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The Nature of Money in Modern Economy –Implications and Consequences

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Abstract. This paper discusses the great importance of the monetary question, and briefly examines some of the dominant erroneous concepts of money and their effects upon societies. It also points and links to the great progress currently being made by researchers in this field, so readers can examine them more fully. It presents very brief summaries of what some of the important new papers do. It also aims at helping instructors in outlining a reading curriculum to assist in a long overdue understanding of money power. Finally, the paper presents a money and banking system proposal which has evolved since the Great Depression of the 1930s, and is now ready for implementation and has even been introduced as potential legislation into the United States Congress.

1. Introduction

Perhaps no subject as important to mankind as the nature of money has been so neglected and misunderstood in both the popular and professional mind, to the great detriment of the intelligent and just operation of societies. The author's intent is to *discuss* the great importance of the monetary question, *briefly examine* some of the dominant erroneous concepts of money and their effects upon societies, and *point and link to* the great progress currently being made by researchers in this field, so readers can examine them more fully.

While this paper can only present very brief summaries of what some of the important new papers do, we hope readers will find it useful in outlining a reading curriculum to assist in a long overdue understanding of the "money power."

Finally, the authors will *describe* a money and banking system proposal they are very familiar with, which has evolved since the Great Depression of the 1930s, and is now ready for implementation and has even been introduced as potential legislation into the United States Congress. A money system which removes many of the problems and injustices that have afflicted societies; and thereby helps set the stage for justice, progress and peace on Earth.

2. Some Background

Mankind can and has lived under various governmental systems from democracy to dictatorship, but the best will be those which are most in harmony with man's nature. Likewise, many things can and have been used as money, from shells, products of agriculture and mining, tools and fiat papers and coins, even debt – but the best is that which is in harmony with the nature of money. It is, therefore, important to understand the nature of money when reforming society's monetary system. As a key building block and measurement tool of economics, understanding the nature of money is also an essential element to foster real progress in economics.

The monetary subject has a long history. Aristotle established what the authors consider the "science of money" in the 4th century BC, when he defined money as an abstract legal power, a fiat of the law, summed up in his phrase, "Money exists not by nature but by law" (Aristotle, 1999, 80). Thus to Aristotle, the essence of money isn't a commodity that comes from a mine or a farm. It is created by "nomos" – which was the law or binding custom; and the Greek name for money was "nomisma." Aristotle makes the supreme distinction between money, which is abstract, and wealth, which is tangible.

Aristotle is the first to state this formalized "science of money." We have not found an earlier statement of it, though we read of a real world example in the Spartan Pelenors, which existed about 4 centuries before Aristotle. This was described by the Delphic priest Plutarch (about 4 centuries after Aristotle) in his work "Parallel Lives", in the comparison of Lycurgus of Sparta, with Numa of Rome, both legendary monetary reformers.

According to Plutarch, Lycurgus, who was of the Spartan Royal household, had travelled widely, visiting India, Spain and Libya. On the Island of Crete, he knew the poet Thales "the lawgiver". When he took control of Sparta he instituted land and monetary reforms.

Plutarch tells us that Lycurgus made it illegal to use gold and silver for money and legislated that a number of elongated iron discs should be money instead. Furthermore, the iron discs were dipped in vinegar while still hot, which made them brittle and useless as iron (Plutarch, 1967). Each disc weighed just over ½ kilo (about a pound) and were called "pelanors" because they were shaped like small cakes (pelanoi). Thus, the Pelanors were a form of "nomisma" – not commodity money. They are referred to by Plato as the "Doric" system of money, about which we know little. Interestingly, Plato agreed with Aristotle on the nature of money, writing how the citizens of his Republic would need "a money token for purposes of exchange" (Plato, 1942, 65).

The history of money systems often shows a pattern of Aristotle's science of money being discovered; used in building the society; corrupted and then lost; and again being rediscovered over time by another culture. Even when various specific commodities were used as money (or to represent money) it was the law that made them so. Yet it's important to understand that it is not just the law which *gives value* to money. *Money has value* because of skilled people, resources, and infrastructure, working together in supportive enough social and legal frameworks, creating values for living. Money is the indispensable lubricant that lets things "run". It is not tangible wealth in itself, but a power to obtain wealth. *Money is an abstract social power based in law* and is an unconditional means of payment (Zarlenga, 2002, 657).

It is the law that determines *what will be money*, by accepting that thing for taxes. That makes the government the acceptor of "last resort" of that thing, if necessary, in payment of taxes. Since there is always a demand for it to be used to pay taxes, it is more easily exchangeable between people in a society, who then don't have to worry about it being accepted from them by someone else. This important monetary concept was clearly set forth in the 1905 publication of George Knapp's *State Theory of Money* book, an important monetary work. On page one he states:

"Money is a creature of the Law" (Knapp, 1924 [1905], 1). Later in the book he wrote:

"The most important achievement of economic civilization, the chartalism [using tokens for money] of the means of payment" (Knapp, 1924 [1905], 92) (description added).

And:

"Our test, that the money is accepted in payments made to the States offices" (Knapp, 1924 [1905], 95).

Knapp then categorized various types of money from commodities, and debt, and various abstract paper monies, in dizzying classification terminology.

3. Importance of the Concept of Money

How a society defines money is a main determinant of *who then controls it.* We define *"control"* as the power to issue and remove money from circulation and to determine who gets it first. If a society defines money as a commodity such as precious metals or other valuable commodities (i.e. as wealth) then the *wealthy will control* not only their own wealth but the monetary mechanism as well, since they can control that commodity. Such control over the money system can easily lead to amassing more wealth, with little or no productive work. If the society defines money as credit/debt, as is generally done today around the world, then the bankers will be in control, since they dominate credit. They will then be the ones with the ability to accumulate wealth and power without productive work.

Thus, both money defined as wealth, and money defined as credit/debt, can lead to social injustice through the money system, where one element in society is able to amass wealth and power by creating and controlling money, without productive work. But money has value due to society's structure and therefore as Dr. Anas Zarqa has pointed out: *Money creation is a social prerogative, and hence the benefits of money creation should accrue to the whole society* (Zarqa, 1983, 98).

When a society defines money as Aristotle did - *an abstract legal power* - then government *has a chance* to objectively control it to promote the general welfare. There is a mythology – a "reigning error" – that government issued money has been irresponsible, and inflationary. But despite the prevailing prejudice against government, when one actually examines the monetary record, it becomes clear that government has a far superior record in issuing and controlling money than the banks have had. And that includes society's experience with the Continental Currency, the Greenbacks and German hyperinflation.

The *Continental Currency* of the American Revolution, for example, is attacked as becoming worthless, without discussion that while the government authorized $200 million and issued $200 million (plus replacement notes), the British counterfeited untold billions of them. The Brits also used counterfeiting against the French Assignats – the details became public when the counterfeiters sued each other in the English courts. The Continental Currency carried us over nearly 6 years of warfare to within 6 months of final victory. *It gave us a nation*(1).

The American *Greenbacks* are smeared as worthless inflation money when in fact the U.S. government authorized $450 million and printed exactly $450 million; and every greenback eventually was exchangeable one for one with gold coinage – but very few people bothered to exchange them. *The Greenbacks allowed the U.S. to stay together as one nation*(2).

The *German hyperinflation* is cited by the "banker apologists" without pointing out that the German Reichsbank was privately owned and controlled, or that the hyperinflation began the month (May 1923) that all German government influence over the Reichsbank was removed on the insistence of the allied occupiers; and the hyperinflation was not stopped until Hjalmar Schacht re-asserted German government control(3).

3.1 The Confusion of Money with Credit

In our present system, money and credit have been confused. All the systems we and fellow reformers are familiar with use bank debt, loaned into circulation at interest, for their nation's money system. The main exception is the metal coinage issued by the nation, and sometimes also the nation's paper money, for example as in Great Britain, where such cash is issued by the government owned and controlled, Bank of England. In contrast, the U.S. Federal Reserve System is somewhat ambiguous – the President appoints it's Chairman for 4 year terms and its governors for 14 year terms – but it is essentially a private entity and its 12 branch banks are capitalized by the various banks in their districts(4).

Because society defines money as credit/debt, as the present systems do, the bankers control the system and look at the results. Obscene concentrations of wealth, injustice and continual warfare around the world. If we define money in the proper

(1) See Zarlenga, 2002, "The Lost Science of Money", chapter 14.
(2) Ibid., ch. 17.
(3) Ibid., ch. 21.
(4) See http://www.monetary.org/is-the-federal-reserve-system-a-governmental-or-a-privately-controlled-organization/2008/02.

Aristotelian sense as an abstract legal power, then control over money and society can be under a legal/constitutional system with checks and balances.

Clearly it should be the state which provides the nation's money, not the banks. The U.S. Constitution does place that power into the Congress (Article 1, Section 8, par.5), but it was unadvisedly handed to the Federal Reserve in 1913. Around the world, this power has been inappropriately taken over by the banks, through legal maneuvering and through what's known in the West as "fractional reserve accounting," which is how banks create and circulate their debt in place of government issued money.

3.2 The Neglect of Defining the Nature of Money Leads to Bubbles and Crashes

We can thus see the importance of understanding the concept of money, and yet the subject is neglected, where economic works too often assume an understanding and agreement on the nature of money, or ignore defining it altogether. We regard this as a huge oversight because the effect of what we use for money has major repercussions on society.

The authors maintain that this general *"ignoring"* was a pre-condition for the so called "Great Recession" and its widespread destruction to have occurred. Without what's known as the fractional reserve accounting method, it would not have been possible for the banking system to create the expansionary euphoric phase which clearly led to an over-optimistic evaluation of future conditions, which in effect, created the real estate bubble, leading up to the crash and mortgage and banking crisis.

Without this money creation power – this using bank created debt as money, real estate prices would have remained grounded much closer to realistic valuations. Banker's fees would not have been so high, and customers would not have been so badly damaged by going into such unrealistic mortgage debt. Society's bailing out of the bankers, transferring trillions of dollars to them need not have occurred. Further, it is not the first time that this has happened and we do not think it is asking too much of economists, who generally live comfortably in society, to help assure that it doesn't happen again. Did this "ignoring" occur due to error, neglect, and sloth in economic thought or are there political reasons for it?

4. A Brief Elaboration of Theories of Money Creation

Let's examine both the economist's theories and what the general population has been "allowed" to believe regarding money and banking. First, understand that many "men on the street" in the U.S. mistakenly think that our money is somehow provided by our government. They look at money as the cash they can hold in their hand, and many actually think that the reason it has value is because it is somehow backed by gold that the government has, or that it should have.

It is not hard to understand this "gold backing" error. Indeed, when the Federal Reserve System was first enacted in 1913, there was at one point a requirement that any currency be at least 40% backed by gold holdings. The requirement was quickly watered down and removed with the nation's entry into World War I.

We read that some parts of Islam are supporting gold for money, in reaction against "fiat" money. What we suggest they consider is that fiat money is not the problem – the private creation of fiat money by bankers is the problem – then it acts like a tax on the rest of us. The "Austrian School of Economics," coin dealers, and mining interests have been the main promoters in the United States of the notion that money should be gold. The founder of that school Carl Menger was making that case in his June 1892 work, *The Origin of Money*.

Menger attempted to demonstrate a non-institutional (i.e. non-governmental) "trading origin" of money, relying ultimately on some physical properties of gold. But it is a seriously flawed attempt to figure out an historical event or process without reference to any facts or times that support it – i.e. to do this from theory and some preconceptions rather than from actual historical facts. Indeed, the only three "factual" pieces resembling historical evidence alluded to by Menger (from Plato, Aristotle, and Julius Paulus) all present information that is 180 degrees against Menger's thesis. This is described fully in the first paper of the American Monetary Institute, *"A Refutation of Mengers Theory of the Origin of Money"*[(5)].

(5) See http://www.monetary.org/a-refutation-of-mengers-theory-of-the-"origin-of-money"/2010/12.

Alexander Del Mar, the great monetary historian criticized this error of methodology when he wrote in 1905: "As a rule, political economists...don't take the trouble to study the history of money; it is much easier to imagine it and to deduce the principles of this imaginary knowledge" (Del Mar, 1978 [1905], 101).

4.1 Supposed Gold Standard Systems

Under the old "gold standard" system new money could come into existence by bringing new gold from mining operations or from external transfers, into the mint or the Treasury. However, it was never really feasible to use gold for money, because aside from being at odds with the abstract nature of money, gold supplies have almost never kept pace with population growth and commercial development, making any true gold standard system a formula for deflation – i.e. not enough gold money. This periodically caused bank crises and crashes.

This factor was ameliorated by banks in the U.S. in much of the 19th century, by not really having a gold standard, but *at best* mixing bank paper with the gold coins or supposed other assets. In general, when times became scary as in economic crunches or the Great Depression, people would try to exchange their suspect bank paper for the promised gold, but the gold was not really there. The one period in Europe that gold supplies kept pace with population was during the slaughter of the Central and South American Indians, as centuries of gold accumulation was stripped from them at gunpoint.

Alexander Del Mar, formerly head of the U.S. Bureau of Statistics (1866-69), estimated that this theft removed 1,230 tons of gold and 70,440 tons of silver from the Americas to Europe from 1493 to 1690 (Del Mar, 1969 [1867], 102). A level of murder amounting to genocide accompanied the theft. According to Del Mar, Father Las Casas, catholic bishop of Chiapas; and Sir Arthur Helps both carefully estimated that in one 40 year period the Spaniards killed from 12 to 15 million indigenous Americans (Del Mar, 1968 [1900], 55). Spain did the dirty work on the ground while English and Dutch privateers intercepted much of the loot as it crossed the Atlantic. When the gold and silver reached Europe it increased the money supply by about 400% over that period. This caused prices to rise by a corresponding amount with gold and silver's value dropping about 80%. But industry thrived during this period as money became much more widely distributed in Europe sparking what's been called the "Renaissance of the North."

Though gold has little or nothing to do with "modern money," the continued promotion of it by the Austrian School of Economics, and their Libertarian allies, and the misapprehensions they create, allow gold to remain somewhat relevant to the uninformed. At times, gold can be a good investment, *but one wants something very different from an investment than one wants from money.* One wants an investment to go up. One wants money to be stable. Understand that in a real gold standard, one is still operating within a kind of barter system, rather than a true monetary one.

Unfortunately, the Libertarians considered Ayn Rand's novels promoting "capitalism," as historical evidence. One of her followers, Alan Greenspan, Federal Reserve Chairman for 20 years (1987 to 2006) and one of the persons most responsible for de-regulation of markets, was influenced by these ideas. He allowed the banking system to run amok and bring down the world economy.

Back to the "men on the street", who think that money is government issued and that they can hold the cash under the mattress; and lose whatever the inflation rate takes from its value, or deposit it in a bank account, which holds it in safekeeping for them, and even pays them some rate of interest. Furthermore, they think that the bank pays them interest because it lends out some of their money to others, charging them a greater loan interest rate than they are paying the depositors, and that is the bank's source of income. They believe their bank deposit belongs to them and is safe because of the Federal Deposit Insurance Corporation (FDIC) guarantee – even if their particular bank loses their money by making bad loans.

That is the sad state of general belief which the banking system and its economists have allowed to exist, maybe even fostered. But only one important part of it is really true – that the FDIC guarantees their deposit. The authors believe this general misunderstanding has been a necessary pre-condition for the repeated bubble and crash-creating problem of the banking system. Why? Because if the "man on the street" understood the reality of our money/banking system, it would likely have been altered.

For example, the authors count 48 United States recession/depression cycles of varying intensity and duration, from 1791 to 2016.

This was understood by the late Congressman Wright Patman, Chairman of the United States House Committee on Banking and Currency for over 16 years (1959-1975), who wrote:

"I have never yet had anyone who could, through the use of logic and reason, justify the Federal Government borrowing the use of its own money....I believe the time will come when people will demand that this be changed. I believe the time will come in this country when they will actually blame you and me and everyone else connected with the Congress for sitting idly by and permitting such an idiotic system to continue" (The Congressional Record, September 29, 1941, 7583).

5. An Opportunity Arises After the Crash

When society suffers great economic destruction, an opportunity accompanies the devastation. For example, the four phases of Islamic economic revival distinguished by Prof. Chapra are relevant to what is underway today (Chapra, 1985). First, he posits a re-evaluation since the Great Depression of the 1930s of the Muslim position by non-economist Muslim scholars who re-affirmed classical Muslim positions. Then from about 1965, these ideas were focused on by Muslim economists; the third phase was to actually develop interest free banking and financial institutions, and Chapra predicted the fourth phase would be in the area of monetary theory and implementation.

Similarly, this also started in the West in the 1930s. Two University of Chicago economists, Henry Simons, and Paul Douglas created what was called the "Chicago Plan" which proposed monetary reform to get the U.S. out of the "Great Depression"(6).

(6) See http://www.monetary.org/wp-content/uploads/2014/04/Chicago-Plan-and-American-Monetary-Act.pdf.

The Chancellor of the University, Maynard Hutchins, saw to it that the Chicago Plan was formulated in legal detail and introduced into the U.S. Congress as potential legislation. The two main features of this plan were that the U.S. government would nationalize the essentially private Federal Reserve System and its 12 Federal Reserve Branch banks. Secondly, the fractional reserve accounting system of all the nation's member banks would be decisively ended. Banks would no longer create what the nation used for money when making loans. Government money, not bank debt would be used for our money.

The Chicago Plan was a mark of both courage and genius. Henry Simons made this grand observation of the problem of that time, which still afflicts us today:

"The mistake ... lies in fearing money and trusting debt" (Simons, 1948, 199).

The Plan had wide support from U.S. economists, including Irving Fisher of Yale University, who promoted it strongly through the 1940s, and it became known as "hundred percent reserve banking". One version was sent to all the U.S. academic economists – about a thousand in total. Of those responding, 235 from 157 universities agreed with the proposal; another 40 approved it with reservations; and only 45 disapproved.

The descriptions of the Chicago Plan started by condemning the banking structure as foolish and harmful: "If the purpose of money and credit were to discourage the exchange of goods and services, to destroy periodically the wealth produced, to frustrate and trip those who save, our present monetary system (does that) most effectively!" (Zarlenga, 2005).

The Plan dispensed with the gold standard as "not a real standard," because the value of gold had changed violently up and down against commodities. The Federal Reserve System law passed Congress in December 1913. Then from 1914 to 1917 wholesale prices rose 65% and then increased another 55% to May 1920, so money, including gold coins, lost over 75% of their value against wholesale prices in the Federal Reserves' first six years. Then, from there, by June 1921 wholesale prices *fell* 56% against gold. People who promote gold as stable should study these facts.

In the banking legislation discussions considered at the time of the Great Depression, it was thought the Chicago Plan was the next logical step that would be taken; but unfortunately, it was mishandled politically and that hope faded as the nation became mired in World War II.

While the Chicago Plan failed to pass in the U.S. Congress, it remained in the economic/monetary literature, thanks partly to the work of Mr. Robert DeFremery, who determinedly supported monetary reform along those lines in articles and discussions, until he passed away in November of 2000. His contact with Stephen Zarlenga in the 1990s placed the Chicago Plan materials referred to above, into our hands and led to his making the founding donation to the American Monetary Institute Charitable Trust in 1996 of 150 copies of his book *Rights vs Privileges*(7).

5.1 Current Re-Evaluation of our Banking and Monetary Systems

The so called "Great Recession," starting in 2007-8, is again prompting a serious re-evaluation of the world's flawed banking and monetary systems which caused, or at least allowed, so much destruction to occur. An important development sparked the current re-examination: the publication of the International Monetary Fund's working paper of August 2012, *"The Chicago Plan Revisited"* by Jaromir Benes and Michael Kumhof(8).

The *Chicago Plan Revisited* is a modern day re-examination, and it draws very powerful conclusions about implementing it:

"The Chicago Plan could significantly reduce business cycle volatility caused by rapid changes in banks' attitudes towards credit risk, it would eliminate bank runs, and it would lead to an instantaneous and large reduction in the levels of both government and private debt. It would accomplish the latter by making government-issued money, which represents equity in the common wealth rather than debt, the central liquid asset of the economy, while banks concentrate on their strength, the extension of credit to investment projects that require monitoring and risk management expertise. We find that the advantages of the Chicago Plan go even beyond those claimed by Fisher. One additional advantage is large steady state output gains due to the removal or reduction of multiple distortions, including interest rate risk spreads, distortionary taxes, and costly monitoring of macro economically unnecessary credit risks. Another advantage is the ability to drive steady state inflation to zero in an environment where liquidity traps do not exist, and where monetarism becomes feasible and desirable because the government does in fact control broad monetary aggregates. This ability to generate and live with zero steady state inflation is an important result, because it answers the somewhat confused claim of opponents of an exclusive government monopoly on money issuance, namely that such a monetary system would be highly inflationary. There is nothing in our theoretical framework to support this claim" (Benes and Kumhof, 2012, 55-56)(9).

We especially draw attention to the sentence: "making government-issued money, *which represents equity* in the commonwealth rather than debt" (emphasis added). This is important in removing one erroneous blockage to instituting a better system through monetary reform, the error being made by one group, of mis-defining the *nature* of money as debt. That faction, known as MMT (so called Modern Monetary Theory) accurately observes that most of the money in the U.S. is composed of debt, but then wrongly concludes that *the nature of money is, therefore, debt*. That is simply false – a mis-definition of both debt, and a mis-definition of Money. Legally created government issued money can be *equity, and has been and is treated as such in normally acceptable accounting.*

(7) See our review of it at http://www.monetary.org/review-of-robert-de-fremerys-rights-vs-privileges/2010/12.

(8) See http://www.monetary.org/wp-content/uploads/2012/08/ChicagoPlanRevisited.pdf.

(9) We note that after publication of this IMF Working Paper, Dr. Kumhof made several presentations at the Bank of England in 2013.

Professor Joseph Huber of Martin Luther University has written the definitive paper which challenges the so called Modern Monetary Theory position. He presented it at the 9th Annual AMI Monetary Reform Conference in September 2013. It was then sent out by the Real World Economic Review to its 26,000 subscribers(10). Huber is the creator of the *Monetative e.V.* (11), and he coined the phrase *"Sovereign Money"* some years ago.

5.2 Bank of England Examines how Money is Created when Banks Make Loans

This is the key question in evaluating who controls a modern day money system.

After the IMF working paper, two important developments came from the Bank of England. The Bank published its 1st quarter bulletin 2014, titled *"Money creation in the modern economy"* by Michael McLeay, Amar Radia and Ryland Thomas, of the Banks Monetary Analysis Directorate(12).

That paper opens with this key observation:

"In the modern economy, most money takes the form of bank deposits. But how those bank deposits are created is often misunderstood: the principal way is through commercial banks making loans. Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower's bank account, thereby creating new money. The reality of how money is created today differs from the description found in some economics textbooks…" (McLeay et al., 2014, 1).

The paper describes in exact detail including diagrams, the steps that modern bank accounting must take in the creation of money in the U.S. and in Britain – *how those bank deposits come into existence when they make loans*. What is clear is that banks cannot make loans until they first *create the money* which they place into the borrower's account.

This important paper was followed in May 2015, by the Bank of England's working paper No. 529 *"Banks are not intermediaries of loanable funds – and why this matters"* by Zoltan Jakab and Michael Kumhof (formerly at the IMF, now at the Bank of England)(13). These two articles are now "must reading" for all who want to understand how "modern money" is in fact created, especially economists.

Unfortunately, most economists themselves are victims of some of the common errors described above. For example, what's known in the Bank of England paper's terminology as the *ILF model* (*Intermediation of Loan Funds*). Just like the "man on the street" view, it assumes that banks are enabled to make loans because some depositors have *first* deposited their money in the bank, which then through what's called the deposit multiplier feature of the central bank's rules, can lend greater amounts, system wide, by crediting borrowers' bank accounts, in effect issuing new money into circulation in the form of debt(14).

This view of considering banks to be intermediaries has been known to be false by some of the financiers, especially those with actual banking experience. Their more accurate viewpoint, in the language of the Bank of England reports, is known as the *FMC model*, (*Financing* through *Money Creation*) where the initial step in new money creation is made *by the bank* when it simply credits the borrowers account with the loan amount.

This new research clarifying how banks create money when they make loans has now been carried out authoritatively and exhaustively by the Bank of England's two reports. These papers perform an important service for the advancement of both economic theory and of rational policy decisions

(10) Read it at http://www.paecon.net/PAEReview/ issue66/ Huber66.pdf.

(11) A German based non-profit monetary reform association (http://www.monetative.de/ber-uns/).

(12) See http://www.monetary.org/wp-content/uploads/2016/ 03/money-creation-in-the-modern-economy.pdf.

(13) See http://www.monetary.org/wp-content/uploads/ 2015/ 11/kumhof-bank-of-england-why-banks-are-not-interme diaries-wp529.pdf.

(14) Note: This ILF mode of lending out deposits from others was actually used by the U.S. Savings and Loan industry, until the 1980 *Depository Institutions Deregulation and Monetary Act* (Public Law No. 96-221, 94 Stat. 132, 1980) effectively changed them to operating like the commercial banks. Significantly, it then took *less than ten years* for the U.S. Savings and Loan crisis to develop after this de-regulation.

on bank accounting law. These reports and the others linked here will aid the education of economists, who can then become a force for justice in money and banking systems.

The Jakab/Kumhof paper puts the *old* deposit multiplier view to rest:

"The venerable deposit multiplier (DM) model of banking, which suggests that the availability of central bank high-powered money imposes another limit to rapid changes in the size of bank balance sheets…however does not recognize that modern central banks target interest rates, and are committed to supplying as many reserves (and cash) as banks demand at that rate. *The quantity of reserves is therefore a consequence, not a cause, of lending and money creation.*" (Jakab and Kumhof, 2015, iii) (emphasis added).

Here's a good summary excerpt from the Jakab/Kumhof report:

"Economic models that integrate banking with macroeconomics are clearly of the greatest practical relevance at the present time. The currently dominant intermediation of loanable funds (ILF) model views banks as barter institutions that intermediate deposits of pre-existing real loanable funds between depositors and borrowers. The problem with this view is that, in the real world, there are no pre-existing loanable funds, and ILF-type institutions do not exist. Instead, banks create new funds in the act of lending, through matching loan and deposit entries, both in the name of the same customer, on their balance sheets. The financing through money creation (FMC) model reflects this, and therefore views banks as fundamentally monetary institutions. The FMC model also recognizes that, in the real world, there is no deposit multiplier mechanism that imposes quantitative constraints on banks' ability to create money in this fashion. The main constraint is banks' expectations concerning their profitability and solvency." (Jakab and Kumhof, 2015, 38).

Thus, the decision to create money is based on the bank's perceived or expected profits, which is highly susceptible to both euphoria during expansionary phases, and gloom during contracting ones. The public policy implications of this must now be more widely understood and implemented through reform, rather than regulation.

Regulation doesn't work in a system which concentrates wealth and power. Experience teaches us that such concentrations allow the corrupt to overcome regulation by purchasing political power and influence. That's how Glass Steagall was overcome, under a so called "Democratic" President Clinton. That's also how media became more concentrated under him, etc.

In an expansive, "feel good," atmosphere, banks which remain within reasonable activity levels in comparison to other banks, can expect to participate with them in a generally expanding loan level environment. Does this mean that the money multiplier is a 'myth' or 'fairy tale' that is still taught to economics students all over the world? Yes, in a sense. But the "fairy tale" continues – merely in a different way than is being taught. Money is still created out of thin air, by banks when they make loans but the process is now more widely understood to be limited not by reserves or deposits made into the bank, but by the bank management's guess about the profitability potential of creating the money. That is in effect the real "multiplier" in the system. Further, it's a destabilizing factor causing volatility in banking and the economy.

This isn't just an extreme "British case." According to the U.S. Federal Reserve, it was also the system operating in the old Soviet Union. The 1966 Federal Reserve publication *Money, Banking, and Credit in Eastern Europe states*:

"In the communist countries, money is created in the same way as in capitalist countries – *through the extension of bank credit*. This fact is not generally recognized or accepted in the various countries of Eastern Europe. The result is that a good deal of confusion emerges from their economic literature with regard to the nature of money and the role of the monetary process and the function of the banking system.… Since Marx identified money with gold, the official theory holds paper money to be merely a substitute for gold and ignores deposit money." (Garvy, 1966, 42-43) (emphasis added).

The authors' experience with banker created money is mainly in the English speaking countries. In Great Britain, the paper notes and the coinage is created by Government via its mint or the nationalized Bank of England. In the U.S., all of the money except coinage is created by private bank debt.

5.3 Some Social and Economic Consequences of this Monetary System

Such a monetary system, based on debt, concentrates wealth into fewer and fewer hands, even potentially criminal hands; if their activities were properly defined as criminal. My old friend Marvin K., who had made and lost millions, used to confide to me over coffee in the 1980s, *"Steve, you can't make a billion dollars – you have to steal it!"* How these finance types are misusing that "wealth" to purchase political power, is becoming more visible in the United States, and it is not a pretty picture.

Such concentrated financial wealth will gravitate to financial centers. It will foster developments requiring greater capital amounts and lead to a financialization of the economy, wherein it is easier to add zeros to the sizes of incomes and thereby the profits of theoretically leveraged *financial* activities, rather than those dependent on material manufacture and infrastructure. Such leveraged gambling will displace investment involving real production.

For example, today, March 18, 2016, Hebert, a small town in Caldwell Parish, Louisiana, has been evacuated because a nearby dam is in danger of bursting. The American Society of Civil Engineers warns that one in ten dams are in danger of collapse, and about the same percentage of bridges need serious repair. Yet the stock indexes are close to their all-time highs. Clearly the nation's resources are being misdirected to favor financial activity over real infrastructure.

This leads to deterioration and eventual breakdown in physical infrastructure in U.S. road, transport, water, and sewage systems. These breakdowns render the society more vulnerable to natural disasters. Eighteen hundred people died as levees failed in New Orleans; 13 motorists were killed and 135 injured as the interstate 35 bridge collapsed in Minneapolis. Eventually, rail and transportation service will become more concentrated. The U.S. Rail system is in shameful condition, without even a single high speed rail in the nation.

Socially, such concentration of wealth leads to a growing separation of races in education, housing, medical services, jobs and security. It directly affects law enforcement practices and thus prison populations. It fosters divisions in how people are treated – first along racial lines, as is clear in the many shootings by police of unarmed black people. In other words, it aggravates virtually all the problems we presently see afflicting the U.S.

5.4 The Immoral Consequences of this Monetary System

Why does reform become necessary? A century ago the great monetary historian Alexander Del Mar wrote: "the monetary system; that greatest of all dispensers of equity or inequity" (Del Mar, 1968 [1899], 109-110).

A good system functions fairly, helping to create values for life. A bad one, like our present bank controlled one, obstructs the creation of values; gives special privileges to some and disadvantage to others; causes unfair concentrations of wealth and power; leads to social strife and eventually warfare and a thousand unforeseen bad consequences.

This battle to control the money power has raged for millennia over the same dividing line: will society's money be issued as credit/debit when banks make loans, and be controlled by the few, to favor the few; or will it be issued as money (*equity* not debt) by government, and be spent into circulation for the common good. The AMI motto "warns" that "whoever controls the monetary system controls the nation." If that power is corrupted, benefitting one sector within society at the expense of the others, clearly such injustice will be transmitted throughout the operations of that society.

We have described the injustice of fractional reserve accounting which allows the finance sector to amass power and wealth through the creation of money – the Money Power - without doing productive work – without creating real goods and services for that society. Any proposed reform must take morality seriously. Allowing unfairness into the system brings in the seeds of its own destruction. Consider that a partial reform, for example allowing a smaller part of the nation's money to be created by fractional reserve accounting of banks, is like allowing a "small amount of murder" in. It corrupts *the nature* of the system.

Understand that if we have the power to eliminate even a part of the bank creation of debt money, we would have the power to eliminate all of it. We need the courage to use that Power intelligently.

This corruption of power threatens to take over the U.S. criminal justice system.

Prof. William Black successfully carried out the prosecution of criminal executives in the massive Savings and Loans Scandal in the eighties and early nineties. Addressing our AMI Monetary Reform Conference in 2009, he described how the "Great Recession" banking transgressions, could only have taken place under conditions of purposeful fraud from thousands of top level banking executives.

Readers should view both his longer presentation and a shorter one available on YouTube at the links given in the footnote below[15]. The authors consider this important to understand the lawlessness of bankers which reform must now deal with. There are *many thousands* of criminal bankers in the U.S., and yet not a single one has been prosecuted or even indicted by the Obama Administration. This will, unfortunately, be Obama's main legacy.

As I was working on *The Lost Science of Money* book, in the 1990s, a man was actually beaten to death in the Spanish Harlem section of New York City for stealing a loaf of bread. The U.S. prisons, including private for profit prisons, are overflowing with people in jail for minor marijuana violations. Yet these master financial criminals, these sociopathic monsters have not faced justice. That is highly corrosive to the concept of law and justice in society. Society needs to give them what they deny to us – we need to give them justice.

(15) The longer presentation is available at: https://www.youtube.com/watch?v=zIosqvczEJI. The shorter one can be seen at: https://www.youtube.com/ watch?v=-JBYPcgtnGE.

Lets Be Clear - Beware the Danger of "Pretend Reforms"

The destruction and stupidity which the financial "leaders" allowed can't be hidden. Even the Queen of England publicly asked her advisors how they could have missed seeing the problem. So the "bad guys" understand that "something" has to be done, and be pointed to as having "been done," to try to firm up their position – to establish a pretense of confidence; yet to let those in power remain in power. In other words to not really do the necessary reform which requires ending their corrupt power.

This is not to say that real reform must or would be bad for banking. On the contrary, *reform would actually help the banking business*, rendering it much more rational and predictable. What reform must do is decisively end the power that the controlling element in banking holds, which translates into other problems. Problems like the "war business"; like the control of elections "business"; like the *keeping the people poor so they remain obedient* "business" or aggravating the political process of unnecessarily keeping nations at each other's throats.

Is it Possible to Create and Install a Better System?

Serious public demands for monetary reforms are growing in several countries; in 2015, there were parliamentary hearings in the United Kingdom, and in the Netherlands. Switzerland is considering reforms to stop banks from creating money and Iceland has taken the lead by imprisoning many bankers responsible for Iceland's problems. Even in the United States, the Federal Reserve Bank of Minneapolis, under new leadership is holding public meetings on how to solve the problem of "too big to fail" banks.

What About the "Good Guys" among those who resist real reform?

Working on monetary reform for two decades we've encountered various types who resist reform. Many of whom we observe are without the historical background to understand the deep rooted societal issue of banks replacing a nation's money with their debt. We encounter those who seek simple rather than real answers. These so called "reformer" types grasp at one part of the real reform proposal, thinking the other parts can be done later more easily. They wrongly call this an "incremental" approach. But their approach is simply a formula for failure.

We have also learned to recognize those who merely pretend to be for reform, but whose activities have established a consistent pattern of opposition to reforming the banking and money system. These unfortunately somehow possess advanced propaganda skills, which we are at a loss to explain. We do not discuss them beyond this paragraph in an important paper such as this. Tom Paine's words have special application to these fraudulent "reformers". He described those trying to set up the First Bank of the United States, warning us to beware that

> …a faction, acting in disguise, was rising in America…they had lost sight of first principles…(and)…were beginning to contemplate government as a profitable monopoly, and the people as hereditary property. (Paine, 1967, vol. 3, 383)

What About some Exalted, yet Hesitant Economists?

For example, Mervyn King, former Director of the Bank of England told us in a 2010 speech that *"Of all the many ways of organizing banking, the worst is the one we have today"* (King, 2010, 9). But then in his new book *The End of Alchemy,* he avoids real reform. Or Adair Turner, former chairman of the UK regulator FSA, writing that describing banks as 'intermediaries' is "*dangerously fictitious…*" (Turner, 2015, 6), but then pulls back in his new book *Between Debt and the Devil*. Rather than promoting sovereign money over bank debt, he refers to the real money choice as the "Devil".

Some of these persons are retired, and presumably financially comfortable. Do they fear making a big mistake? Perhaps it's the error Henry Simons warned of in his creation of the Chicago Plan: *"The mistake … lies in fearing money and trusting debt"*(Simons, 1948, 199). The authors think much more should be expected from these folks.

We understand the difficulty for younger good economists making their way in the working world to promote reforms which criticize the most powerful and perhaps the nastiest in the monetary/banking world – those on whom future employment, promotions or professorships might depend. But they must eventually make the moral choice – and the sooner the better.

Questions may arise: What if reforming the system is disruptive? Suppose it leads to underfunding economies and great hardship for millions? In answer, the AMI assembled the most common "20 Questions" (and answers) we encounter, on pages 24 to 29, of our Monetary Reform Manual(16). Take a look. Have a 21st question?

6. The N.E.E.D. Act of Congressman Dennis Kucinich

Despite the election year madness, significant progress has been made to solve the monetary/banking problem in the United States. Legislation has been carefully written and introduced into the House of Representatives in 2011 by Congressman Dennis Kucinich (Democrat of Ohio), which would effectively reform the U.S. banking and monetary system. He named it the N.E.E.D. Act (National Emergency Employment Defense Act). Its desig-nation number in the 112th Congress was HR2990. The bill contains the necessary reforms called for by decades of research and centuries of experience – all the monetary reform proposals advocated by the American Monetary Institute.

The NEED Act was vetted as technically operational before it was introduced, by going through two years of non-partisan Congressional "Legislative Counsel" work, to co-ordinate existing legislation with it. It achieves monetary reform with 3 major actions which are done together:

First, it incorporates (nationalizes) the Federal Reserve System into the U.S. Treasury where all new money is created by government as sovereign money, not by banks as debt. This money is spent into circulation to promote the general welfare. A politically diverse Monetary Authority monitors the system to avoid both inflation and deflation.

(16) Available at: http://www.monetary.org/wp-content/uploads/2016/02/online-version-of-32-pager.pdf.

This in effect puts the monetary power into the hands of the people, through their elected representatives, where the Constitution places it.

Second, it halts the banker's privilege to create what we use for money by ending fractional reserve accounting in a decisive, yet gentle and elegant way. On day one, all the past bank loans still outstanding become U.S. government money. As clients pay those loans back to the banks, instead of that money going out of existence, as it presently does; since the act has turned it from debt into sovereign money, it remains in existence and is paid over to the U.S. Treasury, and can then be re-circulated. The N.E.E.D. act doesn't extinguish any of the existing money supply.

Banks could then accept safe keeping accounts; and savings accounts; act as intermediaries on an ILF model, loaning money out to borrowers via mutual fund type accounts. They would do what people think they do now. Depositors could earn interest through those investment type accounts.

This Act nationalizes the nation's money system, not the banking system. Commercial banking is absolutely not a proper function of government, but *only* government should provide the nation's money.

Third, the N.E.E.D. Act encourages Congress to create and spend new money into circulation, for example, on repairing and replacing infrastructure with 21st century eco-friendly energy sources, including the education and health care needed for an improving society. It can start with the $3.6 trillion the American Society of Civil Engineers estimate is needed over the next 5 years, for infrastructure[(17)] (That's not hard – the banking system was putting about 800 billion a year into corrupt mortgages). This creates many millions of good jobs across our nation, re-invigorating local economies and re-funding local government at all levels[(18)].

The false specter of inflation is always raised against the suggestion that government fulfills its responsibility to furnish the nation's money supply. But that is a knee-jerk reaction – the result of decades, even centuries of banking propaganda against government – by those benefiting from bank issued money.

Working with Dennis Kucinich to formulate the NEED Act, the AMI studied earlier reform attempts, including the 1930s Chicago Plan, the British nationalization of the Bank of England in the 1940s, and the monetary reforms of the 7th U.S. President Andrew Jackson and his Vice President Martin Van Buren in the mid-1830s.

When the Archbishop of Canterbury William Temple's 1942 speech instigated the nationalization of the Bank of England, he accurately described the bad effect of a privately owned and controlled central bank: *"...the result is to make into the master what ought to be the servant"* (Dempsey, 1948, v).

One of the first big things the Brits did after World War II was to nationalize the Bank of England. However they made a crucial error: they allowed the nation's banks to continue using fractional reserve accounting to create money. Immediately after nationalization, a significant part of the money supply was government created, which helped the UK obtain some of their desirable social programs. However, with the passage of time, the banks created more and more of England's money, until today they create an estimated 97% of it, all except the coinage and Bank of England notes. As a result, the British Government is under pressure to fund the valued social programs. Nationalized industries such as the railroads are sold off to privateers and train wrecks have become less rare in Great Britain.

So history teaches us that part one of the NEED Act, just nationalizing the Federal Reserve, isn't enough to regain the nation's money power and obtain real reform. It's also crucial to do part two – stop the banks from using fractional reserve accounting. Don't let them create *any part* of the money supply. Don't repeat the Brit's mistake. If you let them keep 10% of that power, it will become 30% then 70%, then 97%.

(17) See http://www.infrastructurereportcard.org/.
(18) A one page summary, with brief videos by Congressman Kucinich is at page 2 at http://www.monetary.org/wp-content/uploads/2013/01/HR-2990.pdf. The entire 12 page N.E.E.D. Act is there on pp. 3-14.

We know that part three is needed from the 1830s experience of Presidents Andrew Jackson and Martin Van Buren. They did "parts one and two" in terms of the institutions of their day; Jackson stopped using the private 2nd Bank of the U.S. for government transactions; Van Buren established fifteen Treasury branch offices, completely bypassing the 2nd Bank of the U.S. This was about equivalent to a nationalization of the central bank in terms of *not using* the existing central bank. They also stopped accepting the banknotes of state banks, unless they were convertible to gold and silver. That was equivalent to blocking those banks from creating money. *But those two actions created the worst depression the U.S. had seen until then*. While they effectively stopped the banks from creating money, they didn't replace it with government created money. Van Buren soon issued government notes to end the depression.

Part three helps the Congress understand it has the power to create new money and is encouraged to do so for infrastructure replacement, national health care and education costs. *The power to spend money remains in the Congress*, but they become aware that in addition to taxes and borrowing, a well-recognized way to get money is to create it. That's the main way the banks have gotten the "money" they lend. Inflation is avoided because real material wealth (goods and infrastructure and services) is created in the process. Advanced system dynamics studies, for example by Prof. Kaoru Yamaguchi, reach the same conclusion[(19)].

Thus, the NEED Act builds upon the "Chicago Plan" which came out of the University of Chicago (my Alma Mater), in the 1930s; which Chancellor Maynard Hutchins got introduced into the Congress as potential legislation. There's a direct connection of that to the Kucinich N.E.E.D. act, and to this paper. You see, Author Zarlenga was in the very last class, 1959-1963, at the University which utilized the Hutchin's curriculum, which taught us to use original sources, and inculcated thinking methodology. Though the Chicago Plan wasn't discussed, it's still a direct "connection". Interestingly, Presidential candidate Senator Bernie Sanders graduated from the University 6 months after I did, but may not be aware of this Hutchins "Chicago Plan tradition" until I have a chance to speak with him.

The Kucinich N.E.E.D. Act has additional important features. Interest rates are limited to 8% including all fees; compound interest is limited by interest costs never allowed to exceed the principle, except on long mortgages; and the national debt is paid off as it comes due, rather than being continually rolled over.

So yes. It is very possible to institute a sovereign money system. In a two page paper, it is further described how the N.E.E.D. Act provides a seamless and painless overnight transition from a bank debt system to one using government issued sovereign money. It's written by Jamie Walton, a civil engineer, who the authors consider a tireless monetary genius, who worked in Kucinich's office for two years helping him introduce the NEED Act into Congress[(20)].

It is presumptuous of us to say you have an opportunity *right now* to see how good and simple and non-disruptive this act is, but you do: just watch Jamie's presentation at last year's 11th Annual AMI Conference[(21)]. This makes it clear the reform uses generally acceptable accounting, and any disruption is unnecessary. It also firmly demonstrates that *money as equity* is what results from government money creation, not money as debt.

While Dennis Kucinich and the American Monetary Institute are responsible for its present form, the Act is based on Aristotelian monetary concepts in existence since at least the 4th century BC and used successfully in a variety of monetary systems since then, ranging from democratic Athens to republican Rome. It is not merely a theory – its main elements have a long history of successful implementation in major societies around the world, including the American Colonies and the United States. This is clear from the Lost Science of Money book.

(19) See http://monetary.org/wp-content/uploads/ 2011/11/DesignOpenMacro.pdf.

(20) See http://www.monetary.org/seamlesstransition.

(21) See https://www.youtube.com/watch?v=XRtcAsxxyIc.

7. The Religious Establishment can help Achieve a Moral Approach

Don't ignore Religious leadership in helping societies to adopt money systems that improve morality- in terms of fairness to its members, and in promoting moral behavior toward other societies. Some traditions on religion and money should be remem-bered: Virtually all religions condemn usury. Christ's only violent act was overturning the money changers' tables in the temple.

Unknown in the West is evidence that the early Islamic jurists were aware of the validity of fiat money–i.e. of nomisma: "According to Muhammad(22), the property of currency attaches to circulating *fulus* (copper coins), and they are to be considered as an absolute currency…They are in his view suitable for partnership investment like all other absolute currencies, viz., dirhams (silver) and dinars (gold)" wrote Kasani (Kasani in Udovitch, 1970, 53).

Imagine how different European history could have been if something like that were also attributable to Jesus Christ. The Christian "Scholastics" (St. Albert the Great, St. Thomas Aquinas and others) held back usury in the West for centuries (about 1100 AD to 1550 AD), and they paid more attention to Aristotle than to the Bible. Anglican Bishop George Berkeley of Coyne Ireland wrote *The Querist* in 1735 in an effort to reform money. The Archbishop of Canterbury's important role in nationalizing the Bank of England is discussed above. Pope Francis speaks openly on matters of economic justice.

Realize though that religious leaders and their advisors, as well as economists, need education on the monetary reports this article has linked to, to avoid repeating the economic errors that have been spread over the centuries. We encourage economists to understand they have a most important part to play in solving this great problem for humanity.*

(22) He is Muhammad bin Hasan al-Shaibani (d.189 H/805 AD), one of the students of the famous jurist and founder of the Hanafi school of thought, Imam Abu Hanifah.

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Stephen Zarlenga draws on 35 years of experience in the world of finance, securities, insurance, mutual funds, real estate, and futures trading. In 1996 he co-founded the American Monetary Institute (AMI) with Dr. Lucienne DeWulf. He is the author (2002) of The Lost Science of Money book. Earlier as a publisher he published 20 books on money, banking, politics and philosophy (including The Anglo American Establishment, by Prof. Carrol Quigley). From 1970 to 1975 he built the U.S. distribution network of the then leading American mutual fund concentrating in gold shares. Then as a member of the New York Futures Exchange (a subsidiary of the New York Stock Exchange) he specialized in trading the complex CRB futures index for several years. Thus he is familiar with both practical and theoretical sides of our market economy. Yet he calls into question and challenges the basis, and Achilles' heel, of American Capitalism: the banker control and resulting misdirection of the nation's monetary system.

Zarlenga holds a degree in Psychology from the University of Chicago, where he was in the final graduating class under the revered Maynard Hutchins' curriculum which focused on critical reading and thought. Hutchins had the "Chicago Plan" for monetary reform created at the University, formulated into legal language and introduced into the Congress in 1935. In May 2005, Zarlenga met U.S. Congressional Representative Dennis Kucinich (D, Ohio) and assisted with the creation of Kucinich's monetary reform legislation, the N.E.E.D. Act (National Emergency Employment Defense Act), a masterful improvement over the Chicago Plan, which Kucinich introduced into the U.S. Congress in September 2011. The AMI holds its 12th Annual Monetary Reform Conference, featuring internationally important monetary reformers, at the end of September, 2016 in Chicago.

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