

Bloomberg Commodity Outlook – July 2019 Midyear Edition
Bloomberg Commodity Index (BCOM)

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Broad Commodities vs. the Ebbing Tide

- Broad commodities are well-situated to navigate a choppy global 2H
- A peak dollar would favor commodities vs. stocks
- Three bearish crude oil issues in 2H: supply, demand, economy
- With gold at helm, metals poised to be 2H stalwart
- Corn led agriculture bull market appears in early ripening days

Note - Click on graphics to get to the Bloomberg terminal

Data and outlook as of June 28

Mike McGlone – BI Senior Commodity Strategist

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

Gold, Corn Set to Buck Receding-Tide Risks for Commodities in 2H

Performance: June +2.7%, 2019 +5.1%, Spot +6.6%.
 (Returns are total return (TR) unless noted)

(Bloomberg Intelligence) -- The primary concern for broad commodity prices in 2H is the sagging state of global economies, and as the tide continues to ebb, gold has plenty of upside potential and agriculture shouldn't care, in our view. The commodity trend has shifted downward with sovereign debt yields. Commodities are set to outperform equities as the Federal Reserve shifts to ease, adding headwinds for the lofty dollar. Metals should be the stalwart if the greenback peaks. A final pillar supporting the dollar is U.S. equities outperformance vs. the world, which enhances the potential commodity vs. stock market divide in 2H.

Crude oil at about \$60-a-barrel resistance is vulnerable, particularly if risk-off from 2H18 turns out to be a warning shot. A U.S.-China trade deal may change things, but is unlikely.

[Surfing The Receding Tide](#)

Broad Commodities Well-Situated to Navigate a Choppy Global 2H. The receding sovereign debt-yield tide should prevail in 2H, in our view, yet broad commodities are poised to be among the better performers. Federal Reserve easing adds peak potential to the dollar, supporting commodities. If U.S. equities decline, that easing potential increases. Gold and the grains are poised to rev 2Q's momentum higher.

Commodities Poised to Ride Out 2H Squall. Broad commodities will remain subject to the predominant macroeconomic slide in 2H, along with sovereign debt yields, in our view. Risks tilt toward acceleration, with crude oil prices the primary focus of vulnerability. Ending 1H near good resistance at \$60 a barrel increases the

chance 2H could be an echo of the 2H18 plunge, absent a sustained geopolitical bid and definitive OPEC+ cuts. The rest of the commodity market is positioned to outperform most risk assets, notably U.S. equities. A potential peak dollar is a key catalyst.

Broad Commodity Trend Shifting Down With Yields



Lower U.S. equities are more likely to accelerate Fed easing expectations, adding headwinds to the dollar. Most assets rising with the tide is ideal, but unlikely. We expect market expectations for Fed easing to play out, weakening the dollar and supporting broad commodities.

Peak Dollar Would Favor Commodities vs. Stocks.

The expected inception of a Fed easing cycle in 2H supports commodities, notably vs. equities, if history is a guide. Our graphic depicts the Bloomberg Commodity Spot Index beginning periods of outperformance vs. the S&P 500 coincident with the start of the past two easing cycles in 2001 and 2007. A primary potential repeat of 18 years ago is a peak in the trade-weighted broad dollar. It was anticipation of the most-recent tightening cycle that supported a 20% two-year greenback run-up to December 2015. Taking back those hikes should pressure retracement of the lofty dollar.

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Commodities Poised to Outperform Stocks



U.S. stocks appear to be in the driver's seat. Their outperformance vs. global peers has been the strong dollar's primary benefactor. A reversal of rate hikes leaves one final pillar of support for the greenback: U.S. equities vs. the world.

MACRO PERFORMANCE

Broad Economic Trends Favor Gold in 2H. Expected Fed easing in 2H should keep the dollar near the bottom of macroeconomic performers, supporting gold and broad commodities. The greatest mean-reversion risk, in our view, is the almost 30% gain in front WTI crude oil prices. Near resistance at \$60 a barrel at the end of 1H, WTI risks lean toward \$40 support in 2H. The stock market is a big wildcard. If the S&P 500 sustains its 1H total return of close to 18%, gold's upside and the dollar downside will be limited. A greater worry is that equities succumb to slumping sovereign debt yields and repeat 2H18's performance.

2H Outlook: Gold Higher, Crude Oil Lower

Security	%YTD	Chg June	Chg QTD Pct	1Yr % Chg	2Yr % Chg	8 Yr % Chg
Generic 1st 'CL' Future	+27.6%	+8.3%	-3.6%	-21.0%	29.6%	
S&P 500 Total Return Index	+17.9%	+6.4%	+3.7%	+9.9%	24.7%	
S&P 500 Index	+17.3%	+6.9%	+3.6%	+8.1%	20.3%	
MSCI World ex USA Net Total Re	+14.1%	+5.4%	+3.3%	+1.9%	6.9%	
Bloomberg Barclays U.S. Treasu	+11.2%	+1.4%	+6.2%	+12.3%	11.1%	
MSCI Emerging Markets Net Tota	+10.6%	+6.2%	+6%	+3.4%	9.4%	
Gold	+10.0%	+8.0%	+9.2%	+13.0%	12.9%	
Bloomberg Commodity Spot Index	+6.6%	+3.1%	-8%	-5.1%	6.8%	
Bloomberg Commodity Index Tota	+5.1%	+2.7%	-1.2%	-6.1%	2.3%	
Generic 1st 'HG' Future	+2.9%	+2.2%	-7.9%	-8.4%	1.6%	
US Trade Wgt Broad Dollar Indx	-3%	-1.5%	--	+2.7%	4.0%	
Bloomberg Dollar Spot	-8%	-1.6%	-1.0%	--	2%	

Our base case for 2H is acceleration of 2Q trends, notably in gold. The metal is breaking out of a multiyear range with favorable fundamental drivers, notably Fed easing, declining yields and stock-market volatility mean-reverting higher.

SECTOR PERFORMANCE

Gold and Corn Likely to Lead Their Sectors. We expect the top-performing sector in 1H -- energy -- to give way to precious metals and grains in 2H. Led by gold and corn, both have similar, solid technical foundations, with fundamental drivers shifting favorably. The greater challenge for our outlook is that 2H might be what it takes to suppress 2Q's upward momentum in the two primary yellow commodities. Broad metals should be stout, particularly if dollar depreciation that began in June on the back of a dovish Fed is sustained.

Trading-Places Risk: Energy and Precious Metals

Security	%YTD	Chg June	Chg QTD Pct	1Yr % Chg
Bloomberg Energy Subindex Tota	+10.6%	+4.0%	-4.6%	-13.4%
Bloomberg Precious Metals Subi	+7.2%	+7.3%	+7.1%	+8.1%
Bloomberg All Metals Total Ret	+5.9%	+4.6%	-7%	-2.4%
Bloomberg Industrial Metals Su	+4.7%	+2.0%	-7.2%	-11.4%
Bloomberg Grains Subindex Tota	+2.1%	+3%	+8.4%	+1.4%
Bloomberg Agriculture Subindex	+1.2%	+5%	+4.5%	-3.4%
BBG Softs TR	+1.1%	+1.5%	-3%	-11.8%
Bloomberg Livestock Subindex T	-6.8%	-3.5%	-11.0%	-1.4%

A peak dollar will ease industrial metals pressure from macroeconomic stumbles. At the bottom of the sector performance board in 1H, livestock's potential for mean-reversion higher outweighs further downside risks because of increasing global demand due to African swine flu in China.

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Energy (Index weight: 29% of BCOM)

Performance: June +4.0%, 2019 +10.6%, Spot +11.4%

*Note index weights are the 2018 average.

Risks Tilted Downward

Three Bearish Crude Oil Issues in 2H: Supply, Demand, Economy. Crude-oil and energy prices headed into the back half of 2019 are at elevated risk of repeating 2H18's decline, in our view. The main pressure on prices -- increasing U.S. liquid fuel production -- remains on a tear amid a persistent trend of degrading global demand. Absent a sustained geopolitical bid and definitive cuts from OPEC+, our indicators show West Texas Intermediate should be closer to \$40 a barrel, vs. near \$60 at the end of 1H.

Additional crude-oil risk comes from downside potential in the stock market, notably the Russell 2000 Index. Similar to oil, its 52-week mean has shifted downward. Lower crude fits with rapidly declining sovereign debt yields and expected Federal Reserve easing. Without a robust U.S.-China trade agreement, crude's path of least resistance is to resume the trend since 2014 -- down.

Energy 2H19, Similar to 2H18

2H18 May Have Been Shot Across Energy's Bow for 2019's Back Half. Energy conditions for 2H are similar to the same period in 2018 when West Texas Intermediate crude fell 45%, in our view. Of greater concern is the potential for a down 2H to last longer this time. U.S. inventories are climbing rapidly and demand gasping as mean reversion higher for stock-market volatility appears in early days.

Russell Near Resistance Is Crude-Oil Headwind.

Crude oil bulls have another risk to worry about besides excess supply and slack demand: a potential slump in the Russell 2000 Index. Our graphic depicts the strong relationship between the index and West Texas Intermediate prices. The Russell 2000 has returned to a key moving average (52-week) that consistently held support during the bull market. If the index respects the downtrend, it will add a headwind to crude-oil prices. What was support has become resistance, until proven otherwise.

Oil and The Russell 2000 Need to Prove Strength



Small stocks have to prove strength above this key pivot level in the immediate aftermath of the Federal Reserve signaling ease and basically succumbing to what markets have priced in since December. Respecting resistance in the small-cap index would accelerate Fed easing expectations, thus supporting the price of gold.

WTI Crude Oil \$80 Resistance, Then \$70, Now \$60 Suggests a Trend.

Accentuating the path of least resistance in crude oil, the latest turmoil in the Middle East has West Texas Intermediate looking up at \$60 resistance. In April, \$70 was the big resistance, and last year it was \$80. Substantial, sustained production cuts are necessary to end the lower crude oil trend, in our view.

Inventories Put Crude Oil Prices Under Pressure



\$40 a Barrel at Risk of Becoming the New \$50 in WTI Crude Oil.

West Texas Intermediate crude oil should be closer to \$40 a barrel if its relationship with inventories holds. Our graphic depicts the 52-week average of the total change in Department of Energy crude oil inventories at its greatest since September 2016, when WTI averaged \$45. What may be more important is the

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trend: Inventories were declining three years ago and they're rising rapidly now.

Last year's \$42.36 low is in jeopardy based on the autoscaled chart. WTI near \$51 on June 5 has returned to the halfway mark of the 2016-18 rally. It's back in a good support zone nearing \$50, but absent a sharp reversal in increasing inventories, prices should remain pressured. The paradigm shift in U.S. liquid fuel production, which is likely to exceed consumption this year, should keep inventories on the rise.

\$40 WTI Crude Is More Likely Than \$60. WTI crude oil is more likely to sustain below \$40 a barrel than above \$60, in our view. The trend in failed rallies on the back of geopolitical concerns and turmoil in the Middle East appears enduring. The next key resistance is about \$60 -- near the downward sloping 52-week mean, based on our analysis. This level should prove as resilient as \$70 did in April, when President Donald Trump ended Iran sanction waivers. Rapidly increasing U.S. supply and diminishing demand amid a slowing global economy represent the forest -- the predominant forces pressuring prices and supply disruptions appear more as trees.

Crude Oil Poised to Resume Downtrend



WTI has had minimum retracement this year, back close to its 52-week mean, and is poised to resume the downtrend since 2014. A big difference is that then global GDP estimates were being revised upward.

WTI Crude Oil Is Teetering on the Cliff's Edge. There's little tolerance for further elevation in risk assets with West Texas Intermediate crude oil sustaining below its level on June 11. Near \$53.50 a barrel, WTI is akin to a market teetering on the cliff's edge, with significant implications from following the path of least resistance lower, in our view. Increasingly oversupplied in the U.S., liquid fuels are facing the known-known of OPEC+ cuts and the less-known, yet enduring, trend of diminishing incremental demand. Responsive traders have reacted to

the initial revisit of the much-watched \$50 level, but the bounce since the first week of June is appearing as a dead cat.

Dead Cat WTI Bounce Risks With Macro Implications



Declining global bond yields, and futures priced for increasingly aggressive rate cuts despite the very low U.S. unemployment rate, gain legitimacy with lower crude oil prices.

Supply Exceeding Demand Equals Lower Prices.

Lower prices are the primary force to stall the trend in rapidly rising U.S. liquid fuel production vs. consumption, in our view. Rhyme risks with the 2014-15 bear market are elevated. Our graphic depicts the accelerating downtrend in U.S. net demand vs. supply of liquid fuels. A similar velocity of decline about six years ago sparked the plunge in WTI prices. In September 2014, when crude broke below its 60-month average, demand exceeded supply by about 5 million barrels a day vs. 6 MMBPD a year prior. By the end of this year, the Energy Department estimates a surplus vs. a 1.5 MMBPD deficit at the end of 2018.

WTI Price Headwind: U.S. Fuel Production Surplus



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Prices are similarly vulnerable above the 60-month average vs. plunging demand vs. supply as six years ago. A difference is the ability of the U.S. to export, but proper infrastructure is lagging.

PERFORMANCE DRIVERS

Energy Gains Should Keep Vanishing in 2H. This year's energy-price bounce, which partially retraced 2018's decline, is at a greater risk of resuming the downtrend since 2014 in 2H, in our view. Supply disruptions are boosting unleaded gas to be the year's best performer, but such price spurts are typically temporary. The worst performer -- natural gas -- had its negative gamma spurt in 2H18 but, despite prices being too cold by most measures, oversupply remains predominant. Increasing U.S. liquid-fuel supply should remain a price headwind, notably on WTI crude oil.

Energy Likely to See 2019 Gains Keep Slipping Away

Security	%YTD	Chg June	Chg QTD	1Yr %	2Yr %
			Pct	Chg	Chg
Bloomberg Unleaded Gasoline Su	+33.2%	+8.5%	+5.2%	-10.1%	28.2%
Bloomberg WTI Crude Oil Subind	+26.5%	+8.8%	-2.8%	-17.6%	33.5%
Bloomberg Petroleum Subindex T	+24.5%	+6.9%	-1.1%	-13.6%	38.5%
Bloomberg Brent Crude Subindex	+24.1%	+6.0%	-0.9%	-12.4%	49.4%
Bloomberg Heating Oil Subindex	+17.2%	+5.1%	-1.8%	-9.1%	40.6%
BBG Energy Spot	+11.4%	+3.6%	-5.2%	-16.4%	15.7%
Bloomberg Energy Subindex Tota	+10.6%	+4.0%	-4.6%	-13.4%	17.2%
Bloomberg Natural Gas Subindex	-22.8%	-6.1%	-16.2%	-21.1%	-36.0%

Up about 45% in 2019 at its April peak, we fear WTI will gravitate toward \$40 a barrel in 2H vs. close to \$60 as 1H ends. Substantial cuts from OPEC+ and/or a sustained geopolitical bid should be necessary to offset unfavorable demand vs. supply trends and risks to a peaking stock market.

Front Energy Futures to June 28

Ticker	Last	%YTD	%MTD	Chg QTD	1 Yr	2 Yrs	%1YR	Change
				%	Ago	Ago		2 Year Percent
Generic 1st 'XB' Future	s194.3	+46.7%	+7.8%	+2.5%	213.3	148.3	-8.9%	31.0%
Generic 1st 'CL' Future	d 58.1	+27.9%	+8.5%	-3.5%	73.5	44.7	-21.0%	29.6%
Generic 1st 'CO' Future	s66.6	+23.7%	+3.2%	-2.7%	77.9	47.3	-14.5%	40.7%
Generic 1st 'HO' Future	s194.5	+15.7%	+5.6%	-1.5%	217.8	143.3	-10.7%	35.7%
Generic 1st 'NG' Future	2.3	-21.4%	-5.8%	-13.2%	2.9	3.1	-21.3%	-24.6%

Metals

All (Index weight: 35% of BCOM)

Performance: June +4.6%, 2019 +5.9%

Industrial (Index weight: 19.0% of BCOM)

Performance: June +2.0%, 2019 +4.7%, Spot +3.8%

Precious (Index weight: 16.1% of BCOM)

Performance: June +7.3%, 2019 +7.2%, Spot +7.5%

Gold vs. Everything Else

With Gold at Helm, Metals Poised to Be 2H Stalwart: BI Commodity. Gold-price appreciation is likely to be the dominant and most concerning 2H theme for the metals, as we see it, especially if the peak-dollar theme that's gaining credibility with a dovish Federal Reserve provides the final rally pillar. Gold has worthy catalysts for price gains after five years of caged trading. It stands to be the primary beneficiary, absent a definitive U.S.-China trade accord that reverses accelerating global declines in sovereign-debt yields, rate-cut expectations and increasing stock-market volatility.

Industrial metals will benefit if the greenback declines, which places the broad sector on stable 2H footings. The Bloomberg All Metals Total Return Index is poised to reverse a prolonged period of underperformance vs. U.S. equities, as we see it.

Metals Increasingly About Gold

Finding Potential Gold-Rally Suppressants Will Be Key 2H Theme. If the dollar has peaked, then the metals should be primary beneficiaries. The Federal Reserve acquiescing to markets priced for rate easing since December is a potential dollar-peak inflection point. Some combination of opposing forces of base metals vs. gold and a greenback apex should stabilize the metals sector in 2H.

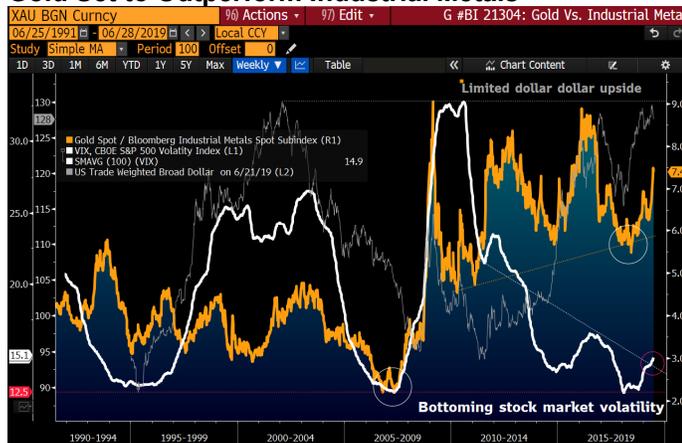
Gold Gaining Favor vs. Industrial Metals. Metals in 2H are likely to be about what it might take to suppress gold from outperforming most others. Absent a definitive U.S.-China trade deal, we find gold's potential upside disconcerting on the back of extreme mean-reversion potential in its primary drivers. The trade-weighted broad dollar near multidecade highs may have finally found its peak trigger with expected Fed easing. Similar upside risks in stock-market volatility, still near multidecade lows,

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indicates the gold vs. industrial-metals outperformance trend since 2007 is set to accelerate.

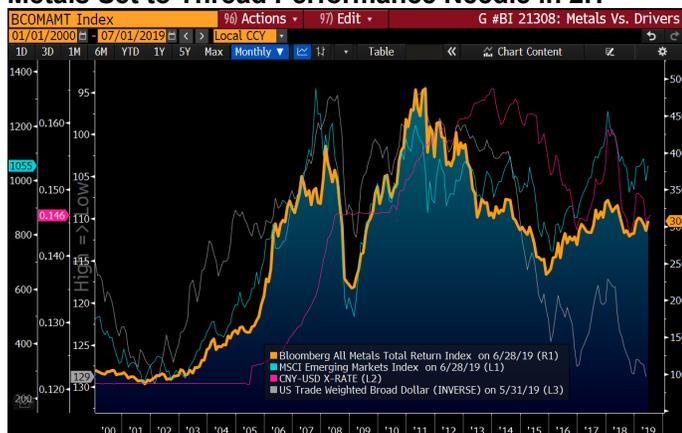
Gold Set to Outperform Industrial Metals



Our graphic depicts the per-ounce gold price divided by the Bloomberg Industrial Metals Spot Subindex looking similar to 12 years ago, when the 100-week average of the VIX volatility index recovered from the same low. Dollar-downside risks were much less then.

Metals Stand to Be Market Stalwart in 2H. With almost a 40% gold weighting, the Bloomberg All Metals Total Return Index should remain stable in 2H, with an upward bias, particularly if the dollar has peaked, in our view. Increasing expectations of Fed easing should have the opposite, bearish sway over the dollar as anticipated tightening did five years ago. Metals is the most negatively correlated commodity sector to the dollar. If the slumping global economic outlook reverses, potentially on the back of a U.S.-China trade deal, the non-gold 60% of the metals index should fare well.

Metals Set to Thread Performance Needle in 2H



We view that as unlikely, as gold's overdue appreciation appears to be in the early days. Among the primary companions of metals depicted in our graphic, the trade-weighted broad dollar, near a two-decade extreme,

appears to have the most potential mean-reversion room in 2H.

Ugh, Gold is Breaking Out

Gold Path of Least Resistance Is Higher, With Macro Implications. The foundation for higher gold prices has rarely been stronger. Five years of consolidation, with elevated risk of downside in a dollar that's near multidecade highs coincident with similar upside potential in stock-market volatility, supports gold prices. Additional backing comes from anticipated Fed easing.

Dollar-Down, VIX-Up Risks Elevated With Fed. If Fed actions manage to prop up the dollar and reduce stock-market volatility, the price of gold may decline, though we think it's an unlikely scenario. Mean-reversion potential is the greater risk in these key gold drivers, supporting the metal's price. The start of the first easing cycle in 12 years is a prime catalyst. A strong dollar -- near a 17-year high -- is deflationary, and indicative of plenty of room to reduce rates. Our graphic depicts the 24-month average of the VIX in the early recovery days, similar to 2007-08.

Gold Support - Dollar, VIX Mean-Reversion Risk



Last year's historic low in U.S. stock-market volatility and subsequent recovery is having the normal effect on markets and the Fed. Volatility is always mean-reverting, and heading higher indicates risk-off sentiment and Fed easing. Gold and Treasury bonds are primary beneficiaries.

Lucky 13 Guides Gold-Price Target Resistance

Toward \$1,700. Gold needs a good reason to not fully retrace the big plunge year of 2013, which peaked at about \$1,700 an ounce, in our view. Some combination of sustained dollar strength and weak stock-market volatility should be necessary to suppress the advancing metal's price. Significant for ending 12 successive years of gains with the worst plunge in two decades, 2013's 28% decline broke the back of the gold bull. Sustaining above that

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year's average near \$1,410 is an indication of a renewed bull.

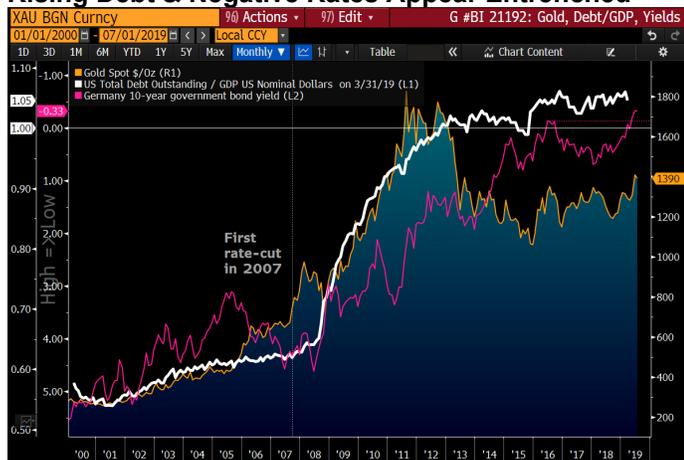
2019 May Be About Retracement of 2013



The midpoint of the 2013 range near \$1,440 enhances the resistance zone gold has re-entered. Shifting back to Fed rate cuts with the dollar near multiyear highs and the CBOE S&P 500 Volatility Index in early recovery days from similar lows supports gold prices. Initial follow-up support is near \$1,300.

Gold Appears Too Cold to Macro Drivers. Seemingly unstoppable trends in increasing sovereign debt-to-GDP levels and declining bond yields are gold-price supportive. These macro trends need to reverse for the price of gold to not advance, in our view. At almost 105%, rising U.S. debt outstanding vs. nominal GDP is notable as economic expansion reaches historic lengths. The increasing number of countries with negative bond yields appears far from an end-game, absent some inflation -- typically a most-supportive gold-price factor.

Rising Debt & Negative Rates Appear Entrenched



In September 2007, the last time the Fed started an easing cycle, debt-to-GDP was about 62% and the Treasury 10-year and German bonds yielded above 4%.

On June 18, the 10-year is about 2%, and Germany's are minus 0.2%. Following its long pause, gold is poised to resume the bull market since 2000. Fed easing is a likely catalyst.

Gold Time Correction Favors Rally Resumption. The unlikely is necessary for gold not to resume the rally it began about two decades ago, in our view. Gold is in a similar extreme coiled-spring condition as in 1997, but with the dollar at multiyear highs such as in 2002. Unless the greenback can manage further appreciation, gold should, which is what we expect. Dollar mean-reversion risks outweigh potential further upside, notably as rate-hike expectations have shifted to ease in the futures market.

Well Rested Gold Bull Just Waiting on the Dollar



The narrowest for longest gold 60-month Bollinger Bands since 1997 is an indication of how compressed the market is and of potential fuel for a breakout. Unchanged since June 2013, gold's sixth year of consolidation can be considered an extended time correction of the bull market since 2002.

Gold vs. S&P 500 Ratio's Deja Vu Potential. An ounce of gold is equivalent to about a half a unit of the S&P 500 Index, but the ratio is set to tilt in the metal's favor, if history is a guide. A repeat of what happened at the start of the Fed's rate-easing cycle in 2007 supports gold-price appreciation vs. U.S. stocks. At the onset of the first rate cut 12 years ago, the gold-to-S&P 500 ratio was about the same level as it is now (almost 0.5). It peaked just above 1.6 in 2011. Gold is well situated to be a primary driver.

About six years of consolidation that resulted in multidecade volatility lows provides plenty of fuel for gold-price appreciation. Extreme mean-reversion risk in its primary drivers -- 17-year highs in the trade-weighted broad dollar and historically low stock-market volatility --

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is what makes gold's upside potential a concern.

Gold Appears in Early Recovery vs. S&P 500



Gold Bulls Set to Prevail at the Bear Border. Gold managed-money net positions should continue to support the price, in our view. CME gold future net positions have reverted to the mean near 24% of open interest (since 2006) for the first time in over a year, notably in the aftermath of reaching the record short extreme of 21% in October. The per-ounce price has since increased about \$160. Net longs are poised to gain the upper hand, as evidenced by steadfast gold exchange-traded fund (ETF) inflows and the recovering 52-week mean on positions. It remains the lowest in the database.

Gold Positions Have a Way to Go to Get Too Long



The trend in total known gold ETF holdings remains price-supportive, particularly since the first Federal Reserve rate hike. Holdings have increased near 56% since December 2015, over double the 24% price gain. Gold's diversification attributes are supporting inflows.

Gold vs. Crude Ripe to Break Resistance. A nudge from continued mean reversion higher in U.S. stock market volatility supports gold and pressures crude oil prices. Our graphic depicts the number of barrels of WTI

that equal an ounce of gold rising to potentially sustain above its mean since the first Fed rate hike in December 2015. A primary driver supporting the recent recovery in the gold-to-crude spread is the rising CBOE S&P 500 Volatility Index. Its 100-week average is still well-below the historical mean near 19 and only recently recovered from near life-of-index lows (1990) last year.

Gold-Crude Oil Showing Comfort at Resistance



For gold to decline, it likely needs sustained weakness in stock-market volatility and dollar strength. Mean reversion potential in these primary gold drivers from multiyear extremes elevates the chance of upside in the price of the yellow metal.

Industrial Metals Ebbing Tide

Receding-Tide Risk Elevated for Copper, Industrial Metals in 2H. The receding tide of industrial-metal prices and global bond yields in 2Q sets the 2H stage for more of the same, in our view. A definitive U.S.-China trade accord is a potential force that might reverse the trend. This is unlikely. Near key support at the end of 1H, copper needs to prove its strength.

Copper Risks Breaching Support in 2H. Industrial metals' greater risk in 2H is to breach support and follow bond yields lower, in our view. Ending 1H near the key mean that matters, the average since the Fed's first rate hike of the cycle in December 2015 puts copper in a precarious position. To avoid resuming the downtrend since the 2012 peak, copper and industrial metals likely require a reversal in the ebbing tide of rapidly declining sovereign-debt yields. Our graphic depicts the 10-year Treasury yield (about 2%) roughly equivalent to the copper price near the 2016 low (auto-scale basis since 2008).

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Little Copper Upside Room Absent Higher Yields



There's little 2H wiggle room for further declines in bond yields absent lower copper prices, as we see it. CME copper needs to sustain above May's high near \$2.90 a pound to indicate strength.

Dr. Copper Risks Tilted to the Downside. The price of copper appears elevated vs. its primary companions, the Chinese yuan and purchasing managers (PMI). Near the mean that matters, since the first Fed rate hike in December 2015, copper is at a critical pivot with global macroeconomic implications. There's little tolerance from an indicator standpoint for CME-traded copper to sustain below \$2.66 a pound. Simply catching up to its autoscale relationship with the yuan and PMI the past five years would set the copper price back near its 2016 lows.

Copper Appears Poised to Follow the Yuan & PMI



Negative interest rates in an increasing number of countries and futures markets priced for Fed ease, despite many economists opining otherwise, would gain legitimacy with copper breaching this support level. Absent a copper-price rebound from this key pivot, the macroeconomic dominoes should continue to tumble.

PERFORMANCE DRIVERS

Gold Gaining Metals-Outperformance Favor in 2H.

Gold's 2Q top-performer status is set to carry into 2H, in our view. With gold second only to nickel nearing the end of 1H, we're concerned that upward momentum in the world's most widely traded metal and the primary portfolio diversifier will have increasingly negative macro implications. For the more-industrial metals including silver to keep from underperforming gold, the predominant 2Q theme of global economic slowdown likely needs to reverse. We view this as unlikely.

Gold Is Gaining Momentum, Support for 2H

Security	%YTD	Chg June	Chg QTD	1Yr %	2Yr %
Bloomberg Nickel Subindex Tota	+18.8%	+5.7%	-2.2%	-14.2%	35.9%
Bloomberg Gold Subindex Total	+10.0%	+8.0%	+9.0%	+12.4%	11.7%
Bloomberg Precious Metals Subi	+7.2%	+7.3%	+7.1%	+8.1%	6.1%
Bloomberg Zinc Subindex Total	+6.2%	-0.6%	-11.9%	-5.6%	2.5%
Bloomberg All Metals Total Ret	+5.9%	+4.6%	-7%	-2.4%	5.5%
Bloomberg Industrial Metals Su	+4.7%	+2.0%	-7.2%	-11.4%	3.8%
Bloomberg Copper Subindex Tota	+3.8%	+2.9%	-7.3%	-8.3%	.0%
US Trade Wgt Broad Dollar Indx	-3%	-1.5%	--	+2.7%	4.0%
Bloomberg Silver Subindex Tota	-1.8%	+5.0%	+1.0%	-5.2%	-10.4%
Bloomberg Aluminum Subindex To	-3.8%	--	-6.8%	-17.3%	-5.5%

Gold's widening disparity vs. silver has similar implications and is in good company with the increasing number of countries with negative yields, declining Treasury yields and increasing expectations of Fed easing. Acceleration of these trends appears as the greater 2H risk.

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Bloomberg Commodity Index (BCOM)

Agriculture (Index weight: 30% of BCOM)
Performance: June +0.5%, 2019 +1.2%, Spot +5.1%)

Grains (Index Weight: 24% of BCOM)
Performance: June +0.3%, 2019 +2.1%, Spot +6.4%)

Softs (Weight: 6% of BCOM)
Performance: June +1.5%, 2019 +0.1, Spot +3.1%)

A Corn Led Bull Market

Corn Led Agriculture Bull Market Appears in Early Ripening Days. Corn, whose position as the leading agricultural commodity is similar to crude oil's relationship to energy, is leading a nascent sector bull market, in our view. The foundation for advancing prices began firming well before this year's weather disruption in the Corn Belt. Sustained low prices tilted demand vs. supply trends favorably. Higher prices are the primary cure. Our fear is that climate change will add volatility and have a more enduring negative effect on production than just a one-off weather blip.

We expect Corn Belt production revisions to remain downward, supporting prices though year-end. A potential peak dollar and bottom in the Brazilian real would solidify an agriculture price bottom. Last years divergent strength in the sector despite broad commodity declines and trade tensions should prevail through 2H.

Ripening Agriculture Bull

Early Transition Days From Lower Prices to Higher in Agriculture. Agriculture is transitioning to the stage of higher prices following multiple years at depressed levels, in our view. Corn is the sprinter, and prices should continue to advance in 2H as the extremity of this year's output reduction materializes.

Agriculture Is Setting Up for a Ripe 2H. In the back half of 2019, we expect a bottoming agriculture sector to be more evident. Our graphic depicts the still depressed Bloomberg Agriculture Spot Index with corn breaking out higher. Broad ag prices have little higher hope if corn doesn't extend its advance. That recovery should be in early days as this unusual too-wet, reduced Corn Belt production year will take time to play out. A likely reference is 1995, when U.S. corn production declined near 26% and prices rose 60%, boosting the agriculture index 19%.

Corn Likely to Lead Agriculture Price Recovery



The next key, more macro-related support pillars for a longer-term recovery in ag prices are a potential peak in the dollar and bottom in the Brazilian real. The trade-weighted broad dollar near multi-decade highs offers plenty of mean reversion room as does the depressed real in the opposite direction.

It Was the Largest Discount Post-Ethanol Mandate.

Corn is in the early stages of recovering from a significant discount, in our view. The halfway mark of the bear market, near \$5.72 a bushel, is target resistance. Key support is the old resistance level of about \$4. The market is rebounding from about a three-decade extreme (36%) reached in 2015. Down 0.4% in 2017 marked an unprecedented fifth-consecutive annual decline and elevated its mean-reversion risk. A similar string of losses last occurred in 1984-86, followed by 78% appreciation in 1986-88.

Historic Corn Discount Disappearing Rapidly



Before the ethanol mandate prompted prices to be bid up in 2006, corn ended 10 consecutive years below the 25-year average; 2017 closed on that longer-term mean. The 2019 setup has elevated rhyme risk with the 2006

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Bloomberg Commodity Index (BCOM)

recovery. Prices didn't peak until 2012, more than 300% higher.

Long-Dormant Corn Prices Should Be Just Awakening: BI Commodity. As corn begins transitioning from a prolonged bear market, our biggest concern is that this year's overdue disruption in the favorable Corn Belt supply trend may be more enduring on the back of climate change. A worthy catalyst has been found for building upon the price foundation that's been firming for a few years. The midpoint of about \$5.72 a bushel in the 2012-16 bear-market range should be initial target resistance -- about 25% above the June 24 price. Favorable supply vs. demand trends should require higher prices to help rebalance.

Corn is in the early days of breaking out of its narrowest 36-month range in 50 years. We're concerned about a potential U.S. production reduction of more than 20% and overoptimism for an immediate return to trendline production in 2020.

Recovering From the Unusual Supports Corn Prices. Long-overdue mean reversion in U.S. corn production is the primary factor supporting a bottom in prices and a potential new bull market, in our view. Similar downside risks vs. limited upside in the trade-weighted broad dollar near a 17-year high should solidify the corn recovery. Our graphic depicts five-year volatility of USDA yields recovering from the lowest in the database since 1973. Essentially, the market was about as ripe as one could seek for a rally catalyst and got it -- record-wet Corn Belt weather.

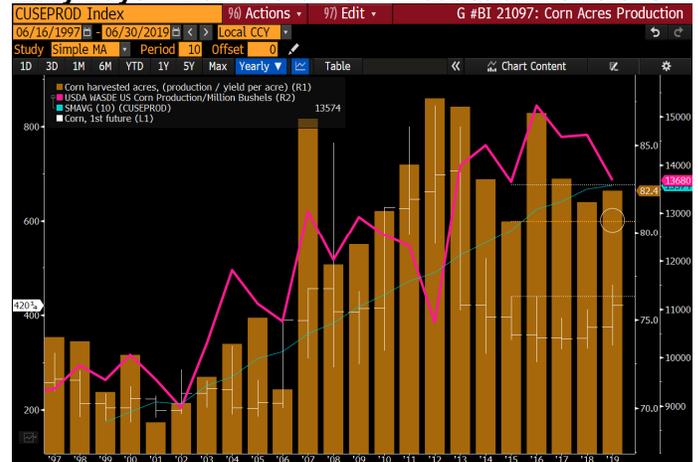
Early Mean Reversion Days? Corn Yields, Greenback



A reversal in the trend is the typical outcome when volatility declines to these levels. The halfway mark of the 2012-16 bear market, about \$5.72 a bushel, is initial target resistance.

Corn Production Cut Starts Slow Leak in Estimate to Avoid Pop. The USDA revision lower of this year's U.S. corn production estimates to near the 10-year mean appears optimistic given the extremity of poor planting conditions and likelihood of farmers taking "prevent plant" insurance. The forecast for harvested acres at 82.4 million, still about 1% above last year, should be the initial but likely fleeting support for production yields. In this year's successive reports, production estimates are more likely to be revised lower, supporting the nascent bull market in prices in our view.

Early Days -- Downward Corn Production Revisions



Our graphic depicts corn planted acres are more likely to be closer to 2015's 80.6 million. Muddy corn conditions, historic delays and risks of a continuation of less than favorable weather including frost risk should keep the price recovery on track to test resistance near the 2014 high of \$5.19 a bushel.

BI Primer: Stormy Weather May Mean Sunny Days Ahead for Soybeans. Soybeans are a prime candidate to illustrate the old adage that grain prices often bottom with high inventories. Mean-reversion risks in multidecade extremes in stocks-to-use, the dollar and favorable Corn Belt weather support higher soybean prices, in our view. Corn is likely in the lead this year, but its potential to revert outweighs further downside price risks from U.S.-China trade tension. Some long-overdue weather volatility will limit total grain supply and narrow the yawning gap between rapidly increasing global soybean demand and declining prices.

Despite slumping U.S. exports to China, low prices and a pickup in shipments to other countries are helping rebalance global trade. Soybeans have the added benefit of being among the most investable agricultural commodities.

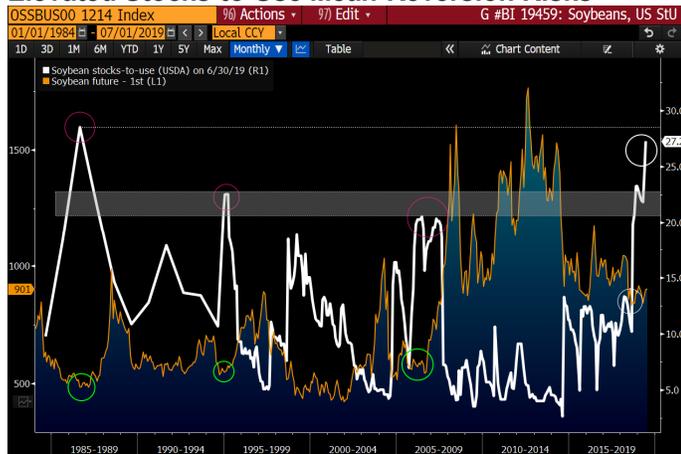
Bloomberg Commodity Outlook – July 2019 Midyear Edition

Bloomberg Commodity Index (BCOM)

Stocks-to-Use Doesn't Get Much More Extreme.

Mean-reversion potential in historically elevated soybean stocks-to-use outweighs further advancement risks and supports prices, if previous cycles are a guide. Approaching 27%, the monthly USDA measure for the U.S. is similar to 1986. From 1987's low to 1988's peak, front futures rallied more than 120%. A similarly elevated monthly reading in 1995 resulted in a 70% soybean price rally from the 1994 bottom to 1997 top. In 2006, stocks-to-use peaked and soybean prices rallied 230% from the 2005 low to 2008 high.

Elevated Stocks-to-Use Mean-Reversion Risks



Stocks-to-use is among the most negatively correlated USDA datasets to soybean prices -- minus 0.67 annually in the past 20 years. Stagnancy in the gauge over the past few years reflects a well-balanced market, with strong U.S. and Brazil production offset by rapidly increasing global demand.

Hedge Funds Still Offsides in Grains. Below-par net positions indicate this year's grain- and agriculture-price recovery is in its early days. In the history of the database since 2006, managed-money net positions of Bloomberg Grains Spot Subindex constituents have been near 200,000 -- about 150,000 above the latest Commitments of Traders data. Our graphic depicts grain prices bumping up against last year's highs and still well-below the 2014-16 peak. Given the extremity of reduced 2019 production, we expect these resistance levels to be breached.

It may be a matter of time, waiting for monthly USDA reports, which may embolden market participants to buy at a time of the season when sellers normally prevail. Record wet weather increases our concerns of a potential cut of over 20% to this year's output.

Grain Positions Are Far From Too Long



PERFORMANCE DRIVERS

Corn Should Remain 2019 Performance Leader. Corn prices will continue to drive the agriculture-sector recovery, in our view. Up almost 20% in 2019 to June 27, front futures should have about another 20% to go if the production reduction we fear (near 20%) this year comes to fruition. Supply bouncing back later in the growing season is unlikely, and given that stocks-to-use began to decline last year despite record yields, the corn recovery should be more enduring. What was resistance near \$4.00 a bushel (since 2014), should now be support.

Most Significant Ag Future Leading 2019 Gainers

Security	%YTD	Chg June	Chg QTD	1Yr % Chg	2Yr % Chg
Bloomberg Corn Subindex Total	+7.6%	-2.2%	+14.9%	+7.7%	-8.2%
Bloomberg Grains Spot Subindex	+6.4%	+2.3%	+11.9%	+10.4%	7.7%
Bloomberg Sugar Subindex Total	+4.0%	-1.7%	-3.4%	-11.5%	-11.5%
Bloomberg Wheat Subindex Total	+3.8%	+4.2%	+14.0%	+3.1%	-11.6%
Bloomberg Grains Subindex Total	+2.1%	+3%	+8.4%	+1.4%	-12.0%
Bloomberg Agriculture Subindex	+1.2%	+5%	+4.5%	-3.4%	-12.8%
BBG Soybean Meal TR	+2%	-1.9%	+2.0%	-6.5%	-1%
Bloomberg Coffee Subindex Total	+2%	+2.2%	+10.6%	-16.1%	-28.6%
Bloomberg Soybean Oil Subindex	+1%	+2.3%	-1.2%	-6.6%	-17.7%
BBG Softs TR	+1%	+1.5%	-3%	-11.8%	-15.6%
Bloomberg Soybeans Subindex Total	-1.8%	+2.1%	+3%	-2.4%	-11.1%
Bloomberg Live Cattle Subindex	-6.8%	+1.4%	-8.9%	+2.8%	-8.3%
Bloomberg Livestock Subindex Total	-6.8%	-3.5%	-11.0%	-1.4%	-10.4%
Bloomberg Lean Hogs Subindex Total	-8.0%	-10.0%	-13.9%	-10.1%	-16.9%
Bloomberg Cotton Subindex Total	-8.9%	-2.0%	-14.2%	-22.1%	-1.5%
Bloomberg Kansas Wheat Subindex	-9.7%	-4.9%	+3.3%	-13.5%	-29.0%

The Bloomberg Commodity Total Return Indexes are underperforming front future changes notably due to rolling into contango, but that's changing rapidly. Indicating demand gaining vs. supply, on a year-over-year change basis corn and wheat one-year futures curves lead all major commodities in shifting toward backwardation.

Bloomberg Commodity Outlook – July 2019 Midyear Edition

Bloomberg Commodity Index (BCOM)

DATA on BI COMD

Performance – Overview

Data as of the morning of July 1, 2019

Key Metrics

Name	1 Mth % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change	3 Yr % Change	5 Yr % Change
Commodities							
BCOM Index TR	3.1	-1.5	5.5	-6.4	0.5	-6.9	-37.7
Energy Index	5.6	-4.7	12.4	-12.9	17.3	-1.5	-62.8
All Metals Index	4.6	-0.6	5.9	-2.3	5.2	7.5	-8.8
Industrial Metals Index	1.9	-7.2	4.6	-11.1	2.4	18.2	-13.9
Precious Metals Index	6.2	6.3	6.1	6.5	5.7	-5.6	-7.5
Ags & Livestock Index	0.1	1.2	0.1	-3.8	-16.0	-23.9	-37.7
Livestock Index	-3.4	-11.2	-6.8	-3.5	-12.5	-7.0	-30.7
Agriculture Index	0.8	4.0	1.5	-3.9	-16.7	-27.0	-39.4
Grains Index	-0.1	6.6	1.8	-0.5	-17.2	-23.8	-41.3
Softs Index	3.4	2.0	2.0	-10.1	-17.2	-36.9	-44.3
BCOM EX Indices TR							
BCOM Index Roll Select TR	2.8	-1.9	4.3	-7.9	-1.2	-5.3	-33.6
BCOM Index Forwards TR							
BCOM Index ER	2.9	-2.1	4.2	-8.5	-3.2	-10.8	-40.4
BCOM Index Spot	3.1	-1.5	6.6	-5.7	4.6	4.6	-18.6
Stocks							
S&P 500 Index TR	7.0	3.1	18.5	10.4	26.3	48.6	65.2
Bonds							
Barclays U.S. Aggregate	1.3	3.5	6.1	7.9	7.4	6.9	15.9
Currencies							
Bloomberg U.S. Dollar Spot Index	-1.4	-0.6	-0.6	0.7	0.5	0.5	18.6
US Dollar Index	-1.4	-0.8	0.2	2.1	0.8	0.8	20.8
US Trade Weighted Broad Dollar	-1.2	0.8	-0.3	2.7	4.0	6.0	24.8

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Commodities										
BCOM Index TR	5.1%	-11.2%	1.7%	11.8%	-24.7%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%
Energy Index	10.6%	-12.7%	-4.3%	16.3%	-38.9%	-39.3%	5.2%	-9.4%	-16.0%	-10.5%
All Metals Index	5.9%	-12.6%	20.8%	15.7%	-19.5%	-7.1%	-21.6%	2.9%	-11.5%	25.9%
Industrial Metals Index	4.7%	-19.5%	29.4%	19.9%	-26.9%	-6.9%	-13.6%	0.7%	-24.2%	16.2%
Precious Metals Index	7.2%	-4.6%	10.9%	9.5%	-11.5%	-6.7%	-30.8%	6.3%	4.6%	42.7%
Ags & Livestock Index	-0.2%	-9.4%	-8.1%	0.9%	-16.1%	-6.0%	-12.6%	2.7%	-12.4%	33.9%
Livestock Index	-6.8%	-1.7%	6.4%	-5.6%	-18.8%	11.6%	-3.5%	-3.5%	-2.3%	9.3%
Agriculture Index	1.2%	-10.8%	-11.0%	2.1%	-15.6%	-9.2%	-14.3%	4.0%	-14.4%	38.5%
Grains Index	2.1%	-5.5%	-11.3%	-5.9%	-19.4%	-9.4%	-16.9%	18.3%	-14.4%	30.3%
Softs Index	0.1%	-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	3.9%	-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	3.8%	-13.0%	0.7%	11.4%	-24.7%	-17.0%	-9.6%	-1.1%	-13.4%	16.7%
BCOM Index Spot	6.6%	-10.5%	7.6%	23.1%	-18.4%	-17.0%	-8.7%	3.7%	-8.1%	26.4%
Stocks										
S&P 500 Index TR	18.5%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%
Bonds										
Barclays U.S. Aggregate	6.1%	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	-0.8%	3.1%	-8.5%	2.8%	9.0%	11.0%	3.3%	-0.7%	1.8%	-1.8%
US Dollar Index	0.0%	4.4%	-9.9%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%
US Trade Weighted Broad Dollar	0.2%	7.2%	-6.0%	4.5%	10.7%	8.4%	2.8%	-1.4%	0.7%	-1.3%

Bloomberg Commodity Outlook – July 2019 Midyear Edition

Bloomberg Commodity Index (BCOM)

Performance – Commodity Total Returns

Key Metrics

Name	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change
▼ BCOM Total Return Indices				
Gold Index	8.0	8.6	10.6	10.9
Corn Index	13.0	7.4	5.9	-12.0
Live Cattle Index	-9.3	-6.7	-0.1	-8.8
Wheat Index	11.9	3.0	-1.3	-21.1
Platinum Index	-1.5	5.2	-1.8	-9.5
Soybeans Index	-0.8	-1.7	-1.8	-14.0
Sugar Index	-1.9	5.0	-2.5	-17.4
Zinc Index	-12.5	5.8	-4.6	1.3
Soybean Oil Index	-1.2	0.8	-6.1	-19.1
Silver Index	1.0	-1.9	-6.2	-9.6
Soybean Meal Index	2.0	0.2	-6.5	-0.1
Copper Index	-6.4	4.4	-7.6	-0.7
Heating Oil Index	-0.8	19.3	-8.7	39.0
Gasoline Index	6.4	36.0	-10.2	27.3
Lean Hogs Index	-13.8	-8.0	-10.9	-21.1
Brent Crude Index	-0.4	27.3	-11.9	49.4
Coffee Index	16.6	2.9	-13.3	-27.4
Aluminum Index	-5.7	-3.5	-16.2	-6.3
WTI Crude Index	-2.6	29.8	-16.2	33.2
HRW Wheat Index	2.2	-9.7	-16.4	-35.6
Nickel Index	-5.1	16.4	-16.7	31.4
Cotton Index	-11.9	-6.7	-20.6	-0.6
Natural Gas Index	-18.8	-23.9	-21.7	-35.7

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ BCOM Total Return Indices										
Gasoline Index	33.2%	-28.3%	2.8%	6.4%	-12.6%	-43.8%	1.9%	25.7%	14.5%	13.1%
WTI Crude Index	26.5%	-20.5%	5.1%	7.1%	-44.3%	-41.7%	6.8%	-11.8%	-3.6%	3.8%
Brent Crude Index	24.1%	-14.9%	14.2%	25.4%	-45.6%	-47.6%	7.2%	7.6%	16.8%	11.5%
Nickel Index	18.8%	-16.4%	25.6%	11.8%	-42.6%	7.3%	-20.1%	-10.2%	-24.7%	32.2%
Heating Oil Index	17.2%	-15.7%	15.0%	33.5%	-42.8%	-38.8%	0.4%	5.5%	10.7%	8.3%
Gold Index	10.0%	-2.8%	12.8%	7.7%	-10.9%	-1.7%	-28.7%	6.1%	9.6%	28.7%
Corn Index	7.6%	-4.6%	-12.1%	-9.8%	-19.2%	-13.3%	-30.3%	19.0%	1.1%	30.7%
Zinc Index	6.2%	-21.4%	29.7%	57.5%	-28.0%	3.5%	-7.0%	9.0%	-27.8%	-8.8%
Platinum Index	4.9%	-14.8%	3.0%	0.8%	-26.5%	-12.3%	-11.8%	8.7%	-21.8%	19.3%
Sugar Index	4.0%	-26.1%	-25.4%	22.8%	-4.7%	-30.9%	-20.0%	-13.0%	-11.9%	24.0%
Copper Index	3.8%	-21.2%	29.2%	15.7%	-25.1%	-16.6%	-8.8%	5.0%	-24.4%	29.5%
Wheat Index	3.8%	3.5%	-12.5%	-24.1%	-22.2%	-9.4%	-27.2%	9.8%	-34.0%	21.2%
Soybean Meal Index	0.2%	-4.4%	-4.8%	18.1%	-18.0%	11.8%	20.0%	49.1%	-18.1%	38.9%
Coffee Index	0.2%	-26.5%	-16.0%	-1.3%	-31.5%	37.8%	-30.5%	-41.6%	-11.2%	67.0%
Soybean Oil Index	0.1%	-19.2%	-7.0%	7.3%	-7.7%	-20.6%	-22.4%	-9.8%	-15.2%	33.8%
Silver Index	-1.8%	-10.2%	5.8%	14.0%	-12.7%	-20.4%	-36.6%	7.1%	-10.1%	81.8%
Soybeans Index	-1.8%	-11.7%	-8.1%	14.8%	-14.6%	-5.5%	10.5%	24.0%	-16.4%	34.9%
Aluminum Index	-3.8%	-16.9%	31.2%	9.7%	-22.9%	-3.1%	-20.7%	-4.0%	-21.7%	5.4%
Live Cattle Index	-6.8%	2.6%	9.1%	-7.4%	-14.3%	22.1%	-5.0%	-3.9%	-1.0%	15.0%
Lean Hogs Index	-8.0%	-11.0%	2.8%	-2.9%	-26.1%	-4.4%	-2.0%	-2.9%	-4.6%	0.3%
Cotton Index	-8.9%	-7.3%	12.5%	10.5%	3.0%	-21.2%	9.0%	-12.7%	-21.7%	98.2%
HRW Wheat Index	-9.7%	-3.1%	-14.9%	-25.3%	-32.7%	-4.7%	-26.2%	5.6%	-22.9%	42.1%
Natural Gas Index	-22.8%	-0.1%	-36.4%	10.3%	-39.9%	-30.7%	5.0%	-30.6%	-47.1%	-40.6%

Bloomberg Commodity Outlook – July 2019 Midyear Edition

Bloomberg Commodity Index (BCOM)

Performance – Prices

Key Metrics

Name	Unit	MTD % Change	3 Mth % Change	YTD % Change	1Yr % Change	2Yr % Change
▼ BCOM Single Commodity Price						
Palladium	\$/oz	0.0	16.7	22.2	63.3	75.8
Corn	¢/bu	-0.3	15.8	11.7	19.6	13.1
Gold	\$/oz	-1.9	7.3	8.2	10.5	11.5
Sugar	¢/lb	3.3	0.5	5.8	7.3	-6.9
Wheat	¢/bu	-0.1	14.0	4.8	6.0	3.2
Soybeans	¢/bu	0.1	0.6	2.1	5.0	-4.4
Platinum	\$/oz	0.3	-1.4	5.3	-1.7	-9.3
Soybean Oil	¢/lb	1.0	-0.1	3.6	-2.0	-13.4
Coffee	¢/lb	0.0	15.2	6.3	-3.5	-11.8
Live Cattle	¢/lb	-5.6	-17.5	-16.4	-3.6	-13.2
HRW Wheat	¢/bu	0.1	4.0	-7.5	-4.0	-11.6
Silver	\$/oz	-0.1	1.3	-1.2	-5.3	-8.0
Soybean Meal	¢/lb	0.3	1.5	2.5	-5.6	3.2
Copper (CME)	¢/lb	0.5	-6.9	3.5	-7.9	0.7
Copper (LME)	¢/lb	0.6	-6.8	1.1	-9.2	1.8
Heating Oil	¢/gal	1.7	-0.5	17.7	-10.5	34.0
Gas Oil	¢/gal	1.1	-0.9	17.7	-11.0	37.7
Lean Hogs	¢/lb	0.0	-8.6	18.2	-11.1	-18.0
Gasoline	¢/gal	-0.4	1.9	46.2	-11.2	27.7
Zinc	¢/lb	0.0	-12.5	2.5	-13.0	-7.0
Brent Crude	¢/bbl	-0.2	-3.7	23.5	-16.4	38.6
Nickel	¢/lb	-2.0	-5.0	16.6	-16.5	32.4
Aluminum	¢/lb	0.3	-5.0	-1.9	-17.4	-6.4
WTI Crude	¢/bbl	2.7	-2.5	32.2	-19.0	30.4
Natural Gas	¢/dth	-1.4	-16.0	-22.6	-22.2	-25.0
Cotton	¢/lb	4.9	-14.4	-8.3	-22.4	-12.1

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ BCOM Single Commodity Price										
Gasoline	46.7%	-26.4%	8.1%	31.4%	-11.7%	-48.5%	-0.9%	4.7%	9.5%	19.5%
WTI Crude	28.8%	-24.8%	12.5%	45.0%	-30.5%	-45.9%	7.2%	-7.1%	8.2%	15.1%
Palladium	27.7%	12.8%	55.3%	21.6%	-29.6%	11.2%	2.1%	7.2%	-18.3%	96.5%
Brent Crude	23.7%	-19.5%	17.7%	52.4%	-35.0%	-48.3%	-0.3%	3.5%	13.3%	21.6%
Nickel	19.0%	-16.5%	27.5%	13.5%	-41.8%	9.0%	-18.6%	-9.2%	-24.2%	33.8%
Lean Hogs	18.2%	-15.0%	8.5%	10.6%	-26.4%	-4.9%	-0.3%	1.7%	5.7%	22.3%
Heating Oil	17.4%	-19.0%	21.8%	54.8%	-40.4%	-40.0%	1.1%	3.8%	15.4%	20.1%
Gas Oil	16.5%	-14.9%	19.8%	53.6%	-36.3%	-45.8%	1.9%	0.3%	21.2%	20.0%
Corn	12.1%	6.9%	-0.4%	-1.9%	-9.6%	-5.9%	-39.6%	8.0%	2.8%	51.7%
Gold	9.0%	-2.1%	13.7%	8.6%	-10.5%	-1.5%	-28.3%	7.0%	10.2%	29.7%
Coffee	6.3%	-19.3%	-7.9%	8.2%	-23.9%	50.5%	-23.0%	-36.6%	-5.7%	76.9%
Platinum	5.2%	-14.8%	3.6%	1.1%	-26.2%	-11.8%	-10.9%	9.9%	-21.1%	21.5%
Wheat	4.9%	17.9%	4.7%	-13.2%	-20.3%	-2.6%	-22.2%	19.2%	-17.8%	46.7%
Copper (CME)	4.3%	-20.3%	31.7%	17.4%	-24.4%	-16.8%	-7.0%	6.3%	-22.7%	32.9%
Zinc	2.5%	-25.6%	30.1%	60.2%	-26.2%	6.0%	-0.5%	12.2%	-25.2%	-3.5%
Soybean Oil	2.5%	-16.7%	-3.9%	12.7%	-4.4%	-17.6%	-21.0%	-5.6%	-9.8%	43.1%
Sugar	2.4%	-20.6%	-22.3%	28.0%	5.0%	-11.5%	-15.9%	-16.3%	-27.5%	19.2%
Soybean Meal	2.3%	-2.0%	-0.1%	18.4%	-27.5%	-16.7%	4.1%	35.9%	-16.4%	18.0%
Soybeans	2.0%	-7.3%	-4.5%	14.4%	-14.5%	-22.3%	-7.5%	18.4%	-14.0%	34.0%
Copper (LME)	0.5%	-17.4%	30.6%	17.3%	-25.8%	-13.9%	-6.8%	4.2%	-21.2%	31.2%
Silver	-2.0%	-9.4%	7.2%	15.8%	-11.5%	-19.5%	-35.9%	8.3%	-9.8%	83.7%
Aluminum	-2.2%	-19.3%	33.3%	12.5%	-17.9%	4.1%	-13.9%	2.5%	-18.8%	11.6%
HRW Wheat	-7.6%	14.4%	2.1%	-10.7%	-25.2%	-2.2%	-22.9%	15.9%	-15.7%	58.7%
Cotton	-12.5%	-8.2%	11.3%	11.6%	5.0%	-28.8%	12.6%	-18.1%	-36.6%	91.5%
Live Cattle	-15.8%	1.9%	4.7%	-15.2%	-16.4%	21.5%	1.8%	8.9%	12.1%	25.9%
Natural Gas	-21.5%	-0.4%	-20.7%	59.3%	-19.1%	-31.7%	26.2%	12.1%	-32.1%	-20.9%

Bloomberg Commodity Outlook – July 2019 Midyear 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											
Lean Hogs	41.5	3.3	5.8	7.4	3.1	9.6	46.1	61.4	56.0	94.6	87.3
Unlead Gas	35.0	0.4	-10.2	-13.4	18.6	31.2	-8.1	40.1	21.3	-12.2	116.1
NaturalGas	33.6	0.8	-1.0	24.9	27.1	67.9	-0.9	61.1	3.3	-4.3	14.6
Coffee	32.5	0.8	10.2	-6.1	4.9	16.3	26.8	91.8	18.4	-2.6	-18.3
Crude Oil	31.8	1.3	-12.4	-22.7	4.6	20.8	-34.3	32.4	4.3	-15.1	121.3
Brent Crude	31.8	1.3	-11.9	-21.9	7.6	18.9	-25.5	28.6	7.8	-14.3	115.5
Palladium	30.6	-1.8	1.5	8.0	13.2	11.4	16.9	35.7	4.8	-2.0	61.3
Corn	29.2	-6.5	-15.4	-23.2	-17.8	57.9	86.5	24.5	22.3	-6.5	2.7
Heating Oil	28.6	1.5	-10.3	-17.0	9.3	21.6	-21.0	26.3	9.6	-12.2	104.4
Gas Oil	28.3	-4.5	-15.0	-18.4	4.4	14.8	-34.5	20.0	3.7	-15.7	100.4
HRW Wheat	26.7	-3.4	-6.0	-23.5	-18.1	18.1	35.2	14.3	11.7	9.1	14.6
Nickel	26.0	26.9	8.6	-2.0	7.3	12.0	-13.2	-8.9	16.3	-7.3	-16.4
Wheat	25.0	-2.0	-7.0	-22.8	-19.7	12.7	32.3	10.8	6.0	1.8	3.9
Zinc	23.5	5.4	4.9	1.1	2.3	-9.2	-3.7	-2.4	-4.9	-9.4	50.1
Sugar	22.6	-4.8	3.8	-9.5	-8.1	2.0	4.8	-11.3	-23.0	-37.1	9.0
Cotton	21.5	2.2	11.3	-0.4	-0.9	13.8	8.5	-10.9	7.8	7.1	17.9
Soybean Meal	19.4	-2.7	-8.2	-16.1	-10.4	33.2	32.4	-20.2	-1.5	-39.4	-20.5
Platinum	18.6	6.6	7.4	16.7	19.5	14.6	8.1	6.4	8.1	-4.2	26.7
Soybeans	18.3	-4.1	-13.0	-21.1	-16.5	38.7	35.1	-21.9	4.8	-35.6	-15.7
Copper (COMEX)	18.3	1.3	2.3	2.5	6.6	14.6	1.6	2.7	9.9	-12.9	44.8
Aluminum	18.2	-1.0	12.6	19.2	-26.7	6.1	-4.8	-22.0	19.6	-5.2	9.3
Live Cattle	18.0	9.6	0.0	5.1	15.4	26.1	40.4	-9.9	-19.4	-8.5	52.4
Copper (LME)	17.4	-13.9	6.0	-1.7	4.2	16.4	-12.2	-9.4	12.4	-6.2	15.4
Soybean Oil	17.3	0.0	-10.0	-11.3	-3.3	25.2	20.4	5.8	-18.6	-17.7	-10.6
Silver	17.2	2.1	-6.0	19.9	24.5	18.9	-12.5	5.4	-0.9	-35.2	-12.2
Gold	13.5	2.4	2.6	51.3	55.9	47.1	9.2	39.7	27.0	-24.4	14.2
▼ BCOM 60 Day Historical Volati...											
Lean Hogs	43.2	0.5	2.8	-5.8	-4.7	5.3	-28.0	-28.5	51.7	30.3	66.7
Coffee	36.5	0.9	1.2	21.3	25.2	44.5	-3.2	73.4	20.4	20.4	-29.6
Live Cattle	33.9	2.7	3.1	7.6	10.9	32.2	33.1	-0.1	29.4	59.3	119.3
HRW Wheat	33.9	2.7	3.1	7.6	10.9	32.2	33.1	-0.1	29.4	13.5	40.8
Crude Oil	32.7	0.4	-0.1	19.3	39.8	21.5	-28.5	19.5	14.6	-12.9	149.6
Unlead Gas	32.1	-0.1	5.1	21.9	34.9	-4.9	-25.6	45.7	23.4	-10.5	126.6
Wheat	31.8	3.4	3.7	4.6	9.6	26.0	37.4	-9.1	27.6	1.4	45.4
Natural Gas	29.7	-0.2	7.4	14.5	24.1	-47.7	-67.0	32.3	-4.4	-43.1	4.2
Brent Crude	29.6	-0.5	0.5	31.6	51.8	27.6	-33.1	17.6	8.7	-22.5	151.1
Palladium	29.0	-3.3	-6.8	-26.0	-25.4	-13.2	7.6	11.1	33.0	2.3	35.1
Corn	28.1	7.5	-0.2	8.8	14.7	86.3	99.7	41.6	36.6	-5.9	49.6
Sugar	26.5	-0.8	5.4	7.9	9.9	-2.2	12.8	-9.0	-14.2	-19.4	13.0
Gas Oil	25.4	0.0	1.9	14.3	22.2	20.3	-20.0	4.7	7.8	-35.0	103.7
Cotton	25.1	0.0	1.3	7.3	5.9	29.1	8.2	-3.7	-0.7	13.5	3.7
Zinc	24.2	-1.3	2.9	-3.7	-4.1	13.3	-7.0	9.8	-2.4	-9.1	66.8
Heating Oil	24.1	0.0	2.4	21.5	41.2	17.6	-22.2	4.3	3.0	-37.4	98.0
Soybean Meal	20.9	0.0	0.3	-0.1	6.7	52.5	25.0	9.1	47.6	-38.4	-6.2
Nickel Gas	19.8	0.0	3.1	-0.1	-4.7	-15.7	-1.0	-31.8	-20.1	-31.1	-39.0
Soybeans	19.5	0.6	0.8	6.5	12.3	57.8	9.0	7.0	46.5	-25.2	4.2
Platinum	18.7	-2.7	-6.8	-7.8	-8.9	-8.1	4.2	13.8	-10.5	-19.5	24.6
Soybean Oil	17.2	0.4	-0.9	10.4	13.5	24.8	10.8	27.1	-3.3	-13.8	-4.3
Copper (CME)	16.5	-1.1	-5.7	-0.7	-0.5	-9.6	-20.7	-5.8	-11.0	-24.6	18.9
Silver	16.5	0.1	0.1	9.9	11.7	8.1	-10.8	-15.0	-3.7	-25.7	-11.4
Aluminum	14.9	0.0	3.6	-6.3	-9.6	-20.3	-0.7	-59.6	14.2	-20.6	-6.4
Copper (LME)	14.8	-0.3	-1.8	2.9	1.8	8.7	-12.8	-12.5	-14.3	-30.4	13.6
Gold	11.9	-0.1	1.9	18.9	25.4	16.9	4.5	20.7	7.8	-32.7	-8.1

Bloomberg Commodity Outlook – July 2019 Midyear 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	-4.7	-2.9	-1.8	0.3	-0.8	-1.2	-1.2	-1.8
▶ Sector								
▶ Energy	-0.2	5.4	-5.6	2.0	0.2	-2.7	-0.2	4.5
▶ Industrial Metals	-1.4	-0.4	-0.9	-0.2	-0.9	-1.0	-0.8	-0.3
▶ Precious Metals	-2.3	-3.0	0.7	0.8	0.4	0.4	0.8	-0.2
▶ Agriculture	-8.3	-8.0	-0.3	0.7	-0.3	0.5	0.6	-2.0
▶ Livestock	-13.2	0.6	-13.9	-11.5	-5.8	-7.2	-15.2	-23.1
▶ Single Commodities								
Unleaded Gas	6.8	2.8	4.0	10.0	2.0	0.7	2.9	10.7
Crude Oil	4.6	11.9	-7.3	11.7	2.6	1.9	3.6	10.0
Brent Crude	4.2	5.6	-1.4	7.4	-0.5	-3.8	-0.1	9.7
Zinc	2.8	2.5	0.2	-0.7	-4.2	-4.7	-2.4	0.6
Palladium	1.5	1.0	0.5	-2.7	0.6	0.3	-1.1	-1.0
Heating Oil	1.1	0.2	0.9	4.5	1.0	0.2	3.1	5.9
Gas Oil	0.7	0.5	0.2	4.7	0.0	-1.2	2.8	4.8
Copper (LME)	-0.5	-0.5	0.0	-0.6	0.5	0.4	-0.5	0.5
Copper (CME)	-1.3	-2.8	1.5	-0.6	-0.5	-0.7	-0.4	0.8
Platinum	-1.9	-1.9	0.1	0.1	0.1	0.1	0.0	-0.8
Gold	-1.9	-2.9	1.0	1.0	0.5	0.7	0.8	-0.2
Nickel	-2.2	-1.7	-0.6	0.9	-0.1	-0.3	0.3	0.1
Silver	-2.7	-3.1	0.4	0.6	0.3	0.2	0.8	-0.2
Wheat	-3.6	-10.9	7.4	6.4	3.5	3.0	6.7	11.5
Live Cattle	-4.6	-6.8	2.3	-9.7	1.5	1.3	-7.6	-10.6
Aluminum	-5.4	0.4	-5.8	-0.1	-0.1	0.1	-0.9	-3.6
Soybean Meal	-5.7	2.1	-7.8	-0.5	-2.6	-2.0	-1.9	-2.0
Soybean Oil	-5.9	-6.4	0.5	0.3	0.8	0.8	0.9	-3.2
Corn	-6.1	-12.8	6.6	2.4	0.1	1.4	4.4	5.5
Soybean	-6.1	-6.1	0.0	1.0	0.6	1.5	-0.2	-2.5
Cotton	-7.6	1.9	-9.6	-4.8	-5.8	-6.2	-7.7	-16.0
Natural Gas	-7.7	7.9	-15.6	-5.7	-3.5	-8.6	-12.5	-14.3
Sugar	-9.3	-9.8	0.6	0.0	3.1	4.4	1.3	-0.3
Thermal Coal	-11.0	9.1	-20.1	-18.6	0.0	-7.8	-1.2	
Coffee	-11.3	-13.6	2.3	4.7	1.2	2.4	5.2	-0.6
HRW Wheat	-15.2	-18.5	3.4	-1.7	-2.4	-0.4	0.2	0.8
Lean Hogs	-21.9	8.1	-30.0	-13.3	-13.1	-15.7	-22.9	-35.7

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	-4.7	-5.0	-1.7	-2.2	-7.1	-4.4	0.3	-0.9	-2.0	2.3
▶ Sector										
▶ Energy	-0.2	-2.2	4.3	0.4	-14.0	-11.3	3.5	-1.3	-2.5	-2.1
▶ Industrial Metals	-1.4	-1.2	-0.8	-0.8	-1.5	-0.8	-1.8	-2.5	-2.1	0.5
▶ Precious Metals	-2.3	-3.1	-2.3	-1.7	-1.0	-0.8	-0.7	-0.7	-0.7	-0.9
▶ Agriculture	-8.3	-8.9	-5.9	-4.2	-5.5	-5.6	-1.5	-2.3	-1.8	12.2
▶ Livestock	-13.2	-1.7	6.5	8.1	0.6	8.3	4.1	-0.7	-0.2	-1.8
▶ Single Commodities										
Unleaded Gas	6.8	-3.2	4.7	2.8	1.0	-12.3	7.0	9.8	7.9	3.7
Crude Oil	4.6	-7.1	5.0	-5.9	-20.4	-13.5	7.3	-1.3	1.4	-3.2
Brent Crude	4.2	-3.1	6.3	-3.1	-22.1	-16.4	4.9	6.3	4.0	-0.4
Zinc	2.8	3.4	3.4	0.2	-2.8	-1.4	-2.3	-4.5	-3.9	-1.7
Palladium	1.5	4.1	1.5	-0.5	-0.2	-0.1	-0.5	-0.2	-0.4	0.0
Heating Oil	1.1	-3.4	5.9	-4.5	-24.5	-4.5	3.2	2.1	2.1	-3.4
Gas Oil	0.7	-4.0	6.2	-4.8	-23.8	-12.0	3.1	2.9	3.0	-4.2
Copper (LME)	-0.5	0.0	-1.3	-0.3	0.3	1.6	1.1	-0.7	-0.3	2.7
Copper (CME)	-1.3	-0.8	-1.8	-0.8	-1.1	-0.2	1.3	-1.1	-0.8	2.5
Platinum	-1.9	-2.0	-1.4	-1.1	-0.4	-0.4	-0.5	-0.7	-1.0	-0.5
Gold	-1.9	-2.9	-2.2	-1.5	-0.5	-0.3	-0.4	-0.7	-0.9	-0.9
Nickel	-2.2	-3.1	-2.0	-1.9	-1.4	-1.1	-1.8	-1.4	-0.1	1.1
Silver	-2.7	-3.3	-2.5	-2.0	-1.4	-1.2	-0.9	-0.7	-0.5	-0.9
Wheat	-3.6	-10.0	-15.5	-17.1	-10.5	-5.0	-7.2	-6.9	-12.4	-8.7
Live Cattle	-4.6	5.2	6.3	13.3	8.1	7.0	2.5	-3.3	-4.5	-3.8
Aluminum	-5.4	-5.3	-2.3	-1.0	-2.7	-3.1	-7.5	-5.0	-5.2	-2.3
Soybean Meal	-5.7	-5.3	-3.4	-0.4	-5.7	9.8	19.9	12.5	-2.4	9.9
Soybean Oil	-5.9	-6.2	-1.1	-1.2	-3.1	-0.9	-3.8	-2.8	-1.6	-0.9
Corn	-6.1	-8.5	-12.1	-10.5	-9.5	-8.1	-9.2	12.7	7.2	9.4
Soybean	-6.1	-7.2	-3.3	0.4	-2.0	0.9	13.1	7.7	-1.2	5.9
Cotton	-7.6	-2.9	6.1	1.7	-2.7	-8.6	6.7	-5.7	3.6	34.6
Natural Gas	-7.7	-2.0	-3.7	-0.1	-22.6	-22.2	-3.2	-20.7	-29.9	-18.4
Sugar	-9.3	-9.3	-3.5	4.8	0.9	-13.1	-8.2	-5.5	-0.3	26.0
Thermal Coal	-11.1	7.5	5.4	18.4	14.0	1.7	1.9	-8.3	-6.2	11.2
Coffee	-11.3	-16.0	-10.9	-9.2	-8.4	-7.4	-11.2	-11.5	-4.9	6.1
HRW Wheat	-15.2	-13.5	-19.1	-16.1	-14.9	-6.3	-5.5	-5.7	-7.9	-3.1
Lean Hogs	-21.9	-8.6	6.7	2.9	-7.0	9.6	5.7	2.0	4.2	0.2

Bloomberg Commodity Outlook – July 2019 Midyear 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	2.2	3.0	-2.9	5.0	-15.8	18.0
BCOM Industrial Metals	1.7	0.6	-1.2	2.9	-2.8	4.5
BCOM Precious Metals	-0.7	-0.7	-0.9	0.2	-2.4	1.8
BCOM	-1.0	-0.7	-3.6	2.6	-7.3	6.3
BCOM Livestock	-2.8	1.8	-0.3	-2.5	6.5	-9.3
BCOM Softs	-6.7	-4.6	-4.0	-2.7	-3.8	-2.9
BCOM Grains	-8.9	-10.2	-10.5	1.6	-7.4	-1.6
BCOM Agriculture		-7.1	-7.6			
▼ Commodities Roll Yield						
Zinc	8.8	3.7	0.8	8.0	-2.9	11.8
Cotton	3.2	1.1	13.0	-9.8	-12.2	15.4
Brent Crude	2.7	4.4	5.6	-2.9	-15.0	17.7
Crude Oil	2.0	3.6	-1.9	3.9	-11.7	13.7
Aluminum	1.8	3.0	-2.4	4.2	-3.0	4.8
Natural Gas	0.9	-3.1	-14.3	15.1	-23.6	24.4
Gas Oil	0.8	3.5	5.4	-4.7	-8.3	9.0
Heating Oil	0.6	2.2	3.0	-2.4	-9.9	10.5
Copper (CME)	0.3	-0.8	-1.7	2.0	-1.6	1.9
Lean Hogs	0.2	3.8	-1.3	1.5	-15.5	15.7
Platinum	-0.3	-0.5	-0.2	-0.1	-0.6	0.3
Nickel	-0.8	-2.8	-1.3	0.5	-2.5	1.8
Gold	-0.9	-1.6	-0.7	-0.2	-1.1	0.2
Unlead Gas	-1.0	-2.4	-1.1	0.2	-10.3	9.3
Soybean Meal	-1.0	-2.3	-5.6	4.6	-1.9	0.9
Silver	-1.8	-2.0	-1.1	-0.7	-1.8	0.1
Soybean Oil	-4.1	-3.9	-3.1	-1.0	-3.8	-0.3
Soybean	-6.5	-5.0	-3.4	-3.0	0.0	-6.5
Sugar	-9.7	-6.5	-8.0	-1.7	-4.9	-4.8
Wheat	-10.7	-14.4	-23.1	12.4	-13.8	3.1
Coffee	-12.1	-8.0	-7.6	-4.6	-9.9	-2.3
Corn	-15.7	-11.1	-12.3	-3.4	-5.8	-9.9
HRW Wheat	-16.1	-17.9	-19.3	3.2	-18.4	2.3

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	2.2	3.6	-7.7	-32.5	-12.6	1.6	-5.1	-11.7	-11.0	-13.8
BCOM Industrial Metals	1.7	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	-1.0	-0.7	-5.9	-11.4	-6.3	0.0	-0.9	-4.7	-6.6	-9.5
BCOM Livestock	-2.8	1.8	0.5	0.2	1.1	-0.2	-4.5	-9.8	-12.3	-14.8
BCOM Agriculture	-4.3	-7.1	-8.0	-6.1	-4.1	-1.0	4.9	1.9	-1.9	-9.6
BCOM Softs	-6.7	-4.5	-4.2	-5.6	-7.4	-12.5	-4.9	0.9	9.0	0.5
BCOM Grains	-8.9	-10.1	-10.7	-7.0	-4.7	0.7	8.2	3.6	-5.8	-12.6
▼ Commodities Roll Yield										
Zinc	8.8	4.2	-3.1	-2.7	-2.5	-4.6	-8.8	-3.1	-3.0	-5.3
Cotton	3.2	0.9	1.0	-1.1	-2.1	7.7	-3.6	5.2	15.5	14.3
Brent Crude	2.7	4.7	-4.9	-27.7	-23.3	0.3	6.9	4.2	8.3	-12.5
Live Cattle	2.1	0.6	4.4	7.8	2.0	0.6	-6.8	-12.8	-12.5	-12.2
Crude Oil	2.0	4.4	-7.3	-38.2	-14.0	4.3	-0.3	-4.5	-9.7	-11.3
Aluminum	1.8	2.4	-3.2	-2.9	-6.0	-9.1	-8.4	-6.2	-3.3	-6.0
Natural Gas	0.9	0.3	-14.0	-52.6	-19.8	0.8	-22.3	-42.7	-13.8	-16.1
Gas Oil	0.8	3.9	-0.9	-22.7	-11.0	-1.6	2.1	7.4	2.1	-12.3
Heating Oil	0.6	3.4	-6.4	-25.3	-3.0	1.1	-1.3	1.0	-2.9	-11.7
Copper (CME)	0.3	-1.0	-3.5	-1.6	-0.7	0.3	-1.7	-1.3	-0.1	-3.6
Lean Hogs	0.2	4.1	-8.2	-13.6	0.3	0.6	-1.7	-4.5	-9.6	-23.8
Platinum	-0.3	0.0	-1.1	-0.4	-0.2	-0.5	-0.8	-1.2	0.9	-2.7
Nickel	-0.8	0.1	-0.6	-1.7	0.5	-2.9	-2.3	-1.0	-1.7	-1.6
Gold	-0.9	-0.7	-0.3	-0.9	-0.4	-0.2	-0.4	-0.9	2.9	-1.0
Unlead Gas	-1.0	-0.6	-4.0	-27.2	1.1	4.7	1.3	18.9	4.5	-6.9
Soybean Meal	-1.0	-2.3	-4.8	-0.5	9.6	28.7	16.5	13.0	-1.3	20.7
Silver	-1.8	-0.8	0.1	-1.8	-1.2	-0.9	-0.7	-1.1	4.5	-5.1
Soybean Oil	-4.1	-2.5	-2.9	-5.4	-3.2	-2.9	-1.3	-4.2	-4.2	-8.5
Soybean	-6.5	-4.4	-3.0	0.2	-0.2	17.0	18.5	5.5	-1.8	0.5
Sugar	-9.7	-5.4	-3.2	-5.2	-9.9	-19.5	-4.1	3.1	18.7	4.6
Wheat	-10.7	-14.3	-18.0	-10.9	-1.9	-7.0	-5.1	-9.4	-14.6	-23.8
Coffee	-12.1	-7.2	-9.2	-9.7	-7.8	-12.6	-7.2	-5.0	-3.4	-8.5
Corn	-15.7	-11.5	-12.4	-7.9	-9.6	-7.4	9.4	10.8	0.4	-20.9
HRW Wheat	-16.1	-17.5	-17.8	-14.7	-7.6	-2.5	-3.3	-4.1	-7.6	-9.9

Bloomberg Commodity Outlook – July 2019 Midyear Edition
 Bloomberg Commodity Index (BCOM)

Curve Analysis – Forwards / Forecasts
Spread %

Name	6/2019	5/2019	4/2019	3/2019	2/2019	1/2019	12/2018	11/2018	10/2018	9/2018	8/2018
1 Yr Spread ((Forward-Forecast)/ Forecast											
Energy											
WTI Crude Spread %	-2.0	-5.0	1.8	-1.9	-3.3	-8.9	-2.8	-3.1	-0.9	2.4	1.2
Brent Crude Spread %	-2.0	-4.9	0.6	-2.5	-1.6	-8.0	-1.1	-1.8	1.3	4.1	3.8
ULS Diesel Spread %		-11.7	-5.2		-4.3	-12.6	-1.5	-0.8	1.7	2.2	1.1
Unleaded Gasoline Spread %	-7.2	-9.2	-5.7	-2.5	-5.5	-17.4	-2.0	-1.8	-1.4	2.8	-0.1
Soft											
Sugar Spread %	-1.5	-4.9	-3.2	-0.1	4.8	2.9	-3.0	-1.2	3.3	-3.6	-2.0
Coffee Spread %	1.7	0.2	-13.8	-11.0	-15.1	-10.3	-9.2	-5.8	-4.8	-6.8	-9.0
Cotton Spread %	-7.4	-7.6	-1.9	-2.3	-5.7	-2.5	-1.2	-1.7	-2.8	-2.5	-1.9
Industrial Metals											
Copper Spread % (LME)	-3.5	-5.1	-0.6	-2.5	-0.9	-6.0	-0.8	-1.1	-1.9	-1.7	-3.4
Aluminum Spread %	-5.3	-7.0	-6.4	-5.6	-4.8	-4.8	-0.8	-1.5	-1.5	-1.0	0.6
Zinc Spread %	-2.8	-4.0	0.2	2.0	0.0	-2.2	-2.2	-2.5	-2.9	-4.9	-7.2
Nickel Spread %	-0.4	-3.7	-3.8	-0.3	1.8	-1.7	-3.9	-3.8	-3.4	-3.1	-0.8
Precious Metals											
Gold Spread %	3.5	-1.9	-1.5	0.9	3.7	3.8	0.0	-0.5	-0.3	-1.7	-1.7
Silver Spread %	-2.2	-6.5	-5.2	-4.7	-1.2	1.6	-1.2	-1.8	-2.4	-4.3	-4.5
Grain											
Corn Spread %	6.1	9.2	-3.5	-1.1	-2.3	1.1	-1.2	-2.3	-3.2	-3.4	-5.1
Soybeans Spread %	-3.1	-3.5	-5.3	-3.6	-3.3	-1.8	-2.7	-2.6	-3.4	-3.3	-5.4
Wheat Spread %	3.8	4.6	-8.6	-5.3	-5.1	4.3	-0.7	-2.3	-2.5	-1.4	1.0

Data Set

Name	6/2019	5/2019	4/2019	3/2019	2/2019	1/2019	12/2018	11/2018	10/2018	9/2018	8/2018
Data Set											
1 Yr Spread											
Energy											
Natural Gas Forward	2.55	2.70	2.74	2.87	2.92	2.94	3.15	3.24	3.00	2.98	2.93
WTI Crude Forward	59.3	57.7	62.0	59.1	58.0	55.1	64.4	64.9	67.4	68.6	67.8
WTI Crude Forecast	60.5	60.8	60.9	60.3	60.0	60.5	66.3	67.0	68.0	67.0	67.0
Brent Crude Forward	65.8	65.1	68.9	65.9	65.8	61.5	71.7	72.4	75.0	76.2	75.1
Brent Crude Forecast	67.1	68.5	68.5	67.6	66.9	66.9	72.5	73.7	74.0	73.2	72.3
ULS Diesel Forward	196.56	194.87	204.70	198.83	202.30	191.11	209.40	210.72	217.57	218.90	216.65
ULS Diesel Forecast		220.59	216.00		211.50	218.71	212.50	212.50	214.03	214.20	214.20
Unleaded Gasoline Forward	176.85	173.01	183.01	171.69	166.66	154.12	192.81	193.71	200.14	206.06	203.36
Unleaded Gasoline Forecast	190.48	190.48	194.02	176.17	176.42	186.54	196.71	197.21	203.00	200.50	203.55
Soft											
Sugar Forward	12.81	12.41	12.70	12.99	13.49	13.15	11.83	11.95	12.06	11.37	11.61
Sugar Forecast	13.00	13.05	13.13	13.00	12.88	12.78	12.20	12.10	11.68	11.80	11.85
Coffee Forward	101.65	100.16	94.77	97.93	102.42	108.81	104.46	108.33	109.42	105.74	107.84
Coffee Forecast	99.90	100.00	109.97	110.00	120.63	121.25	115.00	115.00	115.00	113.49	118.50
Cotton Forward	67.56	69.92	75.27	74.99	72.85	75.30	81.40	81.60	81.62	81.93	84.03
Cotton Forecast	73.00	75.69	76.76	76.76	77.25	77.25	82.41	83.00	84.00	84.00	85.66
Industrial Metals											
Copper Forward (LME)	6,077	6,008	6,387	6,351	6,472	6,138	6,510	6,530	6,484	6,506	6,486
Copper Forecast (LME)	6,300	6,331	6,425	6,515	6,531	6,531	6,562	6,603	6,610	6,615	6,712
Aluminum Forward	1,803	1,806	1,843	1,906	1,927	1,928	2,113	2,117	2,124	2,139	2,180
Aluminum Forecast	1,904	1,942	1,970	2,020	2,025	2,025	2,130	2,150	2,158	2,161	2,168
Zinc Forward	2,589	2,634	2,779	2,813	2,708	2,648	2,860	2,856	2,853	2,832	2,835
Zinc Forecast	2,663	2,744	2,774	2,758	2,707	2,707	2,925	2,930	2,939	2,978	3,055
Nickel Forward	12,511	12,269	12,487	12,834	12,990	12,389	13,019	13,041	13,181	13,348	13,662
Nickel Forecast	12,561	12,742	12,983	12,875	12,766	12,603	13,552	13,552	13,651	13,778	13,774
Precious Metals											
Gold Forward	1,370	1,299	1,295	1,306	1,331	1,330	1,268	1,263	1,263	1,253	1,258
Gold Forecast	1,323	1,325	1,315	1,294	1,284	1,282	1,268	1,270	1,268	1,275	1,280
Silver Forward	15.28	14.85	15.17	15.26	15.90	16.15	15.60	15.52	15.54	15.50	15.59
Silver Forecast	15.63	15.88	16.00	16.00	16.09	15.90	15.78	15.80	15.92	16.20	16.31
Platinum Forecast	860	875	878	869	900	900	885	887	885	885	903
Palladium Forecast	1,320.2	1,300.0	1,280.9	1,246.9	1,148.8	1,120.0	1,000.0	995.8	992.1	978.6	975.9
Grain											
Corn Forward	415.4	415.1	367.8	383.6	382.2	395.5	365.3	361.1	362.4	362.4	360.7
Corn Forecast	391.4	380.0	381.3	388.0	391.2	391.2	369.6	369.6	374.5	375.2	380.0
Soybeans Forward	886.5	888.0	872.9	906.7	930.3	944.9	910.2	910.7	899.7	905.9	898.9
Soybeans Forecast	915.0	920.0	921.4	940.4	962.5	962.5	935.5	935.0	931.5	937.0	950.0
Wheat Forward	512.4	496.7	446.1	473.7	479.1	533.3	496.6	488.7	489.9	493.7	505.1
Wheat Forecast	493.9	475.0	488.0	500.0	505.0	511.3	500.0	500.0	502.5	500.5	499.9

Bloomberg Commodity Outlook – July 2019 Midyear Edition

Bloomberg Commodity Index (BCOM)

Market Flows – Open Interest

Key Metrics

Name	Current	MTD % Change	3 Mth % Change	YTD % Change	1 Yr % Change	2 Yr % Change	2 Year High
▼ Open Interest (Aggregate - 1,000s)							
▼ Single Commodities							
Lean Hogs	296	-6.6	4.2	40.3	29.3	14.7	319
Gold	580	30.9	14.9	29.5	23.4	28.0	598
Palladium	24	20.0	-11.1	-7.7	9.1	-33.3	40
Live Cattle	350	-6.4	-21.4	-5.4	7.4	-9.3	455
HRW Wheat	255	-21.8	-23.4	-13.0	5.4	-3.0	342
Heating Oil	382	-4.3	109.9	3.5	1.6	-10.1	491
Aluminum	490	-3.7	6.8	3.6	1.5	4.9	547
Silver	221	3.8	13.9	27.0	1.4	7.8	244
Nickel	174	17.6	13.7	24.3	0.0	18.4	188
Brent Crude	2,432	5.1	2.7	12.7	-0.5	1.4	2,704
Zinc	173	8.8	-2.3	21.8	-1.1	-12.2	225
Coffee	266	-21.8	-23.6	-2.2	-2.2	19.8	357
Platinum	84	0.0	20.0	2.4	-2.3	9.1	94
Copper (LME)	164	-5.8	5.8	1.9	-2.4	-17.2	219
Corn	1,714	-5.9	-5.9	8.3	-8.0	25.8	2,007
Copper (CME)	245	-13.4	-2.4	11.9	-8.2	-3.5	338
Sugar	865	-15.9	-5.8	-1.3	-8.7	5.4	1,062
Soybean Meal	450	-9.3	-1.5	4.9	-9.5	17.2	538
Gas Oil	975	0.2	7.0	19.3	-9.7	7.4	1,138
Natural Gas	1,289	-0.4	104.6	6.0	-12.3	-3.5	1,700
Soybean Oil	420	-22.7	-12.3	-11.8	-14.6	10.5	606
Unlead Gas	369	-2.1	117.1	-9.6	-16.3	-8.9	501
Crude Oil	2,017	-2.9	3.8	-4.2	-18.6	-6.2	2,714
Soybean	643	-18.3	-11.3	-3.2	-20.5	-6.1	976
Wheat	363	-18.6	-26.7	-16.6	-23.6	-10.4	581
Cotton	176	-18.9	-22.1	-17.4	-31.3	-12.0	322

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ Open Interest (Aggregate - 1,000s)	14,169	13,672	14,620	12,978	11,965	10,881	11,033	10,367	9,282	10,206
▶ BCOM										
▼ Sector										
▶ Energy	7,463	7,072	7,928	7,097	6,057	5,033	5,346	4,980	4,230	4,262
▶ Agriculture	5,153	5,239	5,168	4,493	4,563	4,211	4,090	3,876	3,418	4,399
▶ Industrial Metals	1,246	1,135	1,354	1,319	1,178	1,224	1,104	1,006	1,159	1,105
▶ Precious Metals	907	731	786	667	673	620	613	658	585	783
▶ Livestock	646	581	572	501	431	481	591	578	552	534
▼ Single Commodities										
Brent Crude	2,432	2,158	2,322	2,159	2,031	1,513	1,443	1,285	886	873
Crude Oil	2,017	2,105	2,458	2,064	1,671	1,468	1,616	1,473	1,328	1,430
Corn	1,714	1,582	1,540	1,236	1,334	1,237	1,203	1,128	1,151	1,549
Natural Gas	1,289	1,216	1,448	1,243	957	939	1,291	1,165	1,011	772
Gas Oil	975	817	865	802	700	435	477	512	458	619
Sugar	865	876	753	805	879	836	830	754	559	613
Soybean	643	664	705	632	646	599	576	546	460	629
Gold	580	448	472	416	415	372	380	428	419	585
Aluminum	490	473	520	541	551	595	539	495	682	546
Soybean Meal	450	429	376	329	402	341	262	212	194	192
Soybean Oil	420	476	444	372	384	355	340	306	273	358
Heating Oil	382	369	449	429	342	346	279	263	269	301
Unlead Gas	369	408	387	400	355	332	239	282	277	267
Wheat	363	435	523	448	368	371	411	456	384	492
Live Cattle	350	370	333	306	265	266	327	329	317	327
Lean Hogs	296	211	239	194	166	215	264	248	235	207
Coffee	266	272	218	191	172	160	142	144	105	140
HRW Wheat	255	293	330	239	193	132	154	158	139	219
Copper (CME)	245	219	280	224	166	160	167	147	121	167
Silver	221	174	194	164	168	151	132	141	106	136
Cotton	176	213	279	242	185	178	172	171	152	207
Nickel	174	140	150	160	148	132	81	69	65	61
Zinc	173	142	200	184	167	182	184	166	148	135
Copper (LME)	164	161	203	209	146	155	132	130	143	196
Platinum	84	82	83	63	65	64	62	60	42	39
Palladium	24	26	37	24	24	33	39	29	18	23

Bloomberg Commodity Outlook – July 2019 Midyear Edition

Bloomberg Commodity Index (BCOM)

Market Flows – Commitment of Traders

Key Metrics

Name	Current	5 Day Change	1 Mth Change	3 Mth Change	YTD Change	1 Yr Change	2 Yr Change
▼ Net - Managed Money Total/Disagg							
▼ Single Commodities							
Corn	187,929	44,414	304,658	449,255	90,117	248,248	294,048
Gold	229,664	39,983	205,286	171,918	172,715	225,478	152,932
Soybean Oil	-35,969	6,777	32,971	-46,345	15,533	54,211	-46,480
Wheat	31,513	8,800	73,273	105,019	48,517	43,990	41,671
Lean Hogs	33,207	-1,904	-23,777	25,117	8,468	38,664	-34,098
Coffee	-30,855	4,515	43,804	46,335	25,491	37,355	12,764
Soybeans	-34,042	21,265	119,089	29,950	-23,497	9,943	84,641
Gasoline	86,958	11,299	-15,491	-4,944	33,842	9,395	107,097
Palladium	11,396	386	3,113	-1,405	-1,819	5,077	-12,480
Nickel	42,230	-664	-1,792	12,113	13,772	5,041	22,602
Platinum	-23,479	-2,420	-23,598	-26,573	-18,915	2,689	-13,722
Silver	23,472	18,724	54,332	13,478	14,896	1,306	11,045
Live Cattle	29,406	-7,314	-43,299	-115,753	-56,853	-390	-95,779
Zinc (Pre MiFID II)	79,906	-1,121	-6,682	3,640	-471	-8,898	44,606
Aluminum (Pre- MiFID II)	163,475	6,307	-3,292	21,105	3,315	-10,481	115,362
Zinc (Post MiFID II)	34,847	0	-8,748	-24,516	-1,665	-21,139	
Sugar	-40,911	16,608	125,812	59,155	-1,539	-26,102	72,523
Copper (LME) (Pre MiFID II)	37,448	-917	-16,651	-27,111	-31,597	-34,385	25,052
Copper (LME) (Post MiFID II)	7,060	0	-3,828	-23,372	-23,448	-35,969	
HRW Wheat	-16,803	3,941	31,281	34,577	-19,238	-47,685	-61,043
Copper (CME)	-33,982	10,077	2,985	-43,879	-13,786	-56,043	-92,798
Heating Oil	-3,672	10,587	-8,265	-7,195	-6,048	-57,981	28,630
Aluminum (Post- MiFID II)	130,536	0	-603	-20,997	-3,354	-62,267	
Soybean Meal	-910	-928	34,104	28,935	-296	-64,046	53,520
Cotton	-37,460	-7,075	-374	-26,642	-53,463	-113,851	-68,870
Brent Crude	254,754	-16,752	-138,861	-53,852	92,505	-198,464	54,550
WTI Crude	145,439	-1,299	-90,970	-66,878	27,838	-245,356	11,833
Natural Gas	-167,210	-17,584	-164,435	-330,468	-360,320	-332,978	-248,176

Historical

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
▼ Net - Managed Money Total/Disagg										
▼ BCOM	620,528.0	911,257.0	1.2M	1.8M	107,932.0	1.1M	835,105.0	791,313.0	637,042.0	1.6M
▼ Sector										
▶ Energy	316,269.0	528,452.0	1.1M	1.0M	95,835.0	278,790.0	623,230.0	258,739.0	230,666.0	224,236.0
▶ Precious Metals	241,053	74,176	124,419	101,310	-239	153,310	70,026	171,032	134,710	232,650
▶ Livestock	62,613	110,998	136,667	147,051	24,525	117,295	137,611	110,898	104,018	133,520
▶ Agriculture	22,492	-59,133	-449,709	225,844	-75,733	383,375	-1,048	281,653	188,257	962,170
▶ Industrial Metals		302,863	437,560	423,576	90,351	218,292	35,635	14,988	-4,018	39,105
▼ Single Commodities										
Brent Crude	254,754	162,249	561,284	454,585	163,672	115,571	136,611	125,397	81,537	
Gold	229,664	56,949	109,919	41,247	-24,263	98,391	34,104	101,922	111,919	169,987
Corn	187,929	97,812	-206,624	-113,648	-136,111	239,704	-94,812	140,109	148,653	396,782
WTI Crude	145,439	117,601	411,972	307,909	100,797	199,388	270,386	134,834	192,466	217,046
Aluminum (Post- MiFID II)	130,536	133,889								
Gasoline	86,958	53,116	79,450	50,091	28,391	44,226	54,637	64,383	61,288	67,205
Zinc (Post MiFID II)	34,847	36,512								
Lean Hogs	33,207	24,739	53,957	54,535	13,444	37,193	40,840	51,329	35,913	29,108
Wheat	31,513	-17,004	-145,735	-108,927	-83,120	20,481	-71,468	-11,899	-29,252	36,542
Live Cattle	29,406	86,259	82,710	92,516	11,081	80,102	96,771	59,569	68,105	104,412
Silver	23,472	8,576	-7,105	39,098	6,282	17,051	5,573	23,113	6,200	26,836
Palladium	11,396	13,215	25,815	12,742	8,690	19,970	15,660	16,769	5,212	13,034
Copper (LME) (Post MiFID II)	7,060	30,508								
Soybean Meal	-910	-614	31,257	19,537	-40,843	54,132	57,931	41,489	-15,232	40,129
Heating Oil	-3,672	2,376	81,824	33,541	-35,339	-27,087	26,602	23,945	19,644	36,104
HRW wheat	-16,803	2,435	-34,422	9,085	-14,975	24,999	8,022	23,619	9,128	49,108
Platinum	-23,479	-4,564	-4,210	8,223	9,052	17,898	14,689	29,228	11,379	22,793
Coffee	-30,855	-56,346	-57,846	12,706	-15,181	25,385	-8,417	-23,076	2,905	36,182
Copper (CME)	-33,982	-20,196	99,520	72,131	-25,964	-4,455	35,635	14,988	-4,018	39,105
Soybeans	-34,042	-10,545	-69,091	107,075	-63,515	39,446	136,683	109,007	23,683	164,287
Soybean Oil	-35,969	-51,502	3,406	85,522	60,895	35,047	-46,649	-42,424	-2,103	56,961
Cotton	-37,460	16,003	102,402	76,052	51,307	11,005	43,288	25,828	6,683	40,645
Sugar	-40,911	-39,372	-73,056	138,442	165,810	-66,824	-25,626	19,000	43,792	141,534
Natural Gas	-167,210	193,110	-52,446	174,043	-161,686	-53,308	134,994	-89,820	-124,269	-96,119
Copper (LME) (Pre MiFID II)	37,448	69,045	67,384	9,065	25,215					
Aluminum (Pre- MiFID II)	163,475	160,160	145,790	71,738	118,175					
Nickel	42,230	28,458	57,232	15,372	29,631					
Zinc (Pre MiFID II)	79,906	80,377	81,039	20,140	49,726					

Bloomberg Commodity Outlook – July 2019 Midyear Edition
Bloomberg Commodity Index (BCOM)

Market Flows – ETF Flows (quarterly)

Name	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
ETFs (\$ Billion AUM)										
Total ETF Assets Under Management...	143.62	135.96	141.73	120.33	86.90	101.21	110.90	195.26	171.14	166.46
Precious Metals	121.75	109.30	109.98	90.30	62.95	77.79	84.93	164.56	142.19	130.39
Gold	109.69	96.79	95.36	76.91	51.78	62.75	68.70	143.55	120.89	105.90
Silver	8.85	9.02	10.11	9.41	7.24	8.64	10.60	16.18	16.38	18.41
Platinum	1.62	1.92	2.39	2.26	2.22	3.32	3.46	2.48	2.49	2.83
Palladium	0.86	0.83	1.28	1.07	1.24	2.30	1.40	1.37	1.32	2.12
Precious Metals Basket	0.63	0.65	0.70	0.57	0.40	0.64	0.68	0.92	1.07	1.13
Other	0.10	0.09	0.15	0.08	0.06	0.13	0.10	0.06	0.02	
Broad Commodity	12.47	16.26	17.20	14.78	10.84	14.55	17.70	19.57	18.21	19.74
Energy	6.86	7.34	11.13	12.25	10.71	5.39	4.61	6.70	5.78	9.63
Agriculture	1.38	1.78	1.78	1.82	1.74	2.37	2.61	3.10	3.89	5.22
Industrial Metals	1.15	1.25	1.63	1.17	0.64	1.09	1.02	1.27	0.99	1.38
Livestock	0.01	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)	2.05	0.75	8.73	23.49	10.67	3.31	-40.94	19.41	1.63	16.32
Precious Metals	4.87	3.60	8.60	22.61	-3.83	-2.45	-36.86	17.69	5.93	14.94
Livestock	0.00	0.00	-0.03	0.01	-0.01	-0.02	-0.04	-0.05	0.03	-0.02
Industrial Metals	-0.03	-0.05	0.05	0.33	-0.14	0.18	-0.17	0.26	-0.14	0.18
Agriculture	-0.10	-0.09	0.32	0.12	-0.14	-0.21	0.03	-0.84	-0.58	-0.54
Energy	-1.15	-3.01	-1.20	-1.97	13.94	4.17	-3.30	1.85	-2.57	-0.42
Broad Commodity	-1.54	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...	148.82	138.14	146.21	123.02	88.64	101.61	110.16	197.38	171.69	168.43
Precious Metals	122.92	110.51	111.21	91.00	62.94	77.80	85.03	166.20	142.69	131.34
Gold	115.03	102.01	101.00	82.54	55.90	67.72	74.56	153.96	129.87	117.13
Silver	4.68	5.01	5.74	4.50	3.10	3.67	4.83	7.40	7.90	8.10
Platinum	1.62	1.92	2.39	2.24	2.21	3.28	3.39	2.42	2.44	2.85
Palladium	0.86	0.83	1.28	1.07	1.24	2.30	1.40	1.37	1.32	2.12
Precious Metals Basket	0.66	0.68	0.73	0.61	0.43	0.70	0.75	0.99	1.14	1.15
Other	0.07	0.07	0.08	0.04	0.06	0.13	0.10	0.06	0.02	
Industrial Metals	1.16	1.27	1.66	1.19	0.68	1.06	0.99	1.20	0.90	1.35
Energy	10.55	7.84	13.98	14.13	12.28	5.72	3.72	7.20	5.84	10.62
Broad Commodity	12.76	16.62	17.44	14.80	10.87	14.55	17.70	19.57	18.21	19.75
Agriculture	1.41	1.87	1.91	1.90	1.85	2.46	2.69	3.16	3.96	5.27
Livestock	0.01	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)	2.24	-0.37	11.40	19.59	20.77	8.97	-42.11	21.45	1.50	16.50
Precious Metals	4.73	4.13	8.75	22.83	-3.35	-1.85	-36.12	18.57	5.76	14.43
Gold	4.44	4.57	8.47	22.50	-2.99	-3.46	-37.93	15.70	5.28	12.18
Silver	0.06	0.36	0.47	0.61	0.45	0.56	1.66	2.56	0.67	0.55
Platinum	0.32	-0.17	0.08	0.00	-0.24	0.34	0.14	0.31	0.13	0.80
Palladium	-0.05	-0.55	-0.31	-0.41	-0.41	0.72	-0.03	0.21	-0.41	0.54
Precious Metals Basket	-0.03	-0.04	0.04	0.16	-0.16	-0.01	-0.01	-0.25	0.06	0.37
Other	-0.02	-0.04	-0.01	-0.03	0.00	0.01	0.05	0.05	0.02	
Industrial Metals	-0.03	-0.03	0.02	0.30	-0.04	0.20	-0.11	0.27	-0.16	0.13
Energy	-0.72	-4.80	1.10	-6.05	23.41	9.20	-5.34	3.02	-2.59	0.37
Broad Commodity	-1.64	0.48	1.16	2.38	0.85	1.64	-0.60	0.50	-1.04	2.18
Agriculture	-0.11	-0.14	0.40	0.12	-0.10	-0.20	0.10	-0.86	-0.50	-0.59
Livestock	0.00	0.00	-0.03	0.01	-0.01	-0.02	-0.04	-0.05	0.03	-0.02

PERFORMANCE: Bloomberg Commodity Indices

Composite Indices

* Click hyperlinks to open in Bloomberg

Index Name	Ticker	2019									
		Jun	YTD	1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
Bloomberg Commodity ER	BCOM	2.51%	3.83%	-8.87%	-10.34%	-40.83%	-35.00%	-3.57%	-10.69%	-22.00%	398.39%
Bloomberg Commodity TR	BCOMTR	2.69%	5.06%	-6.75%	-6.41%	-38.11%	-31.71%	37.02%	111.58%	365.14%	5463.60%
Bloomberg Commodity Spot	BCOMSP	3.07%	6.61%	-5.73%	5.60%	-18.87%	15.74%	253.70%	264.01%	330.11%	1835.25%
Bloomberg Roll Select	BCOMRST	2.38%	3.87%	-8.26%	-4.79%	-33.98%	-19.24%	187.68%			
1 Month Forward	BCOMF1T	2.64%	5.02%	-6.60%	-4.78%	-34.78%	-22.75%	137.65%			
2 Month Forward	BCOMF2T	2.47%	5.01%	-3.89%	-0.31%	-31.64%	-20.23%	188.10%			
3 Month Forward	BCOMF3T	2.55%	4.94%	-5.78%	-1.59%	-31.14%	-18.14%	197.92%			
4 Month Forward	BCOMF4T	2.47%	5.07%	-5.50%	0.98%	-27.75%	-10.84%				
5 Month Forward	BCOMF5T	2.61%	5.52%	-5.10%	2.00%	-26.71%	-10.21%				
6 Month Forward	BCOMF6T	2.54%	5.37%	-4.39%	3.16%	-25.43%	-7.99%				
Energy	BCOMENTR	3.95%	10.64%	-14.28%	-1.54%	-63.36%	-71.74%	-38.01%	31.73%		
Petroleum	BCOMPETR	6.87%	24.54%	-14.96%	17.09%	-58.25%	-47.39%	119.28%			
Agriculture	BCOMAGTR	0.51%	1.18%	-4.18%	-27.75%	-40.12%	-25.56%	-26.73%	-20.92%	18.62%	1531.70%
Grains	BCOMGRTR	0.29%	2.11%	-0.17%	-24.98%	-41.59%	-33.27%	-35.90%	-45.28%	-32.15%	465.73%
Industrial Metals	BCOMINTR	2.05%	4.68%	-10.99%	20.46%	-14.03%	-4.24%	130.36%			
Precious Metals	BCOMPRTR	7.33%	7.17%	7.61%	-2.24%	-6.19%	34.41%	321.82%	252.46%	291.33%	
Softs	BCOMSOTR	1.50%	0.13%	-11.77%	-37.09%	-46.16%	-31.72%	-51.75%	-34.98%	34.31%	2597.46%
Livestock	BCOMLITR	-3.46%	-6.84%	-3.50%	-7.42%	-30.95%	-18.94%	-44.04%	-20.72%		
Ex-Energy	BCOMXETR	2.13%	2.79%	-3.11%	-9.03%	-25.04%	-3.95%	50.68%			
Ex-Petroleum	BCOMXPET	1.37%	0.00%	-4.46%	-13.19%	-34.24%	-30.42%				
Ex-Natural Gas	BCOMXNGT	3.34%	7.68%	-6.10%	-2.54%	-32.14%	-12.98%				
Ex-Agriculture	BCOMXAGT	3.62%	6.76%	-7.90%	3.97%	-38.30%	-36.62%				
Ex-Grains	BCOMXGRT	3.17%	5.71%	-8.13%	-2.24%	-37.65%	-33.53%				
Ex-Industrial Metals	BCOMXIMT	2.82%	5.06%	-5.97%	-11.66%	-42.62%	-38.53%				
Ex-Precious Metals	BCOMXPMT	1.81%	4.67%	-9.18%	-7.37%	-43.22%	-39.97%				
Ex-Softs	BCOMXSOT	2.77%	5.43%	-6.38%	-3.80%	-37.93%	-32.76%				
Ex-Livestock	BCOMXLIT	3.07%	5.86%	-7.02%	-6.52%	-38.67%	-32.66%				
Ex-Agriculture & Livestock	BCOMXALT	4.27%	8.13%	-8.43%	4.65%	-39.27%	-38.51%				
Bloomberg Dollar Spot	BBDXY	-1.60%	-0.75%	0.48%	0.12%	18.30%	15.59%				
S&P 500 Total Return	SPXT	7.05%	18.54%	10.42%	48.89%	66.33%	294.16%	214.81%	1659.56%		
US Aggregate	LBUSTRUU	1.26%	6.11%	7.87%	7.10%	15.64%	46.56%	161.92%	473.46%	1588.47%	
US Treasury	LUATTRUU	0.92%	5.18%	7.24%	4.08%	13.11%	35.00%	143.26%	421.72%	1456.55%	
US Corporate	LUACTRUU	2.45%	9.85%	10.72%	12.31%	22.14%	80.26%	212.08%	615.36%	2021.17%	
US High Yield	LF98TRUU	2.28%	9.94%	7.48%	24.30%	25.80%	142.01%	282.87%	916.93%		

Single Commodity Indices

Index Name	Ticker	2019									
		Jun	YTD	1-Year	3-Year	5-Year	10-Year	20-Year	30-Year	40-Year	50-Year
Natural Gas	BCOMNGTR	-6.08%	-22.84%	-20.64%	-47.20%	-80.10%	-95.68%	-99.34%			
Low Sulfur Gas Oil	BCOMGOT	3.25%	17.36%	-9.80%	33.21%	-47.65%	-22.78%	363.01%			
WTI Crude	BCOMCLTR	8.79%	26.47%	-18.37%	7.76%	-67.03%	-64.81%	33.24%	206.93%		
Brent Crude	BCOMCOT	6.04%	24.10%	-14.15%	26.99%	-58.47%	-31.37%	386.77%			
ULS Diesel	BCOMHOTR	5.11%	17.16%	-10.37%	22.30%	-46.56%	-28.52%	206.97%	385.68%		
Unleaded Gasoline	BCOMRBTR	8.46%	33.24%	-12.03%	14.96%	-51.77%	-5.72%	350.92%	822.82%		
Corn	BCOMCNTR	-2.16%	7.62%	6.13%	-17.64%	-41.52%	-30.66%	-76.80%	-82.65%	-78.95%	-24.26%
Soybeans	BCOMSYTR	2.12%	-1.82%	-1.99%	-31.81%	-31.95%	20.65%	240.53%	203.98%	244.51%	3720.42%
Wheat	BCOMWHTR	4.17%	3.78%	-0.56%	-21.27%	-45.64%	-70.61%	-86.08%	-90.68%	-87.84%	-16.42%
Soybean Oil	BCOMBOTR	2.26%	0.13%	-6.74%	-19.80%	-39.75%	-47.81%	-20.43%	-30.86%	-23.01%	2860.98%
Soybean Meal	BCOMSMTR	-1.92%	0.18%	-6.12%	-29.11%	-12.71%	105.59%	1129.55%			
HRW Wheat	BCOMKWT	-4.94%	-9.73%	-16.45%	-33.31%	-67.32%	-73.47%	-75.31%			
Copper	BCOMHGTR	2.92%	3.81%	-8.14%	19.57%	-19.54%	4.15%	284.57%	759.50%		
Aluminum	BCOMALTR	0.01%	-3.83%	-16.47%	6.52%	-15.26%	-28.46%	-21.20%			
Zinc	BCOMZSTR	-0.56%	6.20%	-4.18%	31.34%	19.23%	36.55%	81.11%			
Nickel	BCOMNITR	5.67%	18.81%	-14.92%	31.33%	-36.92%	-26.69%	294.71%			
Gold	BCOMGCTR	8.01%	10.01%	12.06%	4.49%	3.55%	43.11%	382.37%	263.02%	355.83%	
Silver	BCOMSITR	4.97%	-1.81%	-6.16%	-20.74%	-31.67%	1.05%	149.02%	143.28%	28.50%	
Sugar	BCOMSBTR	2.40%	3.97%	-3.44%	-46.50%	-53.26%	-50.39%	0.79%	16.23%	-45.14%	109.73%
Coffee	BCOMKCTR	2.22%	0.17%	-15.62%	-44.40%	-62.03%	-62.44%	-90.54%	-86.51%	-75.70%	
Cotton	BCOMCTTR	-2.02%	-8.87%	-22.43%	3.95%	-9.29%	56.88%	-66.88%	-42.59%	193.18%	1099.61%
Live Cattle	BCOMLCTR	1.41%	-6.76%	-0.10%	3.90%	-13.46%	-1.76%	4.25%	82.89%	701.87%	3358.20%
Lean Hogs	BCOMLHTR	-10.02%	-7.99%	-10.93%	-24.94%	-54.76%	-43.58%	-79.52%	-83.54%		

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
		Jun	YTD								
BCOM Roll Select	BCOMRST	2.38%	3.87%	-8.26%	-4.79%	-33.98%	-19.24%	187.68%			
Roll Select Agriculture	BCOMRAGT	0.35%	0.55%	-4.53%	-23.79%	-37.44%	-15.17%	36.19%			
Roll Select Ex-Ags & Livestock	BBURXALT	3.88%	6.33%	-10.59%	5.97%	-33.72%	-25.35%				
Roll Select Grains	BCOMRGRT	0.02%	1.64%	-0.62%	-20.38%	-38.69%	-24.57%	25.31%			
Roll Select Softs	BCOMRSOT	1.29%	-1.51%	-12.93%	-36.91%	-46.32%	-21.16%	-12.43%			
Roll Select Livestock	BCOMRLIT	-3.83%	-4.79%	-4.38%	-19.34%	-36.80%	-12.48%	61.44%			
Roll Select Energy	BCOMRENT	3.18%	7.05%	-17.61%	1.53%	-55.06%	-57.44%	142.47%			
Roll Select Ex-Energy	BCOMRXET	2.01%	2.58%	-3.67%	-8.05%	-24.01%	3.85%	153.92%			
Roll Select Petroleum	BCOMRPET	6.60%	20.21%	-15.46%	20.26%	-49.58%	-27.10%	500.27%			
Roll Select Industrial Metals	BCOMRINT	1.98%	4.28%	-12.14%	19.98%	-13.55%	0.86%	237.73%			
Roll Select Precious Metals	BCOMRPRT	7.31%	7.07%	7.46%	-2.26%	-5.86%	35.48%	338.68%			

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
		Jun	YTD								
Natural Gas RS	BCOMRNGT	-7.21%	-24.10%	-27.10%	-41.37%	-72.55%	-90.25%	-88.95%			
Low Sulfur Gas Oil RS	BCOMRGOT	2.95%	16.33%	-10.66%	28.26%	-45.70%	-22.98%	375.17%			
WTI Crude RS	BCOMRCLT	8.24%	22.79%	-15.18%	15.51%	-53.82%	-36.38%	483.18%			
Brent Crude RS	BCOMRCOT	6.04%	18.86%	-17.05%	27.28%	-50.68%	-22.53%	630.29%			
ULS Diesel RS	BCOMRHOT	4.74%	16.88%	-11.23%	16.74%	-46.91%	-30.50%	390.90%			
Unleaded Gasoline RS	BCOMRRBT	8.58%	23.48%	-14.78%	22.79%	-41.01%	9.01%	579.53%			
Corn RS	BCOMRCNT	-2.59%	7.64%	6.76%	-12.82%	-37.56%	-23.69%	-55.29%			
Soybeans RS	BCOMRSYT	2.19%	-0.79%	-0.06%	-20.35%	-22.43%	49.78%	420.58%			
Wheat RS	BCOMRWHT	3.61%	0.03%	-6.35%	-27.55%	-51.65%	-68.90%	-54.82%			
Soybean Oil RS	BCOMRBOT	2.01%	-0.11%	-7.36%	-19.97%	-39.39%	-42.05%	15.54%			
Soybean Meal RS	BCOMRSMT	-1.43%	0.77%	-3.57%	-18.52%	-5.60%	137.76%	1593.49%			
HRW Wheat RS	BCOMRKWT	-4.94%	-11.55%	-17.29%	-32.24%	-65.93%	-70.57%	-41.34%			
Copper RS	BCOMRHGT	2.92%	3.57%	-9.26%	20.12%	-19.43%	8.75%	442.45%			
Aluminium RS	BCOMRALT	-0.04%	-3.84%	-17.00%	4.95%	-14.09%	-23.93%	16.06%			
Zinc RS	BCOMRZST	-0.56%	5.27%	-7.46%	29.86%	18.09%	43.44%	175.30%			
Nickel RS	BCOMRNIT	5.35%	18.21%	-15.13%	31.14%	-36.08%	-22.14%	526.73%			
Gold RS	BCOMRGCT	8.01%	9.96%	11.99%	4.52%	4.00%	43.84%	388.66%			
Silver RS	BCOMRSIT	4.93%	-2.02%	-6.46%	-20.81%	-31.46%	2.96%	178.96%			
Sugar RS	BCOMRSBT	1.70%	0.62%	-7.38%	-48.70%	-54.74%	-44.07%	119.30%			
Coffee RS	BCOMRKCT	1.80%	-0.35%	-15.27%	-43.88%	-60.77%	-57.88%	-84.26%			
Cotton RS	BCOMRCTT	-1.31%	-8.71%	-21.78%	8.24%	-8.82%	88.66%	-43.72%			
Live Cattle RS	BCOMRLCT	1.41%	-6.87%	-3.35%	-1.43%	-16.74%	3.78%	78.95%			
Lean Hogs RS	BCOMRLHT	-11.34%	-0.40%	-6.53%	-41.79%	-61.20%	-36.86%	14.10%			

BCOM Constituent Weights

[BCOM Index MEMB <GO>](#)

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Group	Commodity	Ticker	Jun 2019 Contrib to Return %	Jun 28 2019 Weight %	May 31 2019 Weight %	Jun 2019 Weight% Change	2019 Target Weight
Energy	Natural Gas	NG	-0.45	6.36	7.05	↓ (0.69)	8.26%
	Low Sulfur Gas Oil	QS	0.08	2.79	2.76	↑ 0.02	2.62%
	WTI Crude	CL	0.71	8.82	8.31	↑ 0.51	7.66%
	Brent Crude	CO	0.45	7.97	7.76	↑ 0.21	7.34%
	ULS Diesel	HO	0.11	2.28	2.22	↑ 0.06	2.16%
	Gasoline	XB	0.23	3.02	2.97	↑ 0.05	2.29%
	Subtotal			1.14	31.23	31.07	↑ 0.16
Grains	Corn	C	-0.14	6.29	6.52	↓ (0.23)	5.89%
	Soybeans	S	0.12	5.78	5.67	↑ 0.11	6.03%
	Wheat	W	0.13	3.08	3.03	↑ 0.05	3.14%
	Soybean Oil	BO	0.06	3.02	2.97	↑ 0.04	3.10%
	Soybean Meal	SM	-0.07	3.31	3.40	↓ (0.08)	3.44%
	HRW Wheat	KW	-0.06	1.14	1.20	↓ (0.06)	1.29%
	Subtotal			0.03	22.62	22.79	↓ (0.17)
Industrial Metals	Copper	HG	0.20	7.23	7.25	↓ (0.02)	7.32%
	Aluminum	LA	-0.01	4.05	4.13	↓ (0.09)	4.41%
	Zinc	LX	-0.03	3.07	3.26	↓ (0.19)	3.21%
	Nickel	LN	0.16	2.97	2.89	↑ 0.08	2.71%
	Subtotal			0.32	17.32	17.54	↓ (0.21)
Precious Metals	Gold	GC	0.97	12.89	12.32	↑ 0.57	12.24%
	Silver	SI	0.17	3.64	3.56	↑ 0.08	3.89%
	Subtotal			1.14	16.53	15.88	↑ 0.65
Softs	Sugar	SB	0.07	3.02	2.98	↑ 0.04	3.15%
	Coffee	KC	0.05	2.54	2.50	↑ 0.04	2.48%
	Cotton	CT	-0.03	1.24	1.32	↓ (0.08)	1.42%
	Subtotal			0.09	6.79	6.79	↓ (0.00)
Livestock	Live Cattle	LC	0.04	3.33	3.39	↓ (0.06)	4.09%
	Lean Hogs	LH	-0.26	2.18	2.54	↓ (0.36)	1.85%
	Subtotal			-0.21	5.51	5.93	↓ (0.42)
Total			2.51	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 Net Chg	1 Week % Chg	Prev Year
US Working Storage (Bcf)	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	452.00	126.00
Consensus (Bloomberg Survey)	1,474.00	1,463.00	11.00	0.75	901.00
Daily Working Storage (Bcf)	219.76	219.77	-0.01	-0.00	113.79
East	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>

Key Indicators

- 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>

Key Indicators

- Agricultural Price Ind: 1,220
- U.S. Farm Net Cash In: 9,400
- U.S. Corn Price Future: 300.63
- 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>

Key Indicators

- China GDP YoY (%): 7.30
- YTD Copper Surplus: -201,15k
- Major Exch Copper Inv: 599,59k
- Sales Growth (YoY): -1.59
- EBITDA Margin (%): 26.52
- T12M Sales Growth (%): -2.59
- Return on Equity (%): 2.71
- Est P/E Current Yr: 17.46
- Price/Book: 1.09

Aluminum: BI ALUM <GO>

Key Indicators

- China Industrial Prod: 7.60
- Global Primary Alumi: 4,28M
- Global Primary Alumi: 4,17M
- Sales Growth (YoY): 2.18
- EBITDA Margin (%): 8.70
- T12M Sales Growth (%): 1.46
- Return on Equity (%): 4.95
- Est P/E Current Yr: 15.05
- Price/Book: 1.38

COMMODITY CHEAT SHEET FOR THE BLOOMBERG PROFESSIONAL® SERVICE

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

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Broad Commodities

Top commodity news	CTOP
Global commodity prices	GLCO
Commodity playbook	CPLY
Commitments of traders report	COT
Calendar of commodity events	ECO17
Commodity arbitrage calculator	CARC
Commodity fundamental data explorer	FDM
Commodity futures overview	CMBQ
Security finder	SECF
Commodity data contributors & broker	CDAT
Contract table menu	CTM
Seasonality chart	SEAG
Commodity curve analysis	CCRV
Commodity fair values	CFVL
Commodity price forecasts	CPFC
Commitments of Traders Report	COT
Commodity maps	BMAP
Commodity options monitor	OMON
Commodities charts	COSY
Commodity Investors menu	CMNV
US exchange traded product fund flows	ETF

Commodity Indices

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

Weather

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

Energy

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

Metals

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

Agriculture

Top agriculture news	YTOP
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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