



Paper Gold: Utopia for Alchemists

BY JOHN HATHAWAY ON JANUARY 7, 2016

An acute shortage of readily marketable physical gold is developing that we believe will deepen in years to come. This possibility seems to be unrecognized by those who are short the gold market through paper contracts. The relentless dumping of synthetic or paper gold contracts since 2011 by speculators in Western financial markets has caused the shortage. The steady selling has driven down the price of physical gold, hobbled the gold-mining industry, and drained the stores of gold held in the vaults of Western financial centers. We believe that the shortage will worsen because (1) the precursors of production (exploration, discovery, reserve life) are very negative, (2) the mining industry has little financial credibility and seems unlikely to attract capital even with a big rise in gold prices, and (3) refining capacity limitations tend to create supply bottlenecks when physical demand spikes.

Therefore, absent any significant and sustained rise in the gold price, we expect few new mines to be built for many, many years to replace depleting and aging mine reserves. In addition, refining capacity should remain static for the foreseeable future. At the same time, the pool of vaulted gold in readily marketable form that supports paper/synthetic gold trading has all but vanished as Asian demand has drained inventories in London and other Western storage complexes.

The seemingly endless supply of notional gold coming from the sellers of synthetic is the strongest

explanation for the extended, and in our view overdone, decline in the gold price from peak levels of 2011. Quantities of synthetic gold sold are created out of thin air, with almost no connection to physical metal. The negative investment thesis seems to rest upon confidence that central bankers, and the Fed in particular, will steer a course away from radical monetary experimentation that will return to a normal structure of interest rates and robust economic growth. The fact that these expectations have not been fulfilled in the nearly nine years since the initiation of zero interest rates, notwithstanding the recent 25-basis-point Fed rate hike, leads us to believe that investor credulity in central bankers may be stretched about as far as it can go.

The very popular short exposure in gold is, in our opinion, vulnerable to a trend reversal/mega short squeeze. This would occur if gold ETF assets under management (AUMs) were to rebuild or if holders of COMEX futures were to stand for delivery in a big way. Gold ETF AUMs peaked at 2400 metric tons ("t") in December 2012 vs. 1300 currently. A 200- or 300-t influx to GLD and other ETFs would put a severe strain on London liquidity, which we estimate to be substantially below 1000 t currently. When and why a trend reversal might occur is a matter of guesswork, but a trend change is inevitable (as in all markets), and the dynamics promise to be powerful. In our view, the short interest in paper gold rests on a credit pyramid that is precarious. When a trend reversal occurs, we expect that machine-driven trading, which is agnostic as to investment fundamentals, will serve as a powerful accelerant to the upside, just as it has led to overshooting on the downside.

The Gold Mining Industry Is Severely Incapacitated

Over the past 10 years, aggregate debt of the gold-mining industry increased from \$1 billion to \$41 billion. (For purposes of this discussion, all figures refer to the ten largest companies included in the XAU index as a proxy for the industry.) The increase in debt was to fund capital expenditures for mine expansion in the expectation of sustained high gold prices. From 2005 to 2011, the gold price per ounce rose from \$429.55 to \$1420.78; it averaged \$803.60 over that six-year period (numbers from Bloomberg). Managements, investors, and lenders were uniformly bullish as the gold price reached \$1900.23 in 2011 amid predictions of a government shutdown in August of that year. Following the 2011 peak, the dollar gold price fell steadily to sub-\$1100 levels, a decline of more than 40 percent. The decline has severely undermined industry profitability, added further strain to balance sheets, and raised doubts as to future returns on capital committed to new mining projects.

Equity investor enthusiasm enabled the industry to double share issuance over that 10-year period to fund mine expansion and corporate acquisitions. The incremental return on investment from equity and debt issuance has been highly disappointing. Significant increases in capital have spurred little production growth, and share issuance has severely diluted equity investors. Aggregate profits have fallen from a peak of \$14 billion in 2011 to negative \$5 billion in 2014. Gold production over that same period rose an estimated 13 percent, from 38 million oz. to 43 million oz., while per-share production declined from .38 oz. to .21 oz., or 45 percent.



Note: Estimated gold production = revenue divided by average gold price

Source: Bloomberg, FactSet

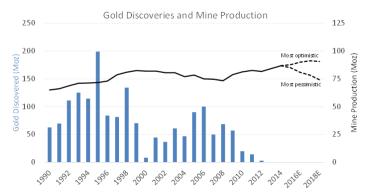
To us, this cumulative and collective misfortune has translated into a loss of credibility and perhaps an inability to raise significant incremental capital for several years to come. In our opinion, it will require a sustained rise of several years in the gold price to attract capital for new mining projects, assuming that such

projects even exist in light of the severe reduction in industry exploration expenditures and discovery rates. In the absence of a sustained rise in the gold price, the most likely outlook over the next two to three years in our opinion is for the industry to continue in a survival mode of balance-sheet repair and running in place to remain positioned for a future rise in the gold price.

Future Mine Production Will Begin to Slump

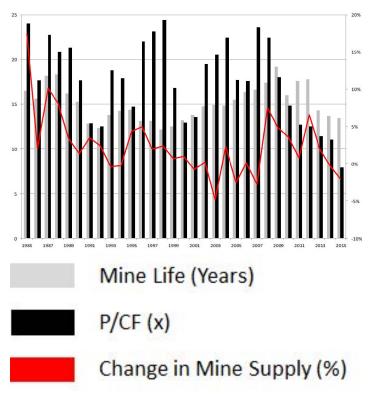
The nuclear winter of the gold-mining industry will have inescapable intermediate to longer-term effects on future mine supply. Financial constraints, investor bearishness, and the ever-lengthening time cycle to build new mines will in our opinion lead to a moderate to severe decline in global gold-mining output before the end of the decade. Discovery of new ore bodies has declined significantly since 2006 (chart below). Without discovery, there can be no new mines. Exploration spending, down about 60 percent from the peak, has been among the prominent casualties of the industry's hard times.

The requirements for building a new mine go well beyond exploration success, however. The hurdles for permits, social licenses, host-government approvals, engineering and construction, and most importantly, financing, are high and going higher. We believe that the time from discovery to production for all significant new projects is five years, optimistically, and more realistically ten or more years. An added headwind is the seemingly steady trend towards more onerous conditions set by host countries for extractive industries in general, and the seemingly steady erosion of the rule of law in locales once thought to be safe for new investment. At the very least, these trends argue in favor of higher hurdles for new investment.



Note: Gold discovered is based on deposits containing >2 Moz Source: BMO Capital Markets, Credit Suisse, SNL Financial

Reserve life has fallen to precarious levels, in our view; the lowest in 30 years (chart below). The current estimated mine life of 13 years is calculated on the assumption of a gold price of approximately \$1,200/oz. That assumption will most certainly be revised, as required by the SEC, to a lower number following 2015 year-end assessments. Not evident in such calculations is the extent to which the practice of high grading (mining of the highest-grade ore) has further gutted the sustainability of industry production at current levels. We estimate that the industry reserve life would be shortened by one to two years based on an assumption of a \$1000 gold price.



Source: Scotiabank

Global mine production for 2015 is expected to reach approximately 3200 t, a very slight increase over 2014. For 2016, we project production to be essentially flat. We believe that the winding down of industry production will be gradual initially, and much more rapid by 2018, reaching a decline of perhaps 25 percent by 2020. A revival of the 10-year complex and arduous process to expand industry production will not occur, our opinion, merely because of a spike in the gold price of 30 to 50 percent from current levels. Many might regard such a spike as a bear market rally to be followed by even lower prices than current lows, based on deeply ingrained bear-market psychology.

We construe the incapacity of the gold-mining industry to be extremely bullish for future gold prices. Notwithstanding the value destruction that has resulted from the carpet-bombing of investors by equity issuance to finance ill-conceived capital programs, we find many reasons to consider investing selectively in gold-mining equities. There are important exceptions to the sins and shortcomings of the industry at large. Value creation, even if currently unrecognized by the market, is in our view taking place in the form of accretive acquisitions by companies with access to capital and good balance sheets from those forced to sell quality assets to address excessive balance-sheet leverage. In addition, there are new mines that have been under construction for several years that should begin to produce gold, profitable even at current prices, at a time when industry production is shrinking. We believe that they will be sought-after acquisition targets as other producers deplete reserves. Other notable exceptions include companies that are still in good financial condition with attractive assets and positive cash generation. Their equities offer dynamic exposure to the repricing of gold that we regard as inevitable.

London Pool of Liquid Gold Is Dry

According to the World Gold Council, the above-ground stock of gold mined throughout history amounted to 183,600 t as of year-end 2014. In theory, because gold never gets used up and can be recycled infinitely, above-ground stocks overwhelm shrinking mine supply as a consideration for predicting future gold prices. We regard this thesis as totally false. All but a small percentage of above-ground gold exists only in illiquid, non-marketable form and cannot influence market prices in the short to intermediate term. Above-ground gold is held in the form of jewelry (50.5 percent), private investments (18.7 percent), government reserves (17.4 percent), and various industrial applications (13.4 percent). Governments have on balance been net buyers of additional reserves; thus, aside from the newly mined and refined gold, additional supply can only

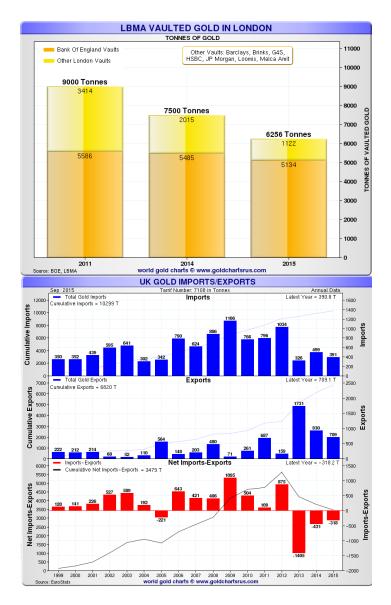
come from existing private investments and jewelry recycling. Much of the former has been relocating to Asia, where gold is bought as a strategic long-term holding and is unlikely to be sold in the near to medium term. Some jewelry becomes available when prices rise substantially, but jewelry recycling takes time, effort, and refining capacity. In the past, refining and minting capacity limitations have invariably caused shortages of marketable gold whenever demand spiked.

The pool of liquid, marketable gold that could have an immediate price impact if sold is vaulted mainly in London and to a lesser extent in COMEX warehouses in North America. These supplies have been depleted by Asian demand, which alone exceeds annual mine production. The chart below illustrates this reality: Demand vastly exceeds mine supply. Flows into four nations alone – China, India, Russia, and Turkey (Silk Road) – have often exceeded monthly production in recent years. In addition to these four countries, there is substantial demand from the rest of the world amounting to 2400 metric tons in recent years.



The depletion of marketable physical gold stocks is depicted in the chart below. In 2011 an estimated 9000 t was located in Bank of England or commercial gold vaults. Of this, 5586 t was the property of other central banks, stored (earmarked) at the Bank of England for safekeeping. While this gold can and has been leased to bullion banks for commercial purposes (often for hedging purposes by the mining industry), this practice has diminished significantly in recent years due to compliance and regulatory considerations affecting the practice and behavior of bullion banking. In addition, a heightened sense of counterparty risk has decreased the willingness of central banks to allow their gold to be leased.

Earmarked gold declined from 5586 t in 2011 to 5134 t currently. The residual supply of potentially marketable gold is vaulted in bullion banks (much of it at HSBC for the GLD ETF) and non-bank commercial storage facilities such as Brinks, Malca Amit, etc. It is here that we can see a precipitous drop in liquidity, from 3414 t in 2011 to only 1122 t in 2015. As of 12/7/15, the largest gold ETF, GLD (State Street SPDRS), was backed by 638.4 t, or 56.8 percent of non-official gold vaulted in London. According to the GLD trust prospectus, gold bars that are held in allocated or unallocated form "are the property of the trust and cannot be traded, leased, or loaned under any circumstances." This leaves only 483.6 t, most of which includes gold held for other gold ETFs, and therefore also not in play. Heavy net export of gold from the UK over the past three years (chart below) is consistent with the view that the pool of gold liquidity is dry.



The picture is similar for gold vaulted in COMEX warehouses. Inventories have dropped by 43 percent since 2011, from slightly below 11,500,000 ounces to 6,446,930 ounces (182.8 metric tons) as of 12/15. The ratio of COMEX open interest to total gold warehoused has held fairly steady, rising from 5.6x in 2011 to 6.1 currently. However, the ratio of gold standing for delivery – the process by which a futures contract can be settled for physical gold rather than cash – rose exponentially into early December and has since fallen significantly but remains at historically high levels:

The standard COMEX response would be that the overwhelming majority of futures contracts are simply rolled over at expiration into a future month or settled in cash. Therefore, the issue of delivery of physical gold rarely comes into play. Even if it does, the process of re-categorizing warehoused gold from registered to eligible for delivery is simple and expedient. In addition, gold can be resupplied by J.P. Morgan, ScotiaMocatta, or other warehouse agents to meet physical demand should the need arise.

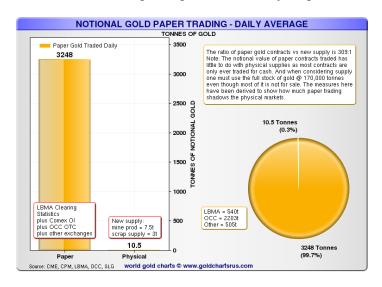
On the other hand, the rise in the ratio of open interest to eligible gold is unprecedented. It suggests to us that the idea that COMEX is an intermediary between physical and paper gold is more pretense than reality. The official description of the COMEX market's *raison d'être* by CME group states, "Gold futures are hedging tools for commercial producers and users of gold." There is no mention of high-frequency trading (HFT), which the CME has encouraged and by some estimates accounts for nearly two-thirds of COMEX activity. COMEX, which mirrors much larger-scale paper trading in London and OTC markets, appears to be an arena for speculation in the "idea" of gold, settled in cash, and completely divorced from physical gold. Speculators include macro hedge funds, commodity traders (CTAs), bullion banks (although to a much reduced extent since the failure of MF Global), and central banks.

Some (for example, Princeton Economics) argue that the decline in the price of oil will lead to forced divestment of gold holdings by sovereign wealth funds, estimated by The Wall Street Journal (12/23/15) to

manage \$7.2 trillion. Many of these funds are located in oil- or commodity-producing nations. However, the same article states, "many of the funds don't disclose their size, holdings, or investment strategies, making it hard to gauge what risk, if any, they pose to the global financial system." As to gold holdings, nobody can know for sure. However, based on our first-hand experience, admittedly anecdotal, the investment strategies of sovereign funds are conducted by managers oriented to the Western zeitgeist: They are designed to provide diversification away from commodities in the form of commonplace or exotic instruments that mimic "smart" hedge fund managers in the West. Lack of transparency notwithstanding, we believe that sovereign wealth funds hold very little physical gold.

Synthetic Gold: Mechanics and Plumbing

The volume of paper gold trading dwarfs flows of physical metal. According to the London Bullion Market Association (LBMA), the daily volume of notional metric tons (transfers) traded is 3248. This compares to world daily production of 7.5 t plus recycling supply of 3t for a world daily total of physical supply of 10.5 t. Based on LBMA statistics, the ratio of paper to physical gold traded is therefore 309:1. Even allowing for the fact that some paper trading, as on COMEX, is for normal commercial hedging purposes, the extraordinary discrepancy suggests to us that, as on COMEX, pure speculation, day trading, front running, and other forms of gaming exist on a very large scale.



Most, if not all, paper gold contracts are settled for cash. This explains how and why the disconnect between synthetic and physical gold can persist. It explains how the supply of paper gold can depress the price of physical gold despite the fact that synthetic sellers do not possess any gold to sell. Short sellers of gold do not borrow gold and then sell it. Therefore they do not need to deliver gold to buyers should their speculation on lower prices turn out to have been ill considered. Untethered (it would appear) from the laws of supply and demand, paper gold is a make-believe substance that trades according to rules written by HFTs, macro hedge funds, major banking institutions, and central banks. Of course, this works only so long as the buyers remain willing to settle in cash, rather than ask for actual gold.

The transformation of the structure of the gold market that has taken place over the past few decades in our view mirrors a broader and highly significant characteristic of all present-day financial markets. The capital tied up in hedging and risk insurance seems to overshadow that required for transactions in underlying equities, bonds, and commodities. Derivatives, such as futures contracts, forward contracts, options, warrants, ETFs, and swaps are estimated by Jeff Desjardins of The Money Project to range in size from \$630 trillion to \$1.2 quadrillion. The link provides a vivid portrayal of the hierarchy of global financial and real assets. Even at the estimated low end, derivatives dwarf underlying values of equities (global stock market value estimated at \$70 trillion; global debt market of \$199 trillion; gold at \$1.8 trillion). Derivatives are contracts between counterparties that derive their value from the performance of an underlying asset, index, or entity. According to Mr. Desjardins,

...banks typically use high amounts of leverage to attain these positions. Some derivatives, such as commodities, are traded on regulated exchanges such as the Chicago Mercantile Exchange (CME). However, the majority of derivatives are traded outside of exchanges between private counterparties, and are called "over the counter" trades.

These positions are often not reflected on bank balance sheets.

Synthetic gold traders appear to share three things in common: no gold, little or nothing in the way of margin requirements, and no knowledge of or interest in the fundamentals of physical supply and demand. In this synthetic world, gold is just another index that can be used by issuers of derivatives and risk managers seeking correlations across asset classes in a quest for risk protection, greater leverage, and trading profits. The most transparent venue for notional gold trading is COMEX, which mirrors the much larger and more opaque OTC derivatives market. CME, of which COMEX is a division, is similar to other exchanges, such as NASDAQ, NYSE, and BAT, that have gone public in recent years. CME, formerly the Chicago Mercantile Exchange, went public in 2003. HFTs are a major source of income for public exchanges; therefore, their presence is encouraged. Public exchanges provide incentives to high-frequency trading activity by providing superior data packages, and thus the timing advantage that is essential to HFT success. Public exchanges compete heavily for volume from traditional investors by granting rebates on their trading activity. The business rationale of bulking up volume is to provide superior data packages to HFT trading firms, a business activity that public exchanges regard as highly profitable. A vast array of derivatives across all asset classes – including commodities, currencies, bond and equity indexes, volatility (VIX) contracts, Fed fund futures, and more – trade on the CME. Central banks are encouraged to trade through a discounted commission schedule. While central-bank CME and COMEX trading activity and position sizes are difficult to ascertain, we believe their presence to be significant.

The Swiss National bank is perhaps the most transparent of major central banks, but we believe their actions are mirrored by others such as the ECB and Japan. Unconventional central bank assets include exposure to equities of \$40.3 billion, or 6.7 percent of the total. Major positions include Facebook, Apple, Amazon, and Google. Under "Investment and Risk Control Process" on the SNB website: "External asset managers are used to obtain efficient access to specific investment categories.... Risk management and limitation is carried out by means of a system of reference portfolios, guidelines and limits." The website does not discuss whether this is utilized as a convenient venue for currency manipulation or risk limitation, but it is well known that the SNB has been heavily engaged in fixing the price of the Swiss France in order to weaken the currency for the benefit of the export-dominated Swiss economy. It has done so by creating Swiss France out of thin air to buy assets denominated in euros or dollars.

While accounting for approximately two-thirds of volume, HFT firms do not show up as any part of open interest. This is because HFT capital is employed strictly to profit from day trading. A frequent complaint voiced by traditional traders on COMEX and other exchanges is that public exchanges cater to those interests above those of traditional investors. Accusations of price stuffing, front running, order spoofing, and other forms of price manipulation are understandable.

HFT tactics, used aggressively, can strengthen a price signal through entry of multiple orders in parallel markets, including public and over-the-counter exchanges. Think of it as the financial equivalent of shock and awe. The notional amount of all HFT orders placed far exceeds the amount that is actually executed. While HFT is directionally agnostic, and is essentially engaged in trend spotting rather than trend enforcing, HFT clients may, and probably do, have an economic interest in affecting price outcomes of indexes, which affects valuation of derivative contracts. HFT firms are tools of these interests.

HFT technology is widely available and understood by HFT clients; therefore, institutions placing orders are most likely well aware of the tactics necessary to achieve desired outcomes. Price manipulation caused by HFT trading would seem to be short-term in nature, as the firms act exclusively as agents and day traders. That cannot be said of the clients who originate the order flow. Flooding a market with fake orders in the real world – for example, copper, oil, gold, or cattle – would quickly become a laughing matter. It is a much easier task to affect the price of cash-settled instruments notionally backed by real underlying assets in rigged exchanges that court hyperactive turnover.

Market depth, critically important to investors...suffers in the world of high-frequency traders. Startling evidence for the lack of robustness in today's market comes from a 2013 Securities and Exchange Commission report that found order cancellation rates as high as 95-97 percent, a result of high-frequency traders playing their cat-and-mouse game. Market depth is an illusion that fades in the face of real buying and selling (Jonathan Macey and David Swensendec, The New York Times op-ed 12/24/15).

A 12/16/15 letter to the SEC from Norges Bank Investment Management (The Norwegian sovereign wealth fund) states,

In our view, innovation by exchanges in recent years has focused overwhelmingly on latency reduction and on services such as novel order types that tend to benefit market participants with **shorter return horizons** [their emphasis].... Trading firms **manage** [our emphasis] the prices they quote on exchanges to control their risk, and having faster connections to the exchange makes the process easier.

HFT firms are liberally populated by former traders from bank proprietary-trading desks and floor traders who team up with technology providers. The fact that Dodd-Frank regulations prohibit proprietary trading by banks is in our view small assurance that these regulations cannot or have not been circumvented by those institutions in the form of equity ownership in HFT firms or participation in dark pools through off-balance-sheet entities. What this means is that the leverage of bank balance sheets has been transferred to the firms that clear HFT trades. The leverage that was once visible on bank balance sheets may now be disguised as a net position held at a clearing firm. The inherent leverage is opaque and invisible to regulators, but in our opinion it is still in the system, and possibly a source of systemic risk that lingers despite Dodd-Frank.

We believe that market-rigging tactics of which banking institutions have been repeatedly accused – and, in many cases, are legal defendants in actions brought against them – have been disguised but are still widely practiced.

That the banks well knew how to profit from the joint manipulation of financial benchmarks, despite any purported differences in interest between and amongst them on a given day, is confirmed by the fact that this [alleged price manipulation of the London Gold Fix] is just one in a series of such behaviors. Many of the world's leading banks admitted to manipulating the key LIBOR financial benchmark, including by way of collusion between their respective traders. In the FX markets, many of the world's leading banks admitted that their traders colluded to move the markets in advance of setting key currency benchmarks (from the complaint filed by Quinn Emanuel on behalf of clients in US District Court, Southern District of New York, Case 14-MD-2548).

Since the failure of MF Global in 2011, COMEX gold open interest dropped from a peak of 650,000 contracts to a range of 370,000 to 450,000. This decline can be seen on the Meridian chart below. Since then, options, both COMEX and the much larger OTC market, have flourished in the form of synthetic futures. The exit of banks from commodity trading since 2011 includes J.P. Morgan (which retained only precious-metals trading), Deutsche Bank, Barclays, and Morgan Stanley (which divested energy-related trading). The exit of banks as counterparties for COMEX traders is a major explanation for the rapid growth of options trading. In the options market, transactions are bilateral and based on the perceived creditworthiness of counterparty balance sheets, similar to credit default swaps. We believe that risk-management practices are unknowable, probably variable, and inscrutable to regulators.



Source: MeridianMacro

OTC options are created out of thin air by market-making shops. There are no size limits and no margin requirements. A 1000-contract lot is the equivalent of 100,000 ounces of gold. Durations of contracts extend up to three years. Position sizes of 40,000 to 50,000 lots, or 4 to 5 million ounces, are not uncommon. Such positions represent the materialization of notional metal – approximately the annual production of major mining entities such as Goldcorp or Newmont Mining – through the stroke of a keyboard. Option positions are considered to be square even if the short exposure is backed by a call option on a gold-exchange-traded fund such as GLD. Hedging a gold short with an exchange-traded product (ETP) from which gold cannot be delivered is but one illustration of the possibility of weak risk-management practices in the OTC options market.

The plumbing and mechanics of the synthetic gold market, in our opinion, are symptomatic of a more generalized preoccupation in the financial markets at large for risk mitigation, and a quest for greater leverage during a market phase where returns have been compressed by an excess of capital. We believe synthetic gold has been co-opted by risk managers and speculators as a convenient, high-capacity instrument to offset bullish bets on financial assets, the US dollar, and ultimately on the success of radical Fed policies. The short exposure to gold that can be easily achieved through the synthetic market would be impossible to achieve in the physical market.

The idea that imaginary financial insurance can provide capital safety is sheer invention; it makes no sense when held up to the light of fundamental analysis. Neither does it survive a basic common-sense test: Buying insurance against a market crash from other market participants is no different than buying a policy against a crash of the insurance industry from an insurance company. It is a movie we have seen before: portfolio insurance in the 1987 market crash, forward hedging of gold by gold-mining companies in the late 1990's, credit default swaps in the 2007-2008 market meltdown, and most recently the liquidity mismatch between junk bond ETFs and the underlying securities. The idea that downside risk can be eliminated from financial-market exposure is a fantasy that never seems to die. The false sense of security conveyed invites and encourages unwise and speculative levels of leverage that in actuality conflate downside risk when these schemes must be unwound.

Through the alchemy of financial engineering, gold has become an index, a policy lever to transmit information. Digitization of tangible and financial assets in the form of ETPs, derivatives, options, and other paper contracts transfigures real assets into abstractions. As with Fed funds, reverse repo rates, Interest on excess reserves, and LIBOR, the price of gold pings an important signal as to risk, the cost of capital, the state of the financial markets, and economic well-being in general. A weak dollar gold price signals that all is well with the high-risk course set by central planners in the Fed board's Eccles building. The Federal Reserve sets Fed funds, reverse repos, and interest on excess reserves to the levels that the Federal Open Market Committee (FOMC) deems appropriate. It is hard to imagine that the dollar price of gold has been overlooked by those who believe that they know how to make all the pieces of the puzzle fit together. The declining price of gold affirms the collective beliefs of central planners and mainstream investment managers. For them, a bullish trend in the dollar gold price would send a disturbing signal that the greatest high-wire act in financial history is teetering.

China's Pro-Gold, Anti-Dollar Strategy

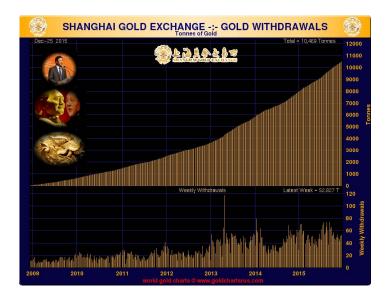
China's strategic vision for gold is quintessentially anti-synthetic; if successful, it will both erode the international standing of the dollar and elevate that of gold. China wishes to achieve reserve currency status for the renminbi (RMB). In September 2015, Party Secretary Song Xin, president of the China Gold Association (CGA), was a keynote speaker at a seminar discussing gold and its role in internationalizing the RMB. He stated that gold would play a pivotal role in "increasing credit" for renminbi internationalization. The agenda includes "rebuilding the international currency system, balancing American hegemony, and positively displaying the due function of gold and the gold industry" (remarks translated and posted by Koos Jansen on 12/4/15). Attendees included representatives from the government; banking, mining, and gold-investment organizations; jewelry companies; and educational institutions. In 2014 Song stated,

For China, the strategic mission of gold lies in the support of renminbi internationalization. Gold...forms the base for a currency moving up in the international arena.... That's why, in order for gold to fulfill its destined mission, we must raise our gold holdings a great deal...we should increase step by step towards 8500 tonnes, more than in the US (Sina Finance, 2014, translation by BullionStar).

In 2012 Song's CGA predecessor, Sun Zhaoxue, published an article in Oiushi magazine, the main academic journal of the Chinese Communist Party's Central Committee, stating,

Currently, there are more and more people recognizing that the "gold is useless" story contains too many lies.... Effectively, the rise of the US dollar...and later the euro currency, from a single currency to a global or regional currency was supported by their huge gold reserve.... Individual demand is an important component of China's gold reserve system.... Practice shows that gold possession by citizens is an effective supplement to national reserves and is very important to national financial security (translation by BullionStar).

The chart below shows that Chinese citizens have heeded the call for gold ownership in a significant way. Movement of physical gold from the Shanghai Gold Exchange (owned by the People's Bank of China) has risen dramatically since 2012, and has reached a cumulative total of roughly 8000 t since then. All of this movement represents transfers to the private sector, and none of it to official-sector reserves. To put this in perspective, global gold-mining output since 2012 has been a cumulative ~12000 t.

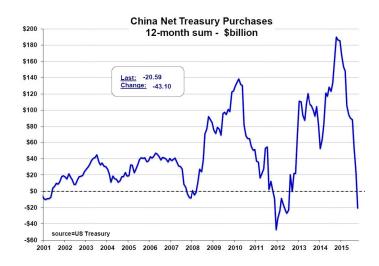


Official-sector purchases are not reflected by SGE statistics. We believe these to have been significant but under-reported. In July, China announced an increase to official gold holdings after 6 years of silence. Koos Jansen of BullionStar estimates that official holdings are now 4000 t, vs. the 1709 t reported. Further,

holdings of other official-sector institutions such as SAFE and CIC are not disclosed, but most likely significant. In a departure from its secretive past, the central bank began to announce increments on a monthly basis since July. The step towards transparency might have been motivated by a desire for inclusion of the RMB in the special drawing rights (SDR) basket, a goal recently accomplished. It might also suggest that holdings, both public and private, are now of sufficient size that a higher RMB and dollar gold price would benefit the standing of the RMB for use in the settlement of international transactions for parties wishing to bypass the dollar.

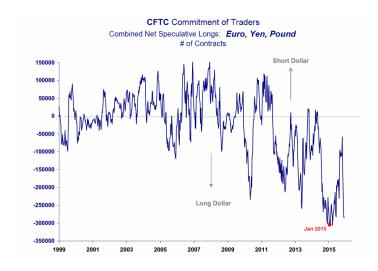
Does the movement towards greater transparency represent a new phase in China's gold strategy? We believe that the shift from secretive to open is among many signs of a shift to an aggressive anti-dollar stance. The process of devaluing of the RMB against the dollar, which began last August, seems to be gaining momentum. We view this development as destabilizing for the fragile US economy, and for that matter, the global economy as well. "China has paved the way for a further weakening of its currency by announcing changes in how it measures the value of the renminbi, raising investors' alarm at the prospect a new currency war just as the US prepares to raise interest rates" (FT, 12/12/15).

Over the past 12 months, China has become a net seller of US Treasuries. The chart below shows a pronounced downtrend, a reversal of steady purchases since 2012, and possibly the beginning of a divestment campaign. Such a shift would certainly fit in with China's weakening balance of trade, public statements about gold, and their goal of internationalizing the RMB. The \$31.33 billion drawdown over the past year is a drop in the bucket relative to China's \$1.2 trillion holding, the third-largest after the Fed and the Social Security Fund.



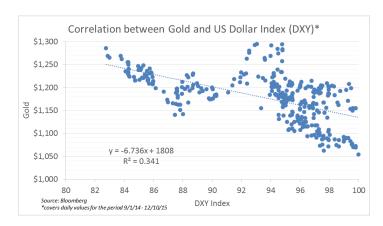
Source: MeridianMacro

While China's stance regarding the future allocation of their FX reserves to US dollars, gold, or other currencies can only be a matter of speculation, we believe that the handwriting is on the wall. Whatever China's future allocation of US dollar instruments as a component of reserves turns out to be, we are quite certain that it will be lower. As US fiscal deficits begin to widen, who will step up to buy the \$158 billion per year that China had purchased from 2012-2015? We wonder whether the negative implications for the strong dollar/weak gold trade have been taken into account by the highly confident dollar bulls. The most recent Commitments of Traders (COT) speculative positions (chart below) suggest otherwise, and a comeuppance ahead for dollar bulls. "Foreigners are half the Treasury market. If we've lost one of the biggest buyers – it doesn't matter if it's at auctions or if it's secondary trading – if we lose them that will be very problematic" (Jim Bianco, Bianco Research, as quoted in Bloomberg Business, 12/29/15).



Source: MeridianMacro

The so-called "strong dollar/weak gold" story seems to be a recurring myth that nicely serves the institutional thirst for risk management and leveraged speculation: "Our cross-asset strategy team forecast persistent strengthening of the USD in 2016, in response to rate hikes...a view that implies downside risk for gold over the same period" (Morgan Stanley Global Metals Playbook, 2015). The two charts below show that the supposedly inverse correlation between the dollar and gold is more myth than reality. The relationship is weak even following the "breakout" of the range-bound DXY index in September 2014. The chart below shows a weak correlation of .341 since then. For the prior 10 years, the relationship was even weaker, at .256. Most dollar bulls view the case in relative terms: "It is the best house in a bad neighborhood," as the saying goes. Nobody really loves the dollar, but everyone seems unequivocal in their dislike for all other paper currencies. We believe that the flaws of other paper currencies stem directly from the flaws inherent in the dollar, which is to say, unlimited supply.



Catalysts for a Trend Reversal

There are numerous catalysts to trigger a change in direction for gold. These include, but are not limited to, a bear market in financial assets, a downturn in the global economy, continued currency turmoil, and of course, bullish supply-and-demand fundamentals. To this list, one must add geopolitical issues; the headlines speak for themselves. We expect these catalysts to interact and feed on each other.

We have suggested over the past year, that a bear market in financial assets would lead to a loss of confidence in central bankers and an impulsive, uncontainable rise in the price of gold. To us, the dollar price of gold and confidence in central banking are inversely related.

Since 2012, the Federal Reserve has been engaged in a pre-emptive war against financial risk...pre-emptive central banking refers to monetary action **in anticipation** of future **financial stress** to avert a market crash **before**

it starts.... A central bank reaction function is now fully embedded in risk premiums...intervention is more important than fundamentals.... The market has ceased to be an expression of the economy...it is the economy. The purpose of a pre-emptive strike on financial risk is to manipulate market psychology to affect fundamental reality ("Moral Hazard in the Prisoner's Dilemma," Christopher Cole of Artemis Capital Management).

Since 2009, strong financial-asset returns and confidence in central banking have become intertwined, in our opinion. Many investors with whom we have met over the past two years with seem to understand the potential downside from reliance on this fragile game of confidence. However, to initiate a position in gold or gold mining stocks is seen as potentially career-threatening at this juncture in part because the confidence game has persisted for so long and in part because adoption of precious-metals exposure is seen as potentially harmful to performance. We therefore believe that the latent demand for the risk protection that gold can provide is vast, and that it will be activated in a reflexive, convulsive fashion when confidence in central banking evaporates.

"The combined expected return on stocks and bonds is the lowest in 100 years." This comes not from an apocalyptic doomsayer, but from Bob Prince (8/3/15), a leading partner of one of the most successful investment firms of our generation, Bridgewater Associates. Investors are all too aware that 2015 has been a difficult year, with most of the popular investment averages showing modest gains or declines, and most active managers having fallen short even of these disappointing benchmarks.

Still, bullishness persists. Even at this eleventh hour, ten leading investment strategists are forecasting a rising stock market for 2016 and improving corporate earnings (Barron's, 12/14/15). The ability of central bankers, gullible media, and clueless mainstream investors to ignore the prospect of a spreading global recession by propping up market averages has in our opinion reached the point of exhaustion. There is unseen rot beneath the surface calm depicted by the market averages. "If you own the S&P 500, you were bailed out by a handful of giant companies that masked the pain beneath the surface.... At present, just 28 percent of all NYSE names are in uptrends, or less than 1 in 3 stocks. That's not a bull market" (Joshua Brown in The Reformed Broker, 12/23/15).

We believe that when clarity returns, the financial markets of recent years will be unmasked to have been a comprehensive manipulation made possible by the alchemy of transforming real assets into hyperactively traded derivatives, ETPs, and financial benchmarks. The process was funded by excessive money-creation of radical central banking. The unprecedented growth of systemic liquidity has outpaced the availability of real assets such as bonds, equities, and commodities to invest in. The financial industry has responded to the need by creating "products" that were several steps removed from the underlying assets and the industry earned substantial fees in so doing. Being disconnected from reality, these "products" have been more easily subjected to price manipulation than the underlying assets, and therefore have served as effective policy levers for central bankers to distort reality to achieve their objectives.

Excessive liquidity-creation by central bank policies has created a dangerous liquidity mismatch. "Exchange-traded products introduce self-reflexivity by creating a highly liquid security (listed stock) that tracks a potentially illiquid underlying instrument (e.g. high-yield bonds, commodity futures)" (again, Cole's "Prisoner's Dilemma"). Exchange-traded products hold more than \$3 trillion in assets. "There is a concern that the power of the indexes distorts markets over time, and...there is the possibility that the structure of ETFs and index funds worsens market shocks when they happen" (FT, 12/28/15).

Much of what passes for financial wealth is in our opinion imprisoned in a matrix from which there is no easy exit. The return migration of capital to real assets promises to be disruptive. The misdirection of capital could well cause losses for many but opportunity for a few. The list of opportunities is short, limited in capacity, possibly complex, and difficult to access. Among the possible opportunities, gold is accessible and straightforward. Gold has a history of responding inversely to the direction of confidence. Gold ETFs, such as GLD, offer the best attributes of self-reflexivity from a bullish perspective. Outflows from the \$3 trillion of equity ETFs seem likely to exacerbate downside market risk. The opposite is true for gold ETFs, which must respond to capital inflows by purchasing physical metal. The pool of liquid gold to meet that need has been severely depleted. We believe that the stage has been set for a significant repricing of gold in all currencies, including the US dollar. Ownership of physical gold outside of the financial system seems to make more sense than ever. Gold-mining equities, which have been severely depressed by the four-year

decline in the gold price, should also participate. We believe that a trend reversal could prove explosive for the entire precious metals complex.

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