



THE SILVER MANIFESTO

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It is important to recognize our membership because many of them have been helpful in numerous ways—asking the right questions, attending our events, and suggesting ways to improve all aspects of our work.

No doubt, as stated in the beginning, there are probably some I have not remembered to mention here by name, and if so, I'm sorry. It wasn't until I began thinking about how our work has grown over the past 16 years and how that was possible that I was actually overwhelmed with emotion, as it has always been my dream to be of maximum service to others.

Finally, let me thank the many of you from so many different backgrounds and locations who have been so willing to help me in my mission "to teach and empower people to understand the benefits of an honest financial system."

–David Morgan

Foreword

Back in October 2010, when Sprott Asset Management LP was launching its silver trust (PSLV:NYSE), I had the occasion to visit many large U.S. financial institutions to discuss the outlook for silver. My favorite question before I began my presentations was to ask the attendees whether they had ever heard of three people—mainly, David Morgan, Ted Butler, and Jason Hommel. To my surprise invariably there was a universal ignorance of these people, whereupon I would suggest that the attendees obviously know nothing about the silver market, as these three individuals, at the time, were the most respected analysts following the silver market. I would point out that the analyst with the broadest coverage of silver was and still is David Morgan.

In managed markets that we participated in and most particularly the silver market in my opinion, it is important to listen to and appreciate the prognostication of the stalwart silver analyst that David Morgan is today.

The history of silver is a long one and its future will be very exciting. The battle will rage on between the pricing in paper markets and the real physical silver market of which Dave is an expert.

I have spent many hours reading Dave's analyses and have come to respect him as a true expert in this field. I am sure you will enjoy his analyses of the past, present, and future for silver.

-Eric Sprott

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Introduction

Let us start at the beginning—why the name Silver Manifesto?

As defined by the dictionary and as derived from the Italian word *manifesto*, which itself is derived from the Latin root of *manifestum*, a manifesto is a published verbal declaration of the intentions, motives, or views of the issuer, whether it an individual, group, political party, or government. A manifesto usually accepts a previously published opinion or public consensus and/or promotes a new idea with prescriptive notions for carrying out changes the author believes should be made. The latter should be emphasized because the market money, or people's money, has always been silver and gold. It is not, as many say, because of tradition, but rather the unique characteristics held by both metals.

It is far from public consensus that silver could or even should be in the monetary system, although in times past it was the fundamental element used in commerce throughout the ages. So, let us address some of the motives, views, and specifically the intent that we wish to be of service to you, the reader. We hope to help you to understand the monetary, economic, and political systems with a much deeper understanding, using this book and many other forms of information to set you on a path of critical thinking and questioning.

Academia no longer teaches or mentions that the United States was founded on a silver standard or that Article 1, Section 10 of the U.S. Constitution (which has not been amended) declares nothing but gold and silver coin are to be used as a medium of exchange! The monetary system was corrupted and could have fallen apart in the 19th century; however, at that time, some political will was strong enough to keep the U.S. on constitutional money. The defense of sound money allowed the dollar to double in purchasing power in 1895 relative to 1890 and it could be argued it was the primary reason there developed a large middle class. As we discuss, monetary inflation is the cause of increasing consumer prices but is primarily a redistribution of wealth. It is the banking corporations and political elites that receive the new money first, which benefits them the most.

Indeed our purpose is to provide the reader information about the silver market from several different perspectives. After absorbing much of the manifesto the reader could be inclined to see the merits of investing in this precious metal. Certainly, the authors and many of the contributors to this work are firm believers that the biggest move in the precious metals markets are ahead of us, perhaps in the 2016-2017 timeframes. Other associates of ours insist that the top of the silver market is not due

until 2020 or 2022. Frankly, no one knows for certain. What we do know is that the current monetary system is based primarily on the U.S. dollar and in just over 100 years this “money” has lost about 95% of its purchasing power. This would be a huge wake-up call to anyone using dollars, yet it is largely ignored by the general public, as few know or understand what is happening to the monetary system. This is not a new story it is something that has occurred time and time again. Highly regarded philosopher Voltaire stated that paper money always returns to its intrinsic value, zero.

To fully appreciate the importance of the precious metals at this pivotal point in world history, we provided this solid economics background (see chapters: 5, 7 and 8). These chapters are usually difficult to write and often found to be dull reading for most people. Obviously, this background information can be skipped but it would be of huge disservice to you, as the sound economic basis of the facts presented builds the case as to why precious metals are so important for anyone who understands the current level of debt held by the banking system. The current worldwide economic landscape is so incredibly fragile and unprecedented, central bankers have become reckless with monetary policy which is built upon governments that continually spend more than taken in by tax revenue.

One of the best ways to take maximum advantage of a bull market in precious metals is through the purchase of mining shares. Having been through one bull market cycle, the amount of profit made in the previous cycle was truly life changing in some instances. In the 1970s’ bull market the South African mining shares led the group, and a handful of top companies were paying dividends equal to the initial investment from years earlier. As an example, a \$10,000 investment was paying dividends of \$10,000 or more, roughly a decade later. The price appreciation in many of the top companies was at least tenfold.

In this bull market the mining shares have not participated to the level that was suggested by the last bull market. There are several reasons for this, one being that so many other financial instruments are now available that deal directly with metal purchase, leaving the risks of mining to the side. There are several Exchange- Traded Funds and we discuss some of these in the book. Regardless, the opportunity in the mining sector could be a once-in-a-lifetime situation as this book goes to press in early 2015.

We have certainly helped to give exposure to precious metals investing through our first book, but primarily through the Internet, having the silverguru YouTube Channel, @silverguru22 for a Twitter feed, and of course our Web site, TheMorganReport.com.

We have thought that the world was facing the biggest currency crisis in all of recorded history and this is still the prime motivator for all of our work. We have seen so many upheavals in the currency markets in just our lifetime, yet the U.S. dollar has not suffered as badly as many other currencies—yet! It is deliberate to add the word *yet*, because the global financial system is largely tied to the U.S. dollar and as it goes so goes the financial system as a whole. Certainly, the BRICS countries are moving away

from the U.S. dollar and may be able to isolate themselves somewhat from a U.S. dollar crisis, but this is unlikely because international trade is so interconnected that to escape what is coming will be impossible.

As in many books, we wanted to summarize or perhaps offer some type of conclusion for the reader. But the essence of the authors is to be open minded and lifelong learners. The best education for us has been life itself and, often, making mistakes. So, the chapter "Beyond Silver" does not offer solutions to the current trajectory for humankind, but rather presents areas to be explored further by the reader. Our highest purpose is to truly be of value to our fellows and be in alignment with the idea that we the people have and will always have the ability to live the paradox of serving others by also serving ourselves.

It is impossible for the government to have monopoly control of "money" and freedom to exist in society, as these are mutually exclusive. We wish to make certain we can help educate as many as possible to take wealth protection precautions. However, it is just as important, if not more so, to instill the idea that the ultimate value for mankind is freedom! This idea can never be taken from you because ideas are bulletproof—but to maintain freedom, the course of history has proven at times that action is required. Are you prepared?

Lastly, it is our quest that individual freedoms are secured again after being stripped away piece by piece. History has illustrated that sound money and freedom go hand in hand. This lies in an even deeper belief of ownership of self and our ability to exercise our natural-born rights, which after all are at the core of our humanity.

Chapter 1: A Monetary History of Silver – 3,400 B.C. - 1792

"Money itself is an object of commerce, a form of wealth precisely because it has value and because any value exchanges in trade for an equal value (ex-ante)." –Anne Robert Jacques Turgot

The question of whether or not gold and silver are money is even more important now than perhaps at any other time in history. The simple and short answer is yes, making the real question: *Why* are silver and gold money?

It is important to first point out that silver and gold have been monies dating back more than 5,000 years. It is also worth noting that every inconvertible fiat¹ (paper money) monetary system in history so far has collapsed, with each "monetary unit" returning to its intrinsic value of zero². It could be argued that not all of them went completely to zero, but as a practical matter the devaluations were so harsh that the currency was abandoned by the population as a medium of exchange—effectively making it worthless.

The average fiat monetary system has lasted roughly 35 years, which ironically, is seldom if ever pointed out in academia. Is it just coincidence that an economic event (hyperinflation³) came about at nearly the same time that fiat money came into existence? Hyperinflationary episodes have occurred more than 50 times in the 20th century, compared to just one time throughout the rest of history, with that being in pre-revolutionary France when it decided to adopt the Assignat.

Various economists have answered the question regarding why silver and gold, as opposed to other commodities, are considered money. A. J. Turgot⁴, Richard Cantillon, Carl Menger, and others have pointed out that it is because these two precious metals have the most marketability or salability.

Aristotle named the attributes that the most ideal (commodity) money should have. It should be scarce, durable, malleable, divisible, homogenous, and transportable (having a high value to weight ratio). These virtues almost perfectly describe silver and

¹Fiat money simply means a currency that derives its value from government regulation or law, such as paper money.

²Voltaire.

³Most commonly defined as beginning in the month in which monetary inflation has caused consumer prices to increase greater than 50%.

⁴"Turgot argues further that, while almost all commodities may more or less conveniently serve as money, gold and silver have been chosen as the 'universal money' because they possess in the greatest degree the various physical properties which peculiarly suit them to that role." –Joseph Salerno, *Money, Sound and Unsound*

gold. We will briefly summarize just how intertwined silver and money have been throughout history, which is necessary to understand because silver has two demand drivers. The first is the industrial demand component, which we break down between fabrication (jewelry, photography, and silverware) and that for industrial uses (electronics, batteries, brazing alloys and solders, photovoltaic, etc.). The second is investment or monetary demand.

Investment demand hit a record in 2013 and looks to have done the same again in 2014. Investment demand should continue to set new records nearly every year until the current fiat money house of cards implodes or a worldwide monetary reset occurs, as soon as this decade. This is for several reasons, including but not limited to:

- Investment demand in both China and India continued at an extremely robust pace. India in particular really drove investment demand in 2014. As of the end of December 2014, net silver imports stood at a whopping 7.063 tons for the year, an increase of well over 15% year-on-year⁵. This puts India on track to import 27%-28% of world mine production (assuming total world mine production increased to 842m oz. in 2014).
- American Silver Eagle Sales set another record high in 2014, reaching the 2013 threshold with a month left in the year. Remember this is immaterial but gives us insight into what the smart money is doing.
- Others will be discussed in greater detail in Chapter 4.

At some point in the next five years, the price of silver is destined to reach triple-digit prices, or over 6 times greater than the present (~\$17-\$18 in early 2015). With silver, the potential is exceptionally strong because of required industrial consumption, which will greatly augment the coming effects of significantly higher investment or monetary demand. This means the price of silver should rise sharply as total demand far outstrips supply. But its value shouldn't be looked at in currency terms, rather in terms relative to other commodities.

To fully grasp the concept of the origination of money, it is necessary to start at the beginning, answering such questions as: *What is money? Why is money necessary? What is its function? Who chooses what constitutes money? And lastly, what makes a chosen monetary system sound or unsound?*

Money is a medium of exchange and a unit in which prices are expressed⁶ but it is not, as many people think, a measure of value. This is because exchange is an action that expresses preferences; that is, he who acquires a good or service values it more highly than what he pays for it. Market participants use cardinal numbers to measure such things like space, time, weight, and mass. This begs the question as to what technical or economic need there could ever be for a measure of value, given its

⁵Koos Jansen, *India Silver Import 6,789t YTD*, Bullionstar.com, December 19, 2014.

⁶Anne Robert Jacques Turgot, *Reflections on the Formation and the Distribution of Riches*, p. 36, London: Macmillan & Co. 1770 (reprinted 1898).

subjective nature. If one were to assume money could measure value, meaning the price paid for a good represents that good's cardinal value, this should then be applicable to money if it were a measure of value. And this brings up the question, "What is the value of this measure of value?" This is essentially a circular argument as it would be absurd to say the value of a unit of money is 5. Value then must be expressed in ordinal terms⁷.

The Origin of Money

Starting from the most basic monetary system, a barter economy is when a person engages in direct exchange with another individual, lacking a standard unit of account. This problem is solved by the development and usage of indirect exchange. Naturally problems arise when exchanging one good for another in a barter economy, because the market is constantly changing due to an individual's ever-changing subjective values of needs and wants. Furthermore, exchanges only take place if each party in the proposed transaction has a direct, personal need for the good he/she receives in exchange and views the good he/she receives in exchange as more valuable than what they have to give away for it.

Every economic act involves a comparison of values⁸, not a measurement. When a society develops and expands, a standard unit of account arises and a monetary unit is needed to facilitate exchange, which after all is the primary basis of our economic life. In other words, direct exchange becomes extremely difficult and inefficient, bringing about indirect exchange—an extension of the division of labor⁹. Market participants preferring more goods over less eventually identify the higher productivity of a system of division of labor. This knowledge and self-interest therefore explain the emergence of a commodity money in a free society (not confined to a single commodity and therefore could be said as bringing about commodity monies)¹⁰.

This is not to say that money doesn't measure objective prices or ratios of exchange¹¹. It is important to realize that it is impossible to measure subjective values, but not objective values. We note this because it is widely accepted that the government must have monopoly control of the (mint) printing press or equivalent (electronic system) in order to provide a unit of account by which to measure goods and services. The problem with this, however, is that when giving government monopoly control, monetary catastrophe is always the end result. This is precisely why a true free market money, absent of government interference, has proven necessary throughout recorded history:

"It is impossible to grasp the meaning of the idea of sound money if one does not realize that it was devised as an instrument for the protection of civil liberties against

⁷Hans Herman Hoppe, *The Economics and Ethics of Private Property*, pp. 179-180.

⁸Ludwig von Mises, *Theory of Money and Credit*, p. 38, Yale University Press, 1953.

⁹Jörg Guido Hülsmann, *The Ethics of Money Production*, p. 22, Ludwig von Mises Institute, 2008.

¹⁰See in particular Carl Menger, *Principles of Economics*, 1981, in Hans Herman Hoppe, *The Economics and Ethics of Private Property*, p. 176.

¹¹Ludwig von Mises, *Theory of Money and Credit*, p. 49, Yale University Press, 1953.

despotic inroads on the part of governments. Ideologically it belongs in the same class with political constitutions and bills of rights¹²."

Some could argue the question of whether fiat money can arise as a natural outcome of human interaction between self-interested parties or if it is possible to introduce it without violating justice or causing economic inefficiency. The answer, as we've discussed up to this point, is a resounding "no"; it cannot. As we will discuss in this and the following chapter, fiat money allows fractional reserve banking to be possible, which can easily be refuted on ethical grounds.

What makes a monetary system sound? A clear and concise answer is, "any monetary system that a government is not involved with." A sound monetary system inherently rises in a market economy, with checks and balances that prevent monetary inflation. A more detailed answer, which history has shown us time and time again, is that the market would choose a commodity money, notably gold and/or silver. This shouldn't be confused with the monetary system of the U.S. during the period of 1913 to 1971 as this wasn't a true gold standard.

One of the great things with the presence of a 100%-backed commodity standard is that such a standard is synonymous with freedom. The inherent nature of government is to usurp as much power as it can in an economy, or said differently, attempt to control all or as many as possible factors of production, the most important being monopoly control of the currency, communication, and transportation.

The irony here is that government and central banks are the cause of the boom-bust cycle (business cycle) by distorting interest rates, which relay important information to every individual, instead of letting the market determine interest rates. A common fallacy is that modern day business cycles (1913-present) are commonplace and, as Alan Greenspan would say, are "Economic Phenomena."

Interest rates relay such information as to what part of the structure of production capital will be most efficiently allocated. It reflects society's savings/investment-to-consumption preference and acts as a signaling mechanism to capitalists as to whether they should invest capital to maximize accounting profits. Artificially manipulating interest rates downward, combined with fractional reserve banking (see: Chapter 7), induces an artificial economic boom in the first place, which is followed by a natural bust, or cleansing, of the imbalances from the economy created by the artificial boom.

Looking at Turgot's contribution to monetary theory—more specifically, how exactly the market adapts and has adapted silver and gold as the ideal money—the following quote from Turgot is ingenious, with an obviously deep understanding on the origins of money:

"Individual actions generate a spontaneous and self-reinforcing market process whereby silver and gold evolve into money¹³. Market participants, realizing this, will become increasingly eager to acquire and hold stocks of these metals for the purpose of

¹²*Ibid.*, p. 454.

¹³Anne-Robert-Jacques Turgot, *Reflections on the Formation and the Distribution of Riches*, p. 38.

being used in exchange at a later date. This demand for silver and gold and the corresponding market values of each will be augmented by this development, further enhancing their usefulness as a medium of exchange. Once this is accomplished and universally becomes the preferred medium of exchange and traded against every other good in the market, the metal weights become the standard unit in which all market values or prices are expressed¹⁴."

Sadly, in order to have a natural money circulate as the predominate medium of exchange, private property rights must at all times be acknowledged and protected! To the degree that private property rights aren't acknowledged, the money that comes into use is forced money, a clear violation of private property rights. Forced money therefore has one feature—it owes its existence to violations of private property rights¹⁵, which violates free market principles. In reality (as opposed to theoretically), there is nothing in the middle of capitalism and socialism, thus if government has monopoly control of the mint, it is anything but free market capitalism, and sadly, this is what exists in every major economy today.

Just how pronounced has silver's monetary role has been throughout history? The very word for silver is *money* in many languages. In Italian, Spanish, and French, the words can be interchanged. In Hebrew, the word *kesep* means both silver and money. Even in Early-American slang, the word *silver* was often used to signify payment: "Grease my palm with silver!" To be precise, among more than 250 million people in over 50 countries, the word for money is identical to the word for silver. Many Europeans refer to both silver and money as "argent," while Spanish-speaking people the world over use "plata" to mean silver, money, or both.

Another greatly misunderstood concept is that of deflation and how mainstream media and market pundits exhibit such great disdain for it. It could be because central bankers do the same, but history has shown that economic forecasts by members of the Federal Reserve Open Market Committee are generally inaccurate and always inaccurate for medium to long periods of time. These forecasts aren't just wrong, but, at times, so significantly inaccurate as to be almost comedic when looked back upon.

Is Deflation Really a Bad Thing?

Why would market pundits and "expert" economists appearing on the popular financial channels be so scared of the deflationary boogeyman? The truth is that deflation is commonplace in a market economy and is synonymous with liberty. A perfect example is in the U.S. during the 19th century (as a whole, given various periods of high inflation or deflation due to vast inflows/outflows of specie). Over the period 1800-1895, deflation caused the purchasing power of the dollar to roughly double. This amounts to an average annual rate of deflation just over 0.72%. This of course refers to the modern-day definition of deflation that is a drop in consumer prices.

¹⁴Ibid, p. 38.

¹⁵Jörg Guido Hülsmann, *Ethics of Money Production*, p. 27, Ludwig von Mises Institute, 2008.

While there were periods of very high inflation, overall, prices declined. If we just think about the repercussions of our monetary units increasing in purchasing power, it is a benefit to society at large and is proof that efficiencies (production improvements) are being made. In fact, declining prices generally indicate an increase in the standard of living. Ironically, high inflation isn't considered to be any better than deflation, but a little inflation is deemed to be ideal. If society as a whole becomes more productive, it makes sense that consumer prices will fall as increased productive capacity allows for goods and services to be produced more efficiently, thereby increasing the standard of living for society as a whole. This is a natural and healthy effect in a market economy. This is not to say severe deflation is a good thing except when following a Fed-induced economic boom, as it speeds up the cleansing of the imbalances or misallocated capital from the system, thereby making the economy and in particular the productive structure readjust in the timeliest manner¹⁶.

Every economic principle, if valid, should be the most beneficial when taken to the extreme. Clearly this is not the case, as academia has not dealt with economic theory this manner. Instead it determines an arbitrary inflation rate as "ideal." This begs the question, why is a little inflation good? The naïve economist would say it boosts economic activity and is necessary as the population grows, preventing a shortage of money.

The truth is there is no optimum quantity of money other than that determined by the market. If we look back on the ideal commodity money, one characteristic that is key is that of divisibility. If prices fall 1%-5% every decade, the simple answer is to make smaller denominations of money every so often, referring back to Aristotle's characteristics of the ideal money in that of divisibility.

Academia and "expert" economists preach that a small rate of inflation is ideal so that the central banks can inflate the supply of money and credit with ease, whereas in a sound monetary system, this is much more difficult. In particular, governments with large debt burdens "hate" deflation the most because those that have accumulated a significant debt burden (governments) want it to be easy to pay back debt. Inflation makes it easy for governments to pay back in "cheaper" real terms, but deflation makes it very difficult.

This is because the purchasing power of each monetary unit will be lower (significantly for longer duration securities) than at the time of its issuance. It is for this reason as well as countless others, such as cost-of-living adjustments to social security, that government overwhelmingly prefers and in fact fully embraces inflation. The U.S. Federal Government and Federal Reserve do their best to convince the public that deflation is a dangerous circumstance precisely because of the nation's vast debt burdens (the U.S. being the largest debtor nation in the history of the world), including gross federal debt but just as importantly its \$60T+ in unfunded liabilities (which will be discussed in further detail in Chapter 8).

¹⁶Jörg Guido Hülsmann, *Deflation and Liberty*, pp. 13-14.

Adam Smith was wrong when he said paper money could serve as a medium of exchange just as well as natural monies but with much lower production costs. In fact, it is precisely because of this fact that precious metals serve as the most ideal monies. Silver and gold are costly to produce, eliminating any possibility of replication at will by governments or other individuals. In other words, because of their relative scarcity, there is a built-in natural insurance against depreciating the purchasing power of money¹⁷.

There are two popular myths regarding money, the first of which is money being neutral, and the second of which is stable prices. When new money (metal or otherwise) begins to circulate in an economy, there are wealth redistribution effects—meaning those who receive the new money first, benefit, relative to those who receive it later. These effects are greatly minimized when a market-generated money is in place, as the cost of mining is a factor, reducing the flow of new money into the economy.

Thinking that prices should remain stable is illogical. If a certain commodity such as gasoline is in high demand in an economy, the price would rise, but this is not inflation because under the assumption of a fixed money supply, the price of another good must necessarily fall. Over longer periods of time, there will be slight monetary inflation (to the degree that a metallic money can be mined) with concurrent consumer price deflation. This is because increases in productivity and lengthening of the production structure would more than offset rather negligible monetary inflation.

Silver's Use as Money: a Brief History

While it is unclear who the first people to mine silver were, we can trace silver mining and silver used as money back to 3400 BC in Mesopotamia (although some argue that silver mining began before that, in Hungary, closer to 4000 BC). This was also beginning of writing, and correspondingly, journal entries. These entries were for local trade, which had various standards as a unit of account, such as silver and animals, amongst several other goods, illustrating that even 5,000 years ago, the market chose silver as a medium of exchange. While this money system was very primitive and remained so until coinage came about, it didn't stop other societies from using silver as a monetary unit nor did it impede the advancement of the monetary system.

The first instance of bimetallism, actually the use of three metals, began 1,400 years later (2000 BC) in Egypt. The monetary system evolved and had definitive weights for trade purposes as well as exchange rates against one another. The unit of weight (deben) and monetary unit (sha) were the following:

- A deben of gold was worth 12 shas
- A deben of silver was worth 6 shas
- A deben of lead was worth 3 shas
- 1 deben = 7.5 grams of gold, 15 grams of silver, or 75 grams bronze/lead

¹⁷Adolph Wagner, Die russische Papierwahrung-eine volkswirtschaftlich und finazpolitische Studie nebst Vorschlagen zur Herstellung der Valuta, pp. 45-46.

Amazingly, by today's standards the gold-to-silver ratio was 2:1, followed by a gold-to-silver ratio of 5:3 (1.66:1). It is important to note that the gold-to-silver ratio was so low because trade with other territories was very limited until the Phoenicians (those from modern-day Palestine, parts of Syria, and Lebanon) started to advance and dominate trade in the Mediterranean. Trade became a comparative advantage for the Phoenicians as they created trading posts and began to explore outside their region. The advancement of the monetary system continued, and in 1500 BC, monetary units of the same metal had varying weights. The Hittites reverted to a monometallic standard, using silver as a medium of exchange. It is also important to point out that this was prior to the advent of coinage, which came 800 years later.

- Shekel ~ 8.41 grams of silver
- Stater ~ 16.82 grams of silver
- Mina ~ 500 grams of silver, or 15.5 ounces
- Talent ~ 30 kilograms, or 933 ounces

The Lydian System

An immense advancement in the monetary system was made by the Lydians, who were the first to utilize coinage (silver and gold) for monetary purposes, which first occurred around 700 BC. The Lydians were the first to not only coin money but to also develop the first system of coins, initially making them from gold and silver alloys. They were also the first to establish retail shops. Some argue it was King Alyattes who developed and then first coined the stater, while others argue it was King Gyges who first circulated this coinage¹⁸.



These small oval nuggets circulated throughout the East. As you can see, the oval nuggets were not 100% homogenous, so technically could not be called coinage.

King Gyges ruled from 690 to 657 BC, while King Alyattes ruled from 610 to 550 BC. Historians tend to link King Gyges with the first coinage and system of coins. These coins were actually not silver or gold, but rather an alloy of the two. Later, the son of King Gyges, King Croesus, greatly improved the smelting technique of his predecessor via separating silver and gold from the electrum. While either King Alyattes or King Gyges came up with the first coinage and system of coins, King Croesus originated the first bimetallic system of coins, with an exchange rate between the two, as follows:

¹⁸Cyrille Jubert, *Silver throughout History*, p. 20.

- 1 gold stater = 8.17 grams of gold
- 1 silver stater = 10.89 grams of silver
- 1 gold stater = 10 silver staters
- $(8.17) \times (1) = (10.89) \times (10)$ OR
- Gold-to-silver ratio = $(108.90/8.17) = 13.33$



The Lydian system spread like wildfire through the East, then to Greece and all of Mediterranean Europe. Greece was able to develop its economy thanks to silver-lead veins running south of the city. The first mines exploited easily-obtained surface veins, which is silver closest to the earth's surface.

This was the start of the first large-scale mining industry, which included more advanced ore refining. As a result, Athens sported a strong currency and advanced trade, but it then made one fatal flaw—initiating the Peloponnesian War.

Athens society and political philosophy were more capitalistic than its neighboring city, Sparta. Sparta had almost the exact opposite philosophy, one that would be regarded as Socialist in today's world. Athens instigated the war in 429 BC and to their detriment did not foresee it lasting 27 years. This brings us to the first instance of government manipulating/debasing its currency. In 407 BC, the government debased its currency by adding copper to the coinage, therefore causing a face value that was less than the value of its metal content. Another devaluation occurred just two years later in 405 BC. During the biblical times of Jesus, notably the betrayal by Judas, we know Judas was paid 30 silver "pieces" for this betrayal. It is unclear as to what weight of silver these 30 pieces equated.

"Then one of the twelve, who was named Judas Iscariot, went to the chief priests and said, 'What will you give me, if I give him up to you?' And the price was fixed at thirty bits of silver." Matthew 26:14-15

There is evidence of two different monetary units (denier and shekel) as well as varying weights of both during this time. At the creation of the denier, it initially weighed 4.51 grams of silver but the silver coin created in 212 BC became devalued and by 140

BC, weighed 3.96 grams of silver. But although the evidence that Judas was paid in "shekels" is much stronger, therein lies another problem. At the time, there were different variants of shekels, "biblical shekels," "Tyrian shekels," and the basic "shekel."

- 30 denier/denarii x 3.96 grams or .127 troy ounces = 3.82 ounces
- 30 biblical shekels x 6 grams, or .193 troy ounces = almost 5.79 ounces
- 30 shekels x 11 grams, or .35 troy ounces = 330 grams or 10.61 ounces
- 30 Tyrian shekels x 14 grams, or .45 troy ounces = 420 grams or **13.50 ounces**

The Tyrian shekel was used over the time period in Jerusalem and they were specifically referenced in the book of Matthew. Due to the fact that a shekel of a specific weight was mentioned (Tyrians) in the book of Matthew (21:12) and it was the medium of exchange used to pay temple tax in Jerusalem, Judas' payment for betraying Jesus was most likely approximately 13.50 ounces of silver.

However, this is a bit confusing, given that the biblical shekel was 6 grams, which naturally sounds as if that were the shekel referred to in the Bible. When the first shekel was coined in 600 BC it weighed almost 11 grams (10.89). Further complicating the issue is the denier/denarii, which is also referenced in the Gospel of John as well Luke (10:25).

The Roman monetary system fell apart when the denier as a weight of silver was reduced as silver coins were recast over and over again with each emperor. Over the period 158 AD to 284 AD, Rome had 20 different emperors, most of whom debased its currency. Starting with Nero in 158-167 AD, the weight of silver in a coin was 2.19 grams. Then in 282-284 AD under Emperor Carus, the weight of coin dropped to 7.47 grams and only included .04 grams of silver. In other words, the silver content in each monetary unit was less than 1/54 of what it was 115 years earlier.

Year	Emperor	Silver Weight in Coin	Depreciation
156-167	Nero	2.19	
167-170	Marcus Aurelius	1.57	-28.31%
191-192	Commode	0.92	-41.40
212-217	Septimius Severus	1.16	26.09%
224-227	Caracalla	0.88	-24.14%
235-238	Maximianus I	0.74	-15.91%
238-244	Gordian	0.61	-17.57%
244-249	Phillip	0.87	42.62%
261-268	Gallian	0.4	-54.02%
268-270	Claude	0.26	-35.00%
282-284	Carus	0.04	-84.62%

19

The Medieval Period

This period primarily involves Charlemagne, who became king of Gaul and Germania in 771, after the death of his brother. Charlemagne went on to expand his empire by defeating the Saxons to the north, followed by Austria and then Northern Italy. Charlemagne decided to replace the previous worthless currency with a new one, a currency strictly minted in silver. The names of the monetary units were nearly the same, the basic unit being called the Roman denarius. This weighed 1.70 grams, with the next monetary unit being the obol, weighing 0.85 grams. A popular unit was the penny, being worth 12 denarii, as well as the pound, worth 240 denarii. This monetary system was on a monometallic standard (silver), partly due to the fact it was the only one relatively plentiful among the Franks. Charlemagne is important in monetary history because his change to monetary policy would be influential throughout Europe for many decades.



This monometallic system lasted for four centuries. In Venice 400 years later, the first "sequins" were minted. Sequins were first called ducats, which weighed 3.60 grams of gold (3.495 grams of fine gold), thereby replacing the monetary system Charlemagne

¹⁹Cyrille Jubert, *Silver Throughout History*, p. 35.

had put in place. Venetian bankers imposed an exchange rate on gold (manipulation) in order to control its inflows.

In 1275, the prevailing gold-to-silver ratio was 8, increasing to 15 just 50 years later. This along with trade with the Mongols and what was essentially a monopoly on gold mines pushed Europe onto a monometallic monetary system, but this time using gold. The gold-to-silver ratio was reduced as the emperor of Mali undertook a journey to Mecca, bringing with him 60,000+ men and more than 10,000 slaves. In every city this journey took them through, they paid generously in gold for the needs of all the journeymen. Due to the influx of gold, Venice reestablished the gold-to-silver ratio, from 15 to 1, to 9 to 1 by 1345.

Florentine bankers were ruined by the gold manipulation of the Venetians. Their fortune prior to the manipulation was primarily in silver and the increase from 8 to 15 per Gresham's Law drove silver out of circulation. This caused 60% of the silver to be driven out of circulation by 1345, and fractional reserve banking (multiple claims on one monetary unit in specie) or lending out more money than it actually held in deposits caused a financial meltdown. This crisis, also known as the "systemic crash of 1345," led to a substantial spike of inflation.

The results were extreme poverty and famine among the masses, the recipe for a wave of epidemics due to the immune system becoming substantially weakened. It was known as the Black Plague. In five years, it wiped out roughly 40% of the total European population. This, along with the Hundred Years' War, resulted in a century of silver shortages and economic stagnation, or in other words, set back economic progress for more than a century.

China: The birthplace of paper money

The first use of pseudo-fiat money was 2,000 years ago by the Chinese Emperor Wu-ti, as he was caught up in a series of wars and needed financing to fund his battles. He tried numerous money substitutes, most of which were very odd, with one of these being deerskin money, which was exactly like it sounds. This money at the time was highly ritualistic. While this use of deerskin money was successful in financing Wu-ti's campaigns, it didn't last very long. To get an idea just how valuable this was in society, a deerskin monetary unit was equivalent to 480 ounces of silver²⁰!

The Tang Dynasty

During the Tang Dynasty (618-906) in China, paper money widely circulated and "religious paper" that corresponded to silver, gold, copper, and silk was not money that circulated in commerce, but was just religious offerings. Copper coins were the primary circulating medium of exchange and for brief intervals of time, silk rolls were used in exchange for medium- to large-sized transactions. Gradually, silver gained preference as

²⁰Yang, *Money and Credit in China*, p. 51.

the common monetary unit among the people. Three types of credit institutions existed, one being a money shop, which was a concept similar to a bank.

By 750, *fei-ch'ien*, or "flying money," illustrated the advancement of the Chinese monetary system. Today it would be considered an instrument used in credit exchange, similar to a credit card transaction. It could be argued that this is comparable to a warehouse receipt used in "classical" deposit banking, as it was a negotiable draft note. It became commonplace to keep metal on deposit somewhere and draw notes against it (known as debiting the metal on account). It is important to note here that this system arose from the market, not government.

By 812, flying money came to an end as government prohibited private *fei-ch'ien* as the fee for using *fei-ch'ien*, similar to credit card fees today (fees were raised from 3% to 10%²¹).

"Chinese histories attribute the origin of ch'ao-pi, or paper money, to the fei-ch'ien 'flying money,' of the Tang period. The 'flying money,' also known as pei-huan, 'credit exchange,' was essentially a draft to transmit funds to distant places; hence it may be considered a credit instrument but not money. This history of paper money and that of other credit instruments, however, is so closely woven together that the 'flying money' forms a logical starting point for our account²²."

Paper money was used in Szechwan in 1011, which was called Chia-Tzu. There were problems from the start as the three most prominent money and credit institutions (pawnshop, co-op loan society, and money shops) had control over issued notes, either shortchanging their customers on deposits or even completely ruining them. It only took 11 years from the start of this first paper money experiment until it collapsed due to a loss in confidence, causing the government to close the private note shops. There were and still are a myriad of contradicting explanations regarding why this system collapsed.

The Song (S'ung) Dynasty

Not too long following the first fiat collapse, the Chinese again experimented with fiat money, with the Song (S'ung) dynasty being the second to issue paper money (1024), which was called Chiao-Tzu. As is typical, the prevailing government began abusing this new concept. The notes in circulation did have an exchange rate against gold, silver, and silk, however, convertibility was prohibited.

Initially, all notes would be redeemed after three years and replaced by new notes at a 3% service charge. This, however, began to be abused as the government stopped this practice and instead just printed more and more notes, inflating the inconvertible fiat paper money. Shen Kuo, the minister of finance, explained to the emperor how the economy prospers with more money in circulation in 1077:

"The Utility of money derives from circulation and loan-making. A village of ten households may have 100,000 coins. If the cash is stored in the household of one individual, even after a century, the sum remains 100,000. If the coins are circulated

²¹Ralph T. Foster, *Fiat Paper Money*, p. 7.

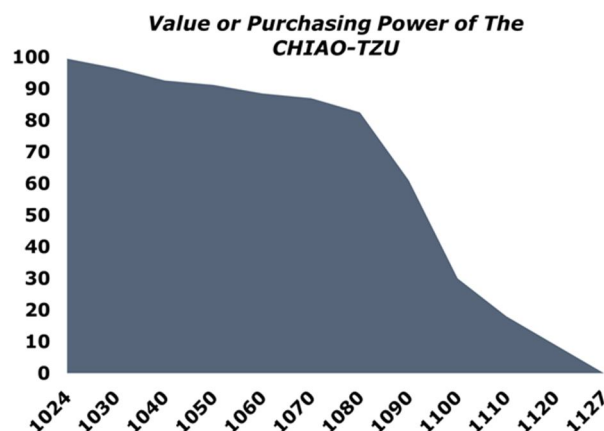
²²Yang, *Money and Credit in China*, p. 51.

through business transactions so that every individual of the ten households can enjoy the utility of the 100,000 coins, then the utility will amount to that of 1,000,000 cash. If circulation continues without stop, the utility of the cash will be beyond enumeration²³."

His logic is astoundingly ridiculous and quite comical. Inflation at that time took a bit longer to be recognized as the S'ung dynasty was cautious at first and only issued small amounts, such that the chiao-tzu held its value for seven decades²⁴. Inflation, nonetheless, became a big problem around 1085-1090. For a time, fiat money and sound money both circulated, but then the government started demanding taxes be paid, at least in part, by inconvertible fiat paper money.

The government also introduced various laws, which essentially forced individuals to use fiat in a plethora of situations. Less than a century later, the inevitable happened and inflation became an issue. The dynasty was fighting the Mongols (the Yuan dynasty) and the increasing cost of fighting the war made inflation very apparent. The S'ung dynasty eventually lost the war early in the 13th century (1217).

From the start in 1106 through 1217, several other fiat systems were tried, but they failed, due to lack of faith from society as a whole.



The Chin Tartars

The Chin Tartars gained control of the Northern China Empire, and the S'ung dynasty continued to reign over the empire, which makes up modern-day Southern China. The Chin brought back paper money in the form of Chiao-ch'ao in 1153. The Chin currency maintained its purchasing power for 40 years because the currency was believed to be fully backed by silver and gold as the Chin emperor proclaimed; however, even while he was saying such things, all the precious metals that backed the currency were either redeemed or sold.

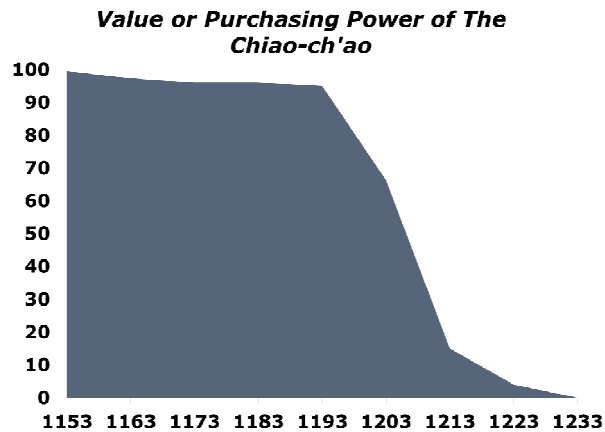
Merchants relied heavily on silver²⁵ to sustain commerce, despite the government trying to do everything in its power to prop up inconvertible fiat paper money by

²³Yang, *Studies in Chinese Institutional History*, p. 69.

²⁴Foster, *Fiat Paper Money*, pp. 12-13.

²⁵Schurmann, *Economic Structure of the Yuan Dynasty*, p. 131.

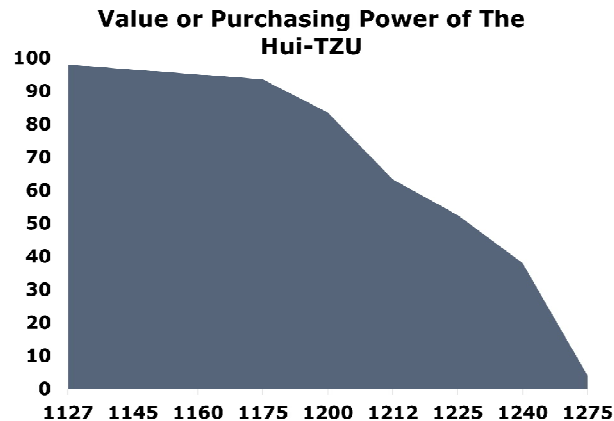
prohibiting the hoarding of metals, imposing a maximum drawdown on silver and gold from the imperial treasury, and eventually inflating the money supply to finance the war.



Coming back to the S'ung dynasty in Southern China, the old S'ung leaders again took charge and introduced paper money after this failed the first time. This time it was in the form of Hui-Tzu, to circulate in everyday commerce. The society reluctantly accepted the new paper money because the collapse of the S'ung currency in the north had been just a few years prior.

Like the paper monies in China before it, the hui-tzu eventually was worth its intrinsic value of zero. For the first 50 years, this paper money was more or less stable—that is, until the government's management of the currency became reckless. This paper money hoax that began in China is in practice in EVERY other government throughout history. More notes came into circulation and the purchasing power declined, followed by an attempt in 1204 (after the currency had lost roughly 20%-22% of its purchasing power) to increase confidence in the monetary unit by calling the newly issued paper note a "gold, silver, and cash communicating medium." Hu Zhiyu criticized the currency, declaring it worthless and stating that only precious metals backing gave paper value . . . in other words, blaming the inconvertibility. He ascribed a great analogy between paper and precious metals as paper money being the child, which is dependent on the mother, precious metals²⁶.

²⁶Ralph T. Foster, *Fiat Paper Money, Fountain of Fortune*, pp. 19, 46, 63.



The Yuan Dynasty

The Yuan dynasty fared better with fiat money relative to the S'ung dynasty, due to the actions of Kublai Khan, who followed the recommendation of Yeh-lü Ch'u-ts'ai, his most prognostic advisor, and instituted a conservative ratio of paper to backing by silver²⁷. Further inspiring confidence in the Chung-t'ung currency, in 1268 the government established the Equitable Ratio of Treasuries. These bureaus served only as a place where convertibility of paper money to silver and gold was processed.

At this point it could be stated that the Chinese had learned from their failures experimenting with paper fiat money. It was clear the government learned something, albeit not in full, from the mistakes made in monetary policy from the recent past, as Minister Liu Hsuan said the following:

"If there was the slightest impediment in the flow of paper money, the authorities would unload silver and accept paper as payment for it. If any loss of popular confidence was feared, then not a cash's worth of the accumulated reserves of silver and gold in the province concerned would be moved elsewhere. At that time, still very little paper money was issued without a reserve to back it, and it was therefore easy to control . . . For seventeen or eighteen years the value of the paper money did not fluctuate²⁸."

Liu accompanied this by also warning of the dangerous risks in inflating the money supply and stressed the necessity of confidence in a currency, which was brought about by precious metal backing and/or convertibility.

The economy improved at first, most notably in agriculture, water irrigation, encouraged silk production, and a vast improvement in monetary affairs, while he made paper money even more widespread but backed the money by specie. This led to more active commerce with the construction of roads, improved canals, and a postal system.

This, however, got the economy into trouble after some time, due to excessive spending on public works programs that persisted after Khan's reign. His successors

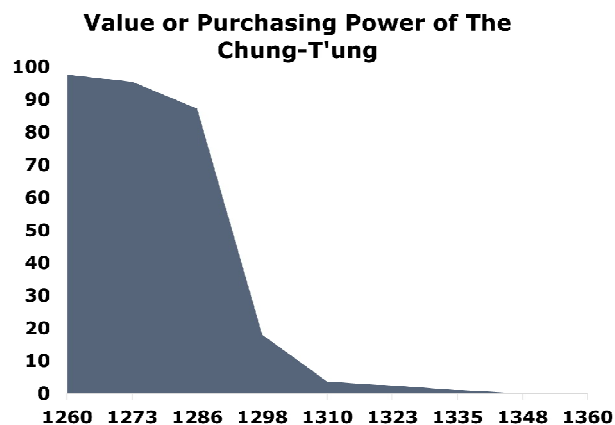
²⁷Schurmann, *Economic Structure of the Yuan Dynasty*, p. 132.

²⁸Elvin, *The Pattern of the Chinese Past*, p. 160.

fared no better and began engaging in currency manipulation, higher taxation, and several other economic shenanigans that were both unpopular and unsuccessful.

Peasant uprisings began to occur after the government tried to exploit them in various manners, and a series of over 30 very harsh winters caused the existing economic problems to worsen. The Yuan currency morphed into a fiat currency due to the vast expenditures on public works programs, and the Mongols undertook numerous unsuccessful military and naval excursions.

It wasn't one single event but rather several that caused the dynasty to go broke. Several incredibly large naval fleets were destroyed by typhoons, and countless other small events put pressure on the system. Price inflation took off due to massive printing of inconvertible and unbacked paper money, causing society at large to accumulate precious metals. Minister Liu Hsuan was very outspoken in his opposition to the printing of paper money.



The transition from the Yuan dynasty to the Ming dynasty was a result of the peasant uprisings combined with the harsh winters and other natural disasters. The Ming dynasty arose from the collapse of the Yuan dynasty caused by wars among the Mongol imperial heirs. In 1368, Zhu Yuanzhang became the emperor; he was a Chinese peasant and former monk turned rebel army leader.

The Ming Dynasty

The Ming dynasty brought back paper money, purportedly because it lacked the wealth to instill a sound monetary unit. The Ming dynasty managed to inflate the money supply to such a degree that over a 75-year period (1375-1450), the purchasing power of the Ta-Ming pao-ch'ao was reduced to 1/1,000 of its original strength by the end of this period, relative to the start.

In 1375, one ounce of silver was worth one string of paper. By 1450, one ounce of silver was worth 1,000 strings of paper²⁹. The Chinese finally had enough and before the 16th century, silver was far and away the most popular medium of exchange. By the end

²⁹Yang, *Money and Credit in China*, pp. 67-68.

of the Ming dynasty, the people rejected all attempts by the government to bring back paper money.

Silver Fever in Asia

Lastly, the Manchu dynasty (1645-1911) flourished as it became even more liberal (in the classical sense) than the West, with much more freedom from state interference³⁰. Silver ingots overwhelmingly dominated exchange in both domestic and world trade as well as in everyday use in commerce. It could be stated that China had “silver fever” during this time as well, accounting for a whopping 25% of world population. It is important to note that during the first experiments with a “pseudo-fiat” monetary system, the Chinese had eventually realized that such a monetary system would not work and would inevitably fail. In this sense, economic knowledge has not only been lost, but has actually regressed!

At this point in history, the Europeans realized the Chinese civilization was advanced relative to theirs, and had little desire for most European goods; however, the Europeans desired Chinese products, most notably, silk. Gold had no real monetary value in China, so a significant amount of trade with the Chinese was done using silver as the primary monetary unit. Silver became much more highly valued in the Eastern world (China and Japan) and, because of the combined populations, had an uncanny ability to absorb the metal. From the 15th through the 17th centuries, the gold-to-silver ratio in China averaged 6-6.5:1 and roughly the same in Japan. Starting in the 17th century, the gold-to-silver ratio began to climb in the Eastern world. By the mid-17th century, the gold-to-silver ratio had increased to 13-14:1.

It has been said the value of silver in real terms peaked over the period 1450-1489 as the Hundred Years’ War came to an end. Since silver was in short supply during this period, the government once again resorted to debasing its currency. This backfired, driving individuals to hoard silver, naturally exacerbating the shortage.

The Renaissance and Discovery of the Americas

This period was marked by several innovations, notably in navigational instruments (compasses, maps, etc.) and in mining. In 1451, new methods were discovered for the extraction of silver (increasing the recovery rates) by adding mercury, salt, and copper sulfate. Furthermore, new hydraulic processes were implemented to “de-water” underground mines.

These two occurrences allowed for increased extraction of silver from both copper and silver ore. Mining became a more viable industry, which attracted many financiers to invest in both mining and refining. This increased investment and superior mining methods soon resolved the silver shortage issue.

This brings us to a major currency crisis in England known as “The Great Debasement,” as Henry VIII debased the English coinage by first re-smelting the coins

³⁰Goldstone, *Revolution and Rebellion in the Early Modern World*, p. 16, citing Myers, *Customary Law, Markets, and Resource Transactions in Late Imperial China*.

so they contained less and less silver. The market soon realized that this was a 75% depreciation. Thus, as a consequence, rampant inflation occurred in short order. The British currency quickly reversed course when Elizabeth the 1st took the throne and named her financial advisor, Sir Thomas Gresham. This is where the fairly popular term "Gresham's Law" originated among free market economists. It can be explained in different ways, but broadly speaking, it means "bad money drives out good." In those days, it meant that if two currencies are in circulation, the undervalued one will be hoarded/exported and driven out of circulation while the other will be used in everyday transactions. Seigniorage, the right to coin money, was considered a source of income; thus, newly minted coins were overvalued relative to their weight in silver. Each new minting of a given metal resulted in inflation or confirmed Gresham's Law and was driven out of circulation.

We then move to the discovery of "the Americas," in particular, the West Indies and the Caribbean, as Christopher Columbus and the conquistadors were looking for a new route to India. Initially, only gold was shipped backed to Spain from South America. It wasn't until more than five decades later that silver mines were discovered, bringing with them, unprecedented wealth.

The first major discovery was made in modern-day Bolivia, part of Peru at the time. The Potosi Mines were discovered in 1545, being the first large silver mines discovered in the "New World." These mines were in the Andes Mountains and contained very pure and high-grade silver ore. During the first 20 years of mining at Potosi, 60 tons were produced, followed by an average annual production of 240 tons per year for the next 115 years³¹. This amounted to 170,000,000 oz. of silver over the life of the Potosi Mines.

Production after 1680 saw a sharp drop off, because once the extremely high-grade surface veins were fully exploited, grade and prevalence declined at depth. Thus we can conclude these were epithermal deposits, although this knowledge wasn't known at the time, so it naturally was surprising to the miners. During the period of mining at Potosi, other smaller scale deposits were discovered both in Peru and Bolivia. However, the next big mines would be found in Mexico.

The silver mines in Mexico were discovered and exploited relatively soon after that in Bolivia, and by 1650, silver production in Mexico exceeded that of Peru and Bolivia combined. Prior to the significant innovation in silver mining, exploration, extraction, recoveries, and refining developed during the 20th century, Mexico's peak production came in 1780, totaling 22,000,000 oz. Today, Mexico produces roughly 120,000,000 oz. This too will see a significant increase a decade from now, as explained in Chapter 3.

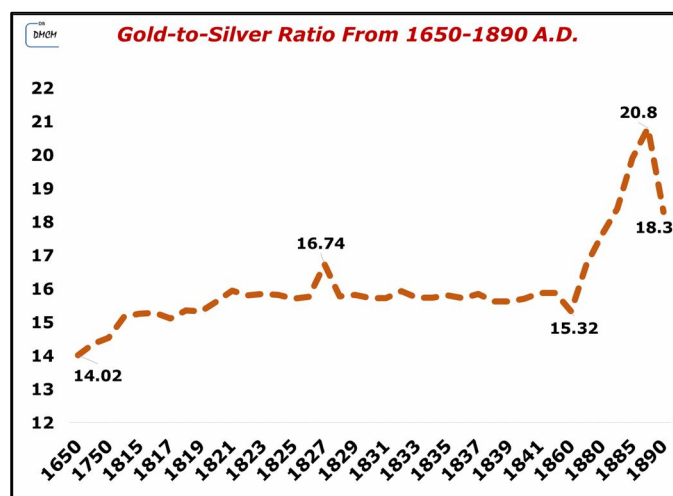
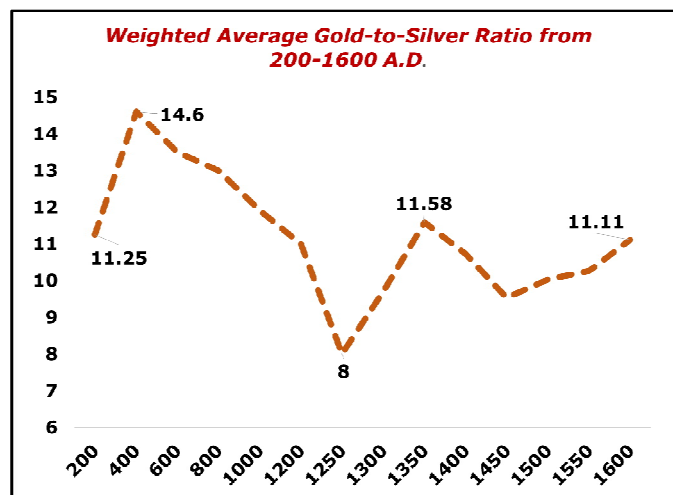
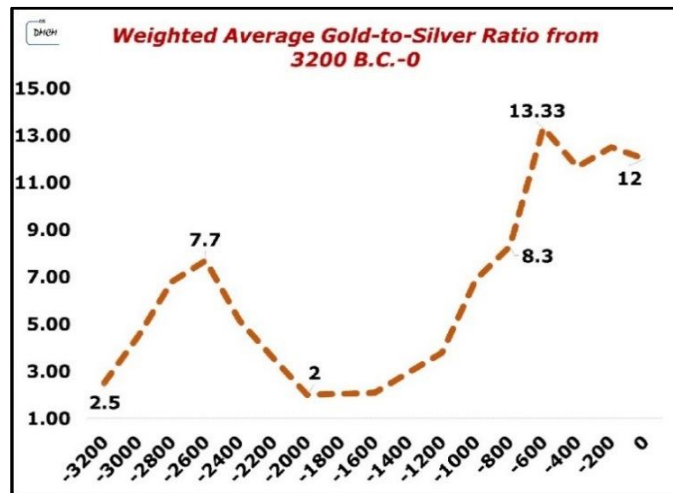
This took place during the reign of Charles V, who, along with his successors, received the "Royal Fifth," or 20%, of all the gold and silver extracted. Added to this was the seigniorage tax for producing money. Naturally, these taxes became too burdensome

³¹Cyrille Jubert, *Silver Throughout History*, p. 80.

and many evaded them by smuggling, shipping, and selling metal to Asia, among other things.

The “Royal Fifth” was changed to the “Royal Tenth” after the Spanish realized what was actually happening. Over time and around the world, the price of silver fell, due to the vast increases in supply from the Americas. This can be seen through the increase in the gold-to-silver ratio, depicted in the chart below. For example, in England, wages increased to 4.1 grams from 3.4 grams over the period 1600-1650 from 1550-1599. Each 50-year period, the same thing happened through 1800. Wages increased to 5.6 grams, 7.0 grams, and then to 8.3 grams by 1800.

GSR Over History	GSR
Menes, 3200 B.C.	2.5
Egypt, 2700 B.C.	9
Mesopotamia, 2700 B.C.	6
Egypt, 2000 B.C.	2
Egypt, 1000 B.C.	10
King Croseus, Lydia, 550 B.C.	13.33
Persia under Darius	13
Plato, 445 B.C.	12
Xenophon	11.66
Menander 341 B.C.	10
Greece, 333 B.C.	15
Greece, 300 B.C.	10
Rome, 207 B.C.	14.5
Rome, 189 B.C.	10
Rome, Julius Ceasar 40 B.C.	7.5
Rome, Claudius	12.5
Constantine The Great	10.5
Theodosian Code	14.4
Medieval England	11.1
Medieval Italy, 1275-1300	8
Medieval Italy, 1301-1325	15
Medieval Italy, 1326-1345	9
Spain, 1497, Edict of Medina	10.07
China: 1400-1600	6.7
Japan: 1400-1550	4.8
Japan: 1550-1650	9.6
France: 1500-1650	13.9
Germany, 1500	10.05
1600-1620	12.1
1700-1720	15.1
1800-1840	15.3
1850 Japan	5



The Mississippi Bubble—A Look at Early Experiments with Paper Money in the Western World

John Law was behind the first widespread use of fiat money, defined at the time as inconvertible paper money or paper money backed by the nation's land. But in reality

it was backed by nothing except an empty promise. Law, who obviously lacked an understanding of the basics of monetary theory, thought increasing the supply of money and credit would boost trade and increase employment and therefore production. Law was of the mindset that the hard-money tradition was entirely incorrect in terms of efficiency and soundness. Anne Robert Jacques Turgot would destroy Law on an intellectual level years later, because of Law's theory of money—that is, money just being a government creation, having no intrinsic value as a metal. The sole function was to be a medium of exchange and anything but a store of value. The following is from Turgot and is mentioned above but important to understand and is just one of many criticisms relating to Law:

"Thus, then we come to the constitution of gold and silver as money and universal money, and that without any arbitrary convention among men, without the intervention of any law, but only by the nature of things. They are not, as people imagine, signs of value; they have a value themselves. If they are capable of being the measure and pledge of other values, they have this property in common with all other articles that have a value in commerce. They differ only because being at once divisible, more unalterable, and easier to transport than the other commodities, it is more convenient to employ them to measure and represent the values³²."

Our contention is that John Law lacked the ability to differentiate cause and effect. He went so far as to assure both England and France that an increased supply of money and credit wouldn't cause any ill effects, such as consumer price inflation. In simpler terms, his thinking was so circular that he believed monetary inflation didn't equate to price inflation³³.

Another criticism of Law's monetary theory is that inflating the money supply would lead to an outflow of gold and silver, per Gresham's Law, equating to a negative balance of trade. Furthering our contention of bordering on lunacy is Law's response to this criticism; he declares that increasing the money supply expands employment and therefore output, increasing exports and leading to a positive balance of trade with gold and silver flowing into the country. All strong economic principles can and should be brought to extremes, and reinforcing the action has the same reaction. In this case, constantly increasing the supply of money and credit should lead to a nation quickly becoming the dominant economy of the world and far and away the wealthiest. Furthermore, Law equated low interest rates with prosperity. However, once again he illustrated his vast lack of economic knowledge by confusing cause with effect.

Holland at the time was on a hard-money standard while also sporting low interest rates. Law took notice of the Dutch prosperity, high savings rate, and higher standards of living, and determined they were a result of low interest rates, when in fact this thinking was completely backwards. He also dismissed that Dutch prosperity had

³²Anne Robert Jacques Turgot, *Reflections on the Formation and the Distribution of Riches*, p.39.

³³Inflation, truly defined as an unnecessary increase in the supply of money and credit, whereas the definition used today is most commonly defined as a general increase in consumer goods. The latter is actually a symptom of inflation.

resulted from high production and export, which in turn brought about an influx of silver and gold coinage. Law looked at the latter as being the cause, not the effect, of prosperity.

Law was soon appointed as the head of France's central bank, after an outright failure instituting his policies in England. Prior to this, Law headed the Banque Generale in 1716, which had a monopoly on bank notes that could be redeemed in silver. Of course, this quickly ended and he also became the head of the Mississippi Company and director general of French Finances. Notes issued by the Mississippi Company were said to be backed by undeveloped land in North America, hence the "Mississippi Company." Law's new bank was solely responsible for the first modern boom-bust episode known as the "Mississippi Bubble."

The supply of money and credit ballooned quickly, followed by rising consumer and commodity prices (which tend to lag inflation for a brief period) as well as a remarkable and abnormal increase in the stock market. This was followed by a "bust," or inflationary depression, in 1720. Richard Cantillon³⁴, Law's partner and skeptic in the Mississippi Company, was widely considered the founder of modern economics in his book, *Essay on Economic Theory* (American translation). Cantillon was a brilliant man, realizing beforehand what John Law was going to do and the results of his actions. He knew the theory of money just as well as Turgot did (and in fact Turgot was influenced by Cantillon's book), illustrated by the following quote:

*"Gold & Silver were highly valued before they were used as money. They hold many advantages such as durability, divisibility, transportability, and homogeneity. These are the reasons which led gold and silver to be chosen as money, not 'fancy' or common consent"*³⁵.

It was during the Mississippi Bubble that the term "millionaire" was coined. Naturally, Richard Cantillon exploited the fact he knew a boom would occur followed by a corresponding bust. He rode the stock market up and exited early, lending out his money to various individuals with an inflation premium. When these loans were repatriated they included an effective interest rate of up to 55%.

It may be worth noting that many in the mainstream consider Adam Smith the father of economics; however, if you read Richard Cantillon's book, *Essay of Economics in General*, and then read Adam Smith's *Wealth of Nations*, it is very apparent that Adam Smith took quite a bit from Cantillon. Several decades earlier, Cantillon had first developed the main ideas that Smith presented in *Wealth of Nations*. In short, Richard Cantillon was the founding father of free market economics, although very few realize this.

³⁴Cantillon strongly voiced his opposition to the enacted policies but realized he could be more effective trying to limit the damage instead of being ousted from monetary affairs altogether.

³⁵Richard Cantillon, *Essay on Economic Theory*, p. 103

Chapter 2: A Monetary History of Silver in America

The U.S. Constitution: Notable Sections and Articles

Article 1

Section 10: No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; **emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts;** pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts, or grant any Title of Nobility.

Section 8: Provides **Congress** with the right to coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures;

Section 8: To provide for the Punishment of counterfeiting the Securities and current Coin of the United States.

Have the Federal and State Governments been in violation of the Federal Constitution since the signing of the document? Beginning with Article I, section 10, it states: no STATE shall enter into any Treaty.....coin Money, emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payments of Debts. Thus the several states at the founding were restricted but did this wording leave some room for the Federal Government to manipulate the meaning?

In order for anything but gold and silver to serve as the only mediums of exchange would Article 1, Section 10, need to be amended? This question has been debated any questioned in court by many and the result has been an upholding of the "legal tender law."

Certainly within the confines of the U.S. gold and silver coins minted by the U.S. Treasury are silver valid in payment. However, there is a problem with this since the amount of "dollars" (read Federal Reserve Notes) varies on a daily basis whereas the coins themselves are only accepted officially at stamped value in "official" transactions. For example to buy a roll of stamps at a U.S. post office with a silver eagle (one troy ounce 0.999 fine silver) it would be accepted at the stamped value of "One Dollar" when in fact the market price could be near \$20 Federal Reserve Notes.

To think about this even more deeply the current minted silver coin is exactly one troy ounce, whereas the 1792 coinage act defines a weight of silver as a dollar which is 371.25 grains and is closer to 3/4 troy ounce. Simply stated the modern department of the Treasury clearly ignored or did not even know this simple fact.

We can then move on to Article 1, Section 8 of the Constitution which provides Congress the right to “coin Money”, not print money. You cannot coin paper! The Federal Constitution provided Congress with the right to coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures. This power was never granted to a Central Bank.

For a full discussion of the above matter let us suggest reading Pieces of Eight by Dr. Edwin Viera on what the legalities of the monetary system of the U.S. is compared to what the foundational agreements stated.

Bimetallism and Gresham's Law

Bimetallism, while not even known by many who advocate a commodity-backed monetary system, is the most ideal monetary system. (Some could argue trimetallism). If we look back in history, bimetallism has a track record of one failure after the next; however, every instance of this, including that used in the U.S. early in its infancy, implemented a bimetallic standard **incorrectly**, as it were as if Gresham's Law was understood by no one. In fact, the problem throughout history was **fixing** a ratio between silver and gold.

Each time this fixed ratio was applied it had to be assumed the market was static, but markets are incredibly dynamic. Thus this implies that the gold-to-silver ratio is ever-changing. It can then be deduced that a bimetallic standard on a fixed ratio could never work for long periods of time and inevitably would cause Gresham's Law to come into effect. Monetary history bears this out as the undervalued monetary unit would flow out to other countries or be hoarded by individuals, while the overvalued monetary unit would circulate in the economy. The U.S. was unable to maintain a bimetallic standard precisely because the government fixed silver and gold to one another.

Why a bimetallic standard, not a monometallic standard? As we've seen throughout the past 5,000 years, the market has chosen this standard more often than a monometallic standard. The instances of a monometallic standard have always been fiat based or made legal tender by the government.

It is outside the scope of this book, but having a monometallic standard that is a gold standard with the banks in control of that one metal, history bears out that the system eventually morphs into a paper-backed “gold” system and eventually into a completely unbacked currency.

Bimetallism also provides a larger monetary unit (gold) or paper redeemable in specie and a smaller monetary unit (silver) or paper redeemable in specie. (Copper could be added in a trimetallic system). The former would be used primarily in large purchases and world trade while the latter would be used in everyday commerce.

While a monometallic standard would provide for a sound monetary system (assuming no fractional reserve banking), a bimetallic standard puts some tighter checks and balances on the monetary system. In the case of a monetary system that government involves itself with, it could inflate notes redeemable for specie; per

Gresham's Law, one metal would be driven out of circulation and this would be noticed by the public. The logical deduction can be made that an outflow of specie which causes the gold-to-silver ratio to become detached from the world market ratio must always be a result of government intervention.

This is because the effects of inflation cause all commodity prices to rise, but not in lockstep with one another. There are several albeit other negligible checks/balances that bimetallism would provide under various scenarios (a worldwide or multi-countrywide sound monetary system versus a single-country sound monetary system). And although minor, they are nonetheless superior, precisely because the market has often chosen a bimetallic standard only to witness the banking establishment move on to a gold-only standard in favor of gold and leaving the (public) silver owners losing purchasing power due to the banks' pronouncement.

Bimetallism, assuming no government intervention in the monetary system, would be implemented by first defining a "Dollar" as a specific weight of silver or gold, not both. The metal not defined as a weight per "Dollar" would then freely-float against the other metal, thereby establishing a parallel standard. This would allow both metals to continuously circulate without having to worry about Gresham's Law driving the undervalued money from circulation. The ability for one metal to freely-float against another would cause the ratio of one metal against another to remain aligned with the world market ratio.

Silver and Gold in the United States (Revolutionary War-Present Day)

In the Colonial era, as the economy grew, silver and gold became more common as a monetary unit replacing beaver fur, wampum, rice, and especially tobacco. Massachusetts issued fiat money in 1690 and this was the first time since the Chinese back in the S'ung and Yuan dynasties. (There were instances such as the South Sea Bubble, Mississippi Bubble, and pre-revolutionary France where a fiat paper money was issued but was purportedly backed by real estate.) As the government issued this fiat paper, it made a pledge to ensure paper would be the accepted medium of exchange: it would redeem paper in silver or gold from tax revenues and these issuances of more fiat would end in just a few years. This pledge amounted to be mere words, as in 1691, the Massachusetts government declared it had "fallen far short" of its issuance and proceeded to issue €40,000 (the U.S. was still part of Great Britain) to repay its debt. In 1692, the government made paper money compulsory and the natural disappearance of silver occurred, with concurrent inflation.

To put this into perspective in 1690, before the "orgy" of fiat money printing began, €200,000 redeemable in specie as silver was available in New England but just over two decades later, New England issued €240,000 paper but silver had nearly completely disappeared from circulation.

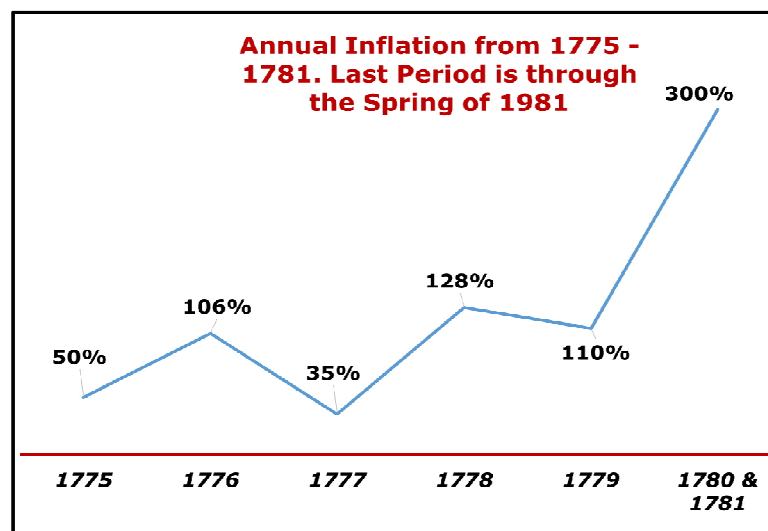
This inflation continued and drove out all the silver from circulation, so the government reacted by stating the new issuances were to be backed by real estate.

Eventually the government had inflated the money supply to such a level it resulted in dramatic consumer price inflation, which propelled the people to begin to turn against paper money.

This experiment of inflating fiat money spread throughout the colonies and resulted in numerous boom-bust periods, which eventually led to Great Britain prohibiting any more paper issuances in 1751. This prohibition was followed by a further extension, and in 1764, the New England colonies resumed payment of silver and retired the inflated money supply.

The Revolutionary War: The First U.S. Fiat Money Collapses in the Continental

Inconvertible fiat paper money funded the Revolutionary War with no pledge of redemption but the promise (broken) of retiring this money in seven years. Prior to the Revolution, the money supply was estimated at \$12,000,000. Even before the first full year (1775), \$6 million had been printed, amounting to a 50% increase in the money supply. This fiat money was known as the "Continental" and was inflated, continuing from 1775 through spring of 1781, as follows:



Note: The Continental did not hyper-inflate, falling short of the widely held definition.

Some historians suggest that Great Britain had a hand in increasing the money supply by counterfeiting the Continental, and although this could be the case, the fact remains that counterfeiting by legal or illegal means results in disaster at some point. With this event fresh in their minds, the founding fathers were well aware that a fiat monetary system wasn't sustainable.

Thomas Jefferson was held in high regard by President Washington and asked Jefferson whether the Constitution allowed congress to create a national bank (central bank). He told Washington "No" in addition to his belief that a central bank would assume powers not granted to it, violating the 10th amendment. It was Jefferson's strong