	-0.6	7.2	-4.0	-4.0	17.5
US Trade Weighted Broad Dollar	-1.3	-1.8	-1.0	-1.3	9.6	-0.2	0.5	22.5

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Commodities										
BCOM Index TR	5.6%	-11.2%	1.7%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%
Energy Index	10.3%	-12.7%	-4.3%	16.3%	-38.9%	-39.3%	5.2%	-9.4%	-16.0%	-10.5%
All Metals Index	4.9%	-12.6%	20.8%	15.7%	-19.5%	-7.1%	-21.6%	2.9%	-11.5%	25.9%
Industrial Metals Index	7.3%	-19.5%	29.4%	19.9%	-26.9%	-6.9%	-13.6%	0.7%	-24.2%	16.2%
Precious Metals Index	2.4%	-4.6%	10.9%	9.5%	-11.5%	-6.7%	-30.8%	6.3%	4.6%	42.7%
Ags & Livestock Index	2.6%	-9.4%	-8.1%	0.9%	-16.1%	-6.0%	-12.6%	2.7%	-12.4%	33.9%
Livestock Index	0.4%	-1.7%	6.4%	-5.6%	-18.8%	11.6%	-3.5%	-3.5%	-2.3%	9.3%
Agriculture Index	3.1%	-10.8%	-11.0%	2.1%	-15.6%	-9.2%	-14.3%	4.0%	-14.4%	38.5%
Grains Index	2.6%	-5.5%	-11.3%	-5.9%	-19.4%	-9.4%	-16.9%	18.3%	-14.4%	30.3%
Softs Index	2.8%	-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	5.2%	-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	5.4%	-13.0%	0.7%	11.4%	-24.7%	-17.0%	-9.6%	-1.1%	-13.4%	16.7%
BCOM Index Spot	5.8%	-10.5%	7.6%	23.1%	-18.4%	-17.0%	-8.7%	3.7%	-8.1%	26.4%
Stocks										
S&P 500 Index TR	7.1%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%
Bonds										
Barclays U.S. Aggregate	0.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%
Currencies										
Bloomberg U.S. Dollar Spot Index	-1.3%	3.1%	-8.5%	2.8%	9.0%	11.0%	3.3%	-0.7%	1.8%	-1.8%
US Dollar Index	-0.7%	4.4%	-9.9%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%
US Trade Weighted Broad Dollar		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	1M	MTD % Change	3 Mth % Change	YTD % Change	1Y Yr % Change	2 Yr % Change
▼ BCOM Total Return Indices						
Live Cattle Index	--	1.3	4.7	1.3	4.3	14.4
Wheat Index	0-	2.8	1.8	2.8	0.5	-9.7
Gold Index	01	3.1	8.6	3.1	-2.1	7.7
Cotton Index	00	3.3	-4.7	3.3	-2.7	1.5
Natural Gas Index	--	-1.1	-7.2	-1.1	-4.3	-25.7
Heating Oil Index	--	12.7	-15.2	12.7	-6.2	16.3
Corn Index	--	0.6	1.2	0.6	-7.0	-17.5
Silver Index	02	3.6	12.3	3.6	-7.6	-10.3
Brent Crude Index	--	12.8	-19.3	12.8	-7.7	13.4
Nickel Index	14	16.8	8.5	16.8	-8.4	23.6
HRW Wheat Index	--	2.3	-2.6	2.3	-9.4	-17.8
Soybean Meal Index	--	0.2	-0.1	0.2	-10.2	-13.7
Sugar Index	12	6.0	-2.9	6.0	-10.3	-44.2
Aluminum Index	0-	3.7	-2.6	3.7	-11.7	5.3
Soybean Oil Index	-0	8.6	6.5	8.6	-11.9	-16.5
WTI Crude Index	-0	17.9	-18.0	17.9	-12.6	2.0
Soybeans Index	--	2.5	6.6	2.5	-12.7	-18.6
Copper Index	02	6.1	4.7	6.1	-13.8	-0.9
Lean Hogs Index	--	-7.1	-10.3	-7.1	-14.3	-13.7
Platinum Index	10	3.2	-2.3	3.2	-18.0	-17.8
Zinc Index	11	11.1	11.0	11.1	-18.3	2.1
Coffee Index	3-	4.2	-8.4	4.2	-20.8	-41.1
Gasoline Index	--	5.2	-21.8	5.2	-27.8	-15.6

Historical

Name	2019↓	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ BCOM Total Return Indices										
WTI Crude Index	18.9%	-20.5%	5.1%	7.1%	-44.3%	-41.7%	6.8%	-11.8%	-3.6%	3.8%
Nickel Index	15.6%	-16.4%	25.6%	11.8%	-42.6%	7.3%	-20.1%	-10.2%	-24.7%	32.2%
Brent Crude Index	14.0%	-14.9%	14.2%	25.4%	-45.6%	-47.6%	7.2%	7.6%	16.8%	11.5%
Heating Oil Index	13.8%	-15.7%	15.0%	33.5%	-42.8%	-38.8%	0.4%	5.5%	10.7%	8.3%
Zinc Index	9.6%	-21.4%	29.7%	57.5%	-28.0%	3.5%	-7.0%	9.0%	-27.8%	-8.8%
Soybean Oil Index	9.4%	-19.2%	-7.0%	7.3%	-7.7%	-20.6%	-22.4%	-9.8%	-15.2%	33.8%
Gasoline Index	7.1%	-28.3%	2.8%	6.4%	-12.6%	-43.8%	1.9%	25.7%	14.5%	13.1%
Copper Index	5.4%	-21.2%	29.2%	15.7%	-25.1%	-16.6%	-8.8%	5.0%	-24.4%	29.5%
Sugar Index	4.4%	-26.1%	-25.4%	22.8%	-4.7%	-30.9%	-20.0%	-13.0%	-11.9%	24.0%
Aluminum Index	3.6%	-16.9%	31.2%	9.7%	-22.9%	-3.1%	-20.7%	-4.0%	-21.7%	5.4%
Cotton Index	3.2%	-7.3%	12.5%	10.5%	3.0%	-21.2%	9.0%	-12.7%	-21.7%	98.2%
Soybeans Index	3.1%	-11.7%	-8.1%	14.8%	-14.6%	-5.5%	10.5%	24.0%	-16.4%	34.9%
HRW Wheat Index	3.0%	-3.1%	-14.9%	-25.3%	-32.7%	-4.7%	-26.2%	5.6%	-22.9%	42.1%
Wheat Index	2.9%	3.5%	-12.5%	-24.1%	-22.2%	-9.4%	-27.2%	9.8%	-34.0%	21.2%
Silver Index	2.7%	-10.2%	5.8%	14.0%	-12.7%	-20.4%	-36.6%	7.1%	-10.1%	81.8%
Live Cattle Index	2.7%	2.6%	9.1%	-7.4%	-14.3%	22.1%	-5.0%	-3.9%	-1.0%	15.0%
Gold Index	2.4%	-2.8%	12.8%	7.7%	-10.9%	-1.7%	-28.7%	6.1%	9.6%	28.7%
Platinum Index	2.2%	-14.8%	3.0%	0.8%	-26.5%	-12.3%	-11.8%	8.7%	-21.8%	19.3%
Corn Index	1.9%	-4.6%	-12.1%	-9.8%	-19.2%	-13.3%	-30.3%	19.0%	1.1%	30.7%
Soybean Meal Index	0.6%	-4.4%	-4.8%	18.1%	-18.0%	11.8%	20.0%	49.1%	-18.1%	38.9%
Coffee Index	0.4%	-26.5%	-16.0%	-1.3%	-31.5%	37.8%	-30.5%	-41.6%	-11.2%	67.0%
Natural Gas Index	0.3%	-0.1%	-36.4%	10.3%	-39.9%	-30.7%	5.0%	-30.6%	-47.1%	-40.6%
Lean Hogs Index	-4.0%	-11.0%	2.8%	-2.9%	-26.1%	-4.4%	-2.0%	-2.9%	-4.6%	0.3%

Bloomberg Commodity Outlook – February 2019 Edition

Bloomberg Commodity Index (BCOM)

Performance – Prices

Key Metrics

Name	Unit	MTD % Change	3 Mth % Change	YTD % Change	1Y Yr % Change	2Y Yr % Change
BCOM Single Commodity Price						
Palladium	\$/lb	9.1	22.3	9.1	27.6	73.2
Wheat	\$/bu	2.6	3.2	2.6	14.3	22.8
HRW Wheat	\$/bu	2.1	1.2	2.1	6.8	16.2
Corn	\$/bu	0.4	3.6	0.4	4.1	4.7
Live Cattle	\$/cwt	0.7	6.7	0.7	0.8	8.0
Gold	\$/oz	3.0	8.6	3.0	-1.4	9.2
Cotton	\$/lb	3.0	-3.2	3.0	-3.7	-0.7
Sugar	\$/cwt	5.8	-3.5	5.8	-3.8	-37.8
Natural Gas	\$/mmBtu	-4.0	-13.4	-4.0	-5.7	-9.4
Gas Oil	\$/bbl	12.4	-19.1	12.4	-6.1	16.3
Silver	\$/oz	3.4	12.5	3.4	-6.8	-8.4
Soybeans	\$/bu	3.7	9.1	3.7	-8.1	-10.7
Soybean Meal	\$/bu	1.2	1.2	1.2	-8.2	-7.4
Nickel	\$/lb	16.9	8.6	16.9	-8.4	25.3
Soybean Oil	\$/gal	9.5	7.7	9.5	-8.8	-10.9
Heating Oil	\$/gal	11.8	-16.9	11.8	-9.2	16.6
Brent Crude	\$/bbl	15.0	-18.0	15.0	-10.4	11.1
Copper (CME)	\$/lb	5.8	4.7	5.8	-12.9	2.1
Coffee	\$/lb	4.0	-6.0	4.0	-13.1	-29.2
Copper (LME)	\$/lb	3.3	2.5	3.3	-13.1	2.9
Aluminum	\$/lb	4.3	-2.4	4.3	-14.5	5.2
WTI Crude	\$/bbl	18.8	-17.4	18.8	-16.7	2.1
Platinum	\$/oz	3.4	-2.3	3.4	-18.0	-17.4
Lean Hogs	\$/cwt	-7.7	-3.8	-7.7	-23.2	-18.6
Zinc	\$/lb	10.3	7.5	10.3	-23.3	-4.0
Gasoline	\$/gal	2.9	-22.9	2.9	-28.6	-10.7

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
BCOM Single Commodity Price										
WTI Crude	21.3%	-24.8%	12.5%	45.0%	-30.5%	-45.9%	7.2%	-7.1%	8.2%	15.1%
Nickel	15.7%	-16.5%	27.5%	13.5%	-41.8%	9.0%	-18.6%	-9.2%	-24.2%	33.8%
Brent Crude	15.7%	-19.5%	17.7%	52.4%	-35.0%	-48.3%	-0.3%	3.5%	13.3%	21.6%
Gas Oil	14.1%	-14.9%	19.8%	53.6%	-36.3%	-45.8%	1.9%	0.3%	21.2%	20.0%
Heating Oil	14.0%	-19.0%	21.8%	54.8%	-40.4%	-40.0%	1.1%	3.8%	15.4%	20.1%
Palladium	12.1%	12.8%	55.3%	21.6%	-29.6%	11.2%	2.1%	7.2%	-18.3%	96.5%
Soybean Oil	10.4%	-16.7%	-3.9%	12.7%	-4.4%	-17.6%	-21.0%	-5.6%	-9.8%	43.1%
Zinc	8.9%	-25.6%	30.1%	60.2%	-26.2%	6.0%	-0.5%	12.2%	-25.2%	-3.5%
Sugar	6.2%	-20.6%	-22.3%	28.0%	5.0%	-11.5%	-15.9%	-16.3%	-27.5%	19.2%
Copper (CME)	5.8%	-20.3%	31.7%	17.4%	-24.4%	-16.8%	-7.0%	6.3%	-22.7%	32.9%
Soybeans	5.0%	-7.3%	-4.5%	14.4%	-14.5%	-22.3%	-7.5%	18.4%	-14.0%	34.0%
Gasoline	4.7%	-26.4%	8.1%	31.4%	-11.7%	-48.5%	-0.9%	4.7%	9.5%	19.5%
Aluminum	4.2%	-19.3%	33.3%	12.5%	-17.9%	4.1%	-13.9%	2.5%	-18.8%	11.6%
Silver	4.2%	-9.4%	7.2%	15.8%	-11.5%	-19.5%	-35.9%	8.3%	-9.8%	83.7%
Platinum	3.8%	-14.8%	3.6%	1.1%	-26.2%	-11.8%	-10.9%	9.9%	-21.1%	21.5%
Coffee	3.5%	-19.3%	-7.9%	8.2%	-23.9%	50.5%	-23.0%	-36.6%	-5.7%	76.9%
Cotton	3.2%	-8.2%	11.3%	11.6%	5.0%	-28.8%	12.6%	-18.1%	-36.6%	91.5%
Gold	3.2%	-2.1%	13.7%	8.6%	-10.5%	-1.5%	-28.3%	7.0%	10.2%	29.7%
Wheat	3.1%	17.9%	4.7%	-13.2%	-20.3%	-2.6%	-22.2%	19.2%	-17.8%	46.7%
Copper (LME)	2.8%	-17.4%	30.6%	17.3%	-25.8%	-13.9%	-6.8%	4.2%	-21.2%	31.2%
HRW Wheat	2.3%	14.4%	2.1%	-10.7%	-25.2%	-2.2%	-22.9%	15.9%	-15.7%	58.7%
Soybean Meal	2.1%	-2.0%	-0.1%	18.4%	-27.5%	-16.7%	4.1%	35.9%	-16.4%	18.0%
Live Cattle	1.8%	1.9%	4.7%	-15.2%	-16.4%	21.5%	1.8%	8.9%	12.1%	25.9%
Corn	1.5%	6.9%	-0.4%	-1.9%	-9.6%	-5.9%	-39.6%	8.0%	2.8%	51.7%
Natural Gas	-2.7%	-0.4%	-20.7%	59.3%	-19.1%	-31.7%	26.2%	12.1%	-32.1%	-20.9%
Lean Hogs	-5.5%	-15.0%	8.5%	10.6%	-26.4%	-4.9%	-0.3%	1.7%	5.7%	22.3%

Bloomberg Commodity Outlook – February 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											
Crude Oil	34.0	-3.5	-1.3	-29.7	-27.3	29.2	-29.7	70.0	16.0	-35.6	82.2
Unlead Gas	33.8	-2.9	0.4	-11.3	-18.7	27.0	-11.3	72.9	25.4	-23.8	92.0
Brent Crude	33.2	-2.1	-2.0	-22.2	-24.3	29.3	-22.2	75.0	12.1	-39.4	102.3
Gas Oil	30.0	-3.7	-4.4	-30.6	-29.2	26.2	-30.6	56.6	1.0	-42.2	90.3
Heating Oil	29.4	-2.4	-2.0	-18.7	-22.3	22.8	-18.7	44.0	5.3	-37.9	79.1
Lean Hogs	29.0	-0.8	-3.5	2.2	1.9	-15.5	2.2	32.4	16.1	29.1	98.1
Nickel	28.2	6.8	12.2	-5.8	-5.9	-7.7	-5.8	-28.3	-3.5	-13.9	16.5
Coffee	28.1	-3.0	-10.0	9.6	10.6	2.2	9.6	29.0	-6.6	-6.7	12.3
Palladium	27.5	-2.5	-5.4	5.4	5.9	8.3	5.4	16.1	-1.2	-8.4	37.5
Natural Gas	24.3	4.0	-3.8	-28.5	-23.6	-46.8	-28.5	-4.5	-36.9	-33.0	-28.4
Sugar	23.7	-3.3	-0.3	9.8	7.5	-15.4	9.8	4.1	-12.6	-19.2	20.0
Zinc	21.6	8.5	64.0	-11.5	-11.5	-19.3	-11.5	-1.7	-33.3	-29.8	38.7
HRW Wheat	21.1	-2.0	-7.3	7.0	7.1	-0.4	7.0	-18.1	3.3	-6.9	10.7
Wheat	20.6	-0.3	-4.9	9.1	6.9	1.0	9.1	-14.2	-4.2	-12.6	0.5
Cotton	20.3	0.1	-2.1	2.6	1.9	9.4	2.6	-6.7	-6.8	16.8	-6.2
Copper (COMEX)	19.0	6.9	8.2	5.9	0.7	-6.2	5.9	3.1	-17.5	-24.6	26.7
Copper (LME)	18.7	2.8	11.3	-5.4	2.4	-3.5	-5.4	-2.3	-25.4	-14.5	13.6
Silver	17.5	4.3	5.0	-10.9	-12.1	1.9	-10.9	-1.7	-23.0	-25.3	-35.2
Corn	16.9	2.9	1.7	8.1	10.0	13.0	8.1	12.6	-8.2	-7.6	-2.5
Platinum	16.6	0.4	1.8	-3.5	-2.7	-1.1	-3.5	8.6	-13.6	-28.3	-6.8
Aluminum	16.4	-11.4	9.1	-14.6	-27.3	-8.4	-14.6	-25.2	-27.0	-24.0	-1.6
Soybean Meal	16.2	0.8	-0.2	10.7	9.3	-10.0	10.7	-21.4	-25.0	-12.3	-13.7
Soybeans	15.7	0.3	-1.6	15.8	13.9	8.9	15.8	10.2	-8.9	6.0	2.2
Soybean Oil	14.7	0.2	3.2	2.3	0.8	0.0	2.3	2.7	-24.6	-18.6	-2.5
Live Cattle	13.0	-1.3	-0.6	1.0	2.2	-11.1	1.0	-27.3	-34.2	-37.3	47.5
Gold	11.2	13.9	4.6	-9.6	-7.3	9.9	-9.6	0.8	-18.2	-28.1	-30.3
▼ BCOM 60 Day Historical Volatility											
Natural Gas	101.6	0.2	1.7	12.9	17.4	266.8	12.9	83.6	78.8	86.4	102.9
Crude Oil	49.5	0.3	1.3	8.2	8.3	104.1	8.2	149.9	36.0	-10.9	183.8
Brent Crude	46.5	-0.1	1.2	5.4	7.2	106.7	5.4	159.8	25.3	-5.4	196.6
Unlead Gas	45.5	0.8	1.6	5.3	5.4	58.4	5.3	101.7	30.9	-1.4	134.5
Lean Hogs	41.7	0.0	0.1	-30.6	-30.6	-31.0	-30.6	57.6	29.0	23.3	134.0
Gas Oil	34.8	0.3	2.9	9.4	13.8	118.2	9.4	92.4	13.6	-26.2	163.8
Heating Oil	33.7	-0.2	2.4	8.7	9.3	80.5	8.7	67.1	4.8	-31.2	104.3
Coffee	33.5	-0.9	-2.2	-11.1	-11.5	-0.9	-11.1	48.9	20.4	10.5	12.8
Palladium	27.8	-0.8	1.0	3.2	3.3	10.2	3.2	43.6	-20.3	-21.8	79.7
Sugar	27.7	-0.7	1.6	17.6	18.8	-29.9	17.6	14.3	-1.8	-17.1	86.7
Zinc	24.6	-0.3	-1.0	-5.3	-4.9	-23.5	-5.3	42.0	-30.3	-15.4	57.0
Live Cattle	23.9	-0.1	-0.3	-6.2	-5.7	-24.5	-6.2	13.1	5.3	-8.9	207.3
HRW Wheat	23.9	-0.1	-0.3	-6.2	-5.7	-24.5	-6.2	13.1	5.3	-4.2	41.5
Copper (CME)	22.3	-3.1	-2.8	7.2	9.0	1.4	7.2	13.4	-7.0	-4.0	69.0
Cotton	22.0	0.1	-3.4	-5.1	-5.1	6.9	-5.1	9.4	34.5	28.6	24.0
Wheat	20.3	0.2	-0.2	-12.4	-11.6	-34.0	-12.4	-7.7	-20.9	-13.0	34.4
Nickel Gas	19.8	0.4	0.5	-1.1	-2.1	-29.6	-1.1	-43.3	-41.9	-37.5	6.3
Aluminum	19.6	0.6	7.0	30.3	27.5	-15.5	30.3	3.0	21.1	-4.9	32.5
Platinum	18.1	-1.2	-4.8	0.9	1.4	-8.5	0.9	2.5	-35.7	-30.5	11.1
Copper (LME)	17.3	-0.1	-7.5	2.2	-0.2	-21.4	2.2	-7.5	-30.9	-24.1	47.7
Silver	16.0	0.1	-9.3	-13.1	-12.9	-12.0	-13.1	-13.2	-45.4	-34.2	-42.2
Soybean Oil	15.0	0.5	0.8	-3.0	-3.2	4.6	-3.0	9.9	-33.2	-29.3	11.0
Soybeans	14.9	-0.4	-9.9	-16.4	-17.1	-28.4	-16.4	18.5	-22.6	3.1	-10.5
Corn	13.2	-0.5	-1.1	-6.3	-6.3	-39.4	-6.3	-1.5	-36.3	-26.6	-29.4
Soybean Meal	12.5	-0.8	-6.9	-25.2	-27.9	-43.9	-25.2	-29.3	-50.1	-28.8	-59.4
Gold	8.6	-0.8	-10.9	-24.0	-24.0	-23.7	-24.0	-17.2	-42.2	-43.9	-51.5

Bloomberg Commodity Outlook – February 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	-1.6	-3.3	0.1	0.1	-0.6	-1.5	-2.0
▼ Sector								
▶ Industrial Metals	-0.8	-0.8	-0.1	0.3	0.3	0.3	-0.2	0.2
▶ Energy	-2.6	5.9	-8.4	-0.4	-0.4	-2.1	-4.2	2.0
▶ Precious Metals	-3.1	-2.8	-0.4	0.0	0.0	0.0	0.1	-1.3
▶ Livestock	-5.2	6.9	-12.1	-3.5	-3.5	-4.5	-4.2	-12.6
▶ Agriculture	-8.5	-7.1	-1.4	0.4	0.4	0.2	-0.7	-4.3
▼ Single Commodities								
Live Cattle	6.6	6.6	0.0	1.4	1.4	-0.4	5.9	-6.6
Zinc	4.5	3.0	1.5	1.1	1.1	0.9	0.5	4.2
Palladium	3.5	1.5	2.0	-0.6	-0.6	-0.7	1.3	3.9
Brent Crude	0.7	6.5	-5.9	3.8	3.8	3.7	-1.4	2.4
Copper (LME)	-0.6	-1.6	0.9	-0.7	-0.7	-0.6	-1.0	-0.1
Copper (CME)	-1.0	-2.5	1.5	-0.2	-0.2	-0.5	1.2	0.2
Cotton	-1.3	3.3	-4.6	1.5	1.5	1.5	-1.5	-4.4
Crude Oil	-1.5	7.9	-9.4	5.6	5.6	4.2	-1.7	3.7
Thermal Coal	-1.5	7.2	-8.7	-9.0	-9.0	-9.0	-1.8	
Platinum	-1.8	-1.6	-0.2	0.2	0.2	0.3	-0.4	-0.7
Gas Oil	-2.2	4.2	-6.4	1.8	1.8	2.8	-3.8	2.7
Nickel	-2.5	-1.5	-1.0	0.6	0.6	0.6	0.0	-0.2
Heating Oil	-2.7	3.6	-6.3	0.7	0.7	1.0	-2.8	4.1
Gold	-2.8	-2.4	-0.4	0.1	0.1	0.0	0.1	-1.3
Silver	-3.4	-3.1	-0.3	-0.1	-0.1	-0.1	0.0	-1.3
Natural Gas	-4.0	4.0	-8.0	-2.0	-2.0	-10.6	-12.7	4.2
Soybean Meal	-4.5	-0.5	-4.0	0.8	0.8	0.8	-2.6	-6.7
Aluminum	-4.6	-1.3	-3.2	0.7	0.7	1.2	-1.5	-2.9
Soybean Oil	-5.4	-2.5	-2.8	0.9	0.9	0.8	0.4	-3.7
Soybean	-5.7	-2.0	-3.6	1.5	1.5	1.5	2.4	-7.3
Unleaded Gas	-6.7	7.7	-14.5	-3.6	-3.6	-6.5	-4.8	-4.9
Corn	-8.3	-11.1	2.9	0.3	0.3	0.1	1.2	1.5
Wheat	-8.5	-16.2	7.7	1.5	1.5	1.1	4.4	9.7
HRW Wheat	-11.5	-16.0	4.5	2.0	2.0	1.7	5.3	5.4
Sugar	-11.7	-10.6	-1.0	-2.3	-2.3	-3.3	-5.1	-13.3
Coffee	-16.2	-11.3	-4.9	-0.2	-0.2	-0.1	-3.3	-7.5
Lean Hogs	-17.0	7.2	-24.2	-8.4	-8.4	-8.6	-14.3	-18.6

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										
▶ Industrial Metals	-0.8	-1.2	-0.8	-0.8	-1.5	-0.8	-1.8	-2.5	-2.1	0.5
▶ Energy	-2.7	-2.2	4.3	0.4	-14.0	-11.3	3.5	-1.3	-2.5	-2.1
▶ Precious Metals	-3.1	-3.1	-2.3	-1.7	-1.0	-0.8	-0.7	-0.7	-0.7	-0.9
▶ Livestock	-5.2	-1.7	6.5	8.1	0.6	8.3	4.1	-0.7	-0.2	-1.8
▶ Agriculture	-8.5	-8.9	-5.9	-4.2	-5.5	-5.6	-1.5	-2.3	-1.8	12.2
▼ Single Commodities										
Live Cattle	6.6	5.2	6.3	13.3	8.1	7.0	2.5	-3.3	-4.5	-3.8
Zinc	4.5	3.4	3.4	0.2	-2.8	-1.4	-2.3	-4.5	-3.9	-1.7
Palladium	3.5	4.1	1.5	-0.5	-0.2	-0.1	-0.5	-0.2	-0.4	0.0
Brent Crude	0.7	-3.1	6.3	-3.1	-22.1	-16.4	4.9	6.3	4.0	-0.4
Copper (LME)	-0.6	0.0	-1.3	-0.3	0.3	1.6	1.1	-0.7	-0.3	2.7
Copper (CME)	-1.0	-0.8	-1.8	-0.8	-1.1	-0.2	1.3	-1.1	-0.8	2.5
Cotton	-1.3	-2.9	6.1	1.7	-2.7	-8.6	6.7	-5.7	3.6	34.6
Crude Oil	-1.5	-7.1	5.0	-5.9	-20.4	-13.5	7.3	-1.3	1.4	-3.2
Platinum	-1.8	-2.0	-1.4	-1.1	-0.4	-0.4	-0.5	-0.7	-1.0	-0.5
Gas Oil	-2.2	-4.0	6.2	-4.8	-23.8	-12.0	3.1	2.9	3.0	-4.2
Thermal Coal	-2.5	7.5	5.4	18.4	14.0	1.7	1.9	-8.3	-6.2	11.2
Nickel	-2.5	-3.1	-2.0	-1.9	-1.4	-1.1	-1.8	-1.4	-0.1	1.1
Heating Oil	-2.7	-3.4	5.9	-4.5	-24.5	-4.5	3.2	2.1	2.1	-3.4
Gold	-2.8	-2.9	-2.2	-1.5	-0.5	-0.3	-0.4	-0.7	-0.9	-0.9
Silver	-3.4	-3.3	-2.5	-2.0	-1.4	-1.2	-0.9	-0.7	-0.5	-0.9
Natural Gas	-4.0	-2.0	-3.7	-0.1	-22.6	-22.2	-3.2	-20.7	-29.9	-18.4
Soybean Meal	-4.5	-5.3	-3.4	-0.4	-5.7	9.8	19.9	12.5	-2.4	9.9
Aluminum	-4.6	-5.3	-2.3	-1.0	-2.7	-3.1	-7.5	-5.0	-5.2	-2.3
Soybean Oil	-5.4	-6.2	-1.1	-1.2	-3.1	-0.9	-3.8	-2.8	-1.6	-0.9
Soybean	-5.7	-7.2	-3.3	0.4	-2.0	0.9	13.1	7.7	-1.2	5.9
Unleaded Gas	-6.7	-3.2	4.7	2.8	1.0	-12.3	7.0	9.8	7.9	3.7
Corn	-8.3	-8.5	-12.1	-10.5	-9.5	-8.1	-9.2	12.7	7.2	9.4
Wheat	-8.5	-10.0	-15.5	-17.1	-10.5	-5.0	-7.2	-6.9	-12.4	-8.7
HRW Wheat	-11.5	-13.5	-19.1	-16.1	-14.9	-6.3	-5.5	-5.7	-7.9	-3.1
Sugar	-11.7	-9.3	-3.5	4.8	0.9	-13.1	-8.2	-5.5	-0.3	26.0
Coffee	-16.2	-16.0	-10.9	-9.2	-8.4	-7.4	-11.2	-11.5	-4.9	6.1
Lean Hogs	-17.0	-8.6	6.7	2.9	-7.0	9.6	5.7	2.0	4.2	0.2

Bloomberg Commodity Outlook – February 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
▼ 1 Year Gross Yield						
▼ Sector Roll Yield						
BCOM Energy	4.9	-1.9	-7.9	12.8	-31.0	35.9
BCOM Livestock	1.7	0.1	-0.3	2.0	2.1	-0.4
BCOM Industrial Metals	0.2	-0.8	-4.7	4.9	-2.1	2.3
BCOM Precious Metals	-0.7	-1.0	-2.7	2.0	-1.3	0.6
BCOM	-0.9	-3.3	-5.4	4.5	-11.8	10.9
BCOM Softs	-5.1	-3.5	-3.2	-1.9	-7.2	2.1
BCOM Grains	-9.8	-10.9	-11.5	1.7	-6.9	-3.0
BCOM Agriculture		-7.8	-7.5			
▼ Commodities Roll Yield						
Lean Hogs	9.3	4.8	-6.4	15.7	-15.1	24.4
Crude Oil	4.1	2.4	-4.8	8.9	-39.5	43.6
Zinc	4.0	1.6	-4.1	8.1	-2.0	6.0
Brent Crude	4.0	9.2	-2.7	6.7	-28.5	32.5
Gas Oil	3.7	6.8	0.0	3.7	-21.6	25.3
Heating Oil	3.1	2.3	-3.9	7.0	-19.3	22.4
Aluminum	2.2	0.1	-4.7	6.8	-1.8	3.9
Natural Gas	1.0	-14.1	-18.7	19.7	-40.7	41.7
Cotton	0.7	4.5	0.1	0.5	-1.2	1.8
Unlead Gas	0.6	-0.6	-7.5	8.1	-25.7	26.2
Platinum	-0.4	-0.3	-0.5	0.1	-0.8	0.5
Copper (CME)	-1.0	-1.7	-2.3	1.3	-2.3	1.3
Gold	-1.2	-0.7	-1.0	-0.3	-1.0	-0.2
Silver	-1.5	-0.8	-1.6	0.1	-1.8	0.3
Nickel	-1.6	-0.7	-5.8	4.2	-1.6	0.0
Soybean Meal	-2.0	-5.7	-4.9	2.9	-1.4	-0.6
Sugar	-3.0	-6.0	-3.1	0.0	-6.2	3.2
Soybean Oil	-3.1	-2.4	-3.7	0.5	-5.3	2.2
Soybean	-4.3	-3.3	-4.1	-0.2	-1.5	-2.8
Coffee	-7.1	-7.6	-6.3	-0.8	-11.4	4.3
Corn	-11.3	-10.8	-12.3	1.0	-8.1	-3.2
Wheat	-12.4	-16.9	-19.5	7.1	-11.2	-1.3
HRW Wheat	-15.8	-17.4	-19.1	3.4	-15.1	-0.7

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
▼ 1 Year Gross Yield										
▼ Sector Roll Yield										
BCOM Energy	4.9	3.6	-7.7	-32.5	-12.6	1.6	-5.1	-11.7	-11.0	-13.8
BCOM Livestock	1.7	1.8	0.5	0.2	1.1	-0.2	-4.5	-9.8	-12.3	-14.8
BCOM Industrial Metals	0.2	0.7	-3.0	-2.0	-1.8	-2.1	-3.9	-3.3	-2.2	-4.1
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	-5.1	-4.5	-4.2	-5.6	-7.4	-12.5	-4.9	0.9	9.0	0.5
BCOM Agriculture	-6.8	-7.1	-8.0	-6.1	-4.1	-1.0	4.9	1.9	-1.9	-9.6
BCOM Grains	-9.8	-10.1	-10.7	-7.0	-4.7	0.7	8.2	3.6	-5.8	-12.6
▼ Commodities Roll Yield										
Lean Hogs	9.3	4.1	-8.2	-13.6	0.3	0.6	-1.7	-4.5	-9.6	-23.8
Crude Oil	4.1	4.4	-7.3	-38.2	-14.0	4.3	-0.3	-4.5	-9.7	-11.3
Zinc	4.0	4.2	-3.1	-2.7	-2.5	-4.6	-8.8	-3.1	-3.0	-5.3
Brent Crude	4.0	4.7	-4.9	-27.7	-23.3	0.3	6.9	4.2	8.3	-12.5
Gas Oil	3.7	3.9	-0.9	-22.7	-11.0	-1.6	2.1	7.4	2.1	-12.3
Live Cattle	3.2	0.6	4.4	7.8	2.0	0.6	-6.8	-12.8	-12.5	-12.2
Heating Oil	3.1	3.4	-6.4	-25.3	-3.0	1.1	-1.3	1.0	-2.9	-11.7
Aluminum	2.2	2.4	-3.2	-2.9	-6.0	-9.1	-8.4	-6.2	-3.3	-6.0
Natural Gas	1.0	0.3	-14.0	-52.6	-19.8	0.8	-22.3	-42.7	-13.8	-16.1
Cotton	0.7	0.9	1.0	-1.1	-2.1	7.7	-3.6	5.2	15.5	14.3
Unlead Gas	0.6	-0.6	-4.0	-27.2	1.1	4.7	1.3	18.9	4.5	-6.9
Platinum	-0.4	0.0	-1.1	-0.4	-0.2	-0.5	-0.8	-1.2	0.9	-2.7
Copper (CME)	-1.0	-1.0	-3.5	-1.6	-0.7	0.3	-1.7	-1.3	-0.1	-3.6
Gold	-1.2	-0.7	-0.3	-0.9	-0.4	-0.2	-0.4	-0.9	2.9	-1.0
Silver	-1.5	-0.8	0.1	-1.8	-1.2	-0.9	-0.7	-1.1	4.5	-5.1
Nickel	-1.6	0.1	-0.6	-1.7	0.5	-2.9	-2.3	-1.0	-1.7	-1.6
Soybean Meal	-2.0	-2.3	-4.8	-0.5	9.6	28.7	16.5	13.0	-1.3	20.7
Sugar	-3.0	-5.4	-3.2	-5.2	-9.9	-19.5	-4.1	3.1	18.7	4.6
Soybean Oil	-3.1	-2.5	-2.9	-5.4	-3.2	-2.9	-1.3	-4.2	-4.2	-8.5
Soybean	-4.3	-4.4	-3.0	0.2	-0.2	17.0	18.5	5.5	-1.8	0.5
Coffee	-7.1	-7.2	-9.2	-9.7	-7.8	-12.6	-7.2	-5.0	-3.4	-8.5
Corn	-11.3	-11.5	-12.4	-7.9	-9.6	-7.4	9.4	10.8	0.4	-20.9
Wheat	-12.4	-14.3	-18.0	-10.9	-1.9	-7.0	-5.1	-9.4	-14.6	-23.8
HRW Wheat	-15.8	-17.5	-17.8	-14.7	-7.6	-2.5	-3.3	-4.1	-7.6	-9.9

Bloomberg Commodity Outlook – February 2019 Edition

Bloomberg Commodity Index (BCOM)

Curve Analysis – Forwards / Forecasts Spread %

Name	1/2019	12/2018	11/2018	10/2018	9/2018	8/2018	7/2018	6/2018	5/2018	4/2018	3/2018	2/2018
▼ 1 Yr Spread ((Forward-Forecast)/ Forecast												
▼ Energy												
WTI Crude Spread %	-8.9	-2.8	-3.1	-0.9	2.4	1.2	2.6	6.1	4.3	7.3	3.6	0.3
Brent Crude Spread %	-8.0	-1.1	-1.8	1.3	4.1	3.8	5.7	7.1	8.9	9.8	4.6	0.3
ULS Diesel Spread %	-12.6	-1.5	-0.8	1.7	2.2	1.1	0.2	8.4	9.6	6.1	2.6	0.8
Unleaded Gasoline Spread %	-17.4	-2.0	-1.8	-1.4	2.8	-0.1	-0.3	-0.1	1.4	3.5	1.3	-0.2
▼ Soft												
Sugar Spread %	2.9	-3.0	-1.2	3.3	-3.6	-2.0	-5.8	-2.3	0.7	-6.2	-6.9	-4.0
Coffee Spread %	-10.3	-9.2	-5.8	-4.8	-6.8	-9.0	-5.6	-5.6	-2.5	-1.3	-4.0	-4.3
Cotton Spread %	-2.5	-1.2	-1.7	-2.8	-2.5	-1.9	3.1	-0.2	9.9	2.5	5.1	10.2
▼ Industrial Metals												
Copper Spread % (LME)	-6.0	-0.8	-1.1	-1.9	-1.7	-3.4	-5.2	-2.9	-1.3	-2.5	-3.5	3.3
Aluminum Spread %	-4.8	-0.8	-1.5	-1.5	-1.0	0.6	-0.4	0.2	3.9	3.3	-3.9	2.7
Zinc Spread %	-2.2	-2.2	-2.5	-2.9	-4.9	-7.2	-7.3	-4.2	-0.4	-2.1	2.8	7.5
Nickel Spread %	-1.7	-3.9	-3.8	-3.4	-3.1	-0.8	1.9	8.4	10.8	5.1	10.3	14.5
▼ Precious Metals												
Gold Spread %	3.8	0.0	-0.5	-0.3	-1.7	-1.7	-2.5	-2.2	0.3	1.1	1.5	1.8
Silver Spread %	1.6	-1.2	-1.8	-2.4	-4.3	-4.5	-2.5	-4.1	-2.3	-2.6	-3.2	-3.6
▼ Grain												
Corn Spread %	1.1	-1.2	-2.3	-3.2	-3.4	-5.1	-3.5	-5.9	2.4	4.4	3.6	3.0
Soybeans Spread %	-1.8	-2.7	-2.6	-3.4	-3.3	-5.4	-7.1	-8.0	0.6	2.6	4.4	4.3
Wheat Spread %	4.3	-0.7	-2.3	-2.5	-1.4	1.0	5.2	0.0	10.3	8.6	2.7	9.1

Data Set

Name	1/2019	12/2018	11/2018	10/2018	9/2018	8/2018	7/2018	6/2018	5/2018	4/2018	3/2018	2/2018
▼ Data Set												
▼ 1 Yr Spread												
▼ Energy												
Natural Gas Forward	2.94	3.15	3.24	3.00	2.98	2.93	2.91	2.97	2.94	2.84	2.87	2.83
WTI Crude Forward	55.1	64.4	64.9	67.4	68.6	67.8	67.6	68.2	66.7	66.0	63.2	60.2
WTI Crude Forecast	60.5	66.3	67.0	68.0	67.0	67.0	65.9	64.3	64.0	61.5	61.0	60.0
Brent Crude Forward	61.5	71.7	72.4	75.0	76.2	75.1	74.3	74.8	74.6	71.4	67.5	63.9
Brent Crude Forecast	66.9	72.5	73.7	74.0	73.2	72.3	70.3	69.8	68.5	65.0	64.5	63.8
ULS Diesel Forward	1.91	2.09	2.11	2.18	2.19	2.17	2.14	2.14	2.17	2.10	2.01	1.92
ULS Diesel Forecast	2.19	2.13	2.13	2.14	2.14	2.14	2.14	1.98	1.98	1.98	1.96	1.91
Unleaded Gasoline Forward	1.54	1.93	1.94	2.00	2.06	2.03	2.03	2.01	2.04	1.98	1.91	1.83
Unleaded Gasoline Forecast	1.87	1.97	1.97	2.03	2.01	2.04	2.04	2.01	2.01	1.91	1.88	1.83
▼ Soft												
Sugar Forward	0.13	0.12	0.12	0.12	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14
Sugar Forecast	0.13	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14
Coffee Forward	1.09	1.04	1.08	1.09	1.06	1.08	1.13	1.16	1.21	1.24	1.22	1.25
Coffee Forecast	1.21	1.15	1.15	1.15	1.13	1.19	1.20	1.23	1.24	1.25	1.27	1.31
Cotton Forward	0.75	0.81	0.82	0.82	0.82	0.84	0.87	0.84	0.89	0.81	0.80	0.80
Cotton Forecast	0.77	0.82	0.83	0.84	0.84	0.86	0.85	0.85	0.81	0.79	0.76	0.73
▼ Industrial Metals												
Copper Forward (LME)	6,138	6,510	6,530	6,484	6,506	6,486	6,568	6,778	6,884	6,864	6,796	6,976
Copper Forecast (LME)	6,531	6,562	6,603	6,610	6,615	6,712	6,929	6,980	6,977	7,040	7,041	6,756
Aluminum Forward	1,928	2,113	2,117	2,124	2,139	2,180	2,169	2,204	2,268	2,228	2,048	2,149
Aluminum Forecast	2,025	2,130	2,150	2,158	2,161	2,168	2,178	2,200	2,182	2,158	2,131	2,093
Zinc Forward	2,648	2,860	2,856	2,853	2,832	2,835	2,875	3,062	3,186	3,201	3,301	3,441
Zinc Forecast	2,707	2,925	2,930	2,939	2,978	3,055	3,100	3,196	3,200	3,268	3,211	3,200
Nickel Forward	12,389	13,019	13,041	13,181	13,348	13,662	13,919	14,445	14,650	13,599	13,323	13,734
Nickel Forecast	12,603	13,552	13,552	13,651	13,778	13,774	13,660	13,323	13,219	12,940	12,075	12,000
▼ Precious Metals												
Gold Forward	1,330	1,268	1,263	1,263	1,253	1,258	1,269	1,283	1,317	1,329	1,334	1,330
Gold Forecast	1,282	1,268	1,270	1,268	1,275	1,280	1,301	1,312	1,313	1,315	1,314	1,306
Silver Forward	16.15	15.60	15.52	15.54	15.50	15.59	16.02	16.30	16.61	16.56	16.51	16.61
Silver Forecast	15.90	15.78	15.80	15.92	16.20	16.31	16.43	16.99	17.00	17.00	17.05	17.23
Platinum Forecast	900	885	887	885	885	903	925	945	953	963	975	963
Palladium Forecast	1,120.0	1,000.0	995.8	992.1	978.6	975.9	987.0	1,009.5	1,004.8	1,040.0	1,070.0	1,018.8
▼ Grain												
Corn Forward	4.0	3.7	3.6	3.6	3.6	3.6	3.7	3.7	4.0	4.0	3.9	3.9
Corn Forecast	3.9	3.7	3.7	3.7	3.8	3.8	3.9	3.9	3.9	3.8	3.8	3.8
Soybeans Forward	9.4	9.1	9.1	9.0	9.1	9.0	9.2	9.3	10.2	10.4	10.4	10.4
Soybeans Forecast	9.6	9.4	9.4	9.3	9.4	9.5	9.9	10.1	10.2	10.1	10.0	10.0
Wheat Forward	5.3	5.0	4.9	4.9	4.9	5.1	5.2	4.9	5.2	5.1	4.8	5.1
Wheat Forecast	5.1	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.7	4.7	4.6

Bloomberg Commodity Outlook – February 2019 Edition

Bloomberg Commodity Index (BCOM)

Market Flows – Open Interest

Key Metrics

Name	Current	MTD % Change	3 Mth % Change	YTD % Change	11 Yr % Change	2 Yr % Change	2 Year High
▼ Open Interest (Aggregate - 1,000s)							
▼ Single Commodities							
Coffee	308	13.2	7.7	13.2	29.4	67.4	341
Soybean Meal	462	7.7	-13.3	7.7	9.2	20.3	538
Live Cattle	388	4.9	13.5	4.9	6.0	9.6	432
Corn	1,691	6.9	0.8	6.9	0.4	24.6	2,007
Soybean Oil	500	5.0	-8.9	5.0	-1.8	25.0	606
Sugar	913	4.2	13.6	4.2	-2.6	9.3	1,062
Gas Oil	944	15.5	-5.5	15.5	-6.4	2.9	1,138
Aluminum	488	3.2	4.7	3.2	-8.4	-4.3	547
Brent Crude	2,337	8.3	8.5	8.3	-8.5	-3.4	2,704
Nickel	149	6.4	4.2	6.4	-10.2	-8.6	188
Platinum	82	0.0	9.3	0.0	-10.9	30.2	94
HRW Wheat	298	1.7	-6.6	1.7	-11.3	27.9	342
Soybean	692	4.2	-10.9	4.2	-12.1	-5.9	976
Copper (LME)	166	3.1	-8.3	3.1	-12.6	-22.1	219
Lean Hogs	214	1.4	-5.3	1.4	-12.7	-0.9	282
Silver	175	0.6	-16.7	0.6	-12.9	-2.8	244
Wheat	466	7.1	-13.9	7.1	-15.7	-3.5	581
Unlead Gas	390	-4.4	1.6	-4.4	-16.1	-9.9	501
Gold	451	1.8	-6.4	1.8	-18.9	13.9	598
Copper (CME)	221	1.4	-12.3	1.4	-22.7	-21.9	338
Heating Oil	367	-0.5	-12.4	-0.5	-23.9	-12.4	491
Cotton	232	8.9	-12.5	8.9	-25.6	-15.0	322
Natural Gas	1,044	-14.1	-32.5	-14.1	-25.8	-11.2	1,700
Palladium	27	3.9	-3.6	3.9	-27.0	-3.6	40
Zinc	146	2.8	-2.7	2.8	-32.1	-25.1	225
Crude Oil	1,724	-17.4	-17.8	-17.4	-34.8	-20.2	2,714

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ Open Interest (Aggregate - 1,000s)										
▶ BCOM	13,657	13,647	14,623	12,965	11,965	10,881	11,033	10,367	9,282	10,206
▼ Sector										
▶ Energy	6,808	7,055	7,931	7,084	6,057	5,033	5,346	4,980	4,230	4,262
▶ Agriculture	5,561	5,239	5,168	4,493	4,563	4,211	4,090	3,876	3,418	4,399
▶ Industrial Metals	1,169	1,134	1,354	1,319	1,178	1,224	1,104	1,006	1,159	1,105
▶ Precious Metals	736	724	786	667	673	620	613	658	585	783
▶ Livestock	602	581	572	501	431	481	591	578	552	534
▼ Single Commodities										
Brent Crude	2,337	2,158	2,322	2,159	2,031	1,513	1,443	1,285	886	873
Crude Oil	1,724	2,087	2,460	2,051	1,671	1,468	1,616	1,473	1,328	1,430
Corn	1,691	1,582	1,540	1,236	1,334	1,237	1,203	1,128	1,151	1,549
Natural Gas	1,044	1,216	1,448	1,243	957	939	1,291	1,165	1,011	772
Gas Oil	944	817	865	802	700	435	477	512	458	619
Sugar	913	876	753	805	879	836	830	754	559	613
Soybean	692	664	705	632	646	599	576	546	460	629
Soybean Oil	500	476	444	372	384	355	340	306	273	358
Aluminum	488	473	520	541	551	595	539	495	682	546
Wheat	466	435	523	448	368	371	411	456	384	492
Soybean Meal	462	429	376	329	402	341	262	212	194	192
Gold	451	443	472	416	415	372	380	428	419	585
Unlead Gas	390	408	387	400	355	332	239	282	277	267
Live Cattle	388	370	333	306	265	266	327	329	317	327
Heating Oil	367	369	449	429	342	346	279	263	269	301
Coffee	308	272	218	191	172	160	142	144	105	140
HRW Wheat	298	293	330	239	193	132	154	158	139	219
Cotton	232	213	279	242	185	178	172	171	152	207
Copper (CME)	221	218	280	224	166	160	167	147	121	167
Lean Hogs	214	211	239	194	166	215	264	248	235	207
Silver	175	174	194	164	168	151	132	141	106	136
Copper (LME)	166	161	203	209	146	155	132	130	143	196
Nickel	149	140	150	160	148	132	81	69	65	61
Zinc	146	142	200	184	167	182	184	166	148	135
Platinum	82	82	83	63	65	64	62	60	42	39
Palladium	27	26	37	24	24	33	39	29	18	23

Bloomberg Commodity Outlook – February 2019 Edition

Bloomberg Commodity Index (BCOM)

Market Flows – Commitment of Traders

Key Metrics (Note – U.S. futures are delayed a month due to the government shutdown)

Name	Current	5 Day Change	1 Mth Change	3 Mth Change	YTD Change	1 Yr Change	2 Yr Change
▼ Net - Managed Money Total/Disagg							
▼ Single Commodities							
Natural Gas	216,506	-5,855	-55,177	136,153	268,952	273,981	51,440
Brent Crude	202,934	30,029	50,934	-206,184	40,685	-381,773	-245,418
Aluminum (Pre- MiFID II)	163,475	6,307	-3,292	21,105	3,315	-10,481	115,362
Aluminum (Post- MiFID II)	141,257	6,226	7,368	-4,411	7,368	-332	
Corn	128,177	29,560	110,196	269,453	334,801	350,330	225,263
WTI Crude	100,733	-18,942	-51,251	-232,375	-311,239	-283,095	-205,423
Live Cattle	85,950	10,426	31,529	11,608	3,240	-4,598	-1,256
Zinc (Pre MiFID II)	79,906	-1,121	-6,682	3,640	-471	-8,898	44,606
Gasoline	53,793	2,575	1,494	-25,313	-25,657	-18,484	10,914
Zinc (Post MiFID II)	47,328	6,214	10,816	5,854	10,816	-25,369	
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
Cotton	34,103	-4,084	-6,882	-26,576	-68,299	-63,572	-41,936
Lean Hogs	30,349	-5,457	2,301	8,524	-23,608	-23,524	-22,662
Gold	24,569	14,317	95,433	98,959	-85,350	-62,507	-29,342
Copper (LME) (Post MiFID II)	19,302	-5,132	-12,889	-18,837	-12,889	-31,483	
Palladium	13,520	104	683	7,908	-12,295	-11,603	-595
HRW Wheat	7,083	4,654	8,354	-30,001	41,505	38,064	3,220
Silver	1,912	10,880	40,758	46,969	9,017	15,888	-41,447
Heating Oil	1,379	-5,897	-29,799	-52,037	-80,445	-63,735	-26,027
Soybeans	350	11,418	55,375	70,163	69,441	41,121	-111,362
Soybean Meal	-4,416	3,424	-6,451	-26,305	-35,673	-52,885	-20,398
Platinum	-4,847	228	-15,068	14,485	-637	3,505	-15,258
Wheat	-5,625	16,777	21,059	-4,246	140,110	147,952	97,970
Copper (CME)	-16,072	-15,159	-8,350	-2,334	-115,592	-93,764	-95,151
Sugar	-33,272	-27,462	-68,614	29,339	39,784	67,212	-179,981
Soybean Oil	-47,798	-1,177	22,358	62,152	-51,204	-56,931	-145,685
Coffee	-53,046	-7,440	-25,688	56,113	4,800	3,855	-72,060

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ Net - Managed Money Total/Disagg										
▶ BCOM		972,535.0	1.2M	1.8M	107,932.0	1.1M	835,105.0	791,313.0	637,042.0	1.6M
▼ Sector										
▶ Energy		534,660.0	1.1M	1.0M	95,835.0	278,790.0	623,230.0	258,739.0	230,666.0	224,236.0
▶ Precious Metals		35,154	124,419	101,310	-239	153,310	70,026	171,032	134,710	232,650
▶ Industrial Metals		306,987	437,560	423,576	90,351	218,292	35,635	14,988	-4,018	39,105
▶ Agriculture		25,556	-449,709	225,844	-75,733	383,375	-1,048	281,653	188,257	962,170
▶ Livestock		116,299	136,667	147,051	24,525	117,295	137,611	110,898	104,018	133,520
▼ Single Commodities										
Brent Crude	202,934	162,249	561,284	454,585	163,672	115,571	136,611	125,397	81,537	
Aluminum (Post- MiFID II)	141,257	133,889								
Zinc (Post MiFID II)	47,328	36,512								
Copper (LME) (Post MiFID II)	19,302	32,191								
WTI Crude		100,733	411,972	307,909	100,797	199,388	270,386	134,834	192,466	217,046
Heating Oil		1,379	81,824	33,541	-35,339	-27,087	26,602	23,945	19,644	36,104
Gasoline		53,793	79,450	50,091	28,391	44,226	54,637	64,383	61,288	67,205
Natural Gas		216,506	-52,446	174,043	-161,686	-53,308	134,994	-89,820	-124,269	-96,119
Gold		24,569	109,919	41,247	-24,263	98,391	34,104	101,922	111,919	169,987
Silver		1,912	-7,105	39,098	6,282	17,051	5,573	23,113	6,200	26,836
Platinum		-4,847	-4,210	8,223	9,052	17,898	14,689	29,228	11,379	22,793
Palladium		13,520	25,815	12,742	8,690	19,970	15,660	16,769	5,212	13,034
Copper (CME)		-16,072	99,520	72,131	-25,964	-4,455	35,635	14,988	-4,018	39,105
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				
Soybeans		350	-69,091	107,075	-63,515	39,446	136,683	109,007	23,683	164,287
Soybean Meal		-4,416	31,257	19,537	-40,843	54,132	57,931	41,489	-15,232	40,129
Soybean Oil		-47,798	3,406	85,522	60,895	35,047	-46,649	-42,424	-2,103	56,961
Wheat		-5,625	-145,735	-108,927	-83,120	20,481	-71,468	-11,899	-29,252	36,542
HRW Wheat		7,083	-34,422	9,085	-14,975	24,999	8,022	23,619	9,128	49,108
Corn		128,177	-206,624	-113,648	-136,111	239,704	-94,812	140,109	148,653	396,782
Coffee		-53,046	-57,846	12,706	-15,181	25,385	-8,417	-23,076	2,905	36,182
Sugar		-33,272	-73,056	138,442	165,810	-66,824	-25,626	19,000	43,792	141,534
Cotton		34,103	102,402	76,052	51,307	11,005	43,288	25,828	6,683	40,645
Live Cattle		85,950	82,710	92,516	11,081	80,102	96,771	59,569	68,105	104,412
Lean Hogs		30,349	53,957	54,535	13,444	37,193	40,840	51,329	35,913	29,108

Bloomberg Commodity Outlook – February 2019 Edition

Bloomberg Commodity Index (BCOM)

Market Flows – ETF Flows (annual)

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
ETFs (\$ Billion AUM)										
Total ETF Assets Under Management (\$...)	134.85	135.96	141.73	120.35	86.92	101.22	110.91	195.29	171.16	166.48
Precious Metals	110.52	109.30	109.98	90.30	62.95	77.79	84.93	164.56	142.19	130.39
Gold	98.47	96.79	95.36	76.91	51.78	62.75	68.70	143.55	120.89	105.90
Silver	8.98	9.02	10.11	9.41	7.24	8.64	10.60	16.18	16.38	18.41
Platinum	1.42	1.92	2.39	2.26	2.22	3.32	3.46	2.48	2.49	2.83
Palladium	0.90	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	
Broad Commodity	13.62	16.26	17.20	14.78	10.84	14.55	17.70	19.57	18.21	19.74
Energy	7.77	7.34	11.13	12.26	10.72	5.40	4.61	6.72	5.79	9.65
Agriculture	1.62	1.78	1.78	1.82	1.75	2.37	2.61	3.11	3.90	5.23
Industrial Metals	1.30	1.25	1.63	1.17	0.64	1.09	1.02	1.27	0.99	1.38
Livestock	0.02	0.03	0.01	0.02	0.02	0.03	0.03	0.06	0.08	0.10
ETFs Fund Flows (\$ Billion)										
Total ETF Fund Flows (\$ Billion)	2.27	0.75	8.73	23.49	10.67	3.31	-40.94	19.41	1.63	16.32
Precious Metals	2.89	3.60	8.60	22.61	-3.83	-2.45	-36.86	17.69	5.93	14.94
Industrial Metals	0.07	-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	-0.02	-0.09	0.32	0.12	-0.14	-0.21	0.03	-0.84	-0.58	-0.54
Energy	-0.28	-3.01	-1.20	-1.97	13.94	4.17	-3.30	1.85	-2.57	-0.42
Broad Commodity	-0.39	0.30	0.99	2.39	0.85	1.64	-0.60	0.50	-1.04	2.18
DELTA WEIGHTED:										
ETFs (\$ Billion AUM) (DW)										
Total ETF Assets Under Management (\$...)	140.06	138.14	146.22	123.03	88.63	101.61	110.16	197.39	171.70	168.44
Precious Metals	111.81	110.51	111.21	91.00	62.94	77.80	85.03	166.20	142.69	131.34
Broad Commodity	13.91	16.62	17.44	14.80	10.87	14.55	17.70	19.57	18.21	19.75
Energy	11.35	7.84	13.99	14.13	12.28	5.71	3.72	7.20	5.84	10.63
Agriculture	1.66	1.87	1.91	1.90	1.85	2.46	2.69	3.17	3.97	5.28
Industrial Metals	1.32	1.27	1.66	1.19	0.68	1.06	0.99	1.20	0.90	1.35
Livestock	0.02	0.03	0.01	0.02	0.02	0.03	0.03	0.06	0.08	0.10
ETFs Fund Flows (\$ Billion) (DW)										
Total ETF Fund Flows (\$ Billion)	2.27	-0.37	11.41	19.59	20.77	8.97	-42.11	21.45	1.50	16.50
Precious Metals	2.80	4.13	8.75	22.83	-3.35	-1.85	-36.12	18.57	5.76	14.43
Industrial Metals	0.07	-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	-0.02	-0.14	0.40	0.12	-0.10	-0.20	0.10	-0.86	-0.50	-0.59
Energy	-0.19	-4.80	1.10	-6.05	23.41	9.20	-5.34	3.02	-2.59	0.37
Broad Commodity	-0.39	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									
		Jan	YTD	1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
Bloomberg Commodity ER	BCOM	5.23%	5.23%	-10.11%	4.53%	-35.99%	-27.23%	4.58%	-4.69%	-9.87%	422.57%
Bloomberg Commodity TR	BCOMTR	5.45%	5.45%	-8.23%	8.20%	-33.68%	-24.22%	49.97%	131.80%	453.63%	5829.21%
Bloomberg Commodity Spot	BCOMSP	5.57%	5.57%	-7.37%	26.83%	-15.82%	38.40%	294.33%			
Bloomberg Roll Select	BCOMRST	5.04%	5.04%	-9.08%	11.59%	-28.44%	-8.65%	216.38%			
1 Month Forward	BCOMF1T	5.72%	5.72%	-7.47%	11.12%	-28.89%	-12.29%	164.44%			
2 Month Forward	BCOMF2T	5.66%	5.66%	-4.72%	16.06%	-25.65%	-10.46%	217.75%			
3 Month Forward	BCOMF3T	5.54%	5.54%	-6.35%	14.50%	-25.19%	-7.68%	227.21%			
4 Month Forward	BCOMF4T	5.49%	5.49%	-6.51%	17.39%	-21.70%	0.47%				
5 Month Forward	BCOMF5T	5.41%	5.41%	-6.23%	17.93%	-21.41%	0.87%				
6 Month Forward	BCOMF6T	5.37%	5.37%	-5.62%	19.26%	-19.84%	3.20%				
Energy	BCOMENTR	9.22%	9.22%	-8.76%	14.45%	-61.96%	-69.50%	-13.75%	77.42%		
Petroleum	BCOMPETR	13.80%	13.80%	-12.15%	30.50%	-58.22%	-40.87%	187.69%			
Agriculture	BCOMAGTR	3.04%	3.04%	-9.30%	-15.84%	-35.75%	-22.03%	-34.36%	-18.32%	42.86%	1602.48%
Grains	BCOMGRTR	1.87%	1.87%	-7.73%	-21.70%	-40.66%	-34.04%	-42.49%	-47.11%	-20.35%	468.65%
Industrial Metals	BCOMINTR	8.05%	8.05%	-13.19%	36.86%	-3.35%	34.20%	176.31%			
Precious Metals	BCOMPRTR	3.23%	3.23%	-3.34%	14.25%	-2.99%	31.73%	283.76%	219.97%	364.55%	
Softs	BCOMSOTR	4.85%	4.85%	-12.33%	-13.04%	-37.01%	-22.40%	-56.02%	-23.23%	71.27%	2995.86%
Livestock	BCOMLITR	-1.50%	-1.50%	-1.92%	-4.11%	-15.65%	-21.49%	-44.83%	-12.02%		
Ex-Energy	BCOMXETR	3.98%	3.98%	-8.22%	4.47%	-18.44%	7.54%	47.05%			
Ex-Petroleum	BCOMXPET	3.44%	3.44%	-7.38%	1.34%	-27.90%	-23.60%				
Ex-Natural Gas	BCOMXNGT	6.05%	6.05%	-9.00%	11.29%	-27.79%	-1.94%				
Ex-Agriculture	BCOMXAGT	6.53%	6.53%	-7.82%	19.83%	-33.92%	-28.13%				
Ex-Grains	BCOMXGRT	6.23%	6.23%	-8.38%	15.37%	-32.50%	-24.63%				
Ex-Industrial Metals	BCOMXIMT	4.82%	4.82%	-7.31%	2.40%	-39.12%	-35.80%				
Ex-Precious Metals	BCOMXPMT	5.89%	5.89%	-9.12%	6.83%	-38.74%	-32.14%				
Ex-Softs	BCOMXSOT	5.49%	5.49%	-7.94%	9.70%	-33.94%	-25.49%				
Ex-Livestock	BCOMXLIT	5.92%	5.92%	-8.65%	8.71%	-34.80%	-24.54%				
Ex-Agriculture & Livestock	BCOMXALT	7.36%	7.36%	-8.43%	21.61%	-35.70%	-29.15%				
Bloomberg Dollar Spot	BBDXY	-1.26%	-1.26%	5.46%	-5.69%	14.47%	7.85%				
S&P 500 Total Return	SPXT	8.01%	8.01%	-2.31%	48.23%	68.19%	304.63%	209.43%	1641.09%		
US Aggregate	LBUSTRUU	1.06%	1.06%	2.25%	5.97%	12.79%	43.51%	144.29%	487.93%	1581.17%	
US Treasury	LUATTRUU	0.47%	0.47%	2.73%	2.57%	9.49%	27.11%	125.24%	437.85%	1459.56%	
US Corporate	LUACTRUU	2.35%	2.35%	0.75%	12.28%	18.12%	81.10%	181.41%	617.34%	1959.58%	
US High Yield	LF98TRUU	4.52%	4.52%	1.73%	30.98%	25.25%	183.13%	266.56%	896.34%		

Single Commodity Indices

Index Name	Ticker	2019									
		Jan	YTD	1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
Natural Gas	BCOMNGTR	-1.09%	-1.09%	-4.27%	-28.70%	-75.52%	-95.90%	-98.90%			
Low Sulfur Gas Oil	BCOMGOT	14.01%	14.01%	-0.90%	72.37%	-48.38%	-15.58%	487.75%			
WTI Crude	BCOMCLTR	17.90%	17.90%	-12.56%	19.79%	-65.38%	-60.72%	86.75%	314.31%		
Brent Crude	BCOMCOT	12.75%	12.75%	-7.72%	48.60%	-59.13%	-18.43%	567.47%			
ULS Diesel	BCOMHOTR	12.66%	12.66%	-6.21%	55.20%	-48.03%	-20.10%	307.86%	451.62%		
Unleaded Gasoline	BCOMRBTR	5.22%	5.22%	-27.82%	-5.33%	-56.98%	2.75%	366.96%	867.75%		
Corn	BCOMCNTR	0.61%	0.61%	-6.98%	-26.56%	-48.13%	-43.55%	-79.39%	-83.87%	-75.84%	-24.69%
Soybeans	BCOMSYTR	2.48%	2.48%	-12.73%	-6.52%	-22.39%	46.36%	213.28%	203.75%	276.60%	3893.93%
Wheat	BCOMWHTR	2.85%	2.85%	0.53%	-30.63%	-45.72%	-74.65%	-88.11%	-91.17%	-83.14%	-21.94%
Soybean Oil	BCOMBOTR	8.56%	8.56%	-11.90%	-12.87%	-33.30%	-40.30%	-35.64%	-30.85%	-10.04%	2951.04%
Soybean Meal	BCOMSMT	0.24%	0.24%	-10.21%	5.06%	-3.26%	161.08%	1154.30%			
HRW Wheat	BCOMKWT	2.31%	2.31%	-9.44%	-37.42%	-57.88%	-72.39%	-76.17%			
Copper	BCOMHGTR	6.06%	6.06%	-13.85%	28.94%	-17.13%	61.59%	357.62%	639.04%		
Aluminium	BCOMALTR	3.65%	3.65%	-11.75%	23.30%	-1.39%	-10.30%	-2.22%			
Zinc	BCOMZSTR	11.08%	11.08%	-18.26%	76.96%	39.16%	95.24%	100.98%			
Nickel	BCOMNITR	16.77%	16.77%	-8.39%	40.43%	-15.99%	-2.34%	405.02%			
Gold	BCOMGCTR	3.12%	3.12%	-2.07%	15.68%	3.47%	33.52%	316.24%	228.80%	414.57%	
Silver	BCOMSITR	3.64%	3.64%	-7.56%	8.77%	-21.02%	14.76%	166.49%	126.87%	75.99%	
Sugar	BCOMSBTR	6.04%	6.04%	-10.29%	-16.68%	-50.06%	-37.52%	-7.90%	67.49%	-45.10%	186.63%
Coffee	BCOMKCTR	4.19%	4.19%	-20.77%	-30.90%	-47.07%	-62.54%	-90.69%	-86.60%	-54.69%	
Cotton	BCOMCTTR	3.26%	3.26%	-2.74%	23.25%	-4.69%	84.25%	-66.52%	-23.58%	238.22%	1166.05%
Live Cattle	BCOMLCTR	1.26%	1.26%	4.26%	7.89%	5.50%	8.52%	14.56%	108.49%	844.72%	4585.85%
Lean Hogs	BCOMLHTR	-7.11%	-7.11%	-14.27%	-23.93%	-44.29%	-56.14%	-83.85%	-82.57%		

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
		Jan	YTD								
BCOM Roll Select	BCOMRST	5.04%	5.04%	-9.08%	11.59%	-28.44%	-8.65%	216.38%			
Roll Select Agriculture	BCOMRAGT	2.82%	2.82%	-8.17%	-11.19%	-32.20%	-12.47%	22.72%			
Roll Select Ex-Ags & Livestock	BBURXALT	6.98%	6.98%	-9.58%	25.90%	-28.86%	-11.05%				
Roll Select Grains	BCOMRGRT	1.63%	1.63%	-6.39%	-16.79%	-38.18%	-28.84%	12.64%			
Roll Select Softs	BCOMRSOT	4.54%	4.54%	-13.48%	-11.14%	-34.13%	-6.05%	-19.22%			
Roll Select Livestock	BCOMRLIT	-2.33%	-2.33%	-9.89%	-17.76%	-23.46%	-14.43%	54.52%			
Roll Select Energy	BCOMRENT	8.46%	8.46%	-10.02%	24.15%	-51.99%	-50.51%	243.90%			
Roll Select Ex-Energy	BCOMRXET	3.70%	3.70%	-8.76%	5.57%	-17.06%	15.66%	148.44%			
Roll Select Petroleum	BCOMRPET	12.56%	12.56%	-9.91%	39.25%	-48.05%	-11.50%	705.89%			
Roll Select Industrial Metals	BCOMRINT	7.86%	7.86%	-14.45%	36.52%	-2.99%	41.22%	308.55%			
Roll Select Precious Metals	BCOMRPRT	3.20%	3.20%	-3.43%	14.64%	-2.56%	33.02%	298.87%			

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
		Jan	YTD								
Natural Gas RS	BCOMRNGT	-1.09%	-1.09%	-11.73%	-14.76%	-65.67%	-89.84%	-81.83%			
Low Sulfur Gas Oil RS	BCOMRGOT	14.01%	14.01%	-0.98%	63.89%	-45.00%	-16.56%	505.94%			
WTI Crude RS	BCOMRCLT	15.46%	15.46%	-9.95%	32.54%	-50.30%	-21.82%	723.35%			
Brent Crude RS	BCOMRCOT	10.85%	10.85%	-8.15%	45.97%	-50.24%	-6.83%	886.68%			
ULS Diesel RS	BCOMRHOT	12.66%	12.66%	-7.94%	47.20%	-48.00%	-22.73%	548.53%			
Unleaded Gasoline RS	BCOMRRBT	7.35%	7.35%	-17.28%	29.94%	-42.64%	30.22%	679.84%			
Corn RS	BCOMRCNT	0.69%	0.69%	-4.98%	-20.92%	-45.18%	-38.34%	-60.46%			
Soybeans RS	BCOMRSYT	2.58%	2.58%	-7.81%	5.91%	-12.80%	62.87%	372.41%			
Wheat RS	BCOMRWHT	1.76%	1.76%	-4.52%	-34.63%	-50.40%	-72.23%	-59.91%			
Soybean Oil RS	BCOMRBOT	8.56%	8.56%	-12.40%	-12.44%	-31.39%	-33.37%	-5.27%			
Soybean Meal RS	BCOMRSMT	0.51%	0.51%	-3.94%	15.16%	6.45%	200.96%	1621.32%			
HRW Wheat RS	BCOMRKWT	1.48%	1.48%	-9.68%	-34.82%	-55.21%	-69.27%	-40.95%			
Copper RS	BCOMRHGT	6.06%	6.06%	-14.44%	30.03%	-16.89%	68.48%	548.92%			
Aluminium RS	BCOMRALT	3.09%	3.09%	-15.01%	20.13%	-2.07%	-5.68%	44.81%			
Zinc RS	BCOMRZST	11.08%	11.08%	-19.63%	76.56%	38.86%	109.07%	212.17%			
Nickel RS	BCOMRNIT	16.55%	16.55%	-8.25%	40.99%	-14.10%	4.08%	707.91%			
Gold RS	BCOMRGCT	3.08%	3.08%	-2.14%	16.18%	3.91%	34.18%	321.72%			
Silver RS	BCOMRSIT	3.62%	3.62%	-7.76%	8.95%	-20.49%	17.74%	199.15%			
Sugar RS	BCOMRSBT	5.85%	5.85%	-14.49%	-16.95%	-47.43%	-23.24%	103.40%			
Coffee RS	BCOMRKCT	3.73%	3.73%	-20.69%	-30.09%	-45.11%	-57.57%	-84.39%			
Cotton RS	BCOMRCTT	2.86%	2.86%	-0.57%	28.60%	-0.63%	127.33%	-43.34%			
Live Cattle RS	BCOMRLCT	-0.75%	-0.75%	-1.62%	0.68%	-1.67%	13.78%	88.63%			
Lean Hogs RS	BCOMRLHT	-4.92%	-4.92%	-24.23%	-42.15%	-51.89%	-49.89%	-10.42%			

BCOM Constituent Weights

[BCOM Index MEMB <GO>](#)

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Group	Commodity	Ticker	Jan 2019 Contrib to Return %	Jan 31 2019 Weight %	Dec 31 2018 Weight %	Jan 2019 Weight% Change	2019 Target Weight
Energy	Natural Gas	NG	-0.07	7.92	9.28	↓ (1.36)	8.26%
	Low Sulfur Gas Oil	QS	0.09	2.73	0.00	↑ 2.73	2.62%
	WTI Crude	CL	1.13	8.19	6.07	↑ 2.11	7.66%
	Brent Crude	CO	0.86	7.57	6.81	↑ 0.76	7.34%
	ULS Diesel	HO	0.41	2.22	3.34	↓ (1.12)	2.16%
	Gasoline	XB	0.18	2.26	3.03	↓ (0.77)	2.29%
	Subtotal			2.59	30.89	28.54	↑ 2.35
Grains	Corn	C	0.04	5.63	7.30	↓ (1.67)	5.89%
	Soybeans	S	0.14	5.79	6.12	↓ (0.34)	6.03%
	Wheat	W	0.12	3.05	4.24	↓ (1.20)	3.14%
	Soybean Oil	BO	0.24	3.19	2.53	↑ 0.66	3.10%
	Soybean Meal	SM	0.00	3.21	3.26	↓ (0.04)	3.44%
	HRW Wheat	KW	0.04	1.25	1.62	↓ (0.38)	1.29%
	Subtotal			0.58	22.11	25.08	↓ (2.97)
Industrial Metals	Copper	HG	0.42	7.50	6.50	↑ 1.00	7.32%
	Aluminum	LA	0.15	4.34	4.22	↑ 0.12	4.41%
	Zinc	LX	0.34	3.40	2.54	↑ 0.86	3.21%
	Nickel	LN	0.43	2.94	2.63	↑ 0.31	2.71%
	Subtotal			1.34	18.17	15.88	↑ 2.29
Precious Metals	Gold	GC	0.36	12.20	12.90	↓ (0.70)	12.24%
	Silver	SI	0.13	3.85	3.68	↑ 0.17	3.89%
	Subtotal			0.49	16.05	16.58	↓ (0.53)
Softs	Sugar	SB	0.18	3.07	3.14	↓ (0.07)	3.15%
	Coffee	KC	0.09	2.48	2.30	↑ 0.18	2.48%
	Cotton	CT	0.04	1.41	1.50	↓ (0.09)	1.42%
	Subtotal			0.32	6.96	6.95	↑ 0.01
Livestock	Live Cattle	LC	0.05	4.07	4.99	↓ (0.92)	4.09%
	Lean Hogs	LH	-0.14	1.75	1.98	↓ (0.23)	1.85%
	Subtotal			-0.09	5.81	6.97	↓ (1.15)
Total			5.23	100.00	100.00		100.00%

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>

Region	2015	2014	2013	2012	2011
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
Latin America	18.4	18.5	18.7	18.4	18.6
Pacific	6.0	8.1	8.3	8.5	8.2
Non-OECD	47.9	46.9	45.7	44.6	43.1
Europe	4.7	4.9	4.7	4.8	4.5
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	8.1	7.9	7.8	7.5
Africa	4.1	3.9	3.8	3.8	3.6
Total World Crude Oil Demand	93.5	92.5	91.8	90.6	89.5

Natural Gas Production: BI NGAS <GO>

Category	Current	Prev Week	1 Week % Chg	1 Week % Chg	Prev Year
Natural Gas Inventories					
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
Total	1,479.00	1,467.00	12.00	0.82	896.00
Net Injections/Withdrawals	12.00	-42.00	54.00	452.07	-57.00
Consensus (Bloomberg Survey)	1,474.00	1,463.00	11.00	0.75	901.00
Domestic 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
Total	269.29	269.28	-0.99	-0.37	136.46

Precious Metal Mining: BI PMET <GO>

Indicator	Value
Avg Gold Spot Price	1,220
Known ETF Gold Hold	52,128
IMF Global Gold Reser	1,036
Sales Growth (YoY)	-8.96
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>

Indicator	Value
Agricultural Price Ind	1.25
U.S. Farm Net Cash In	92.40
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	1.80

Copper: BI COPP <GO>

Indicator	Value
China GDP YoY (%)	7.30
YTD Copper Surplus/Def	201,158
Major Exch Copper Inv	599,596
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>

Indicator	Value
China Industrial Prod	7.60
Global Primary Alumi	4,288
Global Primary Alumi	4,178
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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Commodity Indices

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Listed index futures	BCOM Index CT
Option volatility surface	BCOM Index OVDV
Seasonality chart	BCOMNG Index SEAG
Commodity index futures movers	FMV
Commodity index ranked returns	CRR

Weather

Global weather database	WETR
US snow monitor	SNOW
EU weather & utility models	EUMM

Energy

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Top oil news	OTOP
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Oil Buyer's Guide newsletter	NI OGBRIEF
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Crude stored in tankers	NOON
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Oil versus inflation expectations	SWIF

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Precious metal dashboard	BI PMETG
Base metals dashboard	BI BMET
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Precious metals prices and rates	MTL
Metals Bulletin	MB
COMEX inventories	COMX
LME monitor	LME
LME implied volatilities	LMIV
LME warehouse inventories	LMEI

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Agriculture calendar	AGRI
Agriculture spot prices	AGGP
Agriculture supply & demand	AGSD
Crop calendar	CCAL

BCOM QUICK FACTS

[Index Methodology](#)

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

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