

SILVER FINGER

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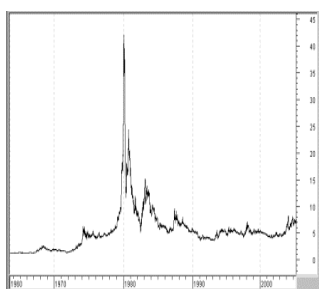
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By HARRY HURT III
September Issue 1980 Playboy

<http://www.sharelynx.com/papers/BunkerHunt.php>

This was the title of a 1980 Playboy article that makes for an astonishing read. Investigate for yourself on the link above. It gives a powerful insight into the motivations behind one of the largest financial bubbles. It would appear far from being motivated by greed, Bunker Hunt was possibly motivated by paranoia (justifiably so) and his desire to remain out of paper assets. In principle he was right in execution, just that he underestimated the Power of the State.

"To be successful, you must decide exactly what you want to accomplish; then resolve to pay the price to get it." B. Hunt



Source: Bunker Hunt-Google Images/ Silver Spike – Sharelynx

Double Bubble

"I was just trying to make some money." Bunker Hunt 1980

That's what Bunker Hunt said to his sister having just bankrupted one of America's richest families. It took him just three months to lose a multi-billion dollar fortune.

In 1980 several bubbles occurred that of the Antwerp Diamond bubble, and most notably that of gold and silver. In Jan 1980 Silver hit \$48.70 ounce, all be it briefly and Nelson Bunker Hunt and his brother Herbert had just got momentarily stupendously rich. It appears that in 1970, Bunker Hunt heir to a vast oil empire was inspired by a visit from his friend Alvin Brodsky to invest in Silver. Gold could not be held by private citizens at that time, so the Hunts began to buy silver in enormous quantity. His friend pointed out to him that all tangible items around him would be more expensive next year as the world was in the early stages of an inflationary spell, (as Central Banks made the mistake of believing in a long-run Phillips Curve relationship.) He suggested as the purchasing power of the dollar was falling he should buy silver.

Bunker who had a steady stream of some 30mm dollars per year from oil revenues from Libya duly did. It took several years but the price started to advance. Instead of being circumspect about his purchases and hiding his intentions from others so as to buy more, he followed a daring tact of trying to engineer higher prices. He encouraged a consortium of Middle Eastern investors, notably Saudi Arabia to purchase a mass of silver futures contracts and to take physical delivery of silver on at expiry of these futures.

When the Hunt's had begun accumulating silver back in 1973 the price was in the \$1.95 / ounce range. Early in '79, the price was about \$5. Late '79 / early '80 the price was in the \$50's, peaking at \$54.

Once the silver market was cornered, outsiders joined the chase but a combination of changed trading rules on the New York Metals Market (COMEX) and the intervention of the Federal Reserve put an end to the game. The price began to slide, culminating in a 50% one-day decline on

March 27, 1980 as the price plummeted from \$21.62 to \$10.80.

The collapse of the silver market meant countless losses for speculators. The Hunt brothers declared bankruptcy. By 1987 their liabilities had grown to nearly \$2.5 billion against assets of \$1.5 billion. In August of 1988 the Hunts were convicted of conspiring to manipulate the market.

One other experience in the silver bubble worth noting, according to author Edward Chancellor ("Devil Take the Hindmost"), is the experience of an official at the Peruvian Ministry of Commerce, employed to hedge his country's silver production, who lost \$80 million by illicitly selling silver short. Said Chancellor, "Although a relatively small sum for a sovereign nation, it was an omen: the 'rogue trader' had appeared on the modern financial scene."

The stock market had its own troubles during the rise and fall of silver. The Dow Jones peaked on February 13, 1980 at 903.84. The day of the collapse, March 27th, the Dow closed at 759.98, a decline of 16% in just 6 weeks. [However, intraday, the loss between the 2/13 high of 918.17 and the 3/27 intraday low of 729.95 was actually 20%.]

For many traders the collapse in silver was the final straw for a stock market already under siege from worries as diverse as the Iranian hostage crisis, the Russian invasion of Afghanistan and soaring interest rates. [The consumer price index climbed at a 13% rate for 1979. The prime lending rate hit 22% in early 1980]. But by the year's end, the whole decline was almost forgotten. The Dow ended the year at 963.99, thanks in large part to the euphoria over the election of Ronald Reagan.

The Velocity of Money & the Silver Bullet

"Inflation is always and everywhere a monetary phenomenon." Milton Friedman

If you increase the money supply too fast, you risk an unwanted rise in inflation. If the money supply shrinks too much or grows too slowly, you could see deflation develop.

As we shown in our monthly chart packs ad nauseam the money supply MZM has been growing not far off 18-20%. Clearly it would see that the FED is inflating rather rapidly. Especially as this measure has risen from zero just 3 years ago. QED, ah but not quite. We must contend with Velocity. The Classical economist Fischer developed the "quantity theory of money" and from it was spawned the concept of "Velocity". *It's a measure of how often the money stock "turns over" over a certain time period.* A base example from Investopedia goes as such:

Mechanic buys \$40 of corn; Farmer spends \$50 on tractor repair; Mechanic spends \$10 on barn cats from farmer. In all \$100 has changed hands in course of let's say one year, even though there is only \$50 in this "economy". So the \$100 represents a dollar spent an average of twice a year, so the velocity was 2/year.

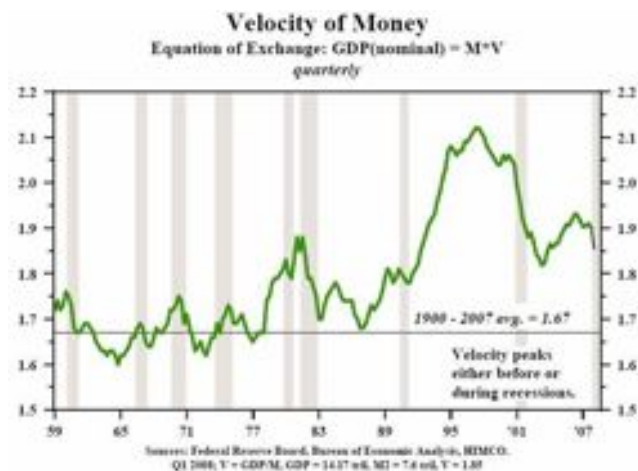
Friedman assumed that V was a constant and from 1950-1978 it was. Post his work though M1 velocity did odd things. Financial Innovation of the 1970s and 80s caused major ups and downs in it.

$P=MV$ (Abbr. version from $PQ=MV$)

(P= Nominal GDP, M= Money Supply, V= Velocity)



Source: FRB. 2007



Source: Mauldin 2008

As Mauldin points out from HIMCO research that since 1958 when the economy is in recession (gray bars) the velocity drops, and what does the fed do? The Fed responds by increasing the money supply. As we can see from the equation $P=MV$, if the velocity falls the money supply must rise to maintain or grow the nominal GDP (Output). A return to the long term average for velocity of 1.67 would see a 10% fall, which means we must have 10% rise in money supply to maintain the same output. The "unwind" of the Alphabet soup of CDOS et al is responsible for the drop in velocity, All the FED can do is INFLATE or DIE.

The Astronomer Copernicus observed;

Money can lose its value through excessive abundance, if so much silver is coined as to heighten people's demand for silver bullion. For in this way, the coinage's estimation vanishes when it cannot buy as much silver as the money itself contains....The solution is to mint no more coinage until it recovers its par value.

Evidently he has observed Fisher's theorem centuries before, and how fitting that he points out if one stops minting or in present day terms "printing" the value may recover. However the ramifications for the FED are too great, the rise in money supply will manifest itself in unproductive allocation of resources to the real kind. Silver will be the beneficiary, faster than the bullet fired from a high velocity rifle. It is the laggard real asset as we will contend.

Silver's timeless fascination

Mankind's timeless fascination with silver stretches back 6,000 years. As early as 700 B.C., the Mesopotamian merchants used silver as a form of exchange. Later, many other civilizations also came to recognize the inherent value of silver as a trading metal.

The ancient Greeks minted the drachma, which contained 1/8th ounce of silver; and in Rome, the basic coin was the denarius, weighing 1/7th ounce. And let's not forget the English shilling "sterling," originally denoting a specific weight of silver, which has come to mean excellence. Infact the words for "silver" and "money" are the same in at least 14 languages.

Silver or money is derived from the Ancient Greek: $\square\rho\gamma\acute{\eta}\nu\tau\omicron\varsigma$ - argēntos, gen. of $\square\rho\gamma\acute{\eta}\epsilon\iota\varsigma$ - argēeis, "white, shining").

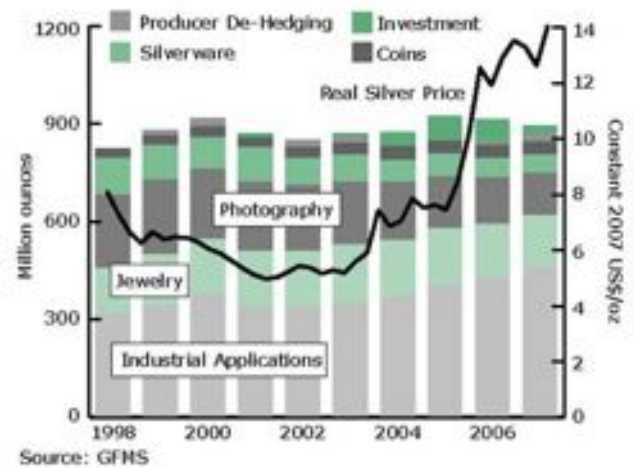
The Incas of Peru called it the "tears of the moon" because they were awed by silver's strange gleam and the Chinese believed that a silver locket hung around a child's neck would ward off evil spirits.

Sadly, in recent years Silver has grown to be regarded as the poor man's gold. However we suspect Silver will shake off this unfortunate shackle and give gold a "run for its money" as the old idiom goes. How come?

There are key fundamental differences between gold and his poor cousin Silver. Demand for gold is almost entirely from those holding for financial safety and capital return and likewise from fabrication that preserves it. Gold is rarely if at all consumed. A base metal is the opposite, it is consumed, e.g. iron. Here Silver is unique, industry will consume it, and others will buy for financial gain and protection. Fluctuations in the price of gold primarily arise from changes in demand as annual mine supply is small compared to existing stockpiles; of the same magnitude as the small amount lost or consumed each year. Hence overland supplies don't change much.

Silver ounces come and go. Unlike gold silvers active chemical properties lend it to practical industrial use that see much of it consumed beyond practical recovery. The uses for silver in modern industry are growing. It is the best conductor of both heat and electricity, the most reflective, and after gold the second most ductile and malleable element. It is used in photography, electrical applications, particularly in conductors, switches, contacts and fuses. Silver alloys are used in batteries as cathodes. As a bactericide, silver is used in water purification and air handling systems. Silver is also a natural biocide and is very effective against bacterial infections such as MRSA. New products using silver's biocidal qualities are being developed each year; clothing, bandages, toothbrushes, door-knobs (flu-protection), keyboards, the list goes on growing.

World Silver Demand



Source: GFMS 2008

Industrial Demand

Batteries. Many batteries, both rechargeable and disposable, are manufactured with silver alloys as the cathode, because of their superior power-to-weight characteristics. Billions of silver oxide-zinc batteries are manufactured yearly.

Bearings. Steel bearings electroplated with high-purity silver have greater fatigue strength and load-carrying capacity than any other type and are used in heavy-duty applications. They are critical for jet engines.

Brazing and soldering. Silver brazing alloys are used in applications ranging from air-conditioning and refrigeration equipment, to power distribution, to the automobile and aerospace industries (48 million ounces in 2006).

Catalysts. An estimated 700 tons of silver are in continuous use around the world as catalysts in the production of two essential compounds, ethylene oxide (the basic building block of flexible plastics) and formaldehyde (the building block of rigid plastics).

Electrical. Silver is used in electrical applications for its conductivity, particularly in conductors, switches, contacts and fuses.

Electronics. Used in silk-screened circuit paths, membrane switches, electrically heated auto windows, conductive adhesives, computer keyboards, printed circuit boards, superconductors and magnetoresistance films.

Medicine. Silver's bactericidal properties have been known for over two hundred years, and hospital use is expanding rapidly.
Silver Spoon ..

Solar energy. Silver paste is used in 90% of all crystalline silicon photovoltaic cells, the most common solar generators.

Water purification. Silver is employed as a bactericide and algacide in increasing numbers of water purification systems in hospitals, remote communities and, recently, homes.

Silver is much less rare than gold and as a consequence less effort goes into salvaging and protecting it. Annual mine production and consumption are large compared to existing stock piles, so price fluctuations in theory come from both these factors as well as investment demand.

Uniquely Silver has been in a multi-decade imbalance between annual "production" and demand from industrial, jewellery and investment. Ted Butler has become the most ardent silver analyst and has done extensive research into the issues of dwindling stockpiles. His most interesting research extend into the leasing market and the existence of huge short positions on Comex (namely among a few players) that has been allegedly used to manipulate the price of silver lower for benefit of the "users". Such unwinds of these positions would require more silver than is readily available and would lead to much higher prices as sellers were searched for.

His contention is that the world consumes, industrially, more silver than it produces, and must draw down inventories to balance. The manipulation of this small market has led to low prices whilst a structural imbalance of some note has been growing.

"What's unique to silver is that it has been in a deficit consumption pattern for more than sixty years, with very low prices over most of that time. That would be impossible for any commodity, except that it has actually occurred in silver. But the very reason it has occurred in silver is the reason I think silver is the best thing to own". Theodore Butler.

Government Silver Inventories

The laws of supply and demand dictate that when there is a chronic production shortfall, inventory can only be bid away at higher, not lower prices. Theodore argues that most of the inventories consumed over the last 60 years came from government holdings. This amounted to a stupendous 6 to 10 billion ounces, some 100-150 million ounces of silver each year for 60 years. So lets put this in perspective it took 5000 years to accumulative these stockpiles and in sixty, they have gone. **Above ground silver is rarer than Gold FACT**

http://www.butlerresearch.com/a_permanent_shortage_of_silver.html

To look ahead 50 years, it would be appropriate to look back fifty years to gain a sense of perspective. Half a century ago, at the end of World War II, total known stocks of silver amounted to ten billion ounces (with the US government holding 4 billion ounces of that total amount). At that time, we were just entering an era of unprecedented global economic expansion that has lasted to the present. In this era, silver was consumed in a variety of vital modern applications at a phenomenal rate. Today, known stocks of silver have shrunk over 95%, to maybe a half a billion ounces. The nine and a half billion ounce draw down in total silver inventory, was the result of the persistent shortfall between supply and demand, which continues to this day. Not coincidentally, the current 200 million-ounce annual deficit in silver mirrors the long-term trend line average. This continuing deficit is remarkable in that there has been decent growth in world production of silver over the past 50 years, but obviously not enough to satisfy the surge in industrial demand.

Top 20 Silver Producing Countries in 2007 (millions of ounces)		
1.	Peru	112.3
2.	Mexico	99.2
3.	China	82.4
4.	Chile	62.0
5.	Australia	60.4
6.	Poland	39.5
7.	Russia	38.0
8.	United States	37.3
9.	Canada	25.8
10.	Kazakhstan	22.7
11.	Bolivia	16.9
12.	Sweden	9.4
13.	Argentina	8.5
14.	Indonesia	8.2
15.	Turkey	7.5
16.	Morocco	7.1
17.	Iran	3.1
18.	India	2.9
19.	Guatemala	2.8
20.	Uzbekistan	2.8

Source: GFMS 2008, Table Hinde Capital Ltd.

In a nutshell- for many decades the world has consumed more silver than it has produced. That has necessitated a draw down of previously produced silver-the existing inventories. There has never been a situation in any commodity where such conditions have failed to cause a dramatic price increase.

The Coming Silver Bullet & Why now?

The fundamentals have been set for the rise in Silver. The case for silver rising faster than a bullet fired from a high velocity rifle, boils down to the naked short selling and leasing. Gold has experienced naked short selling and leasing have, but gold unlike silver has a huge overhang of supply.

Supply from Above-Ground Stocks

Supply from Above-Ground Stocks		
(Million ounces)	2006	2007
Bullion		
Implied Net Disinvestment	-70.8	-25.8
Producer Hedging	-6.8	-25.0
Net Government Sales	78.2	42.3
Sub-total Bullion	0.6	-8.6
Old Silver Scrap	188.0	181.6
Total	188.6	173.1

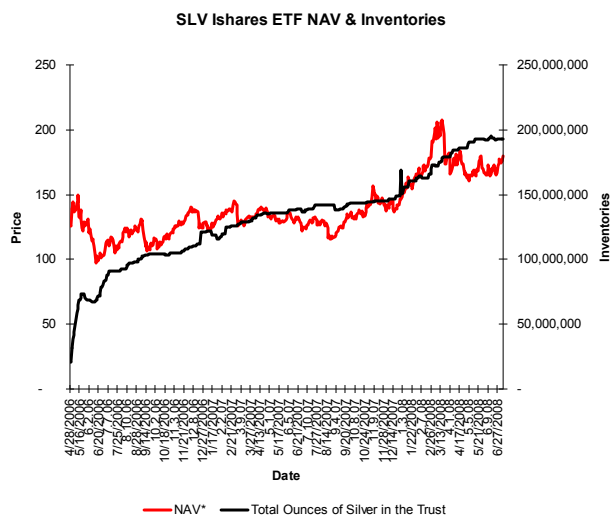
Source: GFMS 2008, Table Hinde Capital Ltd

It is dawning on many that the naked short position in Silver measures into billions of ounces, dwarfing world supplies. This emanates from combined positions on Comex, all other exchanges, forward selling and leasing, cumulative unbacked silver bank certificates, unallocated storage programs and pool accounts. Staggering.

(For every short there must be a long on every futures on Silver Comex it would this is not the case. Butler maintains this is a breach of regulations.)

Each silver contract at the COMEX is a promise. There are too many contracts, too many promises to deliver silver that may not exist. Each contract is for 5000 ounces. There are often over 200,000 contracts for 5000 ounces, that's a total of 1000 million ounces of silver promised to be delivered. With recent market trends of defaults and bankruptcies, these contracts are at risk of default. Yet the exchange has only about a third of that in real silver. How can they promise to deliver more silver than exists? If they fail to deliver silver, then confidence in the world's entire financial system may collapse. Industrial users of silver may have to shut down their factories. To prevent this, users will bid silver prices much higher.

What will cause the shorts to cover investment demand. And it's coming. The advent of Barclays Global Investors shares Silver Trust (AMEX:SLV) the first exchange traded fund (ETF) dedicated to Silver on April 28th 2006 finally gave the man in the street a hassle free means of investing in silver. (There are others but this was one of the first "physically" backed ETF.) Similarly institutions who have been prohibited from holding a position in gold or silver, usually bought the miners. Now they can buy an equity share in "real silver". With 60 to 50 silver ounces to one gold ounce it was way too bulky for the average man in the street to hold. High net worth individuals weren't troubled as they were buying enough for it to be cost effective to pay for storage at a bullion bank or vault. But now the masses can buy, either personally or through their pension institution who buys. One SLV ETF share represents 10 oz of Silver. SLV acquires and stores the bullion. So as quick as you can purchase an ordinary share on your e-trade account you can now buy silver. To boot there is no VAT to be paid on ownership as for real silver in the UK.



Source: Data from IShares SLV Silver Trust, Hinde Capital Ltd Graph

SLV holds nothing but silver; stands ready to issue new shares in exchange for an equivalent amount of silver; and, on the other hand, stands ready to redeem existing shares in exchange for their equivalent in silver. These commitments provide a clean and simple opportunity for profitable arbitrage between bullion and shares, and that arbitrage keeps the share price closely aligned with the value of the fund's net silver per share. And because net silver per share is virtually constant (the fund accrues its storage and other expenses daily and sells tiny amounts of silver from time to time to cover those expenses), the price of the shares tracks the price of silver very closely. As of July 2007 the ETF holds 191mm oz of silver with a market value in excess of just \$3.5bn.

We as a Fund are not an advocate of an investment trust that provides yet another piece of "fiat paper" as a representation of Silver. We are dubious of the Trust to guarantee the investor your "real silver", especially as there is a structural shortfall. Likewise one is open to credit risk and should the provider of the ETF fail one merely becomes a creditor. But man usually takes the easy route, and so will invest in the ETF as a mere click of the button is easier than procuring the real stuff.

Gauging investment demand, will be well served by observing closely movements in the inventories of the ETF.

Silver is a tenth of the size of the gold market

Zombie Silver

What about all that Scrap Silver? Surely that will fill the deficit gap. Casey Research refers to this as "Zombie Silver" inventory. People tend to hold onto their plated silver platters and candelabras out of sheer inertia, sentimental attachment and belief it may well be worth something one day. Higher prices definitely will encourage people to sell, but it has to be high. Perversely the higher prices rise the more people gotta have em

In economics one refers to this as a **Veblen good**. Veblen Goods are a theoretical group of commodities for which peoples' preference for buying them *increases* as a direct function of their price, instead of decreasing according to the theory of supply and demand. In layman terms this equals SNOB VALUE, the higher the price, the greater the exclusivity and status. Family Jones will struggle to keep up; the modern day version of Darwin's survival of the fittest. version. I've got better gear, thus I'm more desirous by others, thus I shall breed, thus my family will succeed me!

Interestingly in last decade, the Silver Institute has reported that demand for silver in silverware has declined by about 50%. This is partly a function of consumer tastes (maybe no snob value) and silver's predilection to tarnish when exposed to oxygen. The institute is looking for ways to reduce tarnishing, as they recognise busier lifestyles require lower maintenance requirements. Do you have a bottle of Mother's Silvo to polish up your parents Silverware? I didn't think so.

The CPM Research group estimates that there are perhaps some 20 billion ounces of scrap. Sounds a lot. Casey makes a great comparison if 20bn came into play, and lets face it a mere fraction would come into the market in any year, but if it did the net value at recent highs of \$20/oz is a mere \$400billion. Exxon Mobil, alone, has a larger market capitalisation than this; some 450bn. Curiously this is the rough amount written off by banks from their balance sheets a number still rising incidentally. Even at height of silver spike its thought only some 300 odd million came into

the market by such means. The bubble burst due to changes in exchange regulations.

China Demand

We have already described how one of the most bullish aspects of the Silver market when compared to the gold market is the absence of US government stockpiles. India had 75million ounces, now all gone and China had over 300million ounces a throw back to the days of their Silver standard, but now would appear to have none.

In November of last year we noticed that The People's Bank of China announced along with the General Administration of Customs lifted restrictive regulations on high purity silver imports that had been in place for the last eight years.

The Silver import regulation, which originally came into effect on 1 Jan 2000, prohibited all unlicensed silver imports into China except those intended for tolling. Under the regulation, companies were required to obtain a licence from the central bank before importing silver for sale in the Chinese market.

Tolling is a common trade practice whereby companies import raw materials and process them into finished exports for re-export.

The 2000 silver import regulation was released in order to alleviate silver oversupply in China, China produce more silver than it consumed. Rapid economic growth is driving consumption towards overtaking domestic production. China is now a net importer of Silver.

Industrial Users Panic

If we consider China would big industrial user we can see how a panic could lead to an unwind of "hedged". Such inventory build or usage could cause Industrial users to panic and buy more real silver. (Indeed fragile supply chains, made so by higher Oil prices- could lead to such a run.)

Higher silver prices will not cause much reduced demand. Why? Because most silver consumed by industry is used in tiny quantities in each application, such as in film or electrical contacts, therefore, rising silver prices will not easily slow down growing industrial demand.

Fresh out of Mints

Having ascertained there is an unsustainable shortfall in silver, has the day come when prices rise to bring out some of the holders who are lucky enough to own real silver and sell some.

Fundamentals and sentiment seem to be conspiring to this eventuality. It appears there is too much money, too many people and too little silver.

Unbacked Silver Bank Certificates could be a growing clue. You get a tremendous amount of physical silver for your money. A million dollars worth weighs almost 2 tons at today's prices. Now where does an individual investor store 2 tons of metal, not in the garden shed that's for sure. A convenient and cost effective means of purchasing silver has traditionally been to purchase Silver Bank certificates or join pool and leveraged accounts. By buying such vehicles you are taking on the credit worthiness of the institution that provides it, much like the ETF. It is estimated there is cumulatively nearly 1bn ounces held in this form especially in Swiss Banks. There is no real silver banking to

such entities. The issuers have the use of "free " money, which is highly profitable to them as long as silver prices do not rise. But if they do, they are essentially holding a short position. It's just been too tempting over the years not to ship in enough silver to meet the outstanding liabilities. Has the day arrived when the Mint houses are struggling to deliver.

Recent financial woes have triggered higher prices and fears over solvency of all entities. There is now an inherent distrust of many paper assets and institutions that cannot back their paper issuance with real items. Many investors are asking for evidence or delivery of their silver holdings as pertaining to these certificates. People are redeeming certificates and trying to swap holdings into Allocated accounts This seems to be the cyber chat on leading analysts' sites.

It would appear the **Mints are Fresh out!** Perth Mint in Australia that has the full-backing of the Australian Government seems to be coming in for its fair share of criticism. Redemptions of shares are not being met with real silver, worryingly some have been told they can have gold in exchange of certificates.

The issues don't stop there it would seem the Royal Canadian Mint have agreed there is a shortage. They are short of silver Maple Leafs. They say the bullion situation is okay. Bars are freely available but not coins. Unanticipated demand from investors has overwhelmed supplies. They argue it's more a production issue of coins than lack of metal supply.

Pieces of Eight

The *Spanish dollar* (also known as the *piece of eight*, the *real de a ocho*, or the *eight real coin*) was a silver coin, worth eight reales, that was minted in the Spanish Empire after a Spanish currency reform in 1497. This was the forerunner of you guessed the Spanish real. In 1794, the U.S. Mint used the Spanish silver dollar as a template for the U. S. silver dollar, so many numismatists believe that the Spanish eight real coin was the forerunner of the U.S. dollar. Irony of Irony.



Image: Silver 8 real coin of Philip V of Spain, 1739

Long tied to the lore of piracy, "pieces of eight" were manufactured in the Americas and transported in bulk back to Spain (to pay for wars and various other things), making them a very tempting target for seagoing pirates. Some pirates were among the richest people in the world. The Manila Galleon transported Mexican silver to Manila in Spanish Philippines, where it would be exchanged for Philippine and Chinese goods, since silver was the only foreign commodity China would take. In oriental trade, Spanish dollars were often stamped with Chinese characters known as "chop marks" which indicate that particular coin had been assayed by a well-known

merchant and determined genuine. Sounds like the Chinese want some reales again.

“Pieces of Eight” we hear investors cry like the parrot of Robert Louis Stephenson’s fabled pirate Long John Silver. Based on the evidence provided instead of “pieces of eight” I think he’d be squawking “cheap”.



Image: Long John Silver and his parrot “Pieces of Eight”

160% of gold mine supply is purchased by investors each year or about 4000 tonnes of gold. In stark contrast, about 0.07% of silver mine supply is purchased by investors each year, about 1555 tonnes, or about 50 million ounces. So, how much money is spent on gold vs. silver each year? J Hommel

<p>Silver: 50 million oz. x \$17/oz. = \$850 million. Gold: 4000 tonnes x 32,151oz/tonne =128.6mmoz. x \$900/oz. = \$115,743 million, or \$115 billion.</p>
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Bimetallism & The Crime of 1873

A bimetallic standard is a monetary standard where the monetary unit is defined as consisting of *either* a certain amount of a metal *or* a certain amount of another, with the monetary authority being ready at all times to coin either metal at the legal price. For example, in the United States for the greater part of the 19th century the dollar was defined as consisting either of 22.5 grains of gold or 371 grains of silver (a grain is 0.065 grams). People could bring gold or silver bars at the Mint (the agency responsible for coining money) and they would get gold or silver dollar coins in exchange.

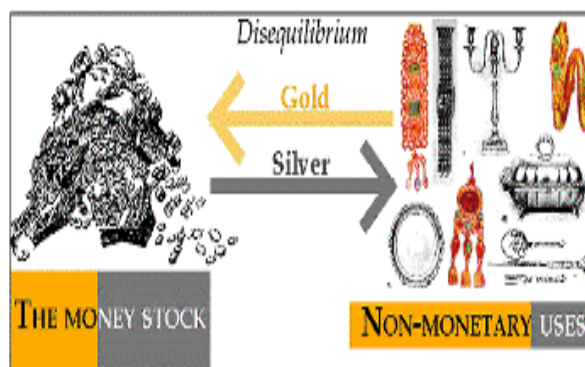
The legal price is fixed...but the market price changes.

Whenever the market price of silver in terms of gold is sufficiently far from the legal ratio, the economy switches to a monometallic standard, using the relatively cheapest metal as money and removing the other from circulation. How come?

The fact that the market ratio was very stable despite the massive gold discoveries of the 1850's is the consequence of a simple arbitrage.

If silver is more valuable (relatively to gold) on the bullion market (following, for example, gold discoveries), then people will melt silver coins to exchange them for gold on the market, and other people will bring gold to the Mint to coin it. This would drain silver from the monetary metal stock, and add it to the non-monetary uses. Conversely, gold will flow from the place it is cheapest (non monetary uses) to the place where it is more expensive (at the Mint). The imbalances can thus be corrected and the market price

be kept in line with the legal price as long as there are big enough countries on a bimetallic standard with the same ratio. Otherwise One metal will be totally drained from the monetary base and what will be left is a monometallic standard.



Source: M Loud 2008

The Crime of 1873- Demonetization of Silver

What is known in the Populist rhetoric of the late 19th century as **The Crime of 1873** (dubbed by the then Democratic Presidential nominee William Jennings Bryan) was the demonetization of silver enacted by the Coinage Act of 1873. Alexander Hamilton had set the United States on a bimetallic standard in 1792 via The Coinage Act and, with the notable exception of the Civil War, the country had not moved from this system. In practice this was a continuous switching from a gold standard to a silver standard. When the legal price of gold in term of silver, that is, how many pounds of silver you get for one pound of gold, which was set by the Coinage Act at 15 for 1, was greater than the market price, then nobody would bring gold to the mint and the country would be on a de facto monometallic silver standard.

The dollar was defined as consisting of either 22.5 grains of gold or 270 grains of silver. This sets the **legal price** of silver in terms of gold at 16:1.

Gold and silver had other uses besides from being coined, and consequently there was also a market for metal bars. They exchange at a **market price**.

If the market price differs sufficiently (because of arbitrage costs) of the legal price, a **stabilizing arbitrage** occurs, where people buy the relatively cheaper metal in the bullion market and go to the mint to coin it. The flow of the metal from monetary uses to non-monetary uses (and vice-versa) keeps the market price in line with the legal price as long as the discrepancies are not too large, or that the bimetallic countries as a whole are big enough:

Between 1871 and 1900 every major country except China left their silver or bimetallic standard for a full gold standard. The reason for this was that after the Franco-German war of 1871, the victorious Germans asked for a very heavy "war indemnity" to be paid in gold by France. They used this gold to finance a new gold standard for their country. The effect was to increase the demand for gold and to unload tons of silver on the neighbouring countries. These countries decided to follow Germany, in fear of silver inflation. The silver freed by Germany was now far cheaper on the market than at the mint, and if they had kept their

bimetallic standard, no one would have been using gold as money anymore and the abundant silver supply would have caused outright inflation. That was, at least, the reason invoked to institute a Gold Standard.

If the market price differs too much from the legal price, the metal that is the cheapest in the bullion market will drive the other out of the money stock. This is a consequence of the **generalized Gresham's law** which states that the metal whose worth is less as a metal than as a legal-tender coin will be the only one used to settle debts, while the other will be hoarded or used as jewellery.

The bimetallic Standard offered the debtors something nice: they could repay their debts in the cheapest metal. The market value of the metal that coins (dollars if you want) were minted from changed every day, but the value of the coins when used to repay debts or to buy something was constant. A dollar is a dollar, be it gold or silver. So nobody would pay with a coin whose metal content was worth more than its legal-tender value, and those undervalued coins were either melted or hoarded. Conversely, overvalued coins, that is coins whose value as a legal tender was greater than the value of their metal content if melted, were the only to circulate. *Bad money drives out good money*, as Thomas Gresham, a Scottish banker, first said it. Now known as Gresham's Law.

Effects on the Money Stock, Output and Prices 1873-1896

Between 1873 and 1896 the strong worldwide deflation struck especially hard in the US, with a 1% annual decline in the general CPI for the whole period.

The money stock could not keep pace with the tremendous rise in output during that period and the spreading monetization of the economy. Even with a more efficient banking system, the total money stock could not be stretched far enough on the currency base, the increase in the rate of increase of which had declined, to avoid deflation.

Political agitation in favour of the free coinage of silver.

Particularly hurt were the net debtors, and among them the peasant class at most because they had to face a rising real value of their (generally heavy) debts combined with a decline in agricultural prices of about 3% a year.

The silver producers, the Populist Party, the peasants and other classes badly struck by the new monetary regime united behind **William Jennings Bryan**, candidate of the Democrats for the Presidential elections of 1896 on a bimetallic (for inflation's sake) and progressive platform which included women vote, income tax, end of American imperialism.

The urban electorates, the net creditors (bondholders, bankers and financiers) and other apostles of "sound money" (i.e. fiat paper) joined the platform of the Republicans led by their nominee **William McKinley**.

Bryan lost the 1896 election due to a swing of the farm vote (following a rise in agricultural prices) and the following, but became secretary of State.

A new gold extraction process using potassium cyanide led in the 90's to a **strong worldwide gold inflation** which lasted until WW1.

Bryan himself agreed that what he sought to achieve with the free coinage of silver (inflation, or at least stability of

prices) had been made possible with gold, and the main tenet of his platform was thus gone.

For Milton Friedman, the free coinage of silver (that is, bimetallicism) would have been desirable in 1873, not in 1896. At the time when Bryan could have established it, this regime would have been strongly inflationary and anyway gold became a lot cheaper immediately afterwards. Bryan was trying to close the barn door after the horse had been stolen. He was right, but 20 years too late.

If for centuries gold had got scarcer and scarcer than silver, the world gold stock of gold doubled during the last half of the 19th century. This change is explained by the two waves of Gold Rushes that happened in the world during this period.

The first Gold Rush wave took place in the 1850's with California (1848) and Australia (1850), and led to an increase in annual gold production from 77 tons in 1847 to 280 tons in 1852.

But for our purpose the second gold rush is more significant. By the end of the century most rich ore mines had already been dug, and a lot of low ore mines were left, too expensive to dig. But in 1887 three Scottish chemists invented a process based on potassium cyanide for extracting gold from low-grade ore. By simply soaking the crushed ore in a bath of potassium cyanide the silver and gold contained in it was dissolved. Then miners had just to drain and precipitate the liquid with some other salt. Many mines deemed so far too poor to be dug profitably gave birth to huge amounts of gold almost overnight. This process was applied most successfully in South Africa (1890) and Klondike (1896). South African gold production goes from zero in 1886 to 23 % of total world output in 1896.



Google Image- Cyanidization Process

http://query.nytimes.com/mem/archive-free/pdf?_r=1&res=9802E5DC123BEE33A25752C2A9619C94679ED7CF&oref=slogin

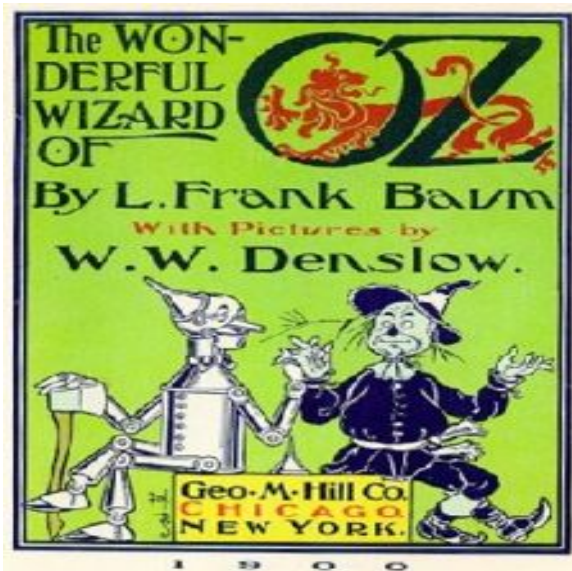
Bimetallic Manifesto and the fear of monometallism. A belief that a gold standard rather than a gold/silver standard would be of lasting injury to the US nation, is captured in the NYTimes piece of the day.

The Wizard of Oz

The Wizard Of Oz was and is a modern fairy tale written by L. Frank Baum and illustrated by W.W. Denslow in 1900. Many latter day scholars have since interpreted the book as being an allegory or metaphor for the political, economic and social events of America of the 1890s. Indeed since the 1960s many historians and economists have explored the **Bimetallism symbolism** in The Wizard of Oz.

A quick synopsis: From 1880 to 1896, the price level in the U.S. economy fell by 23% (deflation). Farmers suffered because the prices they received for their produce declined while their debts grew. This fuelled vigorous political debate between those who supported a move to a **gold standard** and supporters of the existing system of **bimetallism** - where the value of the dollar was tied to both gold and silver in a fixed ratio (more of this later). Democratic presidential nominee William Jennings Bryan supported bimetallism, summarized in his "Cross of Gold" speech. However, Republican William McKinley won the presidency and the gold standard was introduced.

The original 1900 book centres on a yellow brick road (gold), traversed by magical **silver slippers** (the 1939 movie changed them to ruby slippers), as Dorothy leads a political coalition of farmers (Scarecrow), workers (Tin Woodman) and politicians (Cowardly Lion) to petition the President (Wizard) in the capital city of Oz (the abbreviation for ounce, a common unit of measure for precious metal). The real enemy of the little people (Munchkins) is the giant corporation or Trust (Wicked Witch of the West), whom Dorothy dissolves, just as the progressives of the era tried to dissolve the corporate trusts.



Many of the events and characters of the book resemble the actual political personalities, events and ideas of the 1890s.

The 1902 stage adaptation mentioned, by name, President Theodore Roosevelt, oil magnate John D. Rockefeller, and other political celebrities. (No real people are mentioned by name in the book.) Even the title has been interpreted as alluding to a political reality: *oz. is an abbreviation for ounce, a unit familiar to those who fought for a 16 to 1 ounce ratio of silver to gold in the name of bimetallism.*

The book opens not in an imaginary place but in real life Kansas, which, in the 1890s as well as today, was well

known for the hardships of rural life, and for destructive tornadoes. The **Panic of 1893** caused widespread distress in rural America. Dorothy is swept away to a colorful land of unlimited resources that nevertheless has serious political problems.

This utopia is ruled in part by people designated as wicked. Dorothy and her cyclone kill the Wicked Witch of the East.

The Witch had previously controlled the all-powerful silver slippers (which were changed to ruby in the 1939 film). The slippers will in the end liberate Dorothy but first she must walk in them down the golden yellow brick road, *i.e. she must take silver down the path of gold, the path of free coinage.*

Following the road of gold leads eventually only to the Emerald City, which *may symbolize the fraudulent world of greenback paper money that only pretends to have value,* or may symbolize the greenback value that is placed on gold (and for silver, possibly).

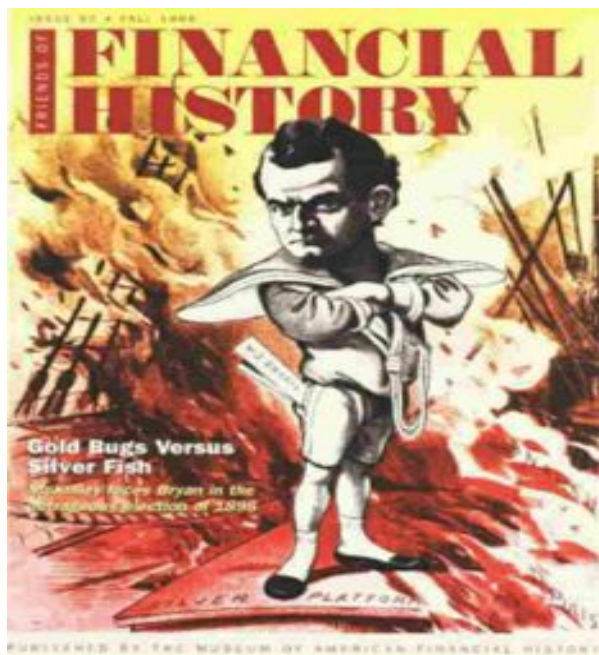
{Other allegorical devices of the book include:

Dorothy, naïve, young and simple, represents the American people. She is Everyman, led astray and who seeks the way back home. She resembles the young hero of Coin's financial school, a very popular political pamphlet of 1893. Another interpretation holds that she is a representation of Theodore Roosevelt: note that the syllables "Dor-o-thy" are the reverse of the syllables "The-o-dore."

The cyclone was used in the 1890s as a metaphor for a political revolution that would transform the drab country into a land of color and unlimited prosperity. The cyclone was used by editorial cartoonists of the 1890s to represent political upheaval.

Historians and economists who read the original 1900 book as a political allegory interpret the Tin Woodman as the dehumanized industrial worker, badly mistreated by the Wicked Witch of the East who rules Munchkin Country before the cyclone creates a political revolution and kills her. The Woodman is rusted and helpless—ineffective until he starts to work together with the Scarecrow (the farmer), in a Farmer-Labor coalition that was much discussed in the 1890s, which culminated in the successful Farmer-Labor Party in Minnesota and its eventual merger with the Minnesota Democratic Party to form the Minnesota Democratic-Farmer-Labor Party in 1944.

The Munchkins are the little people—ordinary citizens. This 1897 Judge cartoon shows famous politicians as little people after they were on the losing side in the election.}



So it would seem that *The Wonderful Wizard of Oz*, could in fact be an allegory of the battle for bimetallism. Hugh Rockoff, a psychiatrist by training, makes a good case for it in his 1990 paper. {ROCKOFF, H., 1990, *The Wizard of Oz as a Monetary Allegory*, in *Journal of Political Economy* 98 (August 1990) pp 793-60}

SUMMARY of the Most Important **Gold Silver ratios**

As Ferdinand Lips writes. The Gold Silver ratio makes for one of the most fascinating questions of monetary history, and also one of the most mysterious. This ratio was at 10 in antiquity, by the Modern Age it was at 14. By the eighteenth century governments tried to stabilise at 15, but without success. In the nineteenth century the ratio was completely destabilised as it raced towards 60 and then back to 16 by the first World War. 1930 and at the height of the Great Depression it hit 100 and today appears to have stabilised at 55; an anomaly in light of all we have written about here.

- **90** Was the ratio of silver to gold when the price of an ounce of silver was at a low in 1991. With one kilogram of gold one could buy 90 kilograms of silver.

- **51** Was the average ratio of the price of gold to silver in 2007.

- **17** Was the gold / silver ratio at the time of the record gold and silver prices in 1980.

- **15** Was the official ratio of gold to silver during the great period of Bimetallism, 15 ½ for France (1803), 15.68 for the USA (1800), 14,29 for England (1806).

- **12** Was the gold/silver ratio in Antiquity in Rome.

-**12.5** Was the ratio in Greece at the time of the death of Alexander the Great in 323 BC.

The ratio of production and reserves of gold and silver:

- **13** Is the ratio of world production from 1493 to 1931. For this 400 year period 13 times more silver than gold was produced.

- **8** Was the ratio of silver to gold production in the world in 2006. What is being said is that eight times more silver than gold was produced in 2006.

- **7.64** It the ratio of all production of gold and silver during one century (1900-2003).

In the 103 year period, there was 7.64 times more silver than gold produced in the world.

- **6.4** Was the ratio of the ground reserves of silver to gold in 2000.

Source: Dr Thomas Chaize

The historic price ratio of silver to gold shows that about 10 ounces of silver would buy one ounce of gold, a 10:1 ratio. Recently, the ratio is about a 50:1 ratio (with silver at \$20/oz., and gold at \$1000/oz.) As the silver to gold ratio returns to historic values, from 50:1 to 10:1, you may make over 5 times more money investing in silver, than gold!

Silver prices may rise to exceed the 10:1 ratio, for the following reasons:

More than all of the silver produced by the mines each year is consumed by industry, which leaves little to no room for substantial investment demand. A marginal increase in investment demand will drive prices sky high.

Most silver is produced as a by-product of mining gold, copper, zinc, or lead. Higher silver prices might not substantially increase the amount of silver mined each year. Consider, in 1980, when silver prices went up to \$50/oz., less silver was mined than in 1979.

Each year, silver mines produce about 650 million ounces of silver. 200 million ounces come from recycling and about 100 million ounces come from investor or government sales. That's a total of about 1000 million ounces. Of that total:

- about 42% is consumed by industrial use
- about 28% consumed by jewellery
- about 20% consumed by photography
- about 5% consumed in coins and medallions

That's 95% of total available silver each year! This implies either a "surplus", or "investment demand", of about 5% total. At \$20/oz., that's only \$1 billion per year of net investment demand. (GFMS data & Hommel)

Net government sales took a steep downturn in 2007, plummeting by 46 percent to 42.3 Moz. The decline was the result of two major sellers in 2006, namely China and India, being essentially absent in 2007. In contrast, Russian government sales, which comprised the bulk of net sales in 2006, rose, partly offsetting the others' declines. I already highlighted China is net importer now.

Despite silver's intrinsic properties as money, silver began to lose its status as money starting in the late 1800's, as nations stopped using silver, and started using only gold as money. Over 100 years of this "demonetization" has caused a serious drop in silver's value, and this trend is about to be reversed as investors re-learn that silver is a great store of value because of its intrinsic properties.

As paper money continues to waver, the neglect of silver's use as money will end. Once again, silver will be valued based on other measures of value, such as a day's wage,

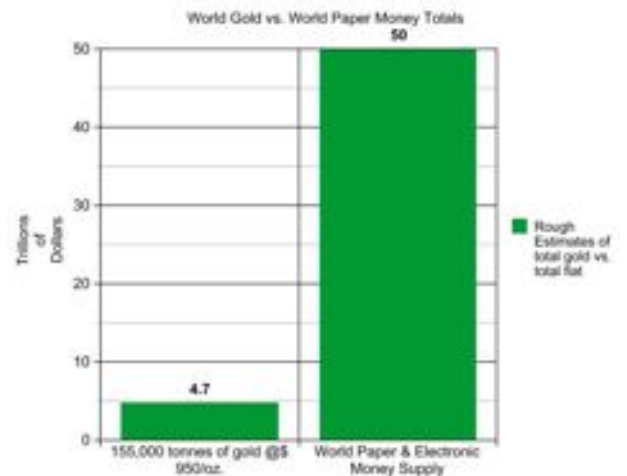
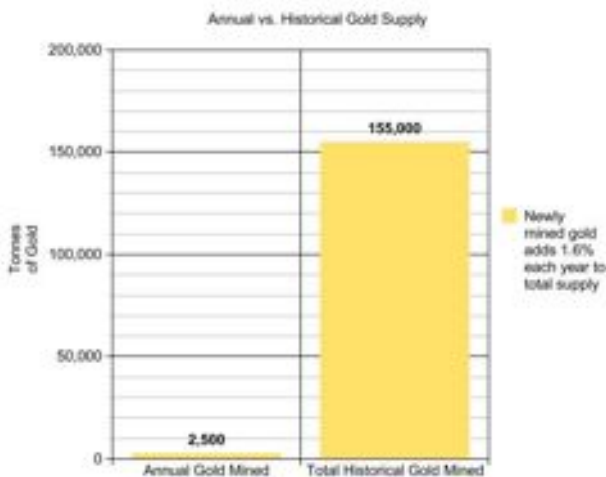
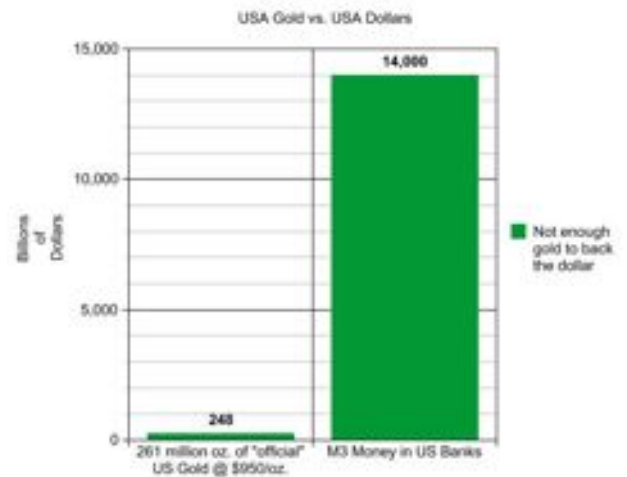
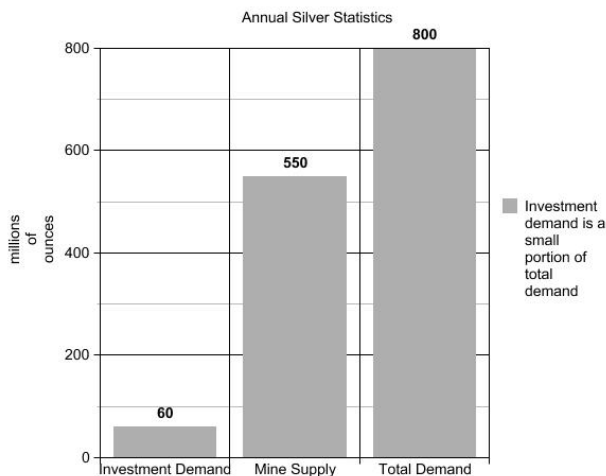
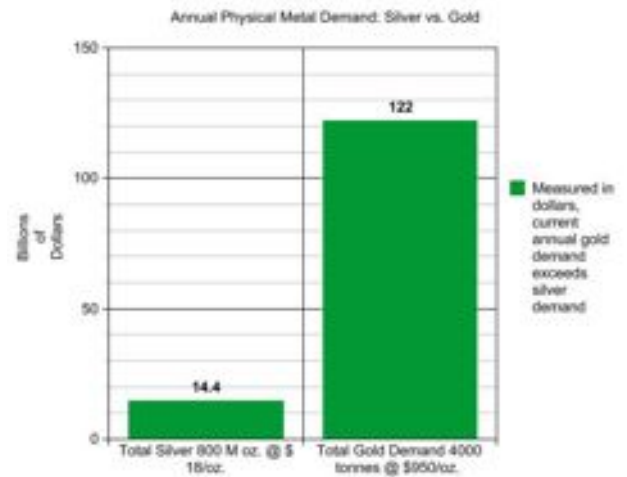
or a ratio to gold. If silver exceeds its historic value, due to the scarcity - from its importance in electronics and photography - then perhaps a silver dime, a silver quarter, or a silver dollar will be worth far more than a day's wage, as it once was.

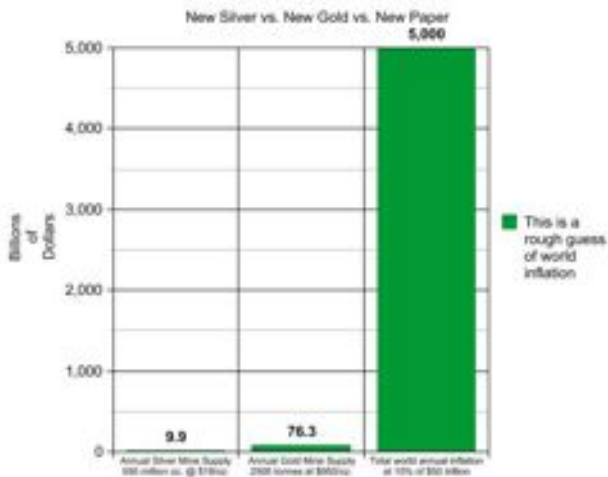
Some important statistics to put all this in perspective were put in graphic form by Jason Hommel. Agree with his bias or no, but the fact remains he has created a fierce amount of debate on the subject of the Silver. Most notably with A. Fekete, "The Gold Standard University" Refreshing dialogue in an age of Automaton.

<http://www.silverstockreport.com/2008/fekete2.html>

http://www.gold-eagle.com/gold_digest_04/fekete050404pv.html

http://www.gold-eagle.com/gold_digest_08/fekete070108.html





Source: *Silver Stock Report*, Jason Hommel

Aside from the obvious danger to the shorts, I think it is the paper longs that are in real jeopardy from the huge short position. How so? With the real silver long-term situation so tight as to leave you in awe; the last thing this market needs is the largest paper short position in history. Given the historical precedence, when the crunch comes, paper longs will not be able to convert to physical, as their contracts proclaim. It is just not possible. There is too much paper and too little real metal. In the crunch, at the watering hole, paper won't hold up. Not COMEX paper, not any paper. Then we will learn the difference between paper silver and silver. I can't say when this will happen; only that it will happen. In fact, I can guarantee it will be the biggest **force majeure** in history. Now that I think of it, holding physical silver offshore would be the most prudent step a prudent investor could take to further prevent emergency confiscation of physical stocks. Have you ever wondered why Warren Buffett went to the trouble of buying physicals held in London? In the long run, your only defence against the shrinking watering hole, the permanent shortage, is real silver in a real safe place. (Butler)

Earlier I discussed the notion that Silver could be a Veblen good, and then in almost the same breath hinted that it may be seen as an inferior good. This in fact a Giffen good, economic theory suggests such a good is one for which observed demand rises as price rises, but the effect arises without any interaction between price and preference—it results from the interplay of the *income effect* and the *substitution effect* of a change in price. Silver is cheaper than Gold and as gold becomes less affordable, investors will switch/ "substitute" into Silver. So paradoxically it is both a superior and inferior good in behaviour! Just as I had for me been struck by a moment of inspired clarity I was taken back to see that one of the Silver commentators had come to the same conclusion. Just I get accused of stealing intellectual property.

A penny for your thoughts? OR should we say a pieces of eight for your thoughts?

Bunker's Epilogue

Bunker & his family recently sold Hunt Petroleum (privately owned) to XTO Energy for a reputed \$4.2bn. Are the brothers calling a top to the Oil market? I don't know. But rumours are abound they are heading back into the Silver

market. The Gold Oil ratio as we discussed last month tells us gold is the laggard, well now we know silver is the real laggard. Good time for a switch. Talk is they are going straight to the refiners. This time I bet there will be no leveraging of their silver pool, as they don't want the exchange regulators changing the rules on them again. We wonder if Congress will repeat history but this time with the Oil markets. But that's a topic for next month.



This year a 1,000 troy ounce gold bar would have set you back more than \$1 million, while the 1,000 ounces silver could be had for a mere \$22,000. Silver has still not crossed its all-time high of \$54 reached long ago in 1980 or even the average selling price of \$24 an ounce 28 years ago. It is the most undervalued of all the commodities.

Maybe the Hunter's misery in the Silver Crash haunts the common investor, but be sure **THE SILVER BULLET is COMING.**



Source: Google Images