Sprott

Monthly Report

December 7, 2022

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Gold Higher After Peak Fed Hawkishness

Month of November 2022

Indicator	11/30/2022	10/31/2022	Change	Mo % Change	YTD % Change	*Analysis*
Gold Bullion[1]	**$1,768.52**	**$1,633.56**	**$134.96**	**8.26%**	**(3.32)%**	**Largest month return since July 2020**
Silver Bullion[2]	**$22.19**	**$19.16**	**$3.03**	**15.81%**	**(4.78)%**	**Continues to lead gold again**
Gold Senior Equities (SOLGMCFT Index)[3]	**113.04**	**96.79**	**16.25**	**16.79%**	**(8.37)%**	**Largest monthly return since April 2020**
Gold Equities (GDX)[4]	$29.05	$24.16	$4.89	20.24%	(9.30)%	(Same as above)
Bloomberg Comdty (BCOM Index)[5]	116.05	113.35	2.70	2.38%	17.02%	In consolidation range since July
DXY US Dollar Index[6]	105.95	111.53	(5.58)	(5.00)%	10.75%	Momentum peak, trapped bulls
S&P 500 Index[7]	4,080.11	3,871.98	208.13	5.38%	(14.39)%	Bear market rally at key resistance
U.S. Treasury Index	$2,199.79	$2,142.42	$57.37	2.68%	(12.01)%	Support level after 18.50% drawdown
U.S. Treasury 10 YR Yield*	3.61%	4.05%	(0.44)%	-44 BPS	210 BPS	Strong technical evidence of cycle top
U.S. Treasury 10 YR Real Yield*	1.24%	1.53%	(0.30)%	-30 BPS	234 BPS	Peaking real yields at 1.60% resistance
Silver ETFs** (Total Known Holdings ETSITOTL Index Bloomberg)	761.64	764.76	(3.12)	(0.41)%	(14.04)%	Silver in ETFs lagging CFTC action
Gold ETFs** (Total Known Holdings ETFGTOTL Index Bloomberg)	94.28	95.10	(0.82)	(0.86)%	(3.64)%	Gold in ETFs lagging CFTC action

Sources: Bloomberg and Sprott Asset Management LP. Data as of November 30, 2022.

* Mo % Chg and YTD % Chg for this Index are calculated as the difference between the month end's yield and the previous period end's yield, instead of the percentage change. BPS stands for basis points. **ETF holdings are measured by Bloomberg Indices; the ETFGTOTL is the Bloomberg Total Known ETF Holdings of Gold Index; the ETSITOTL is the Bloomberg Total Known ETF Holdings of Silver Index.

November Review

Gold rose for the first time in eight months, climbing $134.96 (or 8.26%) to close November at $1,768.52. This was the yellow metal's best monthly performance since July 2020. Although the initial rally in gold was due mainly to short covering from extended oversold conditions, gold buying had broadened out by month's end. The precious metals group was under heavy selling pressure by systematic type funds focusing only on rate hikes and USD strength. With the USD decreasing sharply, gold has rebounded significantly as these former headwinds quickly turned into tailwinds.

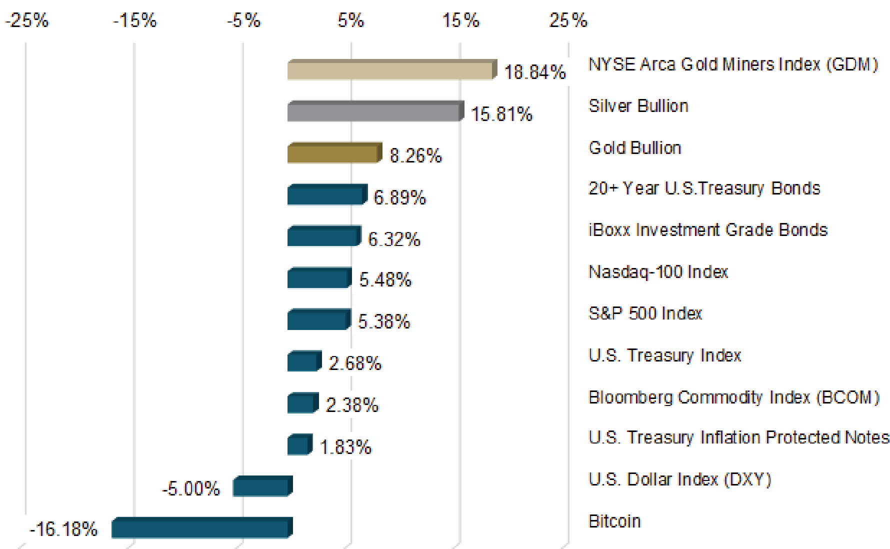
For November, the precious metals group was the best-performing asset group, as shown in Figure 1. Year-to-date (YTD), precious metals have outperformed the broad equity and bond markets. Gold and virtually all risk assets were catalyzed higher by the Fed signaling it would slow its interest rate hikes, a better-than-expected October inflation report (based on the consumer price index [CPI]) and speculation that China may phase out its zero-COVID policy. Almost every risk asset experienced a multi-sigma[8] event driven by extremely low liquidity and crowded high-correlated assets caught by a macro surprise. The market was not positioned for good inflation news and a massive squeeze followed.

For most of 2022, the rapid rate hikes and a soaring USD have negatively impacted gold and have led to the most aggressive tightening of financial conditions since the global financial crisis (GFC). By the end of October, markets were experiencing an "everything bear market". With the Fed's aggressive, front-loading approach to rate hikes now over, central banks are likely to downshift to smaller hikes within a more extended outlook. Inflation has likely seen a near-term momentum peak, and along with peak Fed hawkishness, USD and bond yields have likely seen their momentum peaks. The Fed will want to see evidence of disinflation as it continues to grind down the labor market and household spending. But for markets, what matters most is that the momentum for higher rates and the USD has peaked. Markets responded to this sharp reversal with an "everything rally" in November.

> "The combined gold purchases from China, India and central banks over the past trailing 12 months have far surpassed investment outflows and systematic trading flows."
> Source: World Gold Council.

Figure 1. Precious Metals Posted Strong Results in November

Asset Class Performance Comparison



Sources: Bloomberg and Sprott Asset Management. Data as of 11/30/2022. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

Gold Bullion Update: LT Moving Averages Trading in a Narrow $60 Band

Despite the most extreme moves in bond yields in decades and the USD posting year-over-year returns at its maximum historical levels, gold remains in a rangebound consolidation pattern, refusing to break out (Figure 2). The past two years have seen the gold bullion 50-week moving average trade within a narrow $60 band with short-lived trading peaks and valleys amplified by CTA-type flows.[9] When gold traded at its YTD lows in September/October, CFTC Gold Non-Comm Longs reached a -2 standard deviation regression on its 10-year range, while CFTC[10] Gold Non-Comm Shorts reached a 96%-tile reading (lower panel Figure 2). The combination of these two readings indicated that bearish gold positioning had reached extreme levels and was susceptible to a short squeeze, which occurred in quick order. There was a similar occurrence at the 2018 lows. Short covering signaled the low in 2018 before the pick-up in long positions, and we will likely see this pattern repeat itself.

Figure 2. Gold Bullion 50-Week Moving Average Narrow Band, CFTC Long and Short Positions (2013-2022)

Sources: Bloomberg and Sprott Asset Management. Data as of 11/30/2022. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

U.S. Dollar Momentum Peak, Trapped Bulls

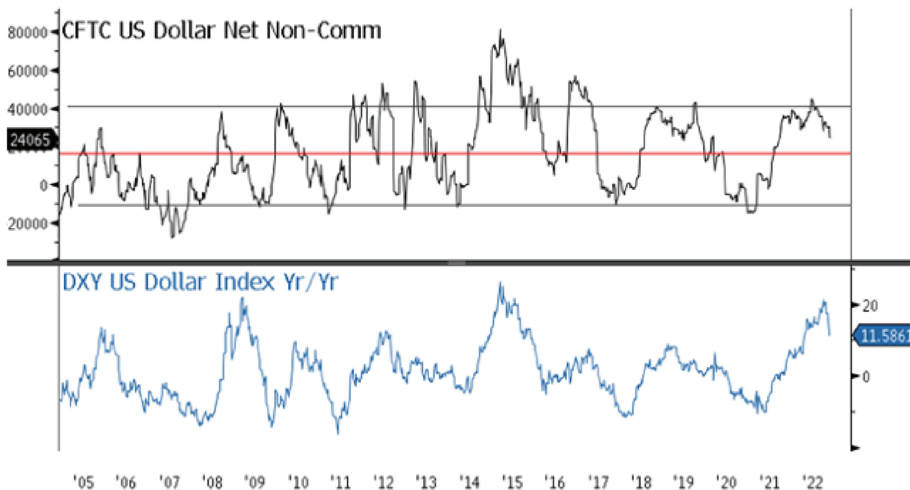
The USD strengthened when the Fed began its rate hike cycle. Although inflation was global, the Fed was far more aggressive than other central banks, creating a widening U.S. rate differential. Furthermore, the U.S. had a higher neutral rate (the rate that is neither stimulating nor restrictive) than most other central banks, allowing more aggressive hikes with far less relative economic drag. With the Fed signaling a slower pace of rate hikes and a near-term cyclical peak in Consumer Price Index (CPI) inflation readings, the USD has pulled back sharply. Figure 3a highlights the long-term chart of the U.S. Dollar Index (DXY). With the DXY reaching the upper channel and monthly Relative Strength Index (RSI) readings running extremely overbought, the DXY was vulnerable to a reversal. Although the DXY may zig-zag higher, the momentum has peaked, which is a more important driver for systematic investment flows. A similar situation occurred in 2016 when the USD eventually made new highs, but gold marked and held the lows. We expect a similar condition may repeat itself. Most of the time, gold and the USD are negatively correlated, but there are occasions when gold and the USD have positive correlation. Typically, this happens when systematic risk is elevated and a corresponding safe-haven flight to USD and gold occurs. For 2023, if the U.S. has a much greater degree of economic resilience than the rest of the world, the USD can rise as global macro problems force safe haven flows into the USD, but we would expect gold to climb as well.

Figure 3a. U.S. Dollar Index (DXY) Momentum has Peaked (2005-2022)

Sources: Bloomberg and Sprott Asset Management. Data as of 11/30/2022. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

It is nearly impossible to capture all the USD exposures (options, swaps, futures, etc.), but CFTC US Dollar Net Non-Comm holdings (see Figure 3b) should be a good proxy for USD positioning. The USD began its rise in the summer of 2021 and considerable long positions have been built. Likely, funds are still long USD (trapped bulls), and the sudden pullback has caused a squeeze resulting in multi-sigma daily moves. The lower panel of Figure 3b is the year-over-year change of the DXY, which has reached the typical +20% change that marked prior USD tops in the post-1985 "Plaza Accord" years. Between still elevated USD positioning and the year-over-year momentum peak, this former significant headwind has quickly reversed into a tailwind for gold. U.S. real yields are closely correlated with the DXY (the last few years intensely correlated), and a lower USD will likely lead to lower real yields, adding another tailwind for gold.

Figure 3b. CFTC U.S. Dollar Net Non-Comm Positioning and U.S. Dollar Index (DXY) Yr/Yr Change (2005-2022)



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Why Hasn't Gold Performed "Better" in 2022?

At its lows thus far in 2022, gold bullion was down more than 11% YTD. Although gold notably outperformed most other assets this year, it seems to have lagged, given its historical reputation as a safe haven asset and an inflation hedge. Though risk assets had severe drawdowns this year, they did not fall in a convex manner ("non-crashing") but were continually in a state of exposure reduction. Furthermore, with the most aggressive Fed rate hike in decades, a soaring USD and inflation priced as cyclical, gold investments were being drained. However, this supply drain was readily countered by long-term gold buyers, including China, India and especially central banks.

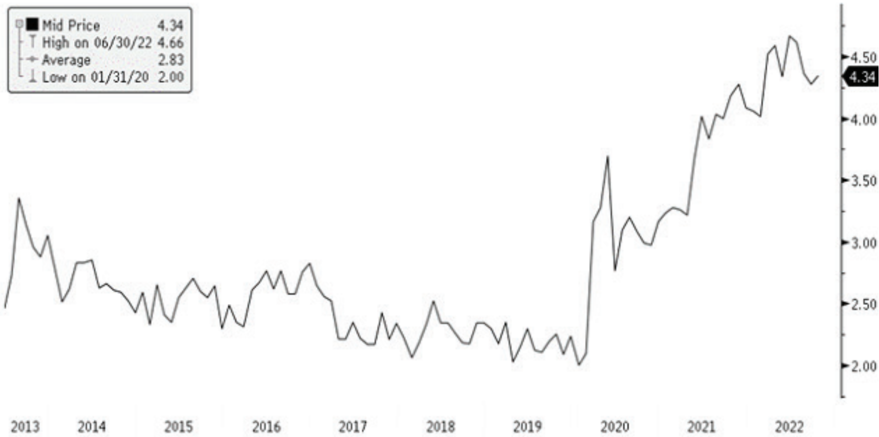
In the 2022 drawdown, funds were generally well hedged, leading to low exposures, low beta and overweight cash, reducing the need for safe haven assets. The Fed telegraphed its plan to tighten financial conditions and launch QT (quantitative tightening) and funds lowered their exposure and their need for hedges (see low SKEW Index[11] readings). In the QE (quantitative easing) era, the Fed incentivized funds to be leveraged long; therefore, funds needed to hedge downside risk. Furthermore, if a potential left-tail risk was possible, there was an increased bid for safe haven assets.

There are some concerns that gold has not responded to the current high inflation levels as it had in the past. Gold earned its inflation hedge reputation during the 1970s, but that was over a decade while we are just one year into the current inflation surge. Other factors influenced gold prices during the 1970s and were interlinked to various degrees. First and foremost was the end of the Bretton Woods system of monetary management (gold as the basis for the USD and other currencies pegged to the USD). Currencies were reordered and revalued over the decade. The DXY from the beginning of the 1970s to the end of the decade fell in value by more than 29%, a tremendous tailwind for gold. By contrast, the DXY in 2022 YTD has increased by 10.75%. In the 1970s, there were many positive drivers for gold as a store of value or safe haven asset. The Vietnam War (U.S. deficit), Middle East Wars and the Iran Revolution (oil supply shocks), loose monetary policies, political upheaval, stagflation, etc., were significant positive forces working to support a higher gold price. Although these forces affected inflation, gold was much more than an inflation hedge in the 1970s. Finally, capital markets are a very different animal now than they were 50 years ago.

We May be Entering a Period of High Macro Volatility

In the near term, we may see a peak in the current "cyclical phase" of the inflation readings as year-over-year comparisons become easier over the next several months, and the economic cycle slows, bringing price relief. In the second half of 2023, we may see firmer evidence of secular inflation, which would likely cause gold to respond well. Since this current inflation cycle began, we have seen inflation categorized as transitory, cyclical and possibly secular. From 1992 to 2020 ("The Great Moderation"), there was little inflation of any shape or form. Today, markets must decide whether the current inflation situation is cyclical, secular, stochastic (random) or worse, possibly elements of all the above. This level of inflation uncertainty will likely translate to continuing high macro volatility and a stark departure from prior decades of relative macro calm. Figure 4 shows that the Federal Reserve Bank of New York Inflation Uncertainty Index is generally trending higher.

Figure 4. Federal Reserve Bank of New York Inflation Uncertainty Index (2013-2022)

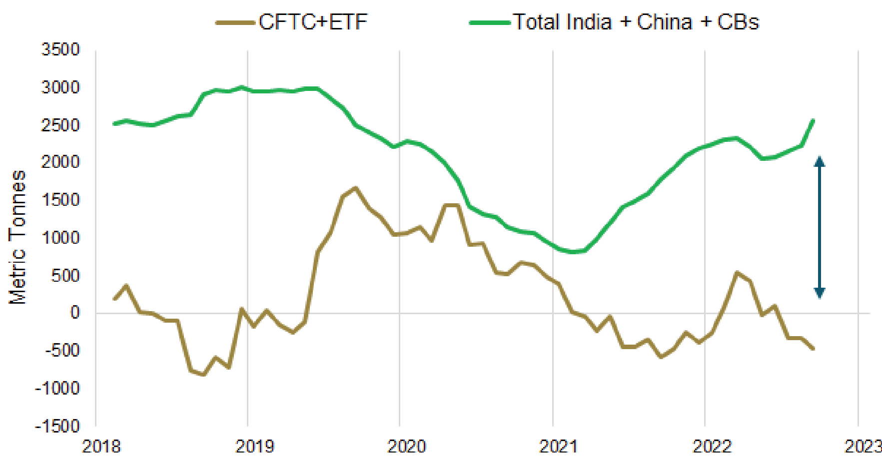


Sources: Bloomberg and Sprott Asset Management. Data as of 11/30/2022. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

Long-Term Gold Buyers are Accelerating Purchases

Gold prices have been volatile as systematic funds dominate trading flows and short-term price action. But under the surface, long-term holders have been buying on weakness (Figure 5). The combined gold purchases from China, India and central banks over the past trailing 12 months have far surpassed investment outflows and systematic trading flows. During 2018, gold made it low on significant investment fund outflows, but long-term buyers patiently absorbed supply. When the systematic funds return to being net buyers, we expect prices will reflect the tighter supply picture (prices gapping higher, much like in 2019).

Figure 5. Gold Purchases by China, India and Central Banks Exceed Investment Outflows



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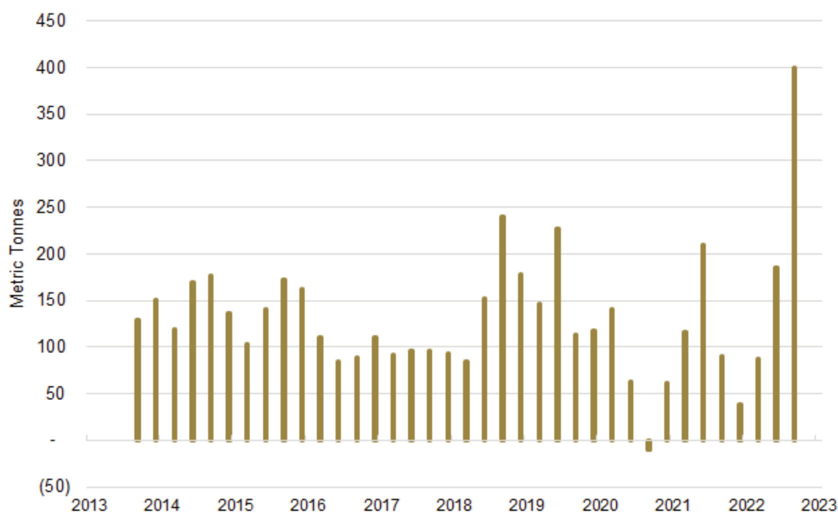
Central Bank Gold Purchases of Gold Are Soaring

The latest central bank quarterly purchases (through September) of 399 metric tonnes of gold are twice the prevailing peaks (Figure 6). At the risk of extrapolation, a massive buyer that is price insensitive, long-term strategic and national security driven has more than tripled its average quarterly purchase size of 136 tonnes per quarter over the past nine years. For reference, primary gold production from mines is about 3,200 tonnes per year. There is little insight into central bank reserve managers' actions, but we believe gold as "outside money" and the risk of persistent (secular) global inflation are the primary reasons.

The seizure of Russia's $630 billion in foreign exchange (FX) reserves was likely a wake-up call for FX reserve managers at all central banks. In the banking system, gold is classified as outside money; it exists outside of the claims of other depositors/creditors in the banking system. The common refrain of "gold is no one's liability" helps illustrate this point. Gold as outside money in the global central banking system will become more attractive to almost any central bank, but especially to any country with any adversarial relationship with the West. The surge in inflation (especially if it is secular) has positioned gold as a safer asset than government bonds. Gold becomes even more attractive if some bond-issuing countries tip into real stagflation.

Figure 6. Central Bank Quarterly Gold Purchases, a New Regime?



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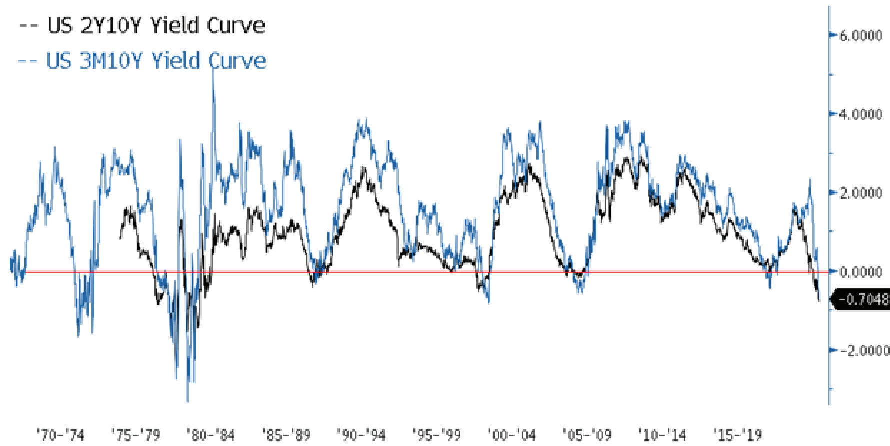
After Year End FOMO, Recession and Financial Instability

If 2022 was the year of the most aggressive rate hikes in 40 years and a spiking USD reaching 20-year highs, then 2023 may likely be the year where the effects of the Fed's hawkish actions are realized in the economy and financial system. The lag time or response of monetary policy can be long and varied, but generally, the effects are felt in nine to eighteen months. With the fastest pace of rate hikes on record and a +5% expected terminal rate, a recession will be difficult to avoid. The two yield curves (10YR-3M and 10YR-2YR) with the best historical track record of forecasting recessions are now inverted and at the most extreme readings since the early 1980s. [FOMO refers to "fear of missing out".]

Figure 7. U.S. 2Y10Y Treasury Yield Curve and U.S. 3M10Y Yield Curve, Both Inverted



Sources: Bloomberg and Sprott Asset Management. Data as of 11/30/2022. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

As the broad market FOMO rally extends, we see hedges monetized as the pain trade ramps up, exposing funds to future left-tail events. Left-tail events will likely be recession/financial instability linked, making gold as a safe haven attractive, especially now that the risk of massive rate hikes and a spiking USD are behind us. Financial markets are still adjusting from a leveraged QE-ZIRP-NIRP[12] and volatility suppression world to a market price discovery world with higher for longer rates, QT, deleveraging, inflation and recession risk. From 2000 to 2021, we have only seen secular bear markets (2000 tech bubble, 2008 housing bubble), which are quick but deep, and the post-GFC Fed put protected corrections (no real bear markets allowed). This regime change could not be more extreme. In the next few months, as rates go the "higher for longer" phase, we will discover the interest rate level at the financial system loses its stability and functioning. We will also see how far this level will be below the level needed to curb inflation. The wider the gap, the greater the level of financial instability.

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[1] Gold bullion is measured by the Bloomberg GOLDS Comdty Spot Price.
[2] Silver bullion is measured by Bloomberg Silver (XAG Curncy) U.S. dollar spot rate.
[3] The Solactive Gold Miners Custom Factors Index (Index Ticker: SOLGMCFT) aims to track the performance of larger-sized gold mining companies whose stocks are listed on Canadian and major U.S. exchanges.
[4] VanEck Vectors® Gold Miners ETF (GDX®) seeks to replicate as closely as possible, before fees and expenses, the price and yield performance of the NYSE Arca Gold Miners Index (GDMNTR), which is intended to track the overall performance of companies involved in the gold mining industry. The SPDR Gold Shares ETF (GLD) is one of the largest gold ETFs.
[5] The Bloomberg Commodity Index (BCOM) is a broadly diversified commodity price index distributed by Bloomberg Indices.
[6] The U.S. Dollar Index (USDX, DXY, DX) is an index (or measure) of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of U.S. trade partners' currencies.
[7] The S&P 500 or Standard & Poor's 500 Index is a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies.
[8] Any event that is extremely rare, beyond the sixth standard deviation in a normal distribution, is known as a six sigma event.
[9] A commodity trading advisor (CTA) is an individual or firm that provides personalized advice regarding the buying and selling of futures contracts, options on futures, and retail off-exchange forex contracts or swaps.
[10] Commodity Futures Trading Commission's (CFTC) Gold Non-Commercial Net Positions weekly report reflects the difference between the total volume of long and short gold positions existing in the market and opened by non-commercial (speculative) traders. The report only includes U.S. futures markets (Chicago and New York Exchanges). The indicator is a net volume of long gold positions in the United States.
[11] The SKEW Index measures perceived tail-risk in the S&P 500. Tail risk is a change in the price of the S&P 500 or a stock that would place it on either of the tail ends, or the far edges of the normal distribution curve.
[12] QE-ZIRP-NIRP is Fed speak and refers to "quantitative easing", "zero interest rate policy" and "negative interest rate policy".

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