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An Ideal American Currency: We Can Eliminate Our National Debt

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An Ideal American Currency: We Can Eliminate Our National Debt
and Heal Our Economy by Reforming Our Banking System

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of the requirements of the
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Honors Thesis

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Abstract

A currency, as the word implies, should flow through an economy with optimum fluidity and be maintained in a quantity that facilitates trade and commerce between individuals supplying the labor used to fuel the corresponding economy. By examining the attributes of a currency, by definition and in practice throughout history, I will construct a model for an ideal currency for the U.S. This vision will raise awareness about how a currency should truly function in a democratic republic, while taking into consideration the inherent limitations of the labor supply and our natural resources. It will serve as a template for a new national currency based on the same attributes and goals. In telling the story of how the use of currencies originated and developed into the debt-based monetary systems of today, I hope to cut through mind-numbing economic jargon and make this story interesting and understandable to anyone who uses money (so pretty much everyone), especially those who are normally automatically repulsed by any mention of economic thought and theory.
Chapter 1: A Currency Defined

Since money is such an intimate part of our daily lives, its true purpose and meaning seem to evade any of our careful consideration while we become caught up in its complexities and its applications to our survival and existence. So let’s allow ourselves, for just a little while, to carefully consider the very definition of a currency so that we may use that knowledge to increase our understanding of how a currency should function in an economy.

The word currency is derived from the latin word *currens*, meaning “running or flowing as of a river (adj.)”, or “electricity or energy flowing from the sun” (n.). It is closely related to the word current, meaning “passing in time, belonging to the time actually passing”, (adj.) Currently, (pun intended), the word currency is most often used to describe “circulation as a medium of exchange”. Accordingly, in this highly generalized definition of the word, currency is a synonym for money.¹ (Since Money is defined as something generally accepted as a medium of exchange, the terms “money” and “currency” will be used interchangeably throughout this thesis.) The word currency can also be used to signify the fact of being in common and present use.

From the definition and origin of the word alone, we can draw three conclusions:

1. a currency should flow through the economy with ease,
2. a currency should represent the energy that fuels the economy,
3. and a currency is closely related to time, predominately, present time.

¹ www.merriam-webster.com/dictionary/money
What is a currency’s purpose within an economy? By definition, an economic system consists of production, distribution or trade, and consumption or use of limited goods and services by different agents in a specific geographic location.\textsuperscript{2} It is worth noting that all of these transactions within an economy can only occur when two agents agree to the value or price of the transacted goods or services involved. A currency is the most common expression of this transaction. It communicates the present value of a good or service in terms that both buyer and seller can understand and agree upon, and perhaps more importantly, it communicates any future value that the agents involved in the transaction may obtain as a result of the agreement. Therefore, it could be said that a currency also functions as a language of trade and commerce.

Economics is rooted in what is known as the “economic problem”. That is, those within an economy have unlimited needs and wants, and they must attempt to match them with scarce, limited resources. Resources, or factors of production, are generally placed into three categories: labor, capital, and land. Labor is human effort, both physical and mental, that is usually measured by allocating time. Labor markets differ from other product markets in many ways. Most of these differences arise from the fact that labor is undeniably in-separable from the laborer! Laborers largely sell their own labor services in exchange for income, so they have control over the amount of their labor services that they make available, and they often care about the ways in which their labor is used. Labor is perishable by natural law, since it perishes with the passage of time and ends in conjunction with the end of the laborers life, which is unpredictable. Labor is regarded as the active function of production because without labor, the other factors of production cannot produce anything!

\textsuperscript{2} http://dictionary.babylon.com/economy/
Capital often serves as complement to labor and includes everything else used to facilitate the production of goods and services, such as factories, machines, tools, infrastructure, and even human knowledge and skill, known as human capital. Although most forms of capital do not perish according to natural law like labor does, the value of capital does depreciate over time. Machines break down or become obsolete…. Bridges need to be widened. …Skills become outdated. …A currency is used to assign a value to capital and then used to depreciate that value over its useful life.

Finally, land refers not only to tracts of ground, but all other gifts of nature, like bodies of water, oil reserves, minerals, etc…“Natural resources not only generate wealth but also contribute raw materials to create other types of wealth such as buildings, bridges, machinery and equipment.”3 Since businesses invest capital and employ people to produce, process, market, transport and export natural resource, natural resource wealth plays an important role in generating employment (labor) and production of capital. Natural resources sustain human life, but as global population increases, it will require deliberate human activity to sustain them. A currency typically places a value on natural resources as they are extracted.

All three types of resources are limited by natural law, in that they only exist, at the present time, in a fixed quantity. A currency is often used to place a value on these limited resources so that they can be used in production. Therefore, the quantity of a currency at any given time should somehow correspond to the amount of resources in the economy at that time; including labor, capital and land. Our next task would then be to balance this amount with our needs and prioritize our wants within the limits of our resources. We will revisit this idea in a later chapter.

As previously stated, the word currency is closely related to time, since currency also means “the quality or state of being current: occurring in or existing at the present time.”\(^4\) Incidentally, currencies are directly integrated with time because nearly everything you would ever consider purchasing with any currency or even using as a currency takes human time and energy to produce. Therefore, a currency is and also functions as a claim on human labor, human labor that may or may not have already occurred. On the other side of the coin, so to speak, the amazingly complex job specializations that we have today depend on a currency serving as a widely accepted medium of exchange.

Indeed, any medium of exchange serves as an intermediary used in trade to avoid the inconveniences, namely the requirement of a coincidence of wants, of a pure barter system. Within the confines of the barter system, two parties must both, coincidentally, each want something that the other has, at the exact same time. In the first-ever recorded currencies of ancient Sumer and Egypt, metals were used as a form of receipt to represent value stored in the form of commodities, such as grain stored in ancient temples. However, in an era when there really was no safe place to store value, the value of the currency was only as safe as the forces that defended it, and trade could only reach as far as the authority of those forces. This led to the metal itself being used as the store of value.\(^5\)

Any economics textbook will tell us that money should have at least three fundamental characteristics.\(^6\) First and foremost, money should be a store of value. Gold and silver fulfill this role quite well because they are scarce, widely appreciated and used, take a lot of human labor to mine, and since they do not corrode or rust, they do not depreciate in value over time. Any currency that cannot be stored and remain valuable in the long term fails to solve the coincidence of wants

\(^5\) [http://www.reference.com/browse/currency](http://www.reference.com/browse/currency)
problem of the barter system. A “gold standard”, a currency in which the unit of account is based on a fixed quantity of gold, can help the currency remain valuable because it serves as a protection against inflation. The amount of gold in existence, since gold takes a lot of time and labor to mine, cannot be readily increased. However, the downside of a gold standard, is that it does not allow the money supply to be increased as a means to stabilize the economy.

Second, a currency needs to be widely accepted as a medium of exchange. Commodity currencies, based on objects with intrinsic value, are easily accepted as a medium of exchange since their value is obvious. However, most currencies today are fiat currencies, from the latin word fiat, meaning “let it be done.” Fiat money has value and it is widely accepted only because a government decrees it. Almost anything can be (and probably has been) used as a medium of exchange.

The third requirement is that a currency functions as a unit of account, or a measurement of value. This means that money should be easily and uniformly divisible, as well as fungible. Fungible goods or commodities are capable of mutual substitution, such as a barrel of crude oil or shares in a company, where one unit is as good as another. Diamonds, while they function well as a store of value and are widely accepted, fail the requirements of a unit of account since evenly dividing them is difficult and destroys their value, and since they vary greatly in quality, preventing mutual substitution. Metals like gold, silver, and copper are excellent at serving as a unit of account, because their purity can be precisely measured and uniformly divided.

According to some economists, money also has a fourth essential function as a standard of deferred payment, although this function is not as widely designated as the other three. A standard of deferred payment is the accepted way to settle a debt. This is also indicative of money’s relationship to time because in order for money to serve as a standard of deferred payment it must

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retain its value (or store of value) into the future. Instead of money acting as a medium of exchange in the present, it is delaying that exchange until a predetermined time in the future, and it uses the monetary unit of account to state the terms of the debt agreement. Since the standard of deferred payment function of money actually encompasses the first three functions, there is debate about whether it should be listed as a fourth function or not.

There have been many historical disputes with respect to the combination of money’s functions. Some have argued that they need more separation and that a single unit of account is ineffective at handling them all. One of the arguments is that money’s function as a store of value, which requires storing the money instead of spending it, conflicts with its function as a medium of exchange, which requires it to circulate. 8 Quite the opposite, some propose that storing of value and using money as a standard of deferred payment is just a deferral of the exchange, and evidence that money as a medium of exchange can be transported across both space and time.

Chapter 2: Usury: The Borrower is Servant to the Lender

The standard of deferred payment function of a currency involves the repayment of a loan, which is, of course, usually charged at interest. The act of charging interest on loans has been ridiculed and regulated since ancient times when the practice was known as “usury”. In modern times, usury is defined as lending money at an *exorbitant* rate of interest. There are countless rationales for the censure of usury, which at one point or another has been condemned, outlawed, or regulated by all of the world’s major religions and economies.

The first known legal proclamation was chisled into a cuneiform tablet in 2400 B.C. by Enmetena, who ruled over the ancient Sumerian city of Lagash. The purpose of this momentous document was to return the city to “ama-gi”, or freedom, by canceling all debts of the people. The literal translation of ama-gi is “return to the mother.” The return of “amagi” was marked by the return of mothers and daughters, who had been pledged for debts and forfeited to creditors:

“A remission of the obligations
(Ama-gi) of Lagash he instituted
He returned the mother to the child
And returned the child to the mother
And a remission of interest bearing barley loans he instituted”

The tradition of releasing humanity from usury continued into ancient Israel and permeated Judaism and Christianity. The Ancient Hebrew word “andurarum” (translates to liberty, with a root meaning- “to move freely like running water” (human movement)) was often used to describe the

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9 The Bible, Proverbs 22:7, “The rich rule over the poor, and the borrower is slave to the lender.”

10 http://architecturalwatercolors.blogspot.com/2012/05/jubilee-short-history-of-long-tradition.html
release of bondservants who has been enslaved for debt and were allowed to be reunited with their families. Ama-gi- and andurarum were “terms for freedom and order [which] all were based on the idea of freedom from debt and its worst consequences - debt servitude and the loss of one's customary land-tenure rights.”

In the Old Testament of the Bible, the prophet Ezekial includes usury in a list of abominable things, along with rape, murder, robbery, and idolatry. In the books Exodus, Leviticus, and Deuteronomy, Jews are forbidden from lending at interest to one another and discouraged from lending to others: “Thou shalt not lend upon usury to thy brother; usury of money, usury of victuals, usury of anything that is lent upon usury” In the book of Deuteronomy, there is an injunction of a “jubilee year” every 50 years, when all debts were forgiven and slaves, who had been driven to slavery by debt, are freed. In the New Testament, Jesus threw the “money changers” out of the temple in Jerusalem because they were using their monopoly on the supply of the half-shekel coin, which the Jews needed to pay taxes to the temple, to make exorbitant profits.

Usury is gravely forbidden in Islam as well. The Quran 2:275-276 states: "...those you take usury will arise on the Day of Resurrection like someone tormented by Satan's touch. That is because they say 'Trade and usury are the same,' but God has allowed trade and forbidden usury. Whoever, on receiving God's warning, stops taking usury make keep his past gains -- God will be his judge -- but whoever goes back to usury will be an inhabitant of the Fire, therein to remain."

Here are some examples of laws throughout history that were aimed at regulating or eliminating usury:

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12 The Bible, Ezekial 18:13
13 The Bible, Deuteronomy 23:19
As early as 1750 B.C. the Code of Hammurabi was the first known legal system to regulate the interest that could be charged on a loan as a percentage, at 20%, although, “historical records indicate that many loans were made below the legal limit.”

The ancient Greeks began to regulate interest rates between 800-600 B.C.

The Romans adopted the “Twelve Tables” and capped interest at 8 1/3%.

In 88 B.C. the Roman usury rate was raised to 12%.

Aristotle and Plato both believed that usury went against the “natural order” of things. In Book V of Politics, Aristotle insisted that money was barren, since it cannot breed more money.

In 800 A.D. Charlemagne outlawed interest throughout his empire. In 11th century England, the taking of any interest at all was punishable by taking the usurer’s land and chattels.

In Medieval Canon Law, Usury was punishable by ex-communication.

In Medieval Roman Law, usurers were fined four times the amount taken, while robbery was penalized at twice the amount taken.

During the reign of Queen Mary (1553-1558), English Parliament again disallowed the collection of interest.

During the Reign of Queen Elizabeth (1570), interest rates in England were limited to less than 10%. This law lasted until 1854.

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Nearly every nation in the history of the world has done something to eliminate or control the practice of lending. In colonial America, all of the states in the Union adopted usury laws. Most states set the interest limit at 6%. However, deregulation in the early 1900s caused 11 states to eliminate their usury laws, and 9 more states to raise the usury cap to 10-12%. In 1916, the Small Uniform Loan Law allowed “licensed” lenders to charge interest rates of up to 36%, provided they adhered to strict standards of lending outlined in the act. Between 1946 and 1979 all states adopted special loan laws that capped interest rates at the same exorbitant rate of 36%.

Enormous changes in the regulation of usury in the U.S. occurred in the late 1970s and 1980s. In 1978, the Supreme Court ruled that national banks could export the interest rate of their home state to any other state where they did business. Around the same time, South Dakota eliminated its interest rate cap, so credit card companies began to set up operations there and operate nationally with no limitations on what rates they could charge. The Depository Institutions Deregulation and Monetary Control Act of 1980 called for a complete phase-out of interest rate ceilings and was the first of many acts in the 1980s and 1990s that deregulated interest rates and increased deposit insurance protection from $40,000 to $100,000. More recently, the Economic Stabilization Act of 2008 increased deposit insurance to $250,000. The increased protection of bank failures and deregulation of interest rates creates “moral hazard,” because both measures make banks less accountable for their decisions, and thus more likely to fail. As we have recently seen, banks become “too big to fail” and as a last resort, are bailed out with freshly created money that is transferred to the taxpayers in the form of debt.

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19 Marquette vs. First of Omaha, 1978.
Why is usury so bad? In Dante’s *Inferno*, he places usurers on the lowest ledge in the seventh circle of hell, lower than violent murderers, violent suicides, blasphemers and sodomites. Dante asks Virgil to clarify why usury is a sin, and why it is in the category of violent sins against nature and nature’s God. Virgil explains that usury goes against God’s will because a usurer makes money from money (in the form of interest) and not from industry or skill “to earn his way and further mankind” as Genesis stipulates that human beings should. In this manner, usurers go against God’s “art” or his design for the world. In stark contrast, and much closer to contemporary thought, is Benjamin Franklin’s *Advice to a Young Tradesman*, in which he urges: “remember that money is of a prolific and generating nature. Money can beget money, and its offspring can beget more”. However, money does not beget anything. If you use money to purchase farming land or equipment needed to perform a trade, it is not the money or even what is purchased with the money that actually produces goods and services, it is human effort that is responsible for production. In the case of usury, money only “begets more” for the lender in the form of guaranteed interest, but it is still due to the fact that the borrower is putting forth human effort to pay back the loan with interest.

Undeniably, the central problem with usury is that it creates mathematically impossible demands on the money supply, resulting in debt bubbles, that lead to inflation and deflation. These dramatic shifts in the quantity of money invariably lead to the destruction of the economy and horrible suffering by the people within it. As St Thomas of Aquinas, leading theologian of the Catholic church, asserted, putting money out for the generation of more money is an evil unto itself because the formal value of money is the face value. Yet usury allows the face value to fluctuate, and hence the value of money to be reduced, which, St Thomas argued placed an undue burden on money.
Lenders are essentially trying to receive something for nothing, due to the fact that lending money does not involve any input of human effort (aside from drawing up and signing a contract and recording the transaction), and the act of lending itself does not actually produce anything. The borrower is able to take advantage of the possibility of doing something useful with the money; meanwhile, the lender has done nothing except to make the loan and to expect something in return, in the form of interest.

But where does this extra money, that the borrower is expected to pay the interest with, come from? The answer to this question is precisely what has made usury an undesirable practice throughout history. There are two parts to the answer. In some cases, the banks supply the additional money needed to make the interest payments on the loan by making more loans through fractional reserve lending, which will be explored further in the next chapter. It seems that the only way to pay off the loan, since the bank only creates the amount of money for the loan and not the interest, would be for the borrower to borrow even more money, which the bank would also create. While that is the case some of the time, that assumption fails to take into consideration the borrower’s exchange value of labor. If the borrower earns more money, perhaps by taking on a second job in order to pay his or her loan payments, his earnings go into the bank to pay the interest on the loan. Perhaps someone related to the borrower takes a job or works extra hours to help make ends meet. The point is, all interest is eventually paid for with human effort, from the generation of new wealth somewhere, by someone, in the economy, or it may be paid, in the meantime, with new loans that delay that human effort.

But wait, we are getting ahead of ourselves! We missed an opportunity to ask an even more important question at the beginning of this philosophical discussion on usury: Where did the money come from that was being lent by the lender to the borrower in the first place? The
answer is this, and it is even more shocking: In our current monetary system, at least 90% of the time, the banks create this money by just simply making the loan! Of course these loans are made at interest, meaning that the money supply must be expanded again, perpetuating a vicious cycle of exponential growth.

The problem is, increasing the nation’s money supply does not increase the actual wealth produced by the nation, only an increase in income resulting from the labor necessary to produce goods and services can do that. Any difference between growth in the money supply and growth in the economy is absorbed by inflation. This means that even those who lend money want to keep inflation under control. If inflation consumes all of the increase in the money supply, above and beyond any increases in economic growth, they do not make a profit. This results in the formation of yet another vicious cycle: the need for perpetual economic growth to offset the increase in the money supply. While it is commonly believed that our current rate of economic growth is deemed necessary for a healthy economy and to maintain the standard of living that we currently desire, in actuality the growth is only necessary because usury exists to begin with.

Exponential growth is growth that has no limit and consequently produces populations that grow very quickly. Logistic growth is more realistic in life and in nature, in that it does have a limit, and growth approaches this limit in a sigmoidal fashion. In biology, exponential growth is often used as a model for the growth in bacteria and virus cultures and other situations in nature where growth is seemingly fueled by unlimited resources and space. The graph below illustrates the fundamental differences between exponential and logistic growth.

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As we covered in the previous chapter when we examined the definition of a currency and its role in the economy, economics answers the question of how we match LIMITED resources with unlimited needs and wants. If we match our limited population and limited resources with limitless exponential growth in the money supply, we cannot expect the money to function as a medium of exchange. We are essentially matching our money supply with our unlimited needs and wants and ignoring our natural environment. Consequently, usury places an unnecessary burden on a currency, a currency that signifies the hard work of the population and places a value on our most precious gifts, our natural resources.

If we allow our money supply to grow uncontrollably like a virus, it will eventually weaken and kill its own host, our economy. Economic development and growth are meant to provide for the needs of those in the economy and to further mankind as a whole, not to increase profit or power. Usury itself is a form of speculation, or high risk investing, because it relies on constant economic growth, which is never a guarantee. The growth of the economy can slow down, for countless, and totally unpredictable, reasons including but not limited to demographic and environmental changes, changes in supply or demand of goods and services, and interactions with foreign economies. Therefore, economic stability, not economic growth should be the goal of a
currency and related lending practices, and usury makes growth a requirement for the currency to function.

Thomas Edison famously summed up the most general of usury’s immoralities in 1921 when he stood overlooking the water-power developments being made on the Muscle Shoals area of the Tennessee River and said:

“People who will not turn a shovel full of dirt on the project nor contribute a pound of materials will collect more money…than will the people who will supply all the materials and do all the work.”

This idea is not an exaggeration: it highlights the inequality of risk and benefit that lending at interest exemplifies. For example, consider the purchase of a newly constructed home for $150,000. The combined cost of the land, building permits, planning costs, and sales commissions is $50,000 and the cost of labor and materials is $100,000. If the person buying the home puts up a down payment of $25,000, they will need to borrow $125,000. If the mortgage is issued at 7% interest for a 30 year term, the amount of interest paid over the life of the loan is $174,387. In this example, the interest paid to those that lend the money to build the house is $24,387 more than the money paid to those who provided the labor and materials to build it and sell it.

Now it is true that the value of this interest also represents the time-value of money; that the owner of the funds being loaned deserves to be compensated for surrendering the use of his/her capital for 30 years. But that leads to the assumption that the lender owned the funds to be surrendered to begin with. It may lead one to imagine that the lender had earned the capital, saved it, and then graciously decided to lend it out so that a borrower could pay for the construction of a new home. Now imagine that the lender did nothing to earn the money, so it hadn’t been saved. They simply decided to loan it out, created it out of nothing, and recorded the exact amount in their accounting logs with nothing more than a few computer key clicks on a spreadsheet. Of course,

such a practice would be deemed fraudulent, and certainly any amount of interest charged on money that did not really exist to begin with could be deemed exorbitant and usurious.

By now you are probably wondering: How can money be created from nothing? The money supply of any country consists of both a currency (banknotes and coins) and bank money (the balance held in checking and savings accounts). Since bank money makes up the majority of the money supply in most developed nations today, it is owed an equal, if not larger amount of consideration.

To create our currency, Congress passes a law to increase the debt ceiling in order to allow further borrowing. Then the government prints and issues U.S. bonds, that are sold into the market. These bonds can be purchased by individuals, pension funds, foreign countries, virtually anyone who wants to invest in the U.S. government. The large majority of U.S. bonds are purchased by central banks around the world, notably today China and Japan. Since these bonds are purchased with money that already exists, money is not being created quite yet. In order to create new money, the Federal Reserve buys bonds by transferring money in the amount of the bond to the bank holding the bond and taking ownership of the bond. The question is: where does this money come from? The answer is so simple that it can be shocking and difficult to believe or comprehend. The answer is: the money is created from nothing. It is simply recorded as an entry in the Federal Reserve transaction log books and printed up and distributed. It would be the equivalent of making your own checks and writing them out to everyone that you owed money to without even having an account, just a notebook to record the details of the checks written. For an individual or business, this would result in counterfeiting and fraud charges, for the Federal Reserve, currently creating 75 billion per month as part of their Open Market Operations and Quantitative Easing (QE) programs, it is perfectly acceptable and legal.
The majority of our money (about 90%) consists of bank money. This money is created through fractional reserve lending, which allows banks to lend out at least 90% more money than they have in their vaults. For example, if you deposit $100 cash into the bank, the bank puts $10 into its vaults and loans the other $90 to someone else. Then that person puts their $90 back into the bank or pays someone else with it, who then puts it back in the bank. The bank keeps $9 in the vault and loans out the other $81. Then the $81 eventually makes its way back to the bank and the bank keeps $8.10 and loans out the other $72.90. So far, the bank has $27.10 in the vault and $243.90 lent out. This process is allowed to continue until the bank has $100 in the vault and $1000 out in loans. This is a simplified example because obviously the funds don’t necessarily come back to the same exact bank, but eventually, the funds come back to a bank somewhere and the bank only puts a small portion in the vault and lends the rest right back out again.

According to the Quantity Theory of Money, the money supply has a direct, proportional relationship with the price level, and thus the functions of money. Every student of economics today is asked to memorize the formula, MV=PY at some point, where M is the money stock; V is the velocity of money, or turnover rate of money; P is the price level; and Y is real total income of the nation. Although there is much debate on how the quantity of money influences prices, nearly every great economic mind in recent history, including; John Stuart Mill, Irving Fisher, Ludwig von Mises, Karl Marx, John Maynard Keynes; and going back as far as Copernicus and Jean Bodin, acknowledged that there was a relationship.

In order to fully understand this process, let us begin a thorough investigation into the birth of fractional reserve lending. Then the methodology behind how central banks formed will explain how usury evolved into an instrument for the creation of money from nothing.
Chapter 3

How to create money from nothing! The Origin of Fractional Reserve Lending

Although the first recorded use of paper money was in the 7th Century in China, modern day banking practices involving paper money and usury became widespread in 17th century Europe.

An example of the first paper money in Europe, issued by the Stockholms Banco in 1666

Wealthy merchants began to store their precious metals in the private vaults of local goldsmiths, mainly in London and Sweden, who charged a fee for this service. The local goldsmiths would issue a banknote, made payable on demand to the depositor, indicating the quantity and purity of the metal held on their behalf. Eventually the banknotes were made payable to the depositor “or bearer” which allowed them to circulate as a medium of exchange. In time, the goldsmiths started lending out additional banknotes for the precious metals at interest, because they began to realize that only
a small percentage of depositors would redeem their banknotes at the same time. This meant the goldsmiths could lend out much more than they had on reserve in their vaults, keeping only enough to satisfy demands for withdrawals, a revoltingly dishonest practice—because the depositors were paying a fee for the safe-keeping of their precious metals and believed that they were available for withdrawal at any time. This pivotal shift changed the simple promissory note into a mechanism for the expansion of the monetary supply itself, known as fractional reserve lending, and created a new type of money that was based on debt.

The Industrial Revolution began an era of per-capita economic growth in capitalist countries. International trade was increasing and along with it the number of banks and banking services. Significant banking innovations such as security investments, checks, and overdraft protection came about. During this time average income, (and of course GDP accordingly), as well as population began to exhibit unprecedented sustained growth and almost every aspect of daily life was impacted in some way. Before the Industrial Revolution, improvements in Agriculture or Technology consequently led to an increase in population, which accordingly strained food supplies and other natural resources, and limited increases in per capita income. This created a condition known as the Malthusian trap. The Industrial Revolution is credited for ending that cycle. New types of financial activities, like underwriting bonds and foreign loans, performed by new, merchant banks (mostly in London) facilitated this growth in international trade, population, and income. Two immigrant families, Rothschild and Baring, established merchant banking firms in London in the late 18th century and came to dominate world banking in the next century.

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It is understandable that maintaining an appropriate quantity of currency in the economy proved difficult in a volatile economic environment like that of the Industrial Revolution, and it was made even more difficult during times of war, as evidenced by the currency crisis of 1797 when the Bank of England suspended cash payments. Although banks were originally private institutions, by the end of the 18th century, banks were increasingly being regarded as public institutions needed to protect the health of the financial system and to improve public financing of war. For example, the War of the Second Coalition led to the creation of the Banque de France in 1800. The formation of the Bank of England unified political need to raise funds for war and economic need to deal with the fluctuations caused by the emerging banking industry.

The creation of the central bank mechanism shifted the burden to the taxpayer because the government, at the taxpayer’s expense, became the lender of last resort. Power became more centralized because this arrangement effectively granted a monopoly on the creation of money to the bankers, allowing them to create limitless amounts of money, and gave the government the ability to borrow limitless money. It just wasn’t enough for the bankers that they were already creating money by lending out the same money that they were supposed to be protecting; they wanted to be able to create money that didn’t even exist to begin with! Central banks were established in most European countries during the 19th century. By the early 20th century, central banking became ingrained in all major economies worldwide, including the U.S., with the formation of the Bank of North America (1781), The First Bank of the United States (1791), The Second Bank of the United States (1816), and the Federal Reserve Act in 1913.

The creation of central banks as a means to stabilize the booms and busts caused by fractional banking activities, merely shifts the risk and cost of these activities to the taxpayer, and exacerbates the actual source of the problem: fluctuations in the quantity of the currency. Fractional
reserve banking originated in lending money that did not exist. Then the creation of central banking allowed governments to adopt the practice of borrowing money that did not exist and allowed banks to create money for lending that did not exist. It is common sense. Charging interest on money that does not exist is excessive and usurious. The result is always the same: unbridled expansion and inflation of the money supply followed by a contraction of credit and period of deflation, the booms and busts of our modern monetary system.
Chapter IV: U.S. Monetary History

Throughout History, central banks have had their greatest success in stealing the wealth of the middle and lower classes of society and transferring that wealth to the richest members of society, creating what is known as a plutocracy, or ruling by the rich.

It is a remarkable fact that the United States had its first central bank even before the constitution was drafted. The Bank of North America was chartered by the Continental Congress in 1781 and began operations the following year. Robert Morris, the mind behind the organization and charter of the Bank, was a member of Congress and superintendent of public finances. He was a leader of a group of politicians and merchants who supported a powerful centralized government and wanted high taxes to support a large army and navy. Morris had profited greatly from war contracts during the Revolution and was widely known at the time as the financial wizard of Congress. He modeled the Bank of North America closely after the Bank of England. Following the practice of fractional reserve lending, the Bank was allowed to issue paper notes in excess of actual deposits. The Bank was made the official depository for federal funds and made a 1.2 million dollar loan to the government to fund the Revolutionary War, which was still in progress. Since no other bank notes were allowed to circulate under the charter, and since the notes were accepted at face value for all federal and state taxes, the notes began to circulate as a medium of exchange.  

Unfortunately the Bank of North America was riddled with fraud from the very start. The charter stated that private investors would each provide $400,000 for the initial subscription. When Morris was unable to raise the required amount, he embezzled gold that had been lent to the United States from France and had it deposited into the Bank. He then used this gold as a fractional

reserve base to lend the rest of the money that was needed to himself and his other associates who were also becoming “investors” in the bank. Less than two years later, the first experiment with a central bank in the United States ended when “the market’s lack of confidence in the inflated notes led to their depreciation outside the Bank’s home base in Philadelphia.” \(^{26}\) Its charter was not renewed and the Bank did not survive beyond the end of the Revolution. Morris’ political power diminished and he quickly shifted the bank from a central bank to a commercial bank chartered by the state of Pennsylvania.

Following the termination of the Bank of North America and the Constitutional Convention “closing the door on paper money”, the United States enjoyed a period of economic growth and prosperity. That is until, 1790, when Alexander Hamilton, then Secretary of the Treasury, submitted a proposal to Congress to charter the nation’s next central bank, The First Bank of the United States. Hamilton had been a staunch supporter of a sound currency during the Constitutional Convention, but having served as an aide to Robert Morris, he became a leader of the Federalist movement and began a heated political debate that would consume Congress for decades. On one side, the Federalists argued that debt was a good thing, if kept under control, and the power to create a central bank was implied by the Constitution since more money was needed in circulation to keep up with expanding commerce. The Anti-Federalists, later called the Republicans, were aligned with the ideas of Thomas Jefferson. Jefferson pointed out that the Constitution did not grant Congress the power to create a bank, meaning that such power was reserved to the states or the people. Jefferson believed that allowing banks to create money could only lead to national ruin: “A

private central bank issuing the public currency is a greater menace to the liberties of the people than a standing army.” 27 Jefferson also warned: “We must not let our rulers load us with perpetual debt”

Hamilton’s view on debt was this;” A national debt, if it is not excessive, will be to us a national blessing.” 28 He also claimed “no society could succeed which did not unite the interest and credit of rich individuals with those of the state.” 29 This was the view that prevailed after intense debate, and Congress granted a twenty year charter to the Bank of the United States in 1791. It was modeled after the Bank of England and was an exact replica of the Bank of North America, with Thomas Willing, serving as President just as he had served as president of the nation’s first central bank. It is interesting to note here that Thomas Willing had voted against the Declaration of Independence as a member of the Continental Congress years before. Eighty percent of the capital required in the bank’s charter was to come from “private” investors and the other twenty percent was to be provided by the Federal government, with the prearranged understanding that the Federal Government would be loaned the exact same amount right back. This “loan” was then used to make up for a lack of funds by the private investors. When the bank began operations it did so with only nine percent of the funds required by the charter, which amounted to approximately $675,000. 30 The Federal Government took its 2 Million dollar investment and converted that into 8.2 Million borrowed over five years. The freshly created millions were pushed through the economy through government spending programs, once again creating an imbalance between the money supply and the supply of goods and services and causing inflation to rise by 72% over the same five year period. It was this federal debt that caused Thomas Jefferson to exclaim:

29 Temin, Peter. *The Jacksonian Economy* p. 28.
“I wish it were possible to obtain a single amendment to our Constitution. I would be willing to depend on that alone for the reduction of the administration of our government to the general principle of the Constitution, I mean an additional article, taking from the federal government their power of borrowing.”31

The Bank of the United States did have some good consequences. Since the bank's charter required it to maintain some gold and silver as a base for fractional reserve lending, it kept the money supply from being expanded to a point of total loss of purchasing power. It was during this period that “wildcat banks”, named for their locations in remote areas of their country, began to flourish. Since The Bank of the United States was able to place restraints upon the practices of all banks and also acted as a lender of last resort, it did prevent the money supply from growing as fast as it would have otherwise and helped stabilize the monetary system by minimizing bank runs. When the bank’s charter came up for renewal in 1811, it was defeated by a narrow margin. The Jeffersonian democrats had not given up their fight for sound money, and the wildcat banks joined them in the fight, not because they wanted sound money, but because they wanted a monetary system with no restrictions at all. If the free market had been allowed to operate from that point on, competition would have wiped out the most irresponsible banks and restored balance to the system, but the War of 1812 soon began and Congress intervened in the nation’s banking once again to raise funds for the war effort.

The War of 1812 was unpopular with the average citizen, so Congress did not have the option of raising taxes to support it. The government needed the wildcat banks to create more money to fund the war so they allowed them to print bank notes, without backing them up with a percentage of gold or silver, and use the notes to purchase government bonds. The government

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then used the bank notes to purchase materials for the war effort. The states created enough money to raise the national debt from $45 Million to $127 Million, tripling the money supply by 1816. 

Instead of having the courage to let the market clean up the mess caused by the demise of the First Bank of the United States, Congress decided to protect the banks by granting a twenty year charter to a new lender of last resort, the Second Bank of the United States, in 1816. The Second Bank of the United States, which was the nation’s third central bank, promised to continue the tradition of regulating the money supply as The First Bank of the United States had done by not accepting any notes from other banks unless they were redeemable in gold or silver. However, since the First Bank had loosened the rules to raise money for the war and could not return the gesture of backing up their own notes in the same manner, it was not able to maintain the same control over the money supply. A post-war boom was in effect and the state banks were growing in number and inflating the money supply through fractional reserve lending. By 1818, the number of banks had doubled and the Second Bank of the United States was in danger of becoming insolvent and failing to maintain the money supply requirements of its charter. It began a series of enormous contractions in the money supply, in the name of stopping runaway inflation, by tightening the requirements for new loans and calling in as many of the existing loans as possible. “The result of this contraction was a rash of defaults, bankruptcies of business and manufacturers, and a liquidation of unsound investments during the boom.” As the money supply shrunk, the country sank into its first nationwide depression.

The 1820’s brought about a revival in the popularity of the sound money principles of the Jeffersonian Republicans. Martin Van Buren and Andrew Jackson led a new coalition, the Democratic Party, whose main agenda was to abolish the central bank. Jackson was elected

32 http://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt_histo1.htm
33 Rothbard, Mystery, pp. 204-05
president in 1828, and he famously placed his entire political career on the line when he vetoed a measure to renew the banks charter when he was up for reelection in 1832. Not only did Jackson cite the unconstitutionality of the re-charter, he also sought to educate and gain the support of the public by pointing out that the stock of the Bank was owned by the richest members of society and a large portion of the stockholders were foreigners, which was a threat to national security. Jackson was reelected by a large margin and one of his first steps to dismantle the central bank was to remove federal deposits from the bank and place them into private, regional banks. The head of the bank at the time, Nicholas Biddle, responded by contracting credit and calling in loans in order to shrink the money supply, triggering a nationwide panic and depression that he then publically blamed on Jackson’s removal of the deposits. Luckily, the truth about Biddle’s strategy leaked out and the bank was defeated as Jackson’s name was cleared: “The economy was not the victim of Jacksonian politics; Jackson’s policies were the victims of economic fluctuations.”

In the years that followed, numerous monetary reforms were pushed through Congress in an attempt to stabilize the banking system and compel the public to use gold and silver coin for everyday transactions so that bank notes were only used for large transactions and could be more easily controlled. However, people were increasingly using demand deposits, or checkbook money, therefore limits on the use of bank notes were not effective at limiting the creation of new money through fractional reserve lending. Safety funds were created during this time, which required each bank to contribute a small percentage (usually 1-3%) of its capital toward a safety fund. The first safety fund was established in New York in 1829 and was nearly wiped out by the banking crisis of 1837. When the fund was exhausted the solvent banks were forced to cover the deficits of the insolvent ones, creating an incentive for insolvency.

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The Era of “Free Banking” followed, which marked the conversion of banks from corporations to private institutions. However, the rest of the monetary system, which consisted of countless government regulations that blocked the free market remained unchanged, so the “free” banks were no less fraudulent that the chartered banks. All that would have been necessary to truly free the banking system would have been for the states for enforce banking contracts like any other contract, which meant that the executives of any bank that could not redeem its currency in “hard” money, when contractually obligated to do, so would go to prison for fraud. This would create an incentive for banks to refrain from over-issuing their currency, and would make the citizens responsible for being cautious and informed when selecting a bank. The economic chaos of this “free banking” period has been cited as one of the main causes of the civil war.

The civil war ushered in a new experiment in fiat currency circulation, known as the “greenback.” With active war within the States, and congress in need of funds to pay for its expenses, the constitutionality of the matter was overlooked when Congress authorized the Treasury to print $150 million bills of credit in 1862. They were declared legal tender for all private debts (but not legal tender for government duties or taxes). President Lincoln had been a supporter of the banking industry, advocating for Biddle’s Second Bank of the United States and asking Congress to reestablish central banking. Clearly, with the country in a state of emergency, his convictions changed when he enthusiastically supported the issuance of the greenback, which was federal fiat currency, instead of bank fiat currency. He suddenly saw the usefulness in the ability of a government to issue its own debt-free currency. Why should the government pay interest to the banks to create bank fiat currency, when the government can just as easily print federal fiat currency at no interest? In an abstract of Lincoln’s monetary policy that was prepared by the Legislative Reference Service of the Library of Congress it states that Lincoln’s view on the matter was this:
“Government, possessing power to create and issue currency and credit as money and enjoying the right to withdraw currency and credit from circulation by taxation and otherwise, need not and should not borrow capital at interest…The privilege of creating and issuing money is not only the supreme prerogative of the government but it is the government’s greatest creative opportunity.”35

Whatever the reason for the inconsistencies in Lincoln’s actions, it is clear that those in the banking industry were not pleased with the greenbacks that denied them the right to benefit from the government’s debt. The next year, in 1863, Congress passed the National Banking Act, as a plan to raise more money for military expenses by creating a market for government bonds, and then transforming those bonds into circulating money. From that point on, when a bank purchased government bonds, it was able to immediately exchange them for an equal amount of U.S. bank notes, which the government declared legal tender for payment of taxes and duties, but not for private debts. The bank’s net cost for the bonds was nothing, and they were able to collect interest on the bonds and loan out the bank notes at interest at the same time. Naturally, the banks bought up all the government bonds as quickly as they were printed and the problem of how to fund the war was solved! The National Banking Act required banks to keep a percentage (usually around 10%) of their deposits in the form of lawful money, such as gold and silver coin, and also the Greenbacks, which were still in circulation. The banking act made it impossible from that point forward for the federal government to get out of debt, “because to do so meant there would be no bonds to back the national bank notes. To pay off the debt was to destroy the money supply.”36

The period between the National Banking Act charter of the 1860’s and the Enactment of the Federal Reserve system in 1913 was one of tremendous economic volatility. The notion of being able to create posterity by simply creating more money out of nothing prevailed.

The National Banking Act established a system of federally chartered banks which were granted a monopoly in issuing bank notes, which the government agreed to accept as payment in taxes, and the banks were allowed to back ninety percent of the bank notes with government bonds instead of tangible wealth. The currency was repeatedly inflated through more unbridled fractional reserve lending and followed each time by major contractions (deflation) of the money supply, otherwise known as the “panics” of 1873, 1884, 1893, and 1907. Each time, inadequate bank reserves caused banks to suspend payments in gold and silver coin. Congress reacted, not by increasing reserve requirements, but by allowing a decrease! In 1874 legislation was passed that allowed the banks to back their notes entirely with government bonds, which meant that bank notes no longer had any backing at all, not even ten percent. This led the banks to create even more money, causing more inflation that was followed by a contraction of credit. An attempt to control inflation was another portion of the Banking Act of 1874 that allowed holders of Lincoln’s old greenbacks to be redeemed for gold by the Treasury on demand. Historians claim that governmental control of the monetary system was justified in the early 1900s because the booms and busts during his period were a result of free and competitive banking. However, since the banks were granted monopoly power to print bank notes, which the government agreed to accept for the payment of taxes, and since the government subsidized the banks with government bonds, and was doing all that it could to manipulate the money supply, this can hardly be considered a period of free and competitive banking practices.

After the panic of 1907, private banker J.P. Morgan had come to the rescue as a lender of last resort by convincing other New York City bankers to join him in pledging large sums of money to make the system viable. Now congress was under great pressure to find a permanent governmental solution to the reoccurrence of bank runs and widespread panic. In 1908, Nelson W. Aldrich, a republican senator from Rhode Island, proposed the “Aldrich Plan”. The U.S. citizenry
strongly opposed this plan out of fear that it would become a tool of the “money trust”, the same rich and powerful financiers of New York City that had propped up the system after the bank runs. “Central control over financial resources was far advanced by 1910. In the United States, there were two focal points of control: the Morgan Group and the Rockefeller Group…In Europe, the same process had proceeded even further and had coalesced in the Rothschild Group and the Warburg Group.” In the winter of 1910, Senator Aldrich attended a secret meeting in Jekyll Island, GA with the Assistant Secretary of the U.S. Treasury, Abraham Piatt Andrew, and representatives from all of the major banks, from both the U.S. and Europe, in attendance. One of the attendees, Paul Warburg, a representative of the Rothschild bank in England, admitted in his book about the formation of the Federal Reserve eighteen years later: “The results of the meeting were entirely confidential….Senator Aldrich pledged all participants to secrecy.” Three years after this meeting, a plan almost identical to the “Aldrich Plan” resurfaced as the Federal Reserve Act, which was enacted by Congress just a little over 100 years ago, on December 23, 1913. Congress and the public were assured that the Act would decentralize power away from Wall Street; but within a few years of its creation, The Federal Reserve Bank of New York “became the fountainhead” of The Federal Reserve’s twelve regional banks and was headed by Benjamin Strong, former head of J.P. Morgan’s Bankers Trust Co., and one of the original authors of the Federal Reserve Act on Jekyll Island.

Our current central banking system began when the Federal Reserve Act granted the Federal Reserve (the Fed), a federally-sponsored banking cartel, completely separate from the Federal Government, the charter to issue the United States currency by simply printing Federal Reserve Notes and lending them into existence. The stockholders of the Fed were to be held by its member

37 Griffin, G., Edward p.6
40 Lundberg, Americas Sixty Families p.122
banks, with no oversight from the U.S. government or from the public, and this remains the case today.\textsuperscript{41} There is actually nothing federal about the Fed, and they have no actual reserves other than some extravagantly designed pieces of paper. One of the most outspoken critics of the Federal Reserve Act was Rep. Charles A. Lindberg (R-MN) said this after the act was signed into law: “The financial system…has been turned over to…the Federal Reserve Board. That board administers the finance system by authority of a purely profiteering group. The system is private, conducted for the sole purpose of obtaining the greatest possible profits from the use of other people’s money.”\textsuperscript{42}

The Federal Reserve Act was to provide stability for the dollar by becoming the lender of last resort for banks in the event of financial panic. However, during the Great Depression, The Fed failed to halt another disastrous banking collapse in the 1930’s, which resulted in widespread bank failures. Instead of creating money to avoid bank runs as The Fed was chartered and entrusted to do, The Fed shrank the money supply by eight billion dollars, over 1/3 of demand deposits,\textsuperscript{43} failing to protect the integrity of dollar and public confidence in the banking system. Congressman Louis T. McFadden R-PA), former chairman of the House Banking and Currency Committee during the Great Depression stated in 1932: "We have, in this country, one of the most corrupt institutions the world has ever known. I refer to the Federal Reserve Board. This evil institution has impoverished the people of the United States and has practically bankrupted our government. It has done this through the corrupt practices of the moneyed vultures who control it."

Instead of allowing the charter to expire in 1933 as scheduled, President Franklin D. Roosevelt took drastic measures to counter the falling money supply. He signed an executive order\textsuperscript{44}

\textsuperscript{41} "The regional Federal Reserve banks are not government agencies. ...but are independent, privately owned and locally controlled corporations." -- Lewis vs. United States, 680 F. 2d 1239 9th Circuit 1982


\textsuperscript{43} Fisher, Irving. 100% Money. New York: Adelphi, 1936. p.9

\textsuperscript{44} Executive order 6102, 1933.
to confiscate all privately-held gold, stating that the hoarding of gold was stalling economic growth and worsening the depression.

All citizens were to deliver all but a small allowance of their gold to the Federal Reserve in exchange for $20.67 per troy ounce if they were to avoid the penalty of a $10,000 fine and up to 5-10 years imprisonment! After the seizure, the price of gold for international transactions was raised to $35 per ounce, bonds payable in gold were nullified by the Supreme Court, and the resulting
profit was used to stabilize the exchange value of the dollar, “protect the currency system of the U.S. [and to] provide for the better use of the monetary gold stock of the U.S.” The Banking Act of 1935 renewed The Fed’s charter and centralized power from the regional reserve banks to the Federal Reserve Board in Washington, DC. From this point on, the Secretary of the Treasury, who had served as the chairman of the Federal Reserve Board and comptroller of the currency, no longer served with The Fed and the Board meetings were held in a newly constructed building on Constitution Avenue instead of being held at the Treasury Department. “The [Act] changed the titles of the Systems leaders to signify the centralization of authority at the Board of Governors and the reduction in the independence and stature of the twelve Federal Reserve District Banks.”

To end the economic turmoil of the depression and World War II and to provide a foundation for global recovery, a conference was held in Bretton Woods, NH in 1944 with all of the major allied powers attending. Since the U.S. economy represented nearly half of global production, the dollar was made the global reserve currency and all other currencies were given fixed rates of exchange to the dollar, which in turn was redeemable for gold at $35 per ounce. The Bretton Woods system ushered in a period of prosperity and rapid economic recovery as countries agreed to regulate the expansion of their own currencies to maintain the fixed exchange rates. But there was a terrible flaw in the system: Nothing in the Bretton Woods agreement prevented the Fed from expanding the U.S. currency. Because of this flaw the gold backing behind each dollar steadily declined, until there was not enough gold to back all of the dollars; although, this did provide at least some restraint to just how far the currency could be expanded. During the Vietnam War, the U.S. was running budget deficits and flooding the world with dollars. The French became suspicious that the U.S. would not be able to honor its Bretton Woods obligations and began to exchange their surplus dollars for gold.

45 Gold Reserve Act of 1934
greatly reducing the U.S. Treasury's gold stock. President Nixon reacted by “closing the gold window,” in 1971, which impacted the whole world by destroying the foundation of the Bretton Woods gold standard.

Since we have already learned that all currency in the U.S. is created out of debt, what do you suppose happened to U.S. debt levels once the limitations of the gold standard were removed? This is a chart of U.S. federal debt as a percentage of GDP from the 1870s through 2011.

Debt levels began steadily increasing after the termination of the Bretton Woods system in the 1970s and around 1980 the graph makes a sharp turn into the exponential growth oblivion of the last three decades. When our current president took office our national debt was 9.6 trillion, which since then has increased by 7.9 trillion, an 82% increase, to reach our current level of 17.5
trillion!!! Over the past several years we have seen the highest and most rapid accumulation of federal debt in our entire history.

Since all money is loaned into existence, it is no surprise that the growth in the amount of money supply since the gold standard ended, both bank notes and checkbook money (represented best by M2 and M3), exhibits a growth pattern almost identical to the growth in U.S. debt. It’s mind-boggling to observe that it took the U.S. until the early 1970’s, almost 200 years, to generate 1 trillion dollars of money stock. Our last trillion dollars (as measured by M2 money supply) was created in the last 19 months! Currently the Federal Reserve is “tapering” back its Quantitative Easing program to a “mere” 75 billion per month, which creates money to buy “junk” mortgage backed securities We should stop now and ask ourselves? What will it be like to live here in a few years if this exponential growth in the money supply and the national debt continues? How will this end? Hyperinflation? Another devastating debt bubble? Destruction of the Dollar as the world’s reserve currency? A complete currency overhaul?

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47 Usdebtclock.org, accessed 4/1/14
48 Source: Federal Reserve http://www.tradingeconomics.com/united-states/money-supply-m2
As we have seen during our brief journey into the history of fractional reserve lending and centralized banking, the central banking mechanism “unites the interest and credit of rich individuals with those of the state”\textsuperscript{49} just as Alexander Hamilton envisioned that it would when he was an advocate for our second central bank, the Bank of the United States. Each time a central bank was chartered in the U.S., it was funded by the wealthy, and those same wealthy investors also became the stockholders of the bank. Allowing governments to borrow our money into existence through this mechanism makes our government completely dependent on the banking system not only for its funding, but also for the general well-being of the economy.

\textsuperscript{49} (See page 29)
Chapter IV: Constitutional Wisdom

When we observe the monetary chaos around us today— the declining value of the dollar, the collapse of financial institutions, the raising of debt limits, the bailouts….we are forced to ask ourselves: How did we get into this mess? To find out how we got here, we need to know where we started, and a good place to begin is by traveling back in time once more, to the Constitutional Convention of 1787. One of the chief points of issue at the convention was how to establish the nation’s currency. This was a timely topic because all of the colonies had engaged in printing “bills of credit” to finance military costs on numerous occasions, beginning with Massachusetts using its own paper money to finance military raids against the French in 1690. These early colonial experiments in the issue of fiat currencies all ended in the quantity of the notes escalating to the point of being worthless pieces of paper. The latest colonial experiment in the issue of soon-to-be-worthless fiat currency was taking place at the very time of the Constitutional Convention. The monetary unit created to fund the Revolutionary War was known as the “Continental.”

Some examples of Continental currency:

![Continental Currency Examples]


In 1775, continentals were valued at one dollar in gold; but after the supply of Continentals in circulation soared from 12 million to 125 million by 1779, it was worth less than one penny,
leading to the coining of the phrase “Not worth a continental”. Since the inflationary tour was already well under way, they couldn’t help but be reminded of the urgent need for economic stability. Outside the doors of the convention, there were angry mobs threatening the delegates. Many businesses in Philadelphia had gone bankrupt and there was looting in the streets. The delegates to the convention set out to construct a monetary framework in the Constitution that would prevent the disastrous inflationary consequences of printing endless amounts of paper currency.

Our constitution, Article I, Sections 8 and 10 reads as follows:

“Powers granted to Congress…to borrow money... to coin money, regulate the value thereof, and of foreign coin, and to fix the standard of weights and measures.

No state shall…coin money; emit bills of credit; or make anything but gold and silver coin a tender in payment of debts.”

Did the founding fathers intend for Congress to have the power to print paper money from debt? Much of the Constitution was gathered from the Articles of Confederation, which contained the clause “The Legislature of the United States shall have the power to borrow money and emit bills of credit.” In the summer of 1787, there was a lively debate that lasted for several days regarding which of these two powers, if either, should be given to Congress. Because the disdain for paper currency was still so fresh in the minds of the delegates, “It was moved and seconded to strike out the words ‘and emit bills of credit’ and the motion [passed by a margin of four to one]”50 They did not, however, choose to explicitly forbid the issuance of “bills of credit” as they had done for the states, and they did choose to include the power to borrow money. If only they had spent a few more days or weeks to consider the possible ramifications of these choices! As we saw when we

were examining early U.S. banking history, after the Constitution was drafted and the central banking mechanism had a chance to take hold of the economy, the power to borrow money was used to create the same inflationary result as the fiat currencies the delegates were trying to prevent. At any rate, they decided to allow Congress the power to “coin” money, and regulate its value, but did not specify what type of money it should be. In those times “coin” was often used to describe the creation of something, so the phrase “to coin money” did not restrict us to the creation of metallic money. For instance, “In 1720, economist John Law proposed ‘Coining Notes of one Pound’ and otherwise ‘coining paper money’\textsuperscript{51} At that time, the Spanish silver dollar, known as “pieces of eight”, had been the official monetary unit of the states since 1785. The power to fix the standard of units and measures permitted the federal government to continue determining the unit of account for the currency, which was later clarified at 371.25 grains of silver per dollar.

What would the founding fathers of this country think of our currency today? They would be horrified to learn that our monetary policy has become an instrument used to evade the symptoms of budgetary irresponsibility. If the founding fathers had known how detrimental the “borrowing of money” by the federal government would be to “regulating its value” they would not have included it. In fact they would have prohibited it! As we discovered earlier, agreeing to allow government debt was Thomas Jefferson’s biggest Constitutional regret. (see page 30)

There is plenty of evidence demonstrating the founding fathers’ convictions that usury went against the natural order of our world and interfered with freedom.

In February of 1787, George Washington wrote the following in a letter to Henry Knox:

The necessity arising from a want of [currency] is represented as greater than it really is. I contend that it is by the substance, not the shadow of a thing, we are to be benefited. The wisdom of man, in my humble opinion,

cannot at this time devise a plan by which the credit of paper money would be long supported; consequently, depreciation keeps pace with the quantity of the emission, and articles for which it is exchanged rise in a greater ratio than the sinking value of the money. Wherein, then, is the farmer, the planter, the artisan benefited? An evil equally great is the door it immediately opens for speculation, by which the least designing and perhaps most valuable part of the community are preyed upon by the more knowing and crafty speculators.”

In a letter to Thomas Jefferson, George Washington writes:

“Paper money has had the effect in your state that it will ever have, to ruin commerce, oppress the honest, and open the door to every species of fraud and injustice.”

Thomas Jefferson observed how borrowing money at the national level compromises the liberty of the next generation:

“The system of banking, a blot left in all our Constitutions, which, if not covered, will end in their destruction….I sincerely believe that banking institutions are more dangerous than standing armies, and that the principle of spending money to be paid by posterity... is but swindling futurity on a large scale.”

Leading architect of the constitution, James Madison, declared:

“Paper money is unjust. It is unconstitutional, for it affects the rights of property as much as taking away equal value in land.”

Indeed, the system fails to provide a store of value in our currency, which is essential to the valuation of property and property rights.

Furthermore, James Madison frequently referred to those behind a central bank scheme as the “money changers” and strongly criticized their actions. He drew a distinction between private money interests and those who supported the constitution with this statement:

“History records that the money changers have used every form of abuse, intrigue, deceit, and violent means possible to maintain their control over governments by controlling money and its issuance.”

52 Washington to Stone, February 16, 1787. Quoted by Bancroft, pp.231.32
53 Thomas Jefferson, writings.
“The Founders created our Constitution in order to secure each person's Creator endowed rights to life, liberty, and property.”

Being the scholarly gentleman that they were, the founders were well-schooled in the natural law notions of Cicero, Blackstone, Coke, Locke, and the like, and held predominantly Christian values. They realized that our creator-endowed rights must be protected by a code of law which is harmonious with the higher law of the Creator. They were well aware that profiting from money itself and not the fruit of one’s labor, especially when spontaneously created money was involved, went against the natural order of the economy. In the words of Thomas Jefferson: “No one has a natural right to the trade of a money lender, but he who has the money to lend.”

54 Writings of James Madison, v2. p.14
56 Thomas Jefferson, writings. p.79
Chapter VI: The Currency Revolution

Following our examination of how our currencies became what they are today, we can come to this conclusion: our currency is completely based on usury. Our current monetary system and banking practices are history’s most recent manifestation of the truth: that usury goes against the natural order of our world. Our country was founded on natural law principles set forth by those brave individuals who authored our constitution and they would gasp in horror if they could see what has been done to our currency. Under our current monetary system, our government has stolen nearly 18 trillion dollars from future generations and continues to add over 100 million to that total every single day. It is mathematically impossible for this debt to be paid back, since eliminating this debt would eliminate our money supply. In the forward to Irving Fisher’s book *100% Money*, Robert Hemphill, former credit manager of the Federal Reserve in Atlanta, summed up our situation:

“If all the bank loans were paid, no one could have a bank deposit and there would not be a dollar of coin or currency in circulation. This is a staggering thought. We are completely dependent on the commercial banks. Someone has to borrow every dollar we have in circulation, cash, or credit. If the banks create ample synthetic money we are prosperous; if not, we starve. We are absolutely without a permanent money system. When one gets a complete grasp of the picture, the tragic absurdity of our hopeless situation is almost incredible- but there it is.”

It took from the birth of this nation until 1973, nearly 200 years, to generate one trillion dollars of money stock. So for the last 31 years we have been on a 17 trillion dollar spending spree. A spending spree that has created the most amazing standard of living the world has ever known and fueled miraculous technological advances. But this prosperity is not real. Maybe we have been living beyond our means for so long, that we are not sure what real is anymore!

Our modern currencies, based on fractional reserve lending and central banking, rely on unsustainable growth in the money supply and are no more stable or permanent than the interest

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bearing barley loans that Enmetena banned over 3000 years ago. The Fed has no intention on limiting the growth of the money supply, over 90% of which is created through fractional reserve lending by regional and commercial banks. Economist Irving Fisher devised a plan in the 1930’s that would make our money “honest” again by requiring banks to keep 100% reserves on all deposits. Regrettably, Ben Bernake, former Federal Reserve Chairman, confirmed in 2010 at the height of the financial crisis that the Fed wants to eliminate reserve requirements instead of increasing them! “The [Fed] believes it is possible that, ultimately, its operating framework will allow the elimination of minimum reserve requirements, which impose costs and distortions on the banking system.”58

Furthermore, over the past 25 years relationships between growth in the money supply and measures of performance in the money supply, such as GDP and price levels, have broken down to the point that the Fed is no longer setting targets for money supply growth or even reporting M3 money supply levels since “money supply growth does not provide a useful benchmark for the conduct of monetary policy.”59

We are not on this currency roller coaster ride alone. The global nature of our economy has many other countries on a steep upward cliff of exponential debt and money growth right along with us, and many nations have defaulted on debt or are at risk of default in the near future. If the value of the dollar declines, other countries may be forced to devalue their currencies in order to remain competitive. Although the problem of usury has been repeating itself for centuries, the worlds un-backed, debt-based, intertwined currency system is only 43 years old. At this point, the U.S. dollar is only the reserve currency of the world as a matter of convenience. Its framework is well established, and the Feds New York-based FEDWIRE electronic payments system processing between 1-2 trillion transactions per day! Since only the U.S. is able to use its reserve currency status

58 http://www.federalreserve.gov/newsevents/testimony/bernanke20100210a.htm
59 http://www.newyorkfed.org/aboutthefed/fedpoint/fed49.html
to expand its money supply and pay for its trade deficits, it will become increasingly inconvenient for the rest of the world to tie their currencies to ours.

It is no surprise that demand for alternatives to debt based money and banking are on the rise in every part of the world. One example of this resides in the inception of Islamic Banking, which began about three decades ago. In order to be compliant with Islamic religious practices, Islamic Banks conduct profit and loss sharing arrangements that balance risk between borrower and lender instead of charging interest on loans. The value of Islamic banking assets worldwide was 800 billion in 2008 and expected to rise at a rate of 25%, higher than all other sectors of banking worldwide, with total assets of Islamic Banks worldwide currently at 1.2 trillion.

Much of the demand for alternative currencies arises from the fact that our cumbersome, debt-laden currency is soon-to-become obsolete! Cash is already largely obsolete with over 90% of transactions both in the U.S. and abroad occurring with electronic funds. The need for less expensive, more efficient transaction methods is on the rise. In the U.S. the largest growth in the electronic payments industry are those involving money transfer services. Walmart’s recent announcement that it will begin to offer money transfer services similar to those of Western Union and Money Gram will undercut industry price levels by 50% by promising only two fee levels for transfers. Some global brands, like Starbucks are integrating mobile payments with in-store experiences and customer loyalty incentives. New payment technologies based on social media, like Pay with Square, are so efficient they make buying a cup of coffee feel a little like shoplifting. Your name, regular product selections and payment method automatically load onto the “cashier’s”

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60 Kettel, Brian “Islamic Finance in a nutshell” p.2
computer screen the minute you walk in the door with your mobile phone, and you leave the store with your usual cup of coffee without ever even reaching for your wallet.

Although people in the U.S. have been reluctant to adopt mobile payment wallets and electronic money transfers as their primary currency, the mobile and online payment market outside of North America is gigantic! Asia/Pacific’s mobile payments market is expected to overtake Africa to become the largest region by transaction value, reaching $165 billion in the next 2 years. Mobile money transfers made up the majority (71% in 2013) of mobile payment transactions, Users are increasingly using money transfers for small amounts, because the transaction costs are much lower than traditional banking services. For millions of consumers worldwide mobile phones are transformed into portable bank accounts through companies like Vodacom’s “M-Pesa”, the world’s leading mobile money network. M-Pesa allows consumers to add funds to their accounts at local retailers, and then transfer funds to others or pay bills with their cell phones. “It is so successful that two thirds of the Kenyan population, 17.1 million customers, filters 13 billion, more than a quarter of the country’s gross domestic product, through M-Pesa”

However, for a business to operate globally it would have to navigate hundreds of payment systems to reach everyone in the worldwide market. Global retail brands, like Amazon, have payment processing platforms that have evolved in sophistication in order to quickly handle a wide variety of payments, including mobile and online payment methods. However, transactions between smaller businesses or individuals in the global economy are reduced to transfer services like Pay Pal are quite expensive and can take up to 30 days to clear. With increased global communication through social media platforms like Facebook, Pinterest and Twitter, there is a tendency for folks in

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63 Transaction World Magazine October 2013 volume 13 issue 10 p.28
64 Transaction World Magazine September 2013 volume 13 issue 9. p.23
65 Transaction World Magazine October 2013 volume 13 issue 10 p.29
the global market to look for ways to transfer payments directly to one another, without going through a third party like Amazon or PayPal and paying the fees and enduring the long waits for payments to clear associated with them.

Various alternative currencies have been sprouting up all over the globe, not only on a global level but also on national, local and small community levels as well. The term “community currency” can be used synonymously for local, regional, complementary, alternative, and private currencies. Since these terms have numerous meanings to numerous people, have many different designs and serve many purposes beyond those served by most currency systems today, it may be useful to define alternative currencies as they will be used here toward our goal of defining and creating an ideal currency. An alternative currency is any currency that is used as an alternative to the dominant national or multinational currency. If the currency is used or designed to work in combination with the dominant currency, it is called a complementary currency. Most complementary currencies are local currencies because they are limited to a specific area or region. A pure barter system can even be considered an alternative currency, even though only items are traded without the use of any currency whatsoever. One of the most common alternative currencies is gold, for which demand always dramatically increases in times of economic hardship.

Issues often arise around alternative currencies related to paying government taxes. While some currencies are considered tax-exempt, most are considered fully taxable with the tax being payable only in the national currency. However, in order for an alternative currency to be taxed, it has to be recognized as an official currency by the governing authority issuing the tax.

Many alternative currencies attempt to achieve more representation of labor and are based on time. LETS (which stands for Local Exchange Trading System) is a special form of barter that allows participants to trade items for points, with each point representing one hour of human work.
LETS is a locally initiated, democratically organized, not-for-profit community enterprise first originated and run by Michael Linton in Courtenay, British Columbia, Canada and an adjunct to the national currency. It can be difficult for participants to adjust to a time-based currency like LETS because unlike national currencies, that are typically difficult to earn and extremely easy to spend, they are comparatively easy to earn and hard to spend. Each hour of work is valued when both parties in the transaction agree to its point value. LETS is a type of mutual credit that involves openly keeping track of each user's balance, whether it is positive or negative. The resulting effect of a negative balance is similar to a loan, but with no interest. In fact, interest-free loans are one of the main benefits. There is the possibility that someone could run up a negative balance and then leave the system, but since most LETS communities place a cap on negative balances and keep groups small, the community holds people accountable. Time dollars, are also created via mutual credit, and are most popular in retirement communities and community service groups because they support a “favor” economy. Unlike LETS, each time dollar is worth one hour no matter how difficult the job or how qualified the worker is, so it only functions when everyone in the system considers their time and effort to be equal. Another alternative currency, known as ROCS, uses demurrage rates, similar to a negative interest rate, to keep the currency circulating by discounting future cash flow. The main economic advantage of mutual credit systems is that they are self-regulating; the money supply expands and contracts as needed without the need for a central governing authority.

A local currency is a currency that is not backed by the national government, is designed to complement the national currency, and is intended to facilitate trade in a small area. Advocates of a local currency argue that an entire country may not always be an optimum currency area. An example of a local currency is the “Eighth Hour Note” of Ithica, NY “It is money based on sharing,
not scarcity”"66 Local currencies like Ithica Hours, seek to strengthen the local economy by keeping funds in the community, instilling pride in community and building social connections. Joining the network entails a $10 fee, listing your name in the HOURS directory and 4 “HOUR” bills to get you started. The currency has been operating successfully since 1991 with over 900 retailers participating and 100,000 Hours in circulation.

We now have an example of a complementary currency at the national level. It is The Canadian Royal Mint’s, Mint Chip, which is currently in the experimental phase of development.67 The Mint has partnered with social media experts and software developers to create a digital mobile payments currency that is similar to using Canadian cash, by which it is fully backed. 500 volunteer participants have been selected and are currently providing feedback as they use the currency in an R&D pilot program. Mark Brule, the CTO of the Mint, is the head of the initiative and feels that the Mint’s duty is to support trade and commerce, which is moving into the digital arena. The development of Mint Chip marks the first attempt at launching a digital currency by a national government or mint-backed environment.

On the global level we have Bitcoin, which is a digital decentralized, peer-to-peer, crypto-currency. Crypto refers to the fact that Bitcoin technology is based on the cryptography branch of mathematics. Bitcoins have to be “mined” into existence using advanced software programs to solve complex mathematical problems that become increasingly more complex. Other digital currencies like Linden dollars of the Second Life Economy68, QQ Coins in China69, and World of Warcraft Gold Trading70, have gained global traction in the past, but Bitcoin is now officially the largest digital currency on the planet topping out at $12 billion last November and currently valued at around $10

66 http://www.ithacahours.org/
67 www.mintchipchallenge.com
68 Worth $567 million in 2007
69 $900 million in market value-2006
70 The World of Warcraft (WoW) Gold Trading economy was worth 3 billion in 2011- Utopianist April, 2011.
billion. Bitcoin has a high level of fungibility, as bitcoins can be divided up to eight decimal places, but since only a limited number of mathematical problems can be solved within the confines of the Bitcoin system, scarcity is achieved. Growth in Bitcoin supply is listed on a public schedule and will grow to an arbitrarily chosen number of 21 million by the year 2140. Just as a ledger can be used to record transfers of conventional currency, all Bitcoin transfers are recorded in a computer file that acts as a ledger called the block chain. Where a conventional ledger records the transfer of actual dollar bills or notes that exist apart from it, Bitcoins are simply entries in the block chain and do not exist outside of it. Bitcoin fits the bill for individuals wanting to trade globally with one another because it costs practically nothing, and the receiver of Bitcoin can see that it has been sent in seconds, with final irreversible approvable taking place within minutes. Bitcoin uses public-key cryptography, where two cryptographic keys, one public and one private, are generated; but due to the public nature of Bitcoin, linking transactions to individuals or companies is possible even though names are not used in transactions. An article in The Economist argued that Bitcoin is not a real currency because while it does act as a medium of exchange, “the Bitcoin market currently suffers from volatility, limiting the ability of bitcoins to act as a stable store of value.” Hmmm…...That is interesting…. At any rate, a new global digital currency, Litecoin, is on the rise. Litecoin is being introduced as silver to bitcoin’s gold because it is easier to mine, more plentiful in terms of how many total coins can be mined, and it is designed for smaller everyday transactions.

“Technology enthusiasts and venture capitalists are pitching digital currencies as fast and cheap alternatives to traditional financial systems, in which middlemen such as networks, merchant acquirers and banks take a cut. Backers also argue that instruments such as Bitcoin may be of use to

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people and businesses in countries with unstable currencies.” However, many countries are resisting digital currencies, warning that the instruments suffer from volatility, can be exploited for illicit activities, and are vulnerable to theft via hacking.

Alternative currencies and banking methods are all based on the need for currencies to be more “robust”: that is, more efficient, less expensive, more functional to the people actually using them, and less prone to external shocks and government regulation. Just as paper currencies transformed the way business was conducted during the Industrial Revolution, electronic currencies are transforming the way we use and think about money. "In the next 10 years, we'll see more disruption and changes to the banking and financial industry than we've seen in the preceding 100 years”

Like all technologies, alternative currency methods can be used for good or they can be used for bad. How can we harness the technology of the mobile payments industry and combine that with what we know about the functions of a currency, the history of banking, the problem of usury and what our founding fathers had to say about money? Here are just a few ideas…..


Our new ideal American currency will be known as “Vie.”

“Vie”- a French word meaning life, lifetime, existence, useful life, activity, liveliness.

Since our Constitution is based on principles of natural law, our new currency will be based upon life and will seek to coincide with the natural order of the world. To accomplish this, we will employ the art of biomimicry. “Biomimicry…is a design discipline that seeks sustainable solutions by emulating nature’s time tested patterns and strategies.” In microbiology, ATP is a complex nanomachine that is commonly known as the primary energy “currency” of the cell.” ATP, an abbreviation for adenosine triphosphate, is a critically important macromolecule- arguably “second in importance only to DNA.” This complex molecule is critical for all life from the simplest to the most complex. All fuel sources in nature produce ATP, which in turn fuels virtually every activity, of every cell, in every organism on earth. ATP is not a fuel or a store of energy set aside for some

75 http://www.asknature.org/article/view/what_is_biomimicry
future need, it is an energy-coupling agent that is produced by one set of reactions and then almost immediately consumed by another. ATP is formed as it is needed for cellular function: for either transport work; moving substances across cell membranes, mechanical work; supplying the energy needed for muscle contraction, or chemical work; supplying the energy needed to synthesize all of the other types of macromolecules that cells need to exist. “The ATP energy system is quick, highly efficient, produces a rapid turnover of ATP, and can rapidly respond to energy demand changes.”

Even viruses rely on an ATP molecule identical to that used in humans. Through a series of complex chemical reactions, ATP is constantly used by the cells and then recycled. The reason ATP stores energy is because it doesn't remain ATP for long. It quickly turns into something else, ADP, adenosine diphosphate, when the energy is utilized. There must always be an optimum balance between ATP and ADP and the body must be supplied with adequate oxygen to facilitate this process. Since ATP is constantly being used and recycled, complex organisms use an alternative method for storing long term energy. In the human body, long term energy is stored in fat cells.

ATP, the currency of the cell, serves as an optimal model for our ideal currency. Our new currency would be liquid and efficient enough to rapidly respond to energy changes needed to fuel the economy. The quantity of money, represented by ATP, would represent the human effort and the total income of the nation which would always be balanced with our population and natural resources, represented by ADP in our biological model. Growth in the economy, either in population or in production, would necessitate more currency, which could be spent into the economy for the good of society. This currency could be spent for infrastructure projects, education, military spending, cultural and recreation centers, health care research, whatever was most needed by the people, but all spending would be fully disclosed to the public. GDP (Gross Domestic Product) and price levels would once more be a useful tool in determining an adequate currency stock.

Our first order of business in creating our new currency system is to rescind the power given to our government to borrow, granting Mr. Jefferson the “one more amendment” he wished he could attain. Government debt steals wealth and freedom from future generations and borrowing would be unnecessary anyway, since the government would use its “greatest creative opportunity,” as Abraham Lincoln called it, to issue its own debt-free currency. Instead of lending our currency into the system, it would be spent into the system. Lending would only be allowed between private groups and individuals and only on money that actually exists, so it would be a 100% reserve system. Lending would be a contractual agreement between borrower and lender and the interest rate would be adjusted to prevent a buildup of excessive debt, even if that meant adjusting it to 0%!

Since we would no longer be focused on trying to balance government spending with unlimited debt, we would have another amazing, creative opportunity: the freedom to balance our currency with whatever we choose! The quantity of Vie in circulation could then be based on the natural limits of our population and our natural resources, and would most certainly be based at least in part, if not completely, on population and the labor force. Each unit of Vie might be equivalent to one hour of time spent in labor, although nothing would prevent the market from assigning a value of more or less than one hour of Vie to a particular job or task.

The power to “coin”, or create, money and “regulate the value thereof” would be returned to the people, where it properly belongs. An elected Currency Board, the Secretary of the Treasury and representatives from each state, would be responsible for managing the quantity of currency in circulation so that a healthy separation of powers was achieved. A currency board would be created by Congress to analyze the data from the flow of Vie in the economy. This would be done in the interest of the people and would be completely transparent, with all discussions and decisions made

public immediately. The quantity would never be increased for emergencies, not even a war. War should be prepared for and saved for, so that if there was ever an eminent threat, we would be ready. Adding to the amount of Vie in circulation by Congress would only be permissible when the amount in circulation was no longer sufficient to facilitate trade and commerce. Most importantly, there would be a clear, published, intentional, optimal LIMIT to how much currency was in the economy.

Since the quantity and value of Vie would remain very stable, it would function very well as a store of value; but that would not be its’ primary function. The primary function of Vie would be as a medium of exchange. Demurrage could be used to keep units of Vie circulating and prevent the buildup of debt. The people would be free to use other methods, such as precious metals and property ownership to store value, just as our body uses fat to store energy in the long term. Since the quantity of Vie would remain constant except for gradual, subtle increases as needed, property values would remain more stable over time. To encourage the storage of wealth, U.S. citizens would be able to have gold and silver coined by the mint for a small charge representing only the cost of production, or for an additional fee they could exchange gold and silver for coins of equivalent value. Similar legislation was passed as part of the original Coinage Act of 1792 that established our mint and regulated coinage in the U.S. This complementary currency could serve as a backup currency in an emergency or loss of electrical power. Of course, tangible wealth; like gold, silver, or property, could also be purchased with Vie so that citizens could store wealth for themselves or future generations. On the national level, we would store wealth in a similar fashion.

Vie would be a completely digital currency. Vie would use the technology of today’s mobile payments industry to verify the validity of transactions in real time so it would be very efficient and secure. Both a public and private record of transactions would be generated with only the owner of
the funds and the bank processing the transaction being able to access personal accounts. The public record would provide a record of the general use and velocity of money that would be used to ensure that the quantity in circulation was facilitating trade and commerce. Personal Privacy would never be compromised by releasing an individual’s private spending record. Any need that arose to release private financial information for the purpose of tracking fraud or embezzlement would have to go through the same channels that we currently have in place, so probable cause would have to be demonstrated.

It is odd that most people, even though they use money every day, have no idea how it is created. A lot of people automatically assume that our federal government creates our money as it is needed. But we “followed the money” right back to its very creation and came to the realization that all new currency in the U.S. is created out of debt which obligates the public to private banks and makes the public and those in government dependent on the banks for economic stability, which the banks are notorious for not providing. Because of the inefficiencies and lack of fluidity this has caused in our monetary system, there is enormous demand for an alternative. We have seen how technology is changing currency transactions in the global economy by making them more streamlined and internet based. We could use this technology to create a currency that would balance individual privacy with public transparency in order to achieve liberty, and still take into consideration the inherent limitations of our natural environment and our labor force. A currency system can be designed for any objective. Now all we have to do is determine our objectives and demand a new, ideal currency that helps us reach them.
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