



The Gold Standard

The journal of The Gold Standard Institute

The purpose of The Gold Standard Institute is to promote an unadulterated Gold Standard.

President & Journal Editor

Philip Barton

www.goldstandardinstitute.net

President – Europe

Thomas Bachheimer

www.goldstandardinstitut.eu

President – USA

Keith Weiner

www.goldstandardinstitute.us

President – Singapore

Ville Oehman

www.goldstandardinstitute.asia

Contents

Editorial.....	1
News.....	2
Bail Bail Bail Your Bank.....	2
Gold-Backed Currencies.....	4
Is Time Money? Or is Money Timeless?.....	5
Double, double oil and trouble.....	9

Editorial

The editorial space this month is devoted to an excerpt from [Monetary Metals Outlook 2016](#). It is well worth reading in its entirety. Confusions about Gold – what it is and the job that it does – are still rampant. Outlook 2016 does a good job of tackling some of them.

Philip Barton

President, Gold Standard Institute

[Dawn of Gold](#)

There are several popular approaches to analyzing gold. If you visit many alternative investing or gold sites, you will find conspiracy theories about price manipulation, rumors, out-of-context-factoids, and finally mining production and manufacturing consumption. None of these approaches are helpful. They can confuse long-term holders, and cause traders to make costly mistakes. This is especially true over the past several years.

We have written a lot to debunk claims of price manipulation (here is one article, there are many others on the Monetary Metals site). Broadly, they fall into a few categories. One, central banks are selling gold. Maybe, but what explains the even-larger price drop in silver? The banks don't have any silver. Two, banks are short-selling futures naked. This would cause backwardation (we discuss backwardation later in this report). It would also cause expiring contracts to move in the opposite direction than they actually do. Three is just what has to be called magical thinking. For example the bigger your position, the more you control the price. How's that supposed to work? In fact, markets don't work that way.

We would put rumors, London gold export and Indian gold import numbers, and news into the same bucket. Even when factual, these items are the investing world's equivalent of an attractive nuisance—they can lure you to

financial harm. Most importantly, one should never trade based on what the Fed has done (increase the quantity of dollars) or will do (increase it even more). That is not what drives the gold price. We would think this is obvious now, after years of increasing quantity of dollars and falling gold price, but the belief still persists (more on this later, including a graph).

Finally, there is a lot of information out there on electronics and jewelry consumption, and mine production. However, gold and silver cannot be understood by looking at small changes in production or consumption. The monetary metals cannot be understood by conventional commodity analysis.

News

[SNBCHE](#): Will Gold Outperform Stocks?

≈≈≈

[Mining.com](#): Gold covered doughnuts

≈≈≈

[SNBCHE](#): The Bull Market in Stocks May Be Done

≈≈≈

[BBC](#): Turning rubbish into Gold

≈≈≈

[SNBCHE](#): Open Letter to the Banks

≈≈≈

[Gold Silver Worlds](#): A path to Gold and silver

≈≈≈

[PDD Net](#): Sustainable technique recovers Gold from e-waste cheaply

≈≈≈

[Business Standard](#): Somnath temple to invest in Gold ‘monetisation’ scheme (ed note – their Gold is not “idle”, it is performing money’s primary function of storing a stable value over time)

[Al Jazeera](#): Gold miners protest: “Everyone is against the government, which won’t let us work,”

Bail Bail Bail Your Bank

To ‘bail out’ means scooping or pumping water out of the bilges of a boat or ship... to keep it from sinking. So, to bail out the banking system means to take out the... the what out? No, today the meaning of bailing out has been changed; to ‘bail out’ the banking system means adding to the asset side of its balance sheet, not taking out liabilities... like enormously leveraged derivatives... the ballast that weighs down the bank and will sink it.

A bail out as practiced today does not even add any real capital to the banks; rather, new loans are made to ‘bail out’ troubled banks... loans at near zero percent interest, but loans nevertheless. Loans mean more debt on the balance sheet, more liabilities, not more capital. Even if an outright gift of bail out money is given to the bank, the bail out funds consist of bank notes, of Fiat currency. Bank notes are not capital, they are debt instruments; liabilities of the bank of issue. True capital is no one’s liability... true capital is a pure asset... such as Gold and Silver bullion are pure assets; no one’s liabilities.

The curse of today’s economy is that there is no real capital in circulation. Bank notes such as Dollars or Euros are not capital; they are debt notes, liabilities of the central bank. So, we ‘bail out’ banks by creating more Fiat currency... which means more borrowing. Fiat is not simply printed into existence, it is borrowed into existence... and the poor taxpayer is on the hook not only for the newly created Fiat, but must also shoulder interest payments on the loan balancing the newly issued bank notes... double jeopardy, but done behind the scenes.

The lending of trillions to bail out the banks in the 1998 crisis was a clear disaster; the banks are in even worse shape today, with larger derivatives exposure and ever more leverage. The cost of the bail out was borne by treasuries; that is, borne by the ever suffering taxpayer... borne by the taxpayer not yet born.

Taxpayer's wealth is invaded, stolen to support the banksters. Bail outs are nothing but subtle theft. But bail outs are not bad enough; today we have the 'bail in'... blatant theft. The PTB are no longer even bothering to hide their criminal actions. The arrogance and hypocrisy is loud and clear. Anybody who tries to avoid a bail in is called a terrorist, and is dealt with summarily by the authorities. Try to remove your funds from a bank account and you will be targeted for money laundering, terrorism, moperly and doperly; property confiscated, person locked up and jail keys thrown away.

The funds you so trustingly deposited in the bank are not yours, they are the bank's... and you are simply a creditor of the bank. In case of bankruptcy... and ALL mainstream banks are bankrupt, as they are part of a system that is bankrupt... depositors are considered creditors of the bank; and junior creditors at that. Before bail-in laws were passed, deposits were considered senior; that is, depositors would get their funds back before other creditors, such as bond holders, shareholders, etc. No more! Now depositors are the most junior creditors of all.

First come the most senior, sacrosanct creditors; the derivatives holders... mostly other banks and well connected institutions. Then come bond holders, shareholders, and last and least the depositors. This is morally corrupt to the core. Depositors are getting screwed, shareholders take huge losses... maybe all their investment... and bond holders get 'haircuts'... the euphemism for losing their investment. All is upside down.

We hear about deposit insurance; supposedly depositors (at least up to a modest deposit level) are insured against loss. In the US, the FDIC insures small depositors; the only problem is that the FDIC has only about \$50 billion on its balance sheet, and an additional \$100 billion line of credit with the US Treasury. The FDIC insures any bank account up to \$250,000. Now this may seem like a pretty good thing... until you realize that total bank deposits in US banks are about \$10.6 Trillion...

A joke, no? If one bank goes down, the FDIC may possibly bail out its depositors, but it is totally helpless in the face of a major melt down. All signs indicate that the major melt down is on its way. US Treasury debt has doubled in terms of percentage of GDP in less than twenty years, from ~60% to over 110%. Treasury debt is now over \$18 trillion. Total US debt, public and private, is over \$60 trillion.

But it gets worse; the total notional value of the derivatives that are at the heart of the issue... 'Weapons of financial mass destruction'... adds up to over \$1 quadrillion... that is, to over \$1,000 Trillion! How on earth could a trifling \$10 Trillion of bank deposits seized and 'bailed in' do anything to quell the voracious black hole of derivatives? About the same way as \$150 billion of insurance could quell the loss of \$10 trillion of deposits.

We live in a Wiley Coyote world; as soon as we realize that we are over the cliff, as soon as we glance down and see the abyss, comes the big fall. The question is what can you and I do about this? Can we possibly protect ourselves from the fall? Is there any hope for the future? To understand possibilities for the future, we must understand the past. We must understand how we got into this disastrous situation in the first place... and then we may see a possible way out.

The short answer is property rights; the Dollars we earn are ours, no? Why is this ownership not recognized? Why are depositors considered creditors? After all, we did not buy any shares of the bank, we did not buy any bonds of the bank, we did not undertake any derivative contracts with the bank, we did not invest in the bank; we simply deposited our money in the bank... so what gives?

The whole thing is preposterous; if you take your chattels to a warehouse for storage, it is clear that your stuff is your stuff, not by any means the property of the warehouse. In case the warehouse goes bankrupt, the trustee will carefully separate the assets of the warehouse, like the building, land, fixtures, etc. from the items being warehoused, and sell the warehouse assets to satisfy as far as possible creditors' claims... and return the chattels to their rightful owners. Why is deposit money not similarly returned to its rightful owners?

You may argue that money is fungible, unlike chattels; one cannot differentiate between money deposited by different persons... but this is irrelevant. Wheat is not fungible either; farmers deposit their wheat in grain elevators, and their wheat mixes with wheat of other farmers... yet the fundamentals are the same.

In case the grain elevator company goes bankrupt, the trustee will sell the grain elevator, the property, the loading equipment etc. to meet creditor claims... but will credit grain owners in the amount of grain they have deposited. There is no way the grain elevator company... or the chattel warehouse... can lend out, sell, trade, or gamble at the casino using the depositors' property. Any such action would lead to swift criminal charges. Yet, that is exactly what banks do with our deposits; lend them out, sell them, trade them, and use them to gamble in the derivatives casino. Where are the criminal charges?

The truth of the matter is that this debacle, this travesty of justice, this destruction of property rights has been in effect for hundreds of years. In British jurisprudence, over two hundred years ago, a judge was asked to decide this very case; does money (back then, real money i.e. Gold) remain the property of the depositor or does it become the property of the bank... to do with as the bank pleases. Unfortunately, the judge decided in favor of the bank. We have been suffering the consequences of this disastrous judgement for lo all these many years.

The big solution, to resolve the problem once and for all, is to reverse this judgement, to change the law so that money deposited remains the property of the depositor... period full stop. Then, if the bank wants to do anything with the deposit, it must get specific permission from the owner; to lend it out, to gamble with it, whatever. Once the owner agrees to a deal, fine; just as the grain owner may agree that the elevator company market his grain, or the owner of a chattel may agree that the warehouse buy the chattel, or market it, whatever.

Money of the people, by the people, for the people... not of, by, and for the banksters!

Now this fundamental change in law is not likely to happen in the short term; truly I am not holding my breath. In spite of this, individuals can do much to protect themselves; first, keep a minimum of funds in any bank, even the most 'secure' ones. Keep some cash on hand, while avoiding large or frequent cash withdrawals. Second, and crucially important, own real assets; acquire assets that are not anyone's liability... preferably Gold and Silver.

Rudy J. Fritsch

Gold-Backed Currencies

Economic analysts, political analysts, and others are talking and writing about China, Russia, various Islamic countries and possibly other countries instituting a gold-backed currency. They believe that China, Russia, and other countries have been acquiring large quantities of gold in anticipation of going to a gold-backed currency.

Some of these commentators imply that instituting a gold-backed currency is returning to the gold standard. Others admit that it is not. These latter commentators are correct. A gold-backed currency without redemption on demand, especially by the common people, is meaningless — except perhaps for propaganda purposes.

I will use the United States as an example. When the United States ended the gold standard in 1933 and refused to redeem paper money in gold, they still had a gold-backed currency. From 1933 to 1945, Congress required 40 percent of the federal reserve notes to be backed by gold. In 1945, it changed the requirement to 25 percent backing. Then it ended the hypocrisy in 1968 by eliminating all gold backing. However, gold continued to back the U.S. currency, and foreign governments and their central banks could redeem their dollars in gold. In 1971, the United States ceased redeeming dollars in gold. (From 1944 to 1971, the United States redeemed dollars under a gold exchanged standard. Under this gold exchanged standard, only foreign governments and their central banks could redeem U.S. dollars in gold.)

Even after abandoning all pretenses of a gold-backed currency, the United States and the Federal Reserve System continued to back the U.S. dollar with gold. To the extent that the gold held by them is considered an asset, this gold backs the U.S. dollar. Along with all the land owned by the U.S. government and, more important, the military might of the U.S. government, this gold is part of the “full faith and credit” backing the dollar. (Gold is not really credit as it is no one else’s liability.)

Likewise, to the extent that a foreign government or its central bank holds gold, its currency is backed by gold. Although it has no statutory requirement to maintain a specific amount of gold to back its currency, its currency is still backed by gold. As shown with the United States, whenever a statutory limit is approached, the law is changed to reduce the requirement.

Any kind of gold-backed currency is meaningless unless free coinage of gold is allowed and the common people can redeem paper money in gold on demand. Moreover, the country would have to define its monetary unit as a specific weight of gold; it would not be fixing the price of gold. (For example, the Gold Standard Act of 1900 defined the U.S. dollar as 25.80 grains of standard gold, which is 23.22 grains of fine gold. It did not fix the price of gold at \$20.67 per ounce.) Furthermore, a country would not have to stockpile gold before returning to the gold standard. It would not need to possess any gold in order to return to the gold standard. All it needs to do is to define its monetary unit as a specific weight of gold, allow the free coinage of gold, and to require paper money to be redeemed in gold on demand by anyone.

Thomas Allen

<http://tcallenco.blogspot.com.au/>

Is Time Money? Or is Money Timeless?

Does Bitcoin reveal [a 21st Century case for Gold?](#)

George Gilder is a hard-working futurist and visionary popular with conservatives since the Reagan administration. In the 1990s he optimistically analyzed that decade's tech stock boom. When the dot-com bust came, some grumbled about his “hyping”. But [*mandatory disclosure*] a few of his succinct observations back then helped me to learn the big picture and begin to profit. Gilder was writing about what we now call “cloud” computing in the early nineties and, at mid-decade, about the automotive industry converting to drive-by-wire. Now, twenty years on, self-driving cars navigate around traffic jams tracked by a cloud of big data, outdoing even George's forecasts. In 2015, he's begun explaining why gold is money; that's a good omen! You might want to pay attention. Just understand that his ideas are worth more as active thinking points than as conclusive arguments or settled facts. His new [monograph](#) is short, aphoristic, and should delight many gold-standard enthusiasts, even if it oversimplifies economic theory or invokes some mystifying terms; that is a psychic's prerogative. Before jumping farther into the 21st century, let's briefly review the issues.

The 14th, ... 18th and 19th Century Cases for gold

That gold stores and denominates value seemed axiomatic throughout most of modern Western history. If gold's value was even questioned, the difficulty of mining it surely suggested a [Labor Theory](#) valuation of which Thomas Aquinas would approve, even if Austrian economists wouldn't. Indeed, Gilder thinks Satoshi Nakamoto and Nick Szabo were wise to model, in [bitcoin](#), a bitter fact of gold mining - the diminishing returns from any given site or mining technology. Gilder implies that declining ore accessibility and advances in mining technology cancel each other out, thus giving the gold flow a clockwork-like constancy sufficient to equate gold with time itself. It's a poetic notion not confirmed by the [sixfold increase](#) in gold production during the 20th century. The argument may be wrong, but the conclusion that gold is scarce in the same way time is scarce is appealing. What has been *more*

constant since the 1950s is the stock of gold per living person; though I would not blaspheme by equating gold to life itself.

Mining costs are of course the dominant component of the marginal miner's asking price. They form a lower bound on the value of new gold being added to the stock. Historically-increased production indicates that gold's value has risen relative to costs and summoned submarginal mines into production. The same dynamic keeps bitcoin miners busy lengthening the blockchain. It seems bitcoin's value has also swelled to compensate the steadily increasing computational work to close out the next page of that ledger. The thrust of this thinking is that it is the monetary utility of the product which supports the labor, not the labor somehow imbuing a monetary value. In any case, mining costs are just one of the constraints determining the value of a money.

When it came to drafting the U.S. Constitution, the idea that gold and its companion silver were money had been *de facto* settled by common law. The Founders were most concerned with reining-in profligate credit; we just wish they'd [enumerated a right](#) to use gold as money. The threat posed by bills of credit only grew with the industrial, political, and economic revolutions and civil wars of the 19th century. These strained and temporarily broke the gold standard, openly challenging its ultimate suitability. But its seeming "demonetization" has not decreased gold's economic value. As it passed out of circulation and into hoards, it grew scarcer and less liquid in the marketplace. To compensate for a less-efficient monetary system, demand for physical gold rose, driving annual mine production much higher and increasing the *per capita* stock of gold by 70% from 1900 to 1960.

The 20th Century's Ratcheted Redefinition of Money

Carl Menger's chapters (7 and 8 in "[Principles of Economics](#)") on the *evolution* of money explain that money is chosen by market processes which must be free to mutate and evolve. In the early 20th century a eugenics-like view soon arose that *artificial selection* for efficiency could and should dominate. While certainly not condoned by von Mises's Austrian school of the day, most neither understood nor fully appreciated where this might lead. In 1917, Professor Anderson at Harvard wondered this about money:

Is it possible that when commodity basis was necessary to start the thing, and when even in the modern world [c1917] gold bullion, inter-convertible with gold coin, remains the ultimate basis of the money-systems of all great commercial peoples, that you could withdraw the commodity support and keep money unchanged in value? Or could you even have any value left at all? Now in answer, I propose to admit the possibility of doing so. . . . Value is not physical but psychological. . . . The economic society may wish to be free from a money whose original value is gone, but there is a powerful debtor interest which approves of that money, and whose support tends to maintain its value. ("The Value of Money" Benjamin M. Anderson and Jr., 1917)

In all fairness, the depreciating trend line of the new money values had not yet emerged in 1917. Austrian school political economist Robert Higgs calls the resulting [stepwise erosion](#) of rights and values "the ratchet effect". It has left us with a currency that is at root only a conventional social construct, albeit with state (legal) supports that are presented as immense and all-powerful. Those can now be seen as ominously ineffective at fulfilling, simultaneously, all three of the functions of sound money—storing, exchanging, and denominating value.

Which brings us up to the new age of monetary ferment where gold and crypto-currencies have led visionaries such as Mr. Gilder to build our hopes for a sturdier store of value and unit of account, even as internecine squabbles block Austrian school consensus on how to make the case for gold to a world that knows it needs a large stock of currency that will expand as needed but then shrink again to adapt to large seasonal, cyclical, and technological forces.

Entropy in the 21st Century Case for Gold

Gilder cites Nakamoto's rationale for bitcoin mining without pointing out that bitcoin is the first clearly sustained success story in the “eCash” space. That paper money prices and spreads for bitcoin and gold gradually became correlated *must* rightfully be ascribed to the one key thing that bitcoin did differently from its predecessors and did in expressed emulation of gold—its blockchain-mining payout system. In decades of theorizing about the nature of money, we seem to now have one nearly-controlled experiment showing that it's the work involved in money production, not just the stability and integrity of what's produced, that confirms money's value. This may be proof that the paper emperor's clothes are just an illusion. It is *not* proof that labor is the font of all value. On that count George makes an exciting but mystifying observation about information-theoretic entropy.

Entropy is [a family of concepts](#) descended from statistical mechanics (including these applied fields [1](#), [2](#), [3](#) and [4](#)) with so many analogies and [popular metaphors](#) that it has become a much-abused buzzword in many academic realms. Nonetheless, the mathematics is both profound and practical, and a layman's sense of entropy's different meanings in terms of order, chaos, disequilibrium, and irreversibility might help you to discriminate sound uses from utter charlatanism. Both Gilder and [Fekete](#) give *entropy* some role in the story of gold as money. Their analogies are suggestive but non-specific; their points are generalizations not intended to deliver econometric predictions.

Statistical mechanics is applied everyday in two important, but unrelated, fields, thermodynamics (the dissipation of energy in chemical reactions) and communications (especially the design of coded channels to carry messages). The unifying similarity is that both disciplines study their subject by viewing systems as ensembles of distinct states of the system's components (the positions and energy levels of atoms and molecules, or the distinguishable input and output signals at each end of a connected channel). Entropy is a logarithmic measurement of how much variety exists among the possible configurations of these parts.

For example if the system gains a component with n equally probable states in which it might be observed (such as a Krugerrand with $n=2$ sides), the number of possible system states is multiplied by n , and its entropy is increased by the addition of $\log(n)$, so it's an additive measure of a multiplicative effect. Adding one coin that flips fairly increases the system's entropy by one bit when entropy is measured in base two logarithms, but doubles the possible outcomes from flipping all the coins. Because entropy is always concerned with probabilities and the distribution of the probable states of the system, one economic application is to assess the risk of unexpected outcomes. The more variety a system can present, the harder it is to predict which precise state it will be in, i.e., the greater is its capacity to surprise you. When you consider how the number of pixels on your TV screen influences your viewing, the logarithmic scale of entropy will make more sense.

Information Carried by Gold

Gilder's subtitle is “A New Information Theory of Money”. In 1948, Claude Shannon was finally cleared by the US government to publish what he'd learned from Allied code-breaking during WWII—that digging information out of a noisy channel is like discovering the cleartext message concealed by a cryptographic code. In war, the message must hide in the noise. In peace, the message wants to stand free of all interference. His paper “The Mathematical Theory of Communication”, which in effect invented the bit, is *the* seminal text of the Information Age that took us from plug board telephone exchanges of the forties to the satellite and fiber-optic cabled worldwide web we take for granted today.

It is perhaps only now, in a world dense with open lines of communication, that it becomes easy to appreciate what Menger, von Mises, and Hayek had to laboriously explain: market prices communicate the fine grain conditions in the economy. Price fixing fails because it preempts communication and prevents the spread of true knowledge. All the more so for central bank monetary policy making. In Gilder's words:

Only if the channel is changeless can the message in the channel communicate changes. On a constantly changing channel, communication and creativity founder in an ocean of noise.

In economics, money is part of the conduit or carrier. If money is to foster learning and knowledge, it cannot itself be surprising. Part of the channel for capitalist activity rather than part of the content, money must be the measure rather than what is measured. It is the fixed medium rather than the flexible message, a stable matrix for the market rather than a marketable item.

Gold is one obvious way to clarify communication. In commerce, money exchanged for goods sends each price signal. When the signal is received (by the goods' producers to help them decide what next to produce), it can be understood in terms of fungible standard units comprising the same fraction of the world's gold stock as when the consumer spent them.

That's pretty much the central theme, but it is one message that must be reiterated until it is heeded. My only fear is that it does not exploit the entropy insight enough. Just pricing goods in gold misses perhaps one of the most nuanced communication modes capitalism ever developed.

Information Carried by Gold Bills

Ordinary goods' prices are infamously “sticky”, especially laborers' wages, and must be widely broadcast. Some might as well be price-fixed for all the information they can actually be seen to carry. How else are supply and demand supposed to coordinate week by week to cause goods to flow to where demand has made them scarce, and away from gluts where they're unwanted? And how do gluts like the current oil supply form in the face of plummeting price?

Well before the consumer price of a good settles in a trade, the prices of its intermediate production factors are negotiated up and down the supply chain. Delivery dates and lot sizes are guesstimated by informed insiders. This level of commerce can be conducted using bills of exchange, which promise at maturity to distribute the money the consumer is sure to spend at the sticky sticker price.

A practice among those inside or near the supply-demand channel is to optimize their local [cash conversion rate](#) and to hedge against any risk of adverse change in the price of the good or its intermediates while it's being processed at their step of the pipeline. When a bill's price is discounted from face value, its seller is distributing some of his profit margin to the bill's buyer. This consideration purchases access to needed cash, labor, processing time, or other supplies. The shifting constellation of bill prices, derivative of the relatively fixed consumer price, is where we find the information-theoretic entropy needed to coordinate economic activity.

We can now see that an oil glut at the Oklahoma delivery point is the result of cash-strapped producers delivering early and selling cheap against still-sticky consumer prices for fuel. The producers are cash-strapped from debt-fueled speculation that oil would peak in an economic recovery when, in fact, no economic activity is necessary to earn free bailout and stimulus money from worldwide quantitative easing. The siren signal they followed was a credit market dislocation, not the needs of their consumers.

As the infomercial says, “But wait, there's more!” With adequate inspection of the contract terms and prices on gold bills of exchange versus the industry facts on the ground, substantial risks can be ruled out, or fairly priced-in by any interested actor near enough to current industry data. This broadening of bill market participation by further lowering the entropy (surprise factor) of the bills eventually *monetizes* the best-understood bills. The certainty of their performance (maturing into gold coin) comes close to the certainty we so valued in the stability and integrity of gold itself. The stock of bills, while far more variable than the gold stock must be continuously *mined* by the due diligence of market participants; because all bills expire once they mature. Prudent participants only accept terms in tune with the short term cycles of the industries the bills finance. For the same reason that block

chain mining is rewarded by the value of bitcoin, judicious bill acceptance confirms higher values (lower discounts) on bills of exchange. The virtuous circle here literally operates the consumer goods economy. What more humane form of money could you want?

Thermodynamics of Praxeology?

The Austrian school approach begins with, and always returns to, the natural laws of “Acting Man” - our abstraction of rational, purposeful, living - sometimes studied under the title praxeology. Its axiom is that humans must act to stay alive. Physicists as eminent as Erwin Schrödinger, and as contemporary as [Jeremy England](#) are finding support for an idea centered on the second law of thermodynamics (entropy increases over time). That may be enough physics to force lifelike systems to emerge from a primordial bath of randomly interacting molecules. Their insight is just that physical life is something which milks energy from its environment and uses that to increase its internal order by dissipating the excess internal entropy outward to the environment. Life obeys the second law, but defies it locally.

In rethinking the ecology of human life, a few planners use a thermodynamic analogy to analyze the sustainability of processes or technologies that increase the "entropy" (i.e. disorder) in their environments. Economizing waste streams and optimizing the use of by-products are all ordinary practices as industries mature. It's not clear to me that adding quasi-scientific labels adds real meaning, but if it helps make the whole economy more efficient, I'm for it. Beware though that a scientific patina can also work as cover for parasitic and uneconomic activities. Not everything is profitably recyclable.

To risk a blasphemy, it may be that the physical stability of gold atoms and the economic stability of the gold stock are a capital structure which humans form at the base of their monetary system in order to make their individual low entropy states exchangeable and everlasting within the economy. Gold isn't life, but it is a token carrier of one's livelihood and a product, if not a literal measure, of the time that was consumed in irreversibly living and dissipating disorder as necessary.

Greg Jaxon

Greg is an American software architect who has been studying new Austrian economics for over a decade, most lately by showing up to conferences when luminaries such as George Gilder and Philip Barton have something to say.

Double, double oil and trouble

The gold-oil-ratio! Is there something “big” coming up?

The current behaviour of commodity prices – particularly of oil, the most important commodity of all – is causing sleepless nights to analysts, scientists and financial managers. But not only the FIAT money world is paying attention, also the gold world is looking in wonder on the drop in oil prices. The purchasing power of gold has been steadily rising for a year and thus solved one of the most long-standing questions about gold: The question whether gold is a commodity or not. Ever new arguments have been brought into the discussion by the yeah and no sides. Supporters of a gold standard of course have always known this: gold is NOT a commodity or only in the sense of a money commodity. Since prices for all the “pedestrian” commodities have fallen compared to gold, gold has established itself as a class apart even in the eyes of the most avid doubters. This should put an end to these discussions for at least the next few decades.

But back to the ratio between the only true money commodity and the “black gold”: Naturally, not only gold aficionados know of the gold oil ratio. More and more FIAT money pundits sneak a look at this ratio. Even famous FIAT money supporters such as Bloomberg and CNBC discuss this ratio more and more frequently. There are many reasons for this.

Since 1946 the median lies at 1:17. This means that for the last 70 years one ounce of gold bought on average 17 barrels of oil. Roughly speaking, the price was moving within the 11 and 20 band, where 20 signifies cheap oil. Deviations from this price band have been rare and of short duration. Whenever oil was relatively cheap, there have been major economic and geo-political changes. It is safe to say that extraordinarily cheap oil (as measured in gold) presages surprising and significant changes.

This was the case in the late 1980s, when the gold/oil ratio reached a hitherto unknown level of 28/29. What's more, this period of more than 20 years was one the longest phases of cheap oil in economic history. We all know what happened in 1989 and after, and quite a few analysts believe that the artificially low oil price was one of the reasons for the demise of the Soviet Union. This also supports the theory that large geo-political changes require a deflationary shock.

But also vice versa, at a very low gold/oil ratio of under 10 there may be major upheavals. I remember June 2008, a time of extraordinarily expensive oil, when the oil price stood at 140 FIAT dollars and gold at 1000 which yields a gold/oil ratio of 7 and lower. What happened three months later will still be fresh in the reader's memory.

For a year now, we have been seeing a ratio of more than 20 and by January 19, 2016 it had doubled to a level of 40! A level which I would have been deemed impossible until then. The 40 did not last long, but we are still at 38 (February 5). In conjunction with the long period of more than a year (yielding a large time by level "area"), this poses a dire warning. A warning that either economically or politically something big is in the offing – but what?

Please allow me add some more oil-specific facts for clarity's sake: It would be obvious if these changes occurred in the Middle East, still the most important source of crude oil. Especially now that – visible to the naked eye – there are political hand-overs taking place. The US have given the tight band to the Saudis some slack and at the same time thrown open the gates to Iran which have been all but shut tight for decades. An instability in the entire region – and subsequently an instability in global oil supplies – could be the result.

Furthermore, OPEC surprises with their current production supply and pricing policies. Many analysts forget that OPEC was explicitly founded NOT only to pursue the interest of the oil-producing countries. Rather, OPEC is supposed to safeguard the interest of ALL three main groups: producers, investors and consumers. (For more detail please refer to the OPEC charter.) Which is evidently what they are NOT doing right now: the current low prices deter investors, exploration projects are delayed or cancelled which is massively interfering with the 6-7 year oil cycle. This will be sorely felt in 3 or 4 years' time when oil prices are bound to surge. Remember 2004-2008?

Commodity markets are in turmoil and we will see plenty of volatility – not only in terms of commodity prices but also politically. This we can deduce not only from the gold/oil ratio but by using common sense. Which in turn reflects the gold/oil ratio.

Thomas Bachheimer

President of the Gold Standard Institute Europe