

# **The Unadulterated Gold Standard Part I**

June 29, 2013/[2 Comments](#)/by [Keith Weiner](#)

The choice of the word “unadulterated” is not accidental. There were many kinds of gold standard, including what we now call the Classical Gold Standard, the Gold Bullion Standard, and the Gold Exchange Standard. Each contained flaws; each was adulterated.

Page | 1

For example, in the Coinage Act of 1792, the government forced the price of one thing to be fixed in terms of another thing. The mechanism was in Section 11:

*“And be it further enacted, That “the proportional value of gold to silver in all coins which shall by law be current as money within the United States, shall be as fifteen to one...”<sup>1</sup>*

Of course, people respond to such distortions. When the government fixes the price of something too low, then people will hoard or export it. If the price is fixed too high, then they will flood the market with it.

According to Craig K. Elwell, in his 2011 Congressional Research Service Report:

*“Because world markets valued them [gold and silver] at a 15½ to 1 ratio, much of the gold left the country and silver was the de facto standard.”<sup>2</sup>*

Subsequently, the government changed direction. Elwell notes:

*“In 1834, the gold content of the dollar was reduced to make the ratio 16 to 1. As a result, silver left the country and gold became the de facto standard.”*

If the law dictates the ratio between gold and silver, then only one metal—the one that is undervalued—will be used. It would be extremely difficult for the government to get the ratio exactly right. And even if so, as soon as the market value changed the ratio would be wrong and only one metal would circulate.

The government should not attempt to force a price onto the market. In the unadulterated gold standard, the market is allowed to set the price of silver, copper, oil, wheat, a fine wool suit, and everything else. It allows people to use gold, or silver, or seashells as money if they wish (the market has not chosen seashells in modern history).

Throughout the 19th century, there were various state laws to impose new kinds of restrictions on the banks. One popular restriction was that in order to obtain a charter (permission to operate as a bank), the bank had to buy state government bonds. This theme—forcing banks to buy government bonds—was to recur later.

This is a pernicious idea. Banks must have an earning asset to match the liability of the deposit accounts. Why not make them buy some government bonds as a condition for permission to operate? Because this is obviously blackmail. In a free country, one should not need to ask permission to be in business and one should not be forced to do something in exchange for that permission.

This policy has two economic effects. First, it pushes the price of the government bond higher than it would otherwise be, which means it pushes down the rate of interest. This distortion ripples throughout the entire economy.

Second, it exposes the state-chartered bank to the fiscal irresponsibility in the state capitol. And of course the state capitol is encouraged to borrow and spend by this very perverse policy, because they know that there is always a market for their bonds. This lasts until they default, of course. And when

they do, the state-chartered banks become insolvent. This is not a failure of the gold standard, or of the free market. It is a failure of a deficit spending policy and central planning.

There is another problem with this scheme. The bank takes in deposits, especially demand deposits, and it buys bonds, especially longer-dated bonds. This is called “borrowing short to lend long”, and it is dangerous because if the depositors want to redeem their gold or silver, the bank may be in a position where it has only an illiquid bond. Obviously, the depositor does not want a government bond, and so the bank can be forced to default in a “run on the bank”.

All borrowing short to lend long schemes, also called “duration mismatch”, collapse sooner or later. This is because the depositor, who is the ultimate issuer of the credit, is signaling that he only wishes to extend credit for short duration. But the bank has expanded long-term credit. This is not the bank’s decision to make, and by disrespecting its depositors’ intentions, it makes itself vulnerable to a run.<sup>3</sup>

In 1864, the National Banking Act imposed a tax of 10% on notes issued by state banks. Needless to say, state-chartered banks responded to this threat of mass robbery. There were 1466 state-chartered in 1863. Five years later, 83% of them had either gone out of business or become nationally chartered.<sup>4</sup>

One of the provisions of this Act was to require nationally chartered banks to hold US government bonds in order to issue nationally standardized bank notes and other liabilities.<sup>5</sup> One key reason for this was that the federal government was eager to finance the civil war (1861 – 1865). In later years, when the federal government wanted to pay down its debt, this squeezed the banks and the result was deflation and panics.

The problem was exacerbated when the federal government resumed the minting of coins. The “Crime of 1873”<sup>6</sup> was the name many gave to the Coinage Act of 1873, which demonetized silver. This was an enormous wealth transfer from the small saver such as the farmer who had silver stored at home into the hands of the wealthy who kept gold in the banks.

These problems occurred under the Classical Gold Standard. Even before the Federal Reserve Act of 1913, we saw the following adulterations:

1. A fixed gold:silver price ratio in a bimetallic monetary standard. The unintended consequence was that first gold, and later silver, fled the country
2. Laws forcing banks to seek permission to operate. Big-spending governments, needing a market for their bonds, forced banks to buy their bonds in various schemes in exchange for permission to operate. This exposed banks to bank runs and bankruptcy when the bonds defaulted, and created a new problem when the size of the banking system was restricted by the value of government bonds outstanding.
3. Demonetizing one metal shifts wealth from one class of saver to another.
4. Duration mismatch causes the business cycle. The boom occurs due to credit expansion beyond the intent of the savers. The bust begins when there are significant redemptions by depositors who need their money. A full panic occurs when other depositors realize that the bank is not holding either money or short-duration assets such as Bills. The bank holds illiquid long-term bonds and cannot pay depositor redemptions. The run turns into bankruptcy. The panic turns into a wide scale depression.

In Part II, we will look at the Gold Bullion Standard and the Gold Exchange Standard...

<sup>1</sup>[http://nesara.org/files/coinage\\_act\\_1792.pdf](http://nesara.org/files/coinage_act_1792.pdf), accessed Oct 2012

<sup>2</sup><http://www.fas.org/sgp/crs/misc/R41887.pdf>, accessed Oct 2012

<sup>3</sup><http://keithweiner.posterous.com/duration-mismatch-necessarily-fails>

<sup>4</sup>[http://en.wikipedia.org/wiki/National\\_Bank\\_Act](http://en.wikipedia.org/wiki/National_Bank_Act)

<sup>5</sup><http://www.let.rug.nl/usa/essays/general/a-brief-history-of-central-banking/national-banking-acts->

of-1863-and-1864.php

<sup>6</sup>[http://en.wikipedia.org/wiki/Coinage\\_Act\\_of\\_1873](http://en.wikipedia.org/wiki/Coinage_Act_of_1873)

--

## The Unadulterated Gold Standard Part II

June 29, 2013/1 Comment/by Keith Weiner

In [Part I](#), we looked at the period prior to and during the time of what we now call the Classical Gold Standard. It should be underscored that it worked pretty darned well. Under this standard, the United States produced more wealth at a faster pace than any other country before, or since. There were problems; such as laws to fix prices, and regulations to force banks to buy government bonds, but they were not an essential property of the gold standard.

The essential was that people had a right to own and trade gold coins. They had the right to deposit them in a bank, if the bank offered attractive terms (especially the payment of interest). Banks had a right to take deposits, to buy assets, and to pay interest. Banks had a right to issue paper notes that were claims against gold. Banks had a right to lend their deposits (fractional reserves).

Despite some government interference, the Classical Gold Standard enabled a Golden Age of prosperity and full employment that is totally out of reach today (not to be confused with the rapid development of technology). This is not to say there were not business failures, bank failures and panics – what were later called depressions and now recessions. A free market does not attempt to guarantee that no one can ever lose money. It is merely an environment in which no one is forced to subsidize someone else's risks or losses.

Unfortunately, by the early 20th Century, the tide had shifted. Europe was inexorably moving towards war. The US was abandoning the principles on which it had been founded, and exploring a different kind of government: an unlimited government that could centrally plan and manage the economy and the lives of the people.

In 1913, the US government created the Federal Reserve. Much has been written about this now-hated organization. At the time, the Fed was supposed to be the re-discounter of Real Bills. Real Bills arose spontaneously in the market centuries before banks or central banks. They are credit used for clearing. When a wholesaler delivers goods to a retailer, the retailer accepts the goods and signs the bill. Commercial terms were commonly NET 90. It turned out that in the free market, these bills would circulate as a form of currency, with a value that was based on the discount rate and the time until maturity. Real Bills were the highest quality earning asset, and the highest quality asset except only gold itself.

For many reasons, politicians felt that a quasi-government agency could make better credit decisions than the market. To “discount” a Real Bill was to pay gold and take the Bill into one's portfolio. The Fed, as re-discounter, would offer the banks unlimited liquidity in exchange for their bills. Almost immediately, the Fed also began to buy US government bonds. What better way to expand credit than to push down the rate of interest? The Fed could use much more leverage than if they were restricted to buying bills (which would all mature into gold in 90 days or less!) This time, they thought, there was no limit to how far down they could push interest, nor for how long.

The Fed almost certainly enabled the government to borrow at lower rates than would otherwise have prevailed, but even so the rate of interest rose during World War I. This is because the government was borrowing unprecedented amounts of money. The interest rate peaked in 1919. Then it began to fall, not bottoming until after World War II.

The net effect of the Fed was to totally destabilize the rate of interest. In looking at this graph of the 10-year US Treasury bond from 1790 to 2009, one thing is obvious. There were spikes due to wars and other threats to the stability of the government. But for long periods of time, the rate of interest moved in a narrow range. For example, from 1879 until 1913 (i.e. the period of the Classical Gold Standard), the rate of interest was bound to a range of 3% to 3.5%. During World War I, the rate spiked up to 5.5% and then began to fall to well under 2% after World War II. Then the rate began its ascent to over 17% in 1981. After 1981, the rate has been falling and is currently under 1.7%. It will continue to fall, but that is a discussion for another paper.

The US, unlike Europe, did not suspend redeemability of the currency into gold coin. In Europe, the toll of the war in terms of money, property, and of course lives, was much higher. The governments felt it necessary to force their citizens to deal in paper money only. After the war, they had problems returning to gold. For example, Germany was prohibited from freely trading with anyone. One consequence of this was that the Real Bills market never reemerged.

In 1925, Britain initiated a short-lived experiment: the Gold Bullion Standard. The idea was that paper money would be backed by gold, but the gold would be kept in the banking system in the form of 400-ounce bars. Technically, the paper was redeemable, but the bars were so large that, for all practical purposes, the money may as well have been irredeemable to ordinary people. Britain abandoned this regime in 1931, in part due to gold flows to the US.

In 1933, the President Roosevelt told American citizens that they must turn in their gold for approximately \$20 per ounce. Once the government got all the gold they could, Roosevelt revalued gold at \$35 per ounce. The dollar was never again to be redeemable to Americans.

After World War II, Europe was physically and financially devastated. European gold had largely moved to the US either because of the coming war, or to pay for munitions. The Allied powers knew by 1944 that they would be victorious, and so met at Bretton Woods to agree on the next monetary system. They agreed to what could be called the Gold Exchange Standard.

In this new standard, the US dollar would be the reserve asset of the central banks and commercial banks of the world. They would end up with dollars on both sides of their balance sheets, and pyramid credit in their local currencies on top of this reserve. The dollar would continue to be redeemable to foreign central banks (but not to US citizens).

This regime was unstable, as economists such as Jacques Rueff and Robert Triffin realized. Triffin proposed that there is a dilemma for the world and the US. As the world demanded more money, this meant that the US had to run a trade deficit to provide the currency. But a chronic trade deficit would cause the value of the dollar to fall, with wealth being transferred from foreign creditors to domestic (US) consumers.

Throughout the 1960's, European central banks, and most visibly France, redeemed dollars. By 1971, the gold was flowing out of the US at a rate of over 100 tons per day.[1] President Nixon had to do something. What he did was end the Gold Exchange Standard and plunge us into the worldwide regime of irredeemable paper money.

Since then, it has become obvious that without the anchor of gold, the monetary system is un-tethered, unbounded, and unhinged. Capital is being destroyed at an exponentially accelerating rate, and this can be seen by exponentially rising debt that can never be repaid, a falling interest rate, and numerous other phenomena.

In Part III, we will look at the key characteristics of the Unadulterated Gold Standard...

[1] [http://en.wikipedia.org/wiki/Nixon\\_Shock#cite\\_note-1](http://en.wikipedia.org/wiki/Nixon_Shock#cite_note-1)

# The Unadulterated Gold Standard Part III

June 29, 2013/1 Comment/by Keith Weiner

**In Part I**, we looked at the period prior to and during the time of what we now call the Classical Gold Standard. It should be underscored that it worked pretty darned well. Under this standard, the United States produced more wealth at a faster pace than any other country before, or since. There were problems; such as laws to fix prices, and regulations to force banks to buy government bonds, but they were not an essential property of the gold standard.

**In Part II**, we went through the era of heavy-handed intrusion by governments all over the world, central planning by central banks, and some of the destructive consequences of their actions including the destabilized interest rate, foreign exchange rates, the Triffin dilemma with an irredeemable paper reserve currency, and the inevitable gold default by the US government which occurred in 1971.

**Part III** is longer and more technical, as we consider the key features of the unadulterated gold standard. It could be briefly stated as a free market in money, credit, interest, discount, and banking. Another way of saying it is that there would be no confusion of money (i.e. gold) and credit (i.e. paper). Both play their role, and neither is banished from the monetary system.

There would be no central bank with its “experts” to dictate the rate of interest and no “lender of last resort”. There would be no Securities Act, no deposit insurance, no armies of banking regulators, and definitely no bailouts or “too big to fail”. The government would have little role in the monetary system, save to catch criminals and enforce contracts.

As mentioned in [Part I](#), people would enjoy the right to own gold coins, or deposit them in a bank if they wish. We propose the radical idea that the government should have no more involvement in specifying the contents of the gold coin than it does specifying the contents of the software that runs a web server. And this is for the same reason: the market is far better at determining what people need and far better at adapting to changing needs.

In 1792, metallurgy was primitive. To accommodate 18th century gold refiners, the purity of the gold coin was set at around 90% pure gold (interestingly the Half Eagle had a slightly different purity than the Eagle though exactly half the pure gold content). Today, much higher purities can easily be produced, along with much smaller coins (see [Pieces of 50](#)). We also have plastic sleeves today, to eliminate wear and tear on pure gold coins, which are quite soft.

If the government had fixed a mandatory computer standard in the early 1980’s (some governments considered it at the time), we would still be using floppy disks, we would not have folders, and most of us would not be using any kind of computer at all, as they were not user friendly. When something is fixed in law, it is no longer possible to innovate. Instead, companies lobby the government for changes in the law to benefit them at the expense of everyone else. No good ever comes of this.

We propose the radical idea that one should not need permission to walk down the street, to open a bank, or to engage in any other activity. Without banking permits, licenses, charters, and franchises, the door is not open to the game played by many states in the 19th century.

*“To operate a bank in our state, you must use some of your depositors’ funds to buy the bonds sold by our state. In return, we will protect you from competition by not allowing out-of-state banks to operate here.”*

Most banks felt that was a good trade-off, at least until they collapsed due to risk concentration and defaults on state government bonds.

State and federal government bonds are an important issue. We will leave the question of whether and when government borrowing is appropriate to a discussion of fiscal policy. There is an important monetary policy that must be addressed. Government bonds must not be treated as money. They must not become the base of the monetary system (as they are today). If a bank wants to buy a bond, including a government bond, that is a decision that should be made by the bank's management.

An important and related principle is that bonds (private or government) must not be "paid off" by the issuance of new bonds! Legitimate credit is obtained to finance a productive project. The financing should match the reasonable estimate of the useful life of the project, and the full cost must be amortized over this life. If the project continues to generate returns after it is amortized, there is little downside in such a conservative estimate (though it obviously makes the investor case less attractive).

On the other hand, if the plant bought by the bond is all used up before the bond is paid off, then the entrepreneur made a grave error: he did not adequately deduct depreciation from his cash flows and now he is stuck with a remaining debt but no cash flow with which to pay it off. Issuing another bond to pay off the first just extends the time of reckoning, and makes it worse. Fully paying debt before incurring more debt enforces a kind of integrity that is almost impossible to imagine today.

With few very limited and special exceptions, a bank should never borrow short and lend long. This is when a bank lends a demand deposit, or similarly lends a time deposit for longer than its duration. A bank should scrupulously match its assets to its liabilities. If a bank wants to buy stocks, real estate, or tulips, it should not be forcibly prevented, even though these are bad assets with which to back deposits. The same applies to duration mismatch.

Banks must use their best judgment in making investment decisions. However, the job of monetary scientists is to bellow from the rooftops that borrowing short to lend long will inevitably collapse, like all pyramid schemes (see the author's paper: [Why Duration Mismatch Will Always Fail](#)).

There should be no price-fixing laws. Just as the price of a bushel of wheat or a laptop computer needs to be set in the market, so should the price of silver and the price of credit. If the market chooses to employ silver as money in addition to gold, then the price of silver must be free to move with the needs of the markets. It was the attempt to fix the price, starting in 1792 that caused many of the early problems. While "de jure" the US was on a bimetallic standard, we noted in Part I that "de facto" it was on a silver standard. Undervalued gold was either hoarded or exported. After 1834, silver was undervalued and the situation reversed. Worse yet, each time the price-fixing regime was altered, there was an enormous transfer of wealth from one class of people to another.

Similarly, if the market chooses to adopt rough diamonds, copper, or "bitcoins" then there should be no law and no regulation to prevent it (though we do not expect any of these things to be monetized) and no law or regulation to fix their prices either.

If a bank takes deposits and issues paper notes, then those notes are subject to the constant due diligence and validation of everyone in the market to whom they are offered. If a spread opens up between Bank A's one-ounce silver note and the one-ounce silver coin (i.e. the note trades at a discount to the coin) then the market is trying to say something.

What if an electrical circuit keeps blowing its fuse? It is dangerous to replace the fuse with a copper penny. It masks the problem temporarily, and encourages you to plug in more electrical appliances, until the circuit overheats and set the house on fire. It is similar with a government-set price of paper credit.

A market price for notes and bills is the right idea. Free participants in the markets can choose between keeping their gold coin at home (hoarding) vs. lending their gold coin to a bank (saving). It is important to realize that credit begins with the saver, and it must be voluntary, like everything else in a free

market. People have a need to extend credit as explained below, but they will not do so if they do not trust the creditworthiness of the bank.

Before banking, the only way to plan for retirement was to directly convert 5% or 10% of one's weekly income into wealth by hoarding salt or silver. Banking makes it much more efficient, because one can indirectly exchange income for wealth while one is working. Later, one can exchange the wealth for income. This way, the wealth works for the saver his whole life, and there is no danger of "outliving one's wealth", if one spends only the interest. In contrast, if one is spending one's capital by dishoarding, one could run out.

No discussion on banking would be complete without addressing the issue of fractional reserves. Many fundamental misunderstandings exist in this area, including the belief that banks "create money". Savers extend credit to the banks who then extend credit to businesses. The banks can no more be said to be creating money than an electrical wire can be said to be creating energy.

Another error is the idea that two or more people own the same gold coin at the same time. When one puts gold on deposit, one gives up ownership of the gold. The depositor does not own the gold any longer. He owns a credit instrument, a piece of paper with a promise to pay in the future. So long as the bank does not mismatch the duration of this deposit with the duration of the asset it buys, there is no conflict.

If people want to vault their gold only, perhaps with some payment transfer mechanism, there would be such a warehousing service offered in the market. But this is not banking. It's just vaulting, and most people prefer the convenience of fungibility. Who wants the problems of a particular vault location and a delay to transfer it elsewhere? And who wants a negative yield on money just sitting there?

A related error is the claim, often repeated on the Internet, is that a bank takes 1,000 ounces in deposit and then lends 10,000 out.[1] Poof! Money has been created — and to add insult to injury, the banks charge interest! The error here is that of confusing the result of a market process (of many actors) with a single bank action. If Joe deposits 1,000 ounces of gold, the bank will lend not 10,000 ounces but 900 ounces (assuming a 10% reserve ratio).

Mary the borrower may spend the money to build a new factory. Jim the contractor who builds it may deposit the 900 ounces in a bank. The bank may then lend 810 ounces, and so on. This process works if and only if each borrower spends 100% of the money and if the vendors who earned their money deposit 100% of it, in a time deposit. Otherwise, the credit (this is credit, not money) simply does not multiply as Rothbard asserts.

This view of money multiplication does not consider time as a variable. Gold payable on demand is not the same as gold payable in 30 years. It will not trade the same in the markets. The 30-year time deposit or bond will pay interest, have a wide bid-ask spread, and therefore not be accepted in trade for goods or services.

This process involving the decisions of innumerable actors in the free market may have a result that is 10X credit expansion. But one cannot make a shortcut, presume that it will happen, and then assert that the banks are "swindling."

If one confuses credit (paper) with money (gold), and one believes that inflation is an "increase in the money supply" (see here for this author's [definition](#)) then one is opposed to any credit expansion and hence any banking. Without realizing it, one finds oneself advocating for the stagnation of the medieval village, with a blacksmith, cobbler, cooper, and group of subsistence farmers. Anything larger than a family workshop requires credit.

Credit and credit expansion is a process that has a natural brake in the gold standard when people are free to deposit or withdraw their gold coin. Each depositor must be satisfied with the return he is getting in exchange for the risk and lack of liquidity for the duration. If the depositor is unhappy with the bank's (or bond market's) offer, he can withdraw his gold.

This trade-off between hoarding the gold coin and depositing it in the bank sets the floor under the rate of interest. Every depositor has his threshold. If the rate falls (or credit risk rises) sufficiently, and enough depositors at the margin withdraw their gold, then the banking system is deprived of deposits, which drives down the price of the bond which forces the rate of interest up. This is one half of the mechanism that acts to keep the rate of interest stable.

The ceiling above the interest rate is set by the marginal business. No business can borrow at a rate higher than its rate of profit. If the rate ticks above this, the marginal business is the first to buy back its outstanding bonds and sell capital stock (or at least not sell a bond to expand). Ultimately, the marginal businessman may liquidate and put his money into the bonds of a more productive enterprise.

A stable interest rate is vitally important. If the rate of interest rises, it is like a wrecking ball swinging into defenseless buildings. As noted above, each uptick forces marginal businesses to close their operations. If the rise is protracted, it could really cause the affected country's industry to be hollowed out. On the other hand, if the rate falls, the wrecking ball swings to the other side of the street. The ruins on the first side are not rebuilt. But now, capital is destroyed through a different and very pernicious process: the burden of each dollar of (existing) debt rises at the same time that the lower rate encourages more borrowing (see: [Falling Interest Rates Destroy Capital](#)). From 1947 to 1981, the US was afflicted with the rising interest rate disorder. From 1981 until present, the second stage of the disease has plagued us.

Today, under the paper standard, the rate of interest is volatile. The need to hedge interest rate risks (and foreign exchange rate risk, something else that does not exist under the gold standard) is the main reason for the massive derivatives market. In this market for derivatives, which is estimated to be approaching 1 quadrillion dollars (one thousand trillion or one million billion)[2], market participants including businesses and governments seek to buy financial instruments to protect them against adverse changes. Those who sell such instruments need to hedge as well. Derivatives are an endless circle of futures, options on futures, options on options, "swaptions", etc.

The risk cannot be hedged, but it does lead to a small group of large and highly co-dependant banks, who each sell one another exotic derivative products. Each deems itself perfectly hedged, and yet the system becomes ever more fragile and susceptible to "black swans".

These big banks are deemed "too big to fail." And the label is accurate. The monetary system would not survive the collapse of JP Morgan, for example. A default by JPM on tens or perhaps a few hundred trillion of dollars of liabilities would cause many other banks, insurers, pensions, annuities, and employers to become insolvent. Consequently, second-worst problem is that the government and the central bank will always provide bailouts when necessary. This, of course, is called "moral hazard" because it encourages JPM management to take ever more risk in pursuit of profits. Gains belong to JPM, but losses go to the public.

There is something even worse. Central planners must increasingly plan around the portfolios of these banks. Any policy that would cause them big losses is non-viable because it would risk a cascade of failures through the financial system, as one "domino" topples another. This is one reason why the rate of interest keeps falling. The banks (and the central bank) are "all in" buying long-duration bonds, and if the interest rate started moving up they would all be insolvent. Also, they are borrowing short to lend long so the central bank accommodates their endless need to "roll" their liabilities when due and give them the benefit of a lower interest payment.



The problems of the irredeemable dollar system are intractable. Halfway measures, such as proposed by Robert Zoelick of the Bank for International Settlements that the central banks “watch” the gold price will not do.[3] Ill-considered notions such as turning the IMF into the issuer of a new irredeemable currency won’t work. Well-meaning gestures such as a gold “backed” currency (price fixing?) might have worked in another era, but with the secular decline in trust, why shouldn’t people just redeem their paper for gold? One cannot reverse cause and effect, trust and credit. And that’s what a paper note is based on: trust.

The world needs the unadulterated gold standard. Next – [Part IV](#) and Real Bills.

## The Unadulterated Gold Standard Part IV (Intro to Real Bills)

June 29, 2013/1 Comment/by Keith Weiner

**In this Part IV**, we consider another kind of credit: the Real Bill. We must acknowledge that this topic is controversial because of the belief that Real Bills are inflationary. This author proposes that inflation should not be defined as an increase in the money supply per se, but of [counterfeit credit](#).

Let’s start by looking at the function served by the Real Bill: clearing. This is an age-old problem and a modern one as well. The early Medieval Fairs were large gatherings of merchants. Each would come with goods from his local area to trade for goods from other lands. None carried gold to make the purchases for two reasons. First, they didn’t have enough gold to buy the local goods plus the gross price of the foreign goods. Second, carrying gold was risky and dangerous.

The merchants could have attempted some sort of direct barter. But they would encounter the very problem that led to the discovery and use of money originally. It is called the “coincidence of wants”. One merchant may have had furs to sell and wants to buy silks. But the silk merchant does not want furs. He wants spices. The spice merchant may not want silks or furs, and so on. It would waste everyone’s time to run around and put together a three-way deal, much less a four-way or a 7-way deal so that every merchant got the goods he wanted to bring to his home market. They developed a system of “chits” to enable them to clear their various and complex trades. In the end, all merchants had to settle up only the net difference in gold or silver.

Clearing is necessary when merchants deal in large **gross** amounts with small **net** differences.

The same challenge occurs in the supply chain of consumer goods. Each business along the way adds some value to the product and passes it to the next business. For example the farmer starts the chain by selling wheat. The miller turns wheat into flour and sells it to the baker. The baker turns flour into bread and sells it to the consumer. These businesses run on thin margins, and this is a good thing for everyone (though the baker, the miller and the farmer might disagree!) The question is: on thin margins, how are they to pay for the gross price of their ingredients before selling their products?

This is an intractable problem and it only gets worse if they attempt to grow their businesses. Further, it would be impossible to add a new business into the supply chain. For example, a processor to bleach the flour might be a separate company. And then it may turn out that when the bakery grows and grows, that it is more efficient to operate a small number of very large regional bakeries and then the distributor enters the supply chain to buy the bread from the baker and sell it to another new entrant in the chain, the grocer.

With each new entrant into each supply chain, the supply of gold coins would have to grow proportionally. This is not possible. Fortunately, it is not necessary. If there were a means of clearing the market, then only the net differences would have to be settled in gold. If consumers buy 10,000 grams of gold worth of bread from the grocer, the grocer could keep his 5% profit of 500g and pass

9,500g to the distributor. The distributor would keep his 2% profit of 190g and pay 9310g to the baker. The baker would keep his 10%, 931g and pay 8379 to the flour bleacher, and so on up the chain.

The obvious challenge is that the payments move in the opposite direction compared to the goods. Whereas the wheat is eventually turned into bread as it moves from the farmer to the consumer, the gold moves from consumer to farmer. The Real Bill is the clearing mechanism that makes this possible.

Without the Real Bill, the enterprises in the supply chain would have to borrow using conventional loans and bonds, which is less efficient and more expensive. Or else the division of labor along with highly optimized specialty businesses would not be possible.

As we discussed in [Part III](#) of this series, everyone benefits if it is possible to efficiently exchange wealth in the form of savings for income in the form of interest on a bond. The saver's money can work for him his whole life, and he can live on the interest in retirement without fear of outliving his money. The entrepreneur can start or grow a new business without having to spend his career saving a fraction of his wages, working a job in which he is underemployed. Everyone else gets the use of the entrepreneur's new products, and thereby improve their lives.

The same analogy applies to the efficient clearing of the supply chain for every kind of consumer good. This is especially true as new entrants come in to the chain and make the process more efficient (i.e. less expensive to the consumer). And it is also necessary for seasonal demand, such as prior to Christmas. Clearly, there is an increase in the production of all kinds of consumer goods around September or October. Everything from chocolates to wrapping paper must be produced in larger quantities than at other times of the year. Without a clearing mechanism, without the Real Bill, the manufacturers would be forced to limit production based on their gold on hand. There would be shortages.

In practice, the Real Bill is nothing more than the invoice of the wholesaler on the retailer. In our example, the distributor delivers bread to the grocer and presents him with a bill. The grocer signs it, agreeing to pay 9500g of gold in 90 days (probably less for bread). It is an important criterion that Real Bills must be paid in less than 90 days, for a number of reasons. First, the Real Bill is for consumer goods with known demand. If the good does not sell through in 90 days, that indicates a problem has occurred or someone has misestimated the demand. The sooner this is realized, the better.

Second, 90 days represents the change of the season in most countries. What had been in demand last season may not be in demand in the next.

Third, the Real Bill is a short-term credit instrument that is not debt. At the Medieval Fair, there was no borrowing and no lending. The same is true for the Real Bill. The wholesaler does not lend money to the retailer. He delivers the goods and accepts that he will be paid when the goods sell through to the consumer. The retailer agrees to pay for the goods when they sell through, but he does not borrow money.

Finally, if a business transaction requires longer-term credit, then it is appropriate to borrow money via a loan or a bond. The Real Bill is not suitable for the risk or the duration. Longer-term credit means that it is not simply being used to clear a transaction, but that there is some element of speculation, storage, and uncertainty.

What has happened in different times and in different countries is that Real Bills circulate. Spontaneously. No law is required to force anyone to accept them. No banking system is necessary to make them liquid. Real Bills "circulate on their own wings and under their own steam" in the words of Antal Fekete<sup>[1]</sup>. The Real Bill is the highest quality earning asset, and the highest quality

asset aside from gold itself (incidentally, this is why Real Bills don't work under irredeemable paper—it would be a contradiction for a Real Bill to mature into a lower-quality paper instrument).

Opponents of Real Bills have a dilemma. They can either oppose them by means of enacting a coercive law, or they can allow them because they will spring into existence and circulate in a free market under the gold standard. We can hope that the principle of freedom and free markets leads everyone to the latter.

It is not the job of government to outlaw everything that experts in every field believe will lead to calamity. And those experts should be cautious before prejudging free actors in a free market and presuming that they will hurt themselves if left alone.

*In [Part V](#), we will take a deeper look at the Real Bills market, including the arbitrages and the players...*

---

[1] [http://www.gold-eagle.com/gold\\_digest\\_08/fekete070811.html](http://www.gold-eagle.com/gold_digest_08/fekete070811.html)

--

## The Unadulterated Gold Standard Part V

June 29, 2013/0 Comments/by Keith Weiner

**The Real Bill is credit provided for clearing, without lending or borrowing.** It is different than a bond. To review the bond, in [Part III](#) we showed how it arises out of the need to save. People must plan for retirement and senescence during their working years. Even if there is no way to lend at interest, this need still exists. So people hoarded part of their income by buying a commodity with a narrow bid-ask spread that was not perishable. Salt and silver are two commodities that were used for this purpose. For many reasons saving, in which one lends one's wealth at interest, is superior to hoarding. Thus the bond was born.

The Real Bill is quite different. It isn't lending at all. It is a clearing instrument that allows the goods to move to the gold-paying consumer before said consumer pays with gold. The Real Bill does not earn interest, and there are no monthly payments. The Real Bill is an opportunity to buy gold at a discount. The Real Bill sells in the market for less gold than its face value, based on the discount rate and the time to maturity. For example, a 1000g Bill would sell for 9975 grams 90 days from maturity, assuming the discount rate was 1%. When the merchant has sold all of the goods to consumers, and thus has all of the gold, he pays the bill with 1000g of gold.

By contrast, Bills occur wherever people consume. It is certain that people will eat bread tomorrow. Therefore, it is not risky to provide the gold to clear the flour sale. Bills come into existence because of the chronic need to consume. Bills increase in quantity at times of high seasonal consumer demand (such as Christmas) and decrease at times of low demand.

Bills provide the responsiveness necessary for a large and complex economy, without the sinister elements that come with "flexible" irredeemable paper money, central banking, and fiat elements such as "legal tender" laws. This is because Bills respond to market signals (the chief "virtue" of irredeemable paper money, or indeed any government interference in markets, is that does not). Most importantly, every Real Bill is extinguished after it has cleared one delivery of goods. Real Bills are said to be "self-liquidating". Unlike the mortgage on a building, or the bond that finances a factory, the Real Bill is paid in full upon the sale of the asset it financed.

Real Bills are a simple mechanism, but they enable some very elegant arbitrages. For example, seasonal businesses have a problem for part of the year. What does the heating oil distributor do in the spring and summer? As he sells down his stocks of oil, he does not want to buy more oil. He can buy Bills, perhaps issued by a garden supply store that is in its busy season (and therefore is generating Bills). In this vignette, the heating oil distributor is directly financing the inventories of the garden supply! Without a bank or any other intermediary needed, it's more efficient.

There is a subtler arbitrage, between retail merchandise and Real Bills. Every retailer can calculate a rate of return for every product on the shelves. The goods are financed by the issuance of Bills; it makes no sense to carry any goods that have a return lower than the discount rate. Instead, the retailer should not stock those goods and put spare capital into the Bills issued to finance higher-yielding merchandise. Today, without a market discount rate, even in the information age with software to track everything, many retailers make poor decisions of what merchandise to carry.

There are many other even more subtle arbitrages, but let's look at one that is especially interesting. It is basic Econ 101 that if a natural disaster strikes then prices must rise. For example, if the wheat crop is hit by hail then there is a wheat shortage in the region. Prices must rise before wheat is diverted to the empty bakeries and hungry people. Real Bills provide a buffer mechanism. If the shortage is local (and hence small in proportion to the global market), what happens is that the discount rate falls in that region.

Let's look at this. The Real Bill arises, as discussed above, from consumption. In case of shortage, there is greater confidence that goods shipped into the region will be consumed even more rapidly. A lower discount rate means that the distributor is effectively paid a higher amount. This will attract goods out of other regions where there is no shortage. It is not necessary for the baker to pay a higher price on flour, or for the consumer to pay a higher price for bread. What is necessary is that the distributor receives a higher price to divert the flour to the region. The lower discount rate provides that higher price.

Real Bills serve a vital role in the banking system, particularly for the savings bank. To back a demand deposit account, the bank can have 1/3 of the assets in gold and 2/3 in Real Bills. It must be emphasized that this has nothing to do with fractional reserves! The Real Bill is not lending. More importantly, the Bill market cannot go "no bid". All Bills will be fully paid in 90 days, with the average being 45 days.

In contrast, with the lending of demand deposits (a form of duration mismatch), the system becomes unstable. This is not due to the risk of default per se. It is because the banks expand credit into a structure that is not in accord with the wishes of the savers. Eventually, it is guaranteed to collapse in a no-bid bond market with panic, liquidations, defaults, and bankruptcies ([Duration Mismatch Will Always Fail](#)).

The problem with duration mismatch is not merely one of liquidity. If today's crisis, ongoing after more than four years(!) of flailing by central banks shows anything, it is that a mismatched and unbalanced credit structure cannot be fixed with liquidity. What happened is that projects for more and higher-order factors of production were started. But there was insufficient real capital to finance them, so those projects must be written off with losses taken by banks and investors. The demand deposit backed by Bills does not create this problem.

In a free market, if people want a bank to provide only safe storage of gold with perhaps payment processing, then that service will exist for a fee. Such an account will effectively have a negative rate of interest. Most people prefer not to pay fees, and to earn a nominal rate of interest (in gold, of course there is no currency debasement so even 0.01% is positive). The Real Bill makes this possible.

Real Bills are a topic that could fill an entire book. The goal of parts [IV](#) and [V](#) of this series is to provide an overview, show some of the elegant mechanisms of the Bills market, and address some of the

controversy that has swirled around Real Bills from at least the time of Ludwig von Mises, and more recently when Professor Antal Fekete published his ideas about them on the Internet.

To conclude this entire series on the Unadulterated Gold Standard, it is fitting to provide the formal definition now that the reader has sufficient understanding of the concepts and ideas.

**The unadulterated gold standard is a free market in money, credit, interest, and discount based on the right of the people to hold and use gold coins, and which includes Real Bills and bonds.**

As we could only hint in this series, there are numerous specialists conducting transactions that are not obvious (or even counterintuitive) and the credit market can evolve into a structure that is quite complex. So long as there is no force or fraud involved, the system remains stable under a gold standard.

**END**

--

## **In a Gold Standard, How Are Interest Rates Set?**

January 1, 2013/8 Comments/by Keith Weiner

Today, short-term interest rates are set by the diktats of the central bank. And long-term interest rates are set in a “market” in which the central bank is obliged to keep coming back to buy ever more bonds, and speculators front-run the central banks to buy ahead of them. The result has been that, for 30 years and counting, the bond price has been rising, which is the same as to say that the rate of interest has been spiraling into the black hole of zero. When it gets there (and probably sooner) the entire monetary system will collapse.

This is the terminal stage of the disease of irredeemable paper currency. They have banished money (gold) from the monetary system, and the result is a positive-feedback-loop that destabilizes the rate of interest. The rate of interest has a propensity to fall, just like the value of the paper currency itself.

This leads to the question of how interest rates are set by a free market under a gold standard. This is a non-trivial question, and the answer is profoundly important as we debate what sort of role gold ought to play and evaluate the various gold standards being proposed.

If people are free to own gold coins directly, then the mechanics of setting the rate of interest are simple. Let’s define a term. The marginal saver is the saver who could go either way, either holding a bond or a gold coin. If the rate of interest ticks downward, he will sell the bond (or withdraw his money from the bank, thus forcing the bank to sell the bond) and buy the gold coin. He would rather hold the gold than commit to the time and risk for such a low interest rate. If the rate of interest ticks upward, he will buy the bond (or deposit his coin in the bank).

The marginal saver sets the floor under the rate of interest. It cannot fall below his preference or else he will vote with his gold. His preference has real teeth (unlike today).

Now let’s define one more term. The marginal entrepreneur is the entrepreneur whose rate of profit is the lowest possible, while still being viable. If his profit falls for any reason, such as due to a rise in costs, he will shut down his enterprise. One cost is the cost of capital, i.e. the rate of interest. No entrepreneur can borrow at a rate higher than his rate of profit, and the marginal entrepreneur is the first to buy the

bond and sell his capital stock at an uptick in the rate of interest. He is the first to sell a bond and buy capital stock at a downtick in the rate.

The marginal entrepreneur sets the ceiling over the rate of interest. It cannot rise above his ability to pay, or else he will vote with his capital stock. He also has teeth.

Under a proper gold standard, the rate of interest is kept in a band that is not only narrow, but which is also stable over long periods of time. This is the principle virtue of the gold standard. It does not fix the level of prices, which would be neither possible nor desirable. It keeps the rate of interest consistent, which serves the interests of wage earners, pensioners, and other savers, and of entrepreneurs whose work provides the goods, services, jobs, and interest payments that on which everyone else depends (and which they take for granted).

When evaluating any proposed gold standard, one should ask the question: how will it determine the rate of interest?