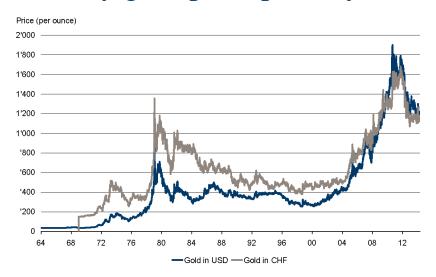
Physical gold outlook 2015: higher prices increasingly likely Intraday gold price per troy ounce: \$1,183; date: May 7th, 2015



Strategic topic:

Scarce gold valuation amidst unprecedented global OE, extensive negative yields, rising solvency & monetary inflation risks, and huge counterparty risks (\$505trn of OTC interest rate derivatives outstanding)

Dan Kurz, blogger dan_34135@yahoo.com



Sources: http://davidstockmanscontracorner.com/this-is-nuts-5-3-trillion-of-government-bondsnow-have-negative-vields, www.bis.org/statistics/dt1920a.pdf

"Onboarding" question: who can guess the 1922 author?

"If gold standards could be reintroduced throughout Europe we all agree that this would promote, as nothing else could, the revival not only of trade and production, but of international credit and the movement of capital to where it is needed most. One of the greatest elements of uncertainty would be lifted. One of the most vital parts of prewar organization would be restarted, and one of the most subtle temptations to improvident national finance would be removed; for if a national currency had once been stabilized on a gold basis, it would be harder (because so much more openly disgraceful) for a finance minister to so act as to destroy this gold basis."

Quote appeared in a Guardian article in 1922

Who can guess the author? (see bottom of slide 19 for answer)

(Food for thought: does much of the above appeal sound like a solution for our current currency debasement predicament?)

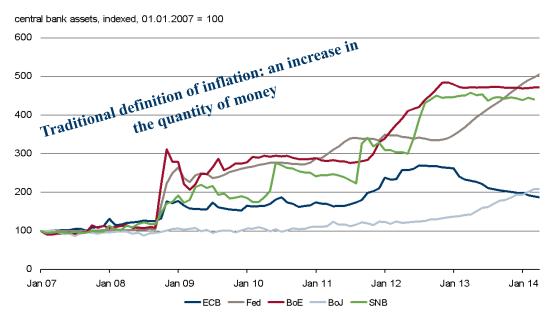
Source: www.guardian.co.uk

Scarce gold amidst sustained, unprecedented, global QE

An ounce of gold bought a tailored suit 100 years ago just as it does today; today the \$ cost of that suit is between 70x - 100x higher

The The ultimate ultimate portable liquid asset asset

Burgeoning monetary base in US, UK, CH, Japan



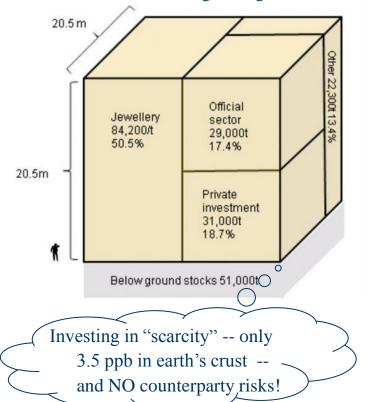
Gold is an allocation minnow:

- 2014 gold demand: 3,923 metric tons (MT) valued at \$151bn; mined gold supply: 3,157 MT valued at \$122bn
- Avg growth in value of global financial assets (debt & equity) bet/2000 & Q2:2014: \$8.3trn p.a., 55x \$151bn!
- Investor gold holdings are less than 0.5% of the value of global financial assets (they were once 1.6%)!

Sources: Bloomberg, CS, WGC, BLS, ShadowStats.com, http://davidstockmanscontracorner.com/chinas-monumental-debt-trap-why-it-will-rock-the-globaleconomy/, www.mckinsey.com/insights/global capital markets/financial globalization

Size of all gold ever mined* compared w/ size of recent US debt -- \$16.4trn** -- shown in \$100 bills (Statute of Liberty in middle!)

Current value of all above ground gold: about \$6.6tm

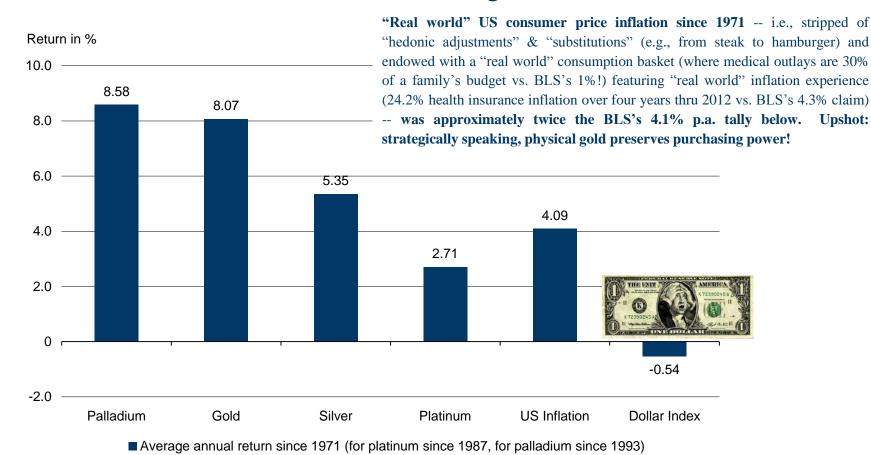


- * From 2012
- ** current US debt: \$18.2trn



Sources: WGC, DB, www.regulations.gov/#!home, www.research.stlouisfed.org/fred2/data/CIVPART Max 630 378.png, www.usdebtclock.org/, http://demonocracy.info/, www.youtube.com/watch?v=jKpVlDSIz9o&feature=youtu.be, http://research.stlouisfed.org/fred2/series/CIVPART

Returns of precious metals, inflation & USD Index from 1971 -termination of Bretton Woods dollar gold standard -- to 2014



Sources: BLS, http://www.europac.com/commentaries/inflation propaganda exposed, Bloomberg, CS

Gold demand has exceeded mined supply by 24% since Q4:12 Shortfall addressed with gold scrap sales

Supply	Q4 2012	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014
Total mine supply	715	680	720	797	815	724	798	824	811
Old gold scrap	391	363	263	338	298	304	267	271	280
Total gold supply	1105	1043	983	1134	1113	1028	1064	1095	1091
Demand	Q4 2012	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014
Jewellery demand	511	540	746	577	522	562	497	546	549
Industrial & dental demand	98	104	104	103	98	96	100	98	96
Investment demand	469	284	229	193	180	279	225	203	198
Official sector purchases	150	131	92	102	85	124	118	116	119
Total gold demand	1271	1058	1171	974	885	1061	939	962	961
Market balance	Q4 2012	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014
Stocksmovements	-123	-15	-188	160	229	-33	125	134	130

www.mineweb.com/news/g old/china-gold-flows-to-hita1-record/. http://goldstockbull.com/arti cles/germany-announcesrepatriation-120-tonnesgold-bundesbank/, www.ingoldwetrust.ch, http://goldstockbull.com/arti cles/germany-announcesrepatriation-120-tonnesgold-bundesbank/, http://kingworldnews.com/a ndrew-maguire-we-arenow-seeing-stunningbehind-the-scenes-action-

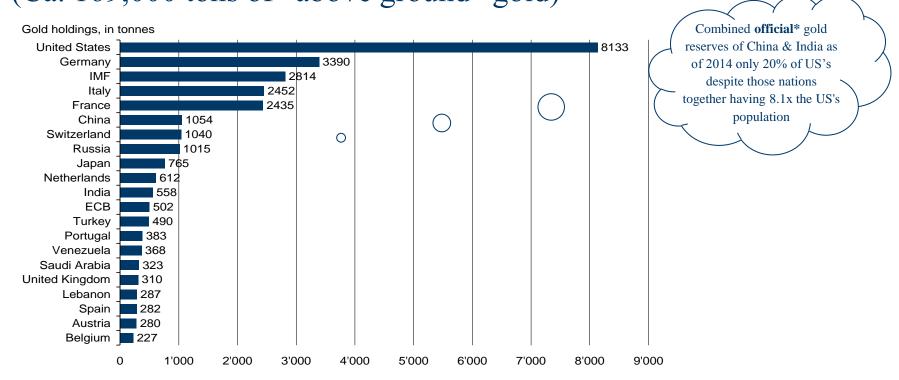
> in-gold-and-silver/, GFMS, WGC, SGE, CS

Sources:

Demand breakdown since Q4:12: 55% jewellery, 23% investment, 12% central banks (official sector), 10% industrial/dental

- Chinese public gold demand, based on Shanghai Gold Exchange (SGE) withdrawals, fell to a still substantial 2,100 metric tons (MT) from **2,668 MT in 2013, accounting for 54% of global gold demand of 3,923MT in 2014** (down from 71% of 3,756 MT in 2013)
- China continues to import lots of gold some 850 tons in 2014 (vs. 1,158 tons in 2013) or 27% of all mined gold in 2014
- Chinese gold flows as represented by withdrawals from the SGE allegdly hit record levels for Q1:15
- **Upshot:** WGC global gold demand tally is a likely undercount of actual demand, implying substantially higher than documented central bank sales. Gold appears to continue moving from the West to the "gold-is-money East"
- How much gold does the West, led by the Fed, really have left? (gold scarcity likely becoming increasingly acute)

Claimed gold holdings by central banks – wild card China! (Ca. 169,000 tons of "above ground" gold)



^{* -} Noteworthy: China last reported its gold reserves -- 1,054 tons -- in 2009. Yet China is the largest gold miner in the world (over 400 metric tons 2014). Plus, China, which accounted for 27% of all 2014 gold mining output, continues to vie with India for the world's biggest gold importer status. Implication: stouter than reported strategic "official sector gold purchases" are moving gold from weak to strong hands, from West to East, boding well for long-term gold prices. Upshot: gold may prove less accessible/more hidden than commonly perceived.

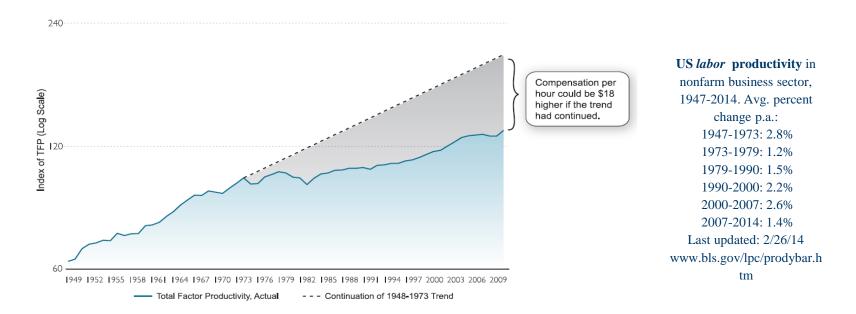
Sources: http://www.theglobeandmail.com/report-on-business/international-business/india-backs-down-from-recent-restrictions-on-gold-imports/article21835857/, Datastream, CS

Gold's historical price behavior

- During productivity-led periods of disinflation/deflation, gold has historically lost value relative to "paper assets" (as in the '90s)
- During debt-induced deflationary periods, gold has historically maintained/enhanced purchasing power (as in '30s, gold up 69% in \$)
- During secular periods of declining productivity/inflation, such as "post '71," gold has historically maintained purchasing power

Total US factor productivity

(http://www.dartmouth.edu/~dcomin/files/def.pdf)



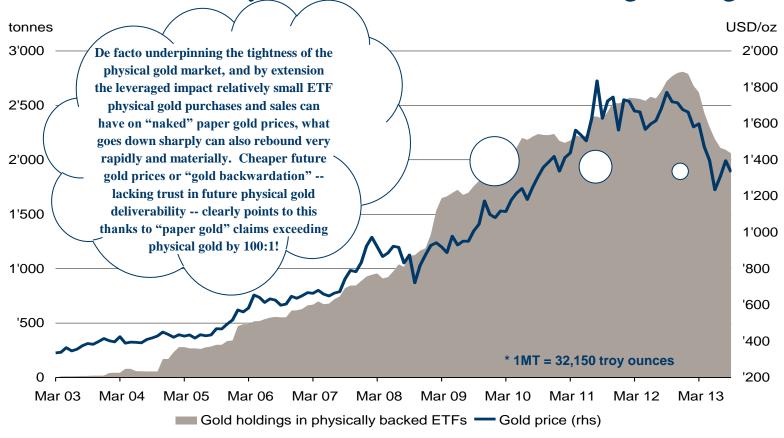
Sources:, http://www.macrotrends.net/1333/historical-gold-prices-100-year-chart, http://www.usinflationcalculator.com/inflation/historical-inflation-rates/, http://onlygold.com/Info/Historical-Gold-Prices.asp, http://fxmadness.com/wp-content/uploads/2009/09/long-term-gold.jpg, BLS, Hamilton Project calculations

Gold price manipulation Gold remains in "backwardation," implying physical supply constraints

- Recent COMEX registered gold inventory (20 MT) amounts to approximately two days worth of Chinese imports
- In light of growing evidence of dwindling Western gold supplies, how much longer can coordinated gold price manipulation,* as conducted by Western central banks, money center banks/bullion banks, the COMEX futures exchange, and the LBMA, continue?
- * Naked gold short-selling, "rehypothecation-based" (multiple use of pledged collateral) physical gold trading, or orchestrated combinations thereof

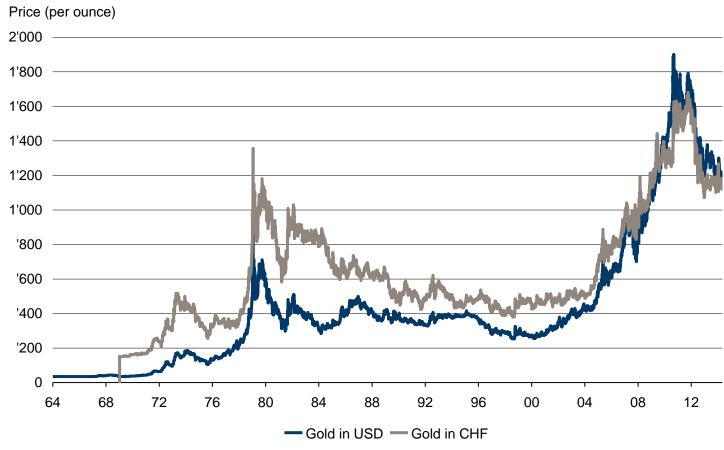
Sources: http://blog.milesfranklin.com/backwardation-is-a-function-of-supply, http://blog.milesfranklin.com/triggers-2,, http://www.paulcraigroberts.org/2014/01/17/hows-whys-gold-price-manipulation/, http://www.mineweb.com/news/gold/china-gold-flows-to-hit-q1record/, http://www.paulcraigroberts.org/2014/09/22/rigged-gold-price-distorts-perception-economic-reality-paul-craig-roberts-dave-kranzler/

Gold price and physical gold-backed ETF holdings Gold ETFs recently accounted for 1% of above ground gold

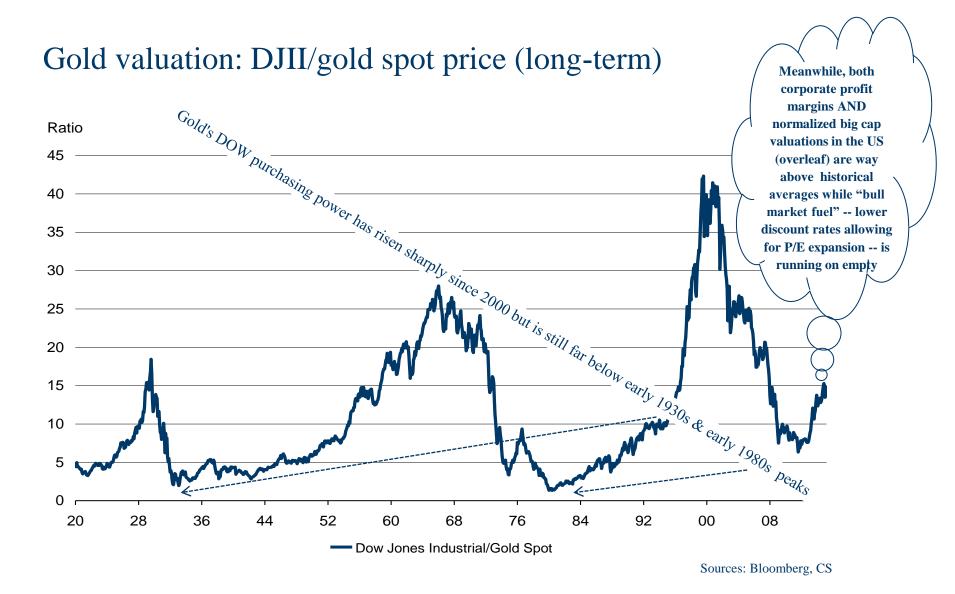


Sources: http://www.paulcraigroberts.org/2014/09/22/rigged-gold-price-distorts-perception-economic-reality-paul-craig-roberts-dave-kranzler/, http://www.zerohedge.com/news/2014-11-13/paper-gold-and-its-effect-gold-price, Bloomberg, various fund providers, CS

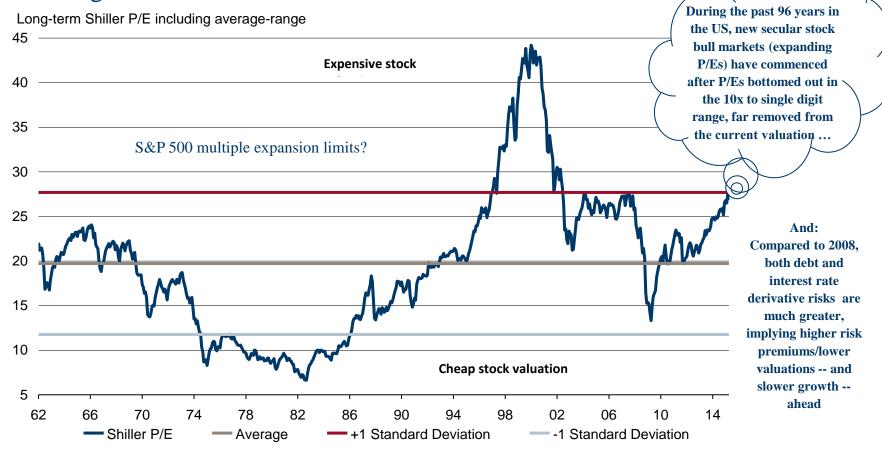
Gold valuation: longer-term gold price in USD and CHF "Gold versus fiat money" in Post Bretton Woods world as of 1971



Sources: Bloomberg, Datastream, CS



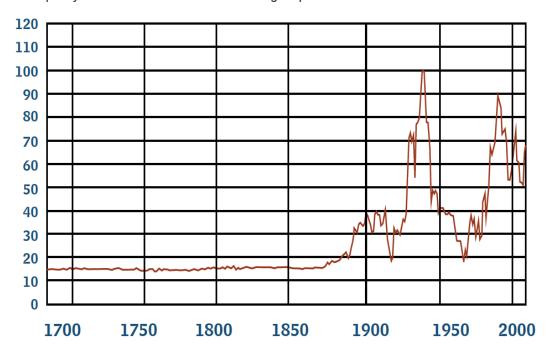
Stocks getting more expensive, especially as recession "overdue" If earnings fell 50%, P/E would double at current S&P 500 level



Sources: Robert J. Shiller, CS

Gold valuation: gold/silver ratio Historically speaking, silver is very undervalued relative to gold

This chart shows how dramatically 20th century government monetary policy distorted the historical silver to gold price ratio.



efore governments became heavily involved in the regulation of money, many cultures spontaneously adopted currencies based on silver and gold. In the two thousand years leading up to the 20th century, the two metals' price ratio stayed in the range of 12-16 troy ounces of silver to one troy ounce of gold. Although this historically important ratio was sometimes a product of market forces and sometimes fixed by governments, it does reflect the relative amounts of silver and gold occurring in nature.

Sources: http://schiffgold.com/case-for-silver.html, http://www.gold-eagle.com/article/gold-and-silver-ratio

Gold valuation: how high can gold go? How much balance sheet expansion can central banks engage in?



<u>Farbast Index (yellow, LHS):</u> Total assets of all US Federal Reserve banks (monetary base)

Golds Comdty (white, RHS): \$ gold spot price per oz

The gap that has opened up between the monetary base (M0) and the gold price is "the" strategic physical gold purchase opportunity

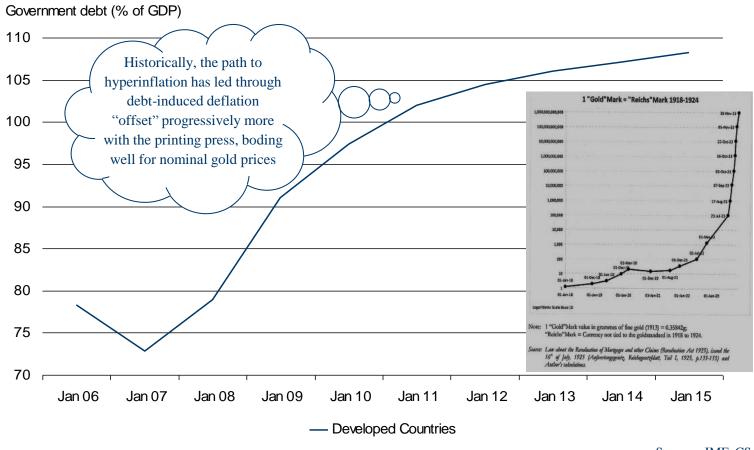
(Ultimately, in fractional reserve monetary systems, material changes in M0 reverberate at money supply level)

"In the absence of the gold standard, there is no way to protect savings from confiscation through inflation. There is no safe store of value. If there were, the government would have to make its holding illegal, as was done in the case of gold ... The financial policy of the welfare state requires that there be no way for the owners of wealth to protect themselves. This is the shabby secret of the welfare Statists' tirades against gold. Deficit spending is simply a scheme for the confiscation of wealth. Gold stands in the way of this insidious process. It stands as a protector of property rights. If one grasps this, one has no difficulty in understanding the Statists' antagonism toward the gold standard."

Author: Alan Greenspan, 1966

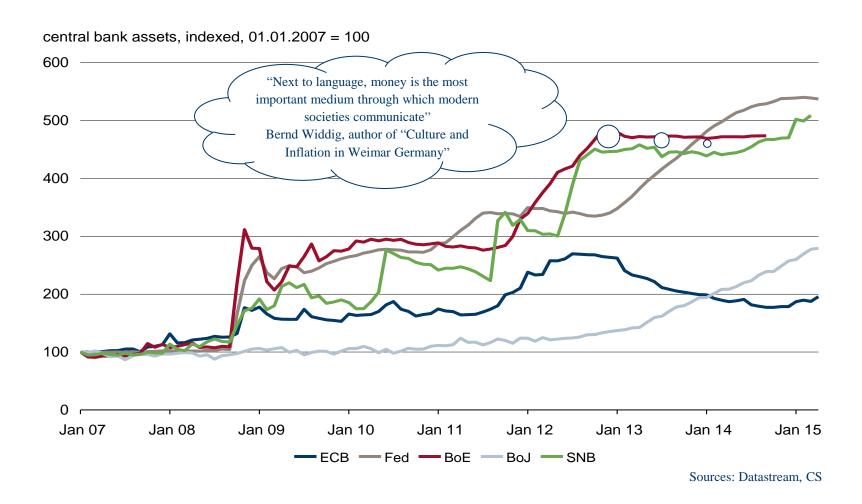
Source: Bloomberg

Bullish for gold: OECD debt trajectory due to rising structural deficits, which have been financed with "QE sequels"



Sources: IMF, CS

Bullish for gold: burgeoning monetary base in US, UK, CH, Japan



Bullish for gold: huge balance sheet risks of global money center banks, Asian gold demand, and growing USD disenchantment

- According to the BIS there was \$505trn -- roughly 30 times the size of the US GDP -- worth of mainly LIBOR-based OTC (not traded on an exchange and off-B/S!) interest rate derivatives outstanding as of 4/15 - huge counterparty risks!
- The recent nominal value of interest rate derivatives surpassed the nominal value of the mortgage security derivatives that threatened to shut down the global financial system in 2008 by a factor of over 400:1. (Banks bet on falling/stable rates!)
- With \$5.3trn of government bond sporting negative yields, the opportunity cost of holding gold is at all-time low!
- India slashed gold and silver import tariffs in 2014, which is physical precious metals demand bullish
- Chinese investors are facing increasing bank solvency issues and the Chinese real estate bubble appears to be bursting: gold demand bullish
- Nearly 60% of the world's population resides in Asia; Asia's middle class has been growing hugely (gold buying power); Asian's historical distrust of paper money remains; Asian's conviction that gold represents real money remains
- Since Post-WW II, all currencies effectively tethered to USD; the \$ has been a completely fiat currency since August 1971
- Asians and re-emerging market residents increasingly distrust the USD as a reserve currency: consider emergence of the BRICS bank, the AIIB, a SWIFT clearing system competitor, rising bilateral yuan-based trade, and Asian gold hoarding

Sources: http://davidstockmanscontracorner.com/this-is-nuts-5-3-trillion-of-government-bonds-now-have-negative-yields/, www.bis.org/publ/otc_hy1311.pdf, http://www.resourceinvestor.com/2014/05/01/india-slashes-gold-and-silver-import-tariff-value, www.forbes.com/sites/roystonwild/2014/04/10/why-asian-shoppersshould-blast-gold-prices-sky-high/; http://www.forbes.com/sites/gordonchang/2014/03/30/china-officials-fibbed-to-depositors-to-stop-bank-runs/, James Dale Davidson

Gold investment summary: Gold price to reflect global QE/global currency debasement

- Gold's timeless value: global acceptance of gold as means of payment over 5,000 yrs: gold coins are the ultimate portable assets!
- Gold's timeless value: paper money has become worthless many times since the Chinese first used it around 140 B.C. will history repeat in the years ahead (historically speaking, fiat money has lasted 40 years on average; "Bretton Woods" was terminated in August 1971)?
- Gold's scarcity: increase in above ground gold supply: 1.0 2% p.a.; "OECD" central bank balance sheets up ca. 210% over past 6.5 years, making for a de facto monetary base compounding rate of roughly 19% p.a.
- Gold's scarcity: less than 0.5% of global financial assets of over \$225trn in gold -- shift towards greater gold exposure would push gold prices higher given supply limitations; going from 0.5% to 1.0% = 29,160 MT or about 9 years of production at current rates!
- **QE**: continued stout monetary base growth is a very good bet based on global government structural (aging) deficit and debt issues: Advanced G20 government debt/GDP over 100% with rise to 300% (!) projected by 2050 (WEO, 2010)
- Conclusion: due to political, fiscal, and economic reasons, global monetary base growth likely to remain robust, increasing longterm solvency and inflation risks and thus the value of gold ... as gold becomes more scarce as expressed in debased currencies
- **Long-term price target:** far in excess of \$2,480, current inflation-adjusted dollar value of gold's high on Jan. 21, 1980

Sources: World Bank, WEO, World Gold Council, Gold & Precious Metals, goldseek.com, IMF, US Treasury, BLS, www.mckinsey.com/insights/global capital markets/financial globalization, http://strategicinvestment.com

* 1MT = 32,150 troy ounces

Answer to "author question" on slide 2: would you believe John Maynard Keynes!



Gold facts

Attributes:

- Average concentration in earth's crust: 3.5 parts per billion or ppb, a fraction of silver's 73 ppb, uranium's 2,700 ppb or copper's 60,000 ppb
- The same value of gold can be stored in roughly 3% the space which silver would require
- Industrial uses include dentistry and electronics; gold has good corrosion resistance and conductor qualities
- Gold has been highly-valued since prehistoric times; earliest known coinage in 630 B.C.
- Gold is only metal still held by central banks as a monetary reserve, thus is most strongly driven by "store of value" considerations of all precious metals
- Extraction & supply (1MT = 32,150 troy oz):
 - There are ca. 169K metric tons (MT) of gold above ground
 - Below ground gold reserves estimated at 49K MT, or ca. 30% of all that's been mined
 - Gold is getting progressively more expensive to mine
 - South Africa has 50% of known un-mined gold (leading producers: China, Australia, US, S. Africa, Russia, Peru)
 - Ca. 2,800 metric tons (90m troy oz) have been mined p.a. on average, meaning gold supplies have been expanding at 1.5 - 2.0% p.a., or roughly in-line with real global GDP growth over 15 years

Sources: World Gold Council, Period Table of the Elements, GFMS, Bloomberg

Precious metals background

- Precious metals (PM) are commonly considered to consist of:
 - Gold, silver, platinum, and palladium

Shared attributes:

- All are rare (supply limited) metallic elements of high economic value -- cannot be manufactured.
- All are inert: virtually impervious to corrosion/decay and less reactive than other elements.
- Historically, precious metals were important as currency; this is also reflected in the fact that all of them have an ISO currency code (gold: XAU; silver: XAG; platinum: XPT; palladium: XPD). Source: www.xe.com/iso4217.php
- Gold was the basis of the "dollar gold currency standard" from 1946 to 1971, when the Bretton Woods Agreement was terminated.
- One USD in 1792 was originally specified consisting of 27 grams of silver while \$10 Eagles contained 17 grams of gold.
- Demand is driven by PM's role as timeless stores of value and by industrial/jewelry use fluctuations.

Differentiation:

- Gold has historically been commonly used as currency and is still held by central banks as a monetary reserve, and as such is most strongly driven by "store of value" considerations of all the precious metals.
- While gold and silver have historically been considered "monetary metals," the de-monetization of silver has been more complete as no central banks currently hold silver as a monetary reserve.
- Until mid 2008, silver was enjoying industrial usage growth; this is again occurring. Plus, silver appears to be realizing rejuvenated store of value/monetary metal recognition as the "poor man's gold."
- Platinum lacks material above-ground stockpiles, making for a bouncier price.
- Silver, platinum, and palladium's significantly higher industrial usage component also make the metals' prices more cyclical

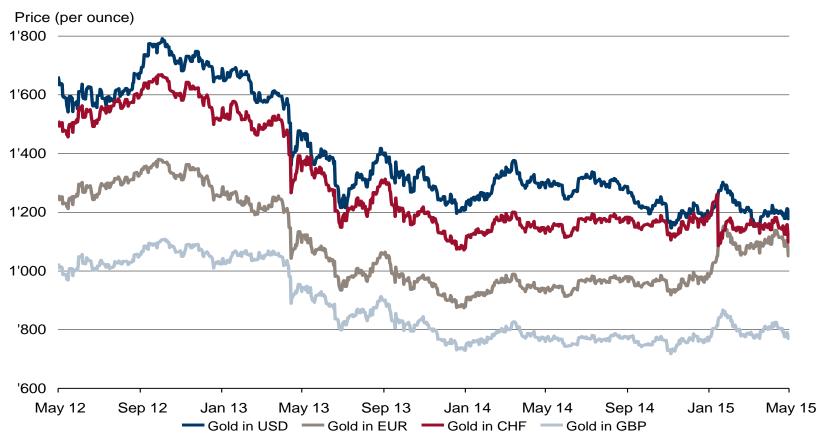
Sources: ISO, Global Policy Forum, US Coinage Act of 1792

Gold valuation: yellow metal shrugged off federal funds rate (interest rate) roller coaster between 2000 - 2008



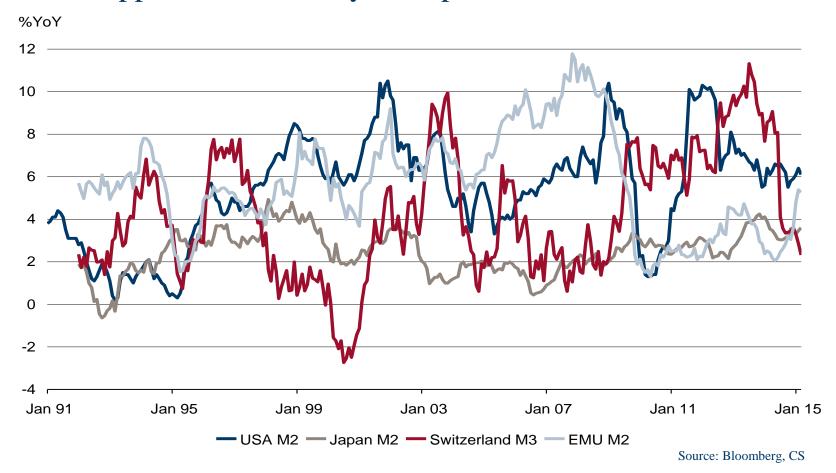
Source: Bloomberg

Gold price in various currencies (Physical gold theme proposed on March 2nd, 2009 @ \$937)

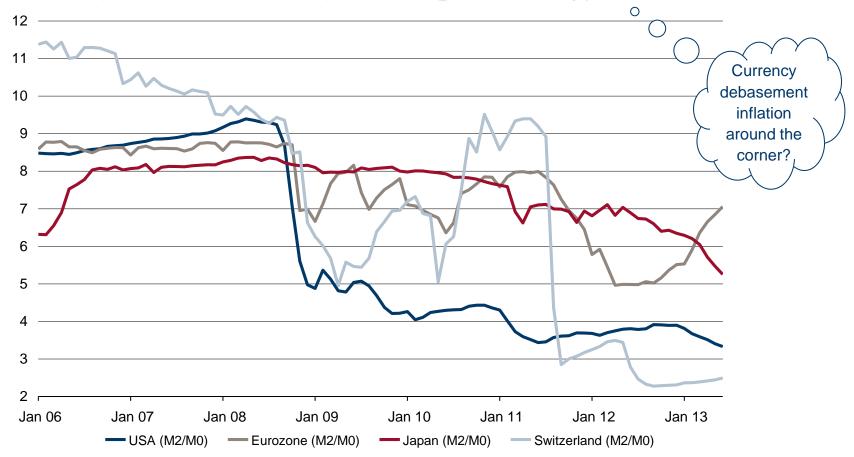


Sources: Datastream, CS

Global money supply growth – M2 except CH What happens when money multipliers stabilize or rise?



Money multipliers for USD, EUR, JPY and CHF Will they be "levitated" by QE-inspired energy & food inflation?



Source: Bloomberg, CS