

A Call for the Restoration of Monetary Order

Part II - Real Balances

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Abstract

This paper develops a microeconomic theory of real balances as a first step toward a unified account of monetary order. Drawing on Calvin’s distinction between money-in-exchange and money-in-use, and on Mises’s treatment of the purchasing power of money, it models the demand for and supply of real balances, the role of velocity as an index of monetary serviceability, and the interaction of money and credit markets. The analysis yields explicit partial-derivative conditions linking real balance demand to price, velocity, liquidity preference, and asset holdings, and credit supply and demand to the interest rate, income, and risk. The model demonstrates formally that the natural equilibrium of a growing real money economy is incremental deflation — a constant, predictable increase in monetary value that is itself a form of monetary stability. The paper is the second in a three-part trilogy that together constitute a call for the restoration of monetary order.

JEL codes: E41, E42, E51, B31

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This paper arises from the theoretical writings of the French, later Swiss, 16th-century, Protestant reformist, Jean Calvin and the Austrian, later American, 20th-century, economic theoretician, Ludwig von Mises.¹

Since 1694 when the Bank of England institutionalized fractional reserve banking with the introduction of statutory counterfeit, the world has suffered endless monetary chaos. The Roosevelt–Nixon Two-Step, during which the US Government confiscated the American gold supply in 1933, untethered the US dollar from the post-World War II international “gold-standard” in 1971, and subsequently transformed American statutory counterfeit into a debt-based fiat currency, threatens not only the economic prosperity of the United States and many of its trade partners, but also the individual market freedoms of American citizens and those of nearly every other country in the world.

Ludwig von Mises, writing in *Theorie des Geldes und der Umlaufsmittel* (1912), asked a simple but devastating question:

How is it that highly experienced executives — each an expert in his own

industry — can make the same mistake at the same time and bring about across-the-board economic catastrophe?

His answer:

They cannot. Unless, of course, they are all confronted with the same important but erroneous market signal.

In February 1937 Irving Fisher, Professor Emeritus of Economics at Yale University, wrote to Franklin Delano Roosevelt, America's 32nd President, the following:²

“Established practices, when retrogressive, have to be disestablished.”

Fisher proposed in so doing a return to 100 percent reserve banking. Although Ludwig von Mises promoted the same, he differed with Irving Fisher in one important aspect. The former advocated, in addition, a return to gold or silver specie. Fisher advocated fiat currency. Neither a return to 100 percent reserve banking, nor a return to specie, nor the introduction of fiat currency took place. The reasons for this were, of course, numerous, but one can well imagine that the primary reason was the banking industry's reluctance to relinquish its lucrative ex-nihilo privilege of creating statutory counterfeit that it had carefully nurtured for nearly two-and-one-half centuries.³

Today, we have a system of fractional reserve banking with statutory fiat modeled as “modern” monetary theory (MMT) and its chief, but minor, crypto-competitor — Bitcoin. The goal of this paper is to present a workable mathematical model reflecting the behavior of a real money economy grounded in precious metal upon reintroduction.⁴

A Theory of Money Based on Real Money

Jean Calvin distinguished between what the present author calls money-in-exchange and money-in-use. Money-in-exchange is property whose title and subsequent use are surrendered in exchange for some real good or service provided by another. Money-in-use is the property of money-in-exchange whose use one surrenders for a specified length of time while retaining title to the property.

This theory of money assumes that each market agent — be it a firm, household, other free market agent, or even government — has a liquidity preference. This preference is determined by the ratio of one's real liquid wealth to his illiquid wealth or, alternatively, to his total real wealth.⁵

Money in Exchange

In this paper we will substitute for the top-down, flow model typically attributed to Irving Fisher and defined as

$$MV = PQ \qquad \text{(Fisher)}$$

or equivalently

$$1 = \frac{MV}{PQ}$$

the following bottom-up, stock model of money-in-exchange:

$$l_i = \frac{1}{V} \cdot \frac{M_i}{A_i} \quad (1)$$

where

$$M_i = P_M Q_M^i \quad (2)$$

and

$$A_i = \sum_{a=1}^{N_a} P_a^i Q_a^i \quad (3)$$

and where⁶

l_i = individual's liquidity ratio

M_i = market value of individual's real money-in-exchange

A_i = market value of individual's illiquid assets

V = velocity of money

P_M = market price of the underlying commodity of money-in-exchange

Q_M^i = quantity of commodity used as money and held by the i th market agent

P_a^i = market price of the a th good to which the i th market agent has title

Q_a^i = quantity of the a th good to which the i th agent has title

In a real economy with real money the value of money-in-exchange necessarily increases as the quantity (or alternatively, the quality not reflected in the value of A_i , but rather in its price P_a^i , for any or all a) of some or all other goods and services rises relative to the increase in the much scarcer quantity of real money. In the absence of a change in velocity of money (V) this relative increase in the market value of the real money supply necessarily results in upward pressure on the ratio of the market value of liquid to illiquid assets. This is, of course, problematic, as the desire to purchase more illiquid assets to offset this upward pressure is encouraged, in part, by the inability of market agents to engage in smaller transactions and thereby easily reduce the total value of their real liquid assets.

In an economy with real money the chief determinants of the velocity of money are technological improvement and the denomination of money-in-exchange. A perceived shortage in the real money supply, brought about by whatever cause, will necessarily result in an increase in the market value of the existent money supply. In the past, the failure to accommodate this increase in value with smaller denominations of the existent real money supply provided an important incentive for the issue of statutory counterfeit.⁷

In effect, it is not enough to increase the velocity of money through improved technology; smaller denominations of money-in-exchange must be made available from time to time — what is more easily achieved today than in previous times.⁸ Accordingly, we can redefine V as

$$V = V(v) \tag{4}$$

where

$$\begin{aligned} v &= \text{the proportion of the total money supply expressed} \\ &\quad \text{in ever smaller units of money-in-exchange} \\ \frac{\partial V}{\partial v} &> 0 \end{aligned}$$

For most of the following analysis v will be held constant.

Market for Money in Exchange (Demand)

From equation (2) we aggregate across all individuals to obtain the total market value of the current real money supply:

$$M = P_M \sum_{i=1}^N Q_M^i \tag{5}$$

From equation (3) we aggregate across all individuals to obtain the market value of total real illiquid wealth:

$$A = \sum_{i=1}^N \sum_{a=1}^{N_a} P_a^i Q_a^i \tag{6}$$

Substituting the values of A and M from equations (5) and (6) into equation (1) yields the real liquidity ratio for the entire economy:

$$l = \frac{1}{V} \cdot \frac{M}{A} \tag{7a}$$

which, after summing across Q_M^i , can be rewritten as

$$l = \frac{1}{V} \cdot \frac{P_M Q_M}{A} \tag{7b}$$

Solving for Q_M yields an economy-wide demand function for real money-in-exchange:

$$Q_M = \frac{VlA}{P_M} \tag{8a}$$

or

$$Q_M^d = Q_M(P_M; V, l, A) \tag{8b}$$

where

$$\frac{\partial Q_M^d}{\partial P_M} < 0, \quad \frac{\partial Q_M^d}{\partial V} > 0, \quad \frac{\partial Q_M^d}{\partial l} > 0, \quad \frac{\partial Q_M^d}{\partial A} > 0$$

Holding the liquidity ratio (l), quantity of money (Q_M), and velocity (V) in equation (7b) constant and recalling equation (6), it becomes clear that any increase in A brought about by an increase in any Q_a^i for all or some i results in an increase in $P_M Q_M$ and a subsequent rise in the value of the total money supply. As P_M is the standard against which all other goods are priced, a rise in P_M necessarily results in a subsequent fall in the price of all other goods (P_a^i for all a). This implies that, in the absence of a change in V , Q_M and A must rise proportionately, and that Q_a^i for any or all a is rising faster than Q_M . In other words, as the value of available money increases relative to all other goods and services, an incremental, general price deflation occurs. As a result, the transaction of smaller valued items is diminished due to the existent, now larger-valued monetary units. This can result in a constraint on economic activity, as trade for smaller valued items is stifled. This problem is overcome with the creation of smaller denominations of some portion of the available money and a subsequent increase in velocity (V).

Market for Money in Exchange (Supply)

An alternative resolution of the aforementioned problem would be an increase in the supply of money (Q_M^s) resulting in a depreciation in the unit-value of the existent supply and an overall fall in the price of money (P_M). This is what occurs when statutory counterfeit is added to the mix.

We can represent the supply of real money-in-exchange as follows:

$$Q_M^s = Q_M^s(P_M; P_f, \tau, \nu) \quad (9)$$

where

$$\frac{\partial Q_M^s}{\partial P_M} > 0, \quad \frac{\partial Q_M^s}{\partial P_f} < 0, \quad \frac{\partial Q_M^s}{\partial \tau} > 0, \quad \frac{\partial Q_M^s}{\partial \nu} > 0$$

and where

P_f = the price of fuel

τ = the level of mining and other money-related technology

ν = new ore discoveries

Market for Money in Exchange (Equilibrium Price and Quantity)

Combining equations (8b) and (9) we solve for the equilibrium price of money (P_M^*) and quantity (Q_M^*):

$$P_M^* = P_M(V, l, A, P_f, \tau, \nu) \quad (10a)$$

$$Q_M^* = Q_M(V, l, A, P_f, \tau, \nu) \quad (10b)$$

Money in Use

The Credit Constraint

In a real economy with real money one neither lends, nor sells purchasing power into existence. In a real economy with real money, one can neither pretend to own what one does not own, nor create purchasing power out of thin air. In a real economy with real money if you wish to enjoy the material wealth produced by others, then you must produce material wealth of your own.⁹

There are no free rides in a real economy with real money that are not provided as voluntarily given charity for the sake of one's fellow human beings and the genuine good-feeling that comes with the presentation of such kindness. Ill-gained real wealth posing as freely given charity is not motivated by compassion for other people; rather, it is motivated by contempt for the human race.

Pretending that your goal is price stability and then rarely, if ever, achieving it, and further pretending that you are providing otherwise unavailable investment opportunity by perverting the very market signal that allows a society to realize its preference for future consumption, is at best disingenuous.

We have created a society in which the majority of its citizens are either indebted and living from paycheck to paycheck, or are completely provided for, to some extent, by the same who are indebted and living from paycheck to paycheck. It is absurd on its face, and thoroughly corrupt when carefully examined.

In a real economy with real money a transfer of liquid wealth with a promise to repay necessarily diminishes the liquidity of the lender and increases the liquidity of the borrower. Similarly, the promise to repay increases the illiquid wealth of the creditor and diminishes the illiquid wealth of the debtor. Equations (11a) and (11b) below capture this result mathematically.

Once again, we start from the bottom and work our way up from each market agent to the market as a whole.

Creditor:

$$l_i = \frac{1}{V} \cdot \frac{M_i - c_i M_i}{A_i + c_i M_i} = \frac{1}{V} \cdot \frac{M_i^{\text{adj}}}{W_i} \quad (11a)$$

Debtor:

$$l_j = \frac{1}{V} \cdot \frac{M_j + d_j M_j}{A_j - d_j M_j} = \frac{1}{V} \cdot \frac{M_j^{\text{adj}}}{W_j} \quad (11b)$$

where

c_i = the individual's fractional propensity to lend

d_j = the individual's fractional propensity to borrow

W_i = real market wealth of the creditor

W_j = real market wealth of the debtor

The need to borrow and lend is both psychological and practical. It is practical in so far as markets are rarely ever stationary, and the need for additional market liquidity from time to time is something that everyone experiences. It is psychological in so far as dependency (or, at least, interdependency) is a natural state of humankind, and the creditor-debtor relationship is the natural market reflection of this natural state.¹⁰ Hence, we can speak about an individual's fractional propensity to lend or borrow. Some of us are more inclined to borrow and others are more inclined to lend.

As one must always pay back in real wealth more than one has borrowed, the tendency to borrow for the sole purpose of consumption in a real economy with real money is diminished, and the inclination to borrow for the purpose of investment and increased future reward is enhanced. As a result, fewer resources are squandered.

Now, in a world of real money it must be true that

$$\sum_{i=1}^{N_i} c_i M_i = \sum_{j=1}^{N_j} d_j M_j \quad (12)$$

where

N_i = total number of lending market agents

N_j = total number of borrowing market agents

Notice that N_i and N_j need not be the same, and are likely not. This is because bond sales — a form of lending — might have only one seller-borrower and many buyer-lenders.

Solving equations (11a) and (11b) for $c_i M_i$ and $d_j M_j$, respectively:

$$c_i M_i = \frac{M_i - l_i V A_i}{1 + l_i V} \quad (13a)$$

$$d_j M_j = \frac{l_j V A_j - M_j}{1 + l_j V} \quad (13b)$$

Substituting equations (13a) and (13b) into equation (12) and summing, and assuming $l_i = l_j = l$, we can show that

$$l = \frac{1}{V} \cdot \frac{M}{A} = \frac{1}{V} \cdot \frac{M}{W} \quad (14)$$

At the aggregate level $A = W$, since equation (12) ensures that the credit adjustments to illiquid wealth sum to zero across all market agents. This is a basic axiom of money that is ignored by the top-down, flow model developed by Irving Fisher.¹¹

The Market for Money-in-Use

Let us assume further that there exists a market for loaned and borrowed money, and that the fractional propensities to lend and borrow are influenced by the market rate of interest, income, and business outlook.

$$c_i = c_i(r; Y) \quad (15a)$$

where $0 \leq c_i \leq 1$ and

$$\frac{\partial c_i}{\partial r} > 0, \quad \frac{\partial c_i}{\partial Y} \geq 0$$

$$d_j = d_j(r; \varphi) \quad (15b)$$

where $d_j \geq 0$ and

$$\frac{\partial d_j}{\partial r} < 0, \quad \frac{\partial d_j}{\partial \varphi} \geq 0$$

and where

r = real rate of interest

Y = real income

φ = business outlook

The idea is that you cannot lend more than you own — a real economy is mostly honest. Accordingly, higher real rates of interest and higher income encourage greater lending. In contrast, a borrower with good credit can borrow up to any amount; higher real rates of interest discourage borrowing, while an optimistic outlook promotes it.

Substituting for c_i and d_j into equation (12) yields:

$$\sum_{i=1}^{N_i} c_i(r; Y) M_i = \sum_{j=1}^{N_j} d_j(r; \varphi) M_j \quad (16)$$

Recalling equation (5) and substituting for M_i and M_j :

$$\sum_{i=1}^{N_i} c_i(r; Y) Q_M^i = \sum_{j=1}^{N_j} d_j(r; \varphi) Q_M^j \quad (17)$$

P_M drops out.

The left-hand side of equation (17) yields the credit supply function:

$$Q_{\text{credit}}^s = Q_{\text{credit}}^s(r; Y) \quad (18a)$$

where

$$\frac{\partial Q_{\text{credit}}^s}{\partial r} > 0, \quad \frac{\partial Q_{\text{credit}}^s}{\partial Y} > 0$$

and the right-hand side yields the credit demand function:

$$Q_{\text{credit}}^d = Q_{\text{credit}}^d(r; \varphi) \quad (18b)$$

where

$$\frac{\partial Q_{\text{credit}}^d}{\partial r} < 0, \quad \frac{\partial Q_{\text{credit}}^d}{\partial \varphi} > 0$$

Solving for the equilibrium rate of interest and quantity of credit:

$$r^* = r(Y, \varphi) \quad Q_{\text{credit}}^* = Q_{\text{credit}}(Y, \varphi) \quad (19)$$

Because the market must clear at equilibrium, $Q_{\text{credit}}^* = Q_{\text{debt}}^*$.

Note that the supply and demand for credit depend neither on the price of money (P_M) nor its velocity (V).

The Market for Real Money

Unlike in economies characterized by Fisher's Quantity Theory of Money, in a real economy with real money, money is a carefully selected energy embodiment that must be obtained from the earth.¹² It is neither the statutory counterfeit that we experienced with the gold standard of the British Empire, nor is it the gold-exchange standards that came into being with the Genoa Agreement (1922) in the wake of World War I and the Bretton Woods Agreement (1945) in the wake of World War II. Nor is it the now equally popular vehicle for real wealth transfer — namely, the more commonly known fiat currency that we have experienced since the Roosevelt–Nixon Two-Step was completed in 1971 — from the productive many to an undeserved, commanding elite and their less than productive voting constituencies. That we, in America, never adopt a CBDC!¹³

Incremental Deflation, Marxism, and Crypto-Currency

Unlike in a real economy with statutory counterfeit or fiat currency, a real economy with real money experiences incremental deflation that keeps lending in check and avoids the boom and bust cycles that have plagued us since the coupling of the industrial revolution with statutory counterfeit and the introduction of mass production. It is in this financially corrupt, market context where the proponents of Karl Marx find fertile ground for their critique of the voluntary, free-market system. Marx gave this corruption a name; he called it capitalism.

Further, in a real economy with real money, the price of money is not the rate of interest of borrowing and lending. Real money does not serve the interests of dishonest bankers; rather, it serves the honest interests of those who trade with it across time and space — the people. Honest bankers insure that excess real balances find a proper use.

As noted above, if the supply of the commodity that serves as the basis of real money is exceptionally scarce, and the economy is forever growing, the denominations of the money must become ever-smaller in order to accommodate the general, but incremental relative fall in goods and services prices and ever greater market value of the agreed base-monetary unit. This can easily be achieved through the issue of a paper or electronic money that is a matched, one-to-one, increment and true representation of the real thing. This agreed, base-monetary unit must be matched with a fixed, immutable amount of the underlying metal. In the United States this could be achieved with a constitutional amendment¹⁴; it should not be left up to the temporal vagaries of an ever-changing, politically charged congressional body of politicians or the president.

Although crypto-currency — especially Bitcoin — has very real advantages over both statutory counterfeit and fiat currency, crypto-currency is born and maintained in the energy-consuming secondary economy, and thus a poor measure of the more important energy-providing primary economy. Real money is also far less dependent on critical and vulnerable infrastructure for its existence — what is important in time of war and large natural disasters.¹⁵

Role of Government

Government in a real economy with real money is much like a common household, but different. It receives income, makes purchases, and provides services. This said, its source of income is taxation, and unlike the common household it uses a partial, but important monopoly on the use of force to extract them. Also, the state tends to dance to the rhythm of its own drum, and its decision to borrow or not to borrow has more to do with its tax revenue and spending decisions than market performance. In time of war, for example, there is no end to how much the state is willing to borrow and spend. It will exhaust an entire economy to stave off defeat.

Notwithstanding its important negotiating leverage due to its size and political influence, in a real economy the state is subject to the same market interest rates as everyone else. In addition, once a state goes into debt, it rarely comes out of it; rather, it balances the interest that it must pay on what it owes with its ability to tax and borrow at the moment that its interest becomes due.

With these thoughts in mind we can adjust equation (17) as follows:

$$\sum_{i=1}^{N_i} c_i(r, \varphi) Q_M^i = \sum_{j=1}^{N_j-1} d_j(r, \varphi) Q_M^j + d_g(r, D) Q_M^g \quad (20)$$

where

$$\begin{aligned}
 d_g(r, D) &= \text{government propensity to borrow} \\
 D &= \text{government debt} \\
 Q_M^g &= \text{quantity of money held by government} \\
 \frac{\partial d_g}{\partial r} &< 0 \quad \frac{\partial d_g}{\partial D} < 0
 \end{aligned}$$

Because this model is built from the bottom up

$$l_i = \frac{1}{V} \cdot \frac{M_i}{W_i}$$

rather than from the top down

$$MV = PQ$$

separating out government from the aggregation of individual debtors is only one example of the usefulness of starting with individual market agents. In effect, one could separate out small firms from large firms with all firms in the same group sharing the same liquidity preference (l). The possibilities of the recombination of market agents are numerous and rely only on a shared liquidity ratio (l) within each group.

Conclusion

This model is only a first step toward understanding what macroeconomic analysis might look like in the absence of statutory counterfeit, fiat currency, general price inflation, and the booms and busts of financial dishonesty that attend them. By grounding the analysis in the behavior of individual market agents rather than in aggregate flows, the bottom-up approach also eliminates many of the tenuous assumptions on which the entire field of macroeconomics has long depended.

The transition from real money, that is close to nature and places the needs of the primary economy over those of the secondary economy, to statutory counterfeit and fiat currencies that emphasize the priorities of the state, corrupt bankers and their closest associates in the secondary economy was fairly sudden and not completely understood at the time of transition. The resulting three-hundred-year illusion of monetary sophistication has not only led humanity down a painful, tortuous path, but it now threatens to destroy the very political and economic liberties that have brought Western civilization the greatest material prosperity the world has ever known.

In this paper, the author has offered not only a different way of modeling the role of money, but has struck at the roots of today's failed monetary system. In the end, the path to the restoration of real money is as simple and straightforward as was the path to its demise. What stands in our way today is the absence of courage and wisdom on the part of economists around the world to take a moral stand and to educate

our youth who might one day compel our respective states and banking industries to amend their corrupt ways.

Pierre-Joseph Proudhon, the nineteenth-century political theorist who demonstrated that the right to own property is not a natural right, showed how unfair it is that only a small number of the world's population owns land.¹⁶

Land and labor are what sustain all human endeavor. As every economist knows, land is also an important source of rent. As the market value of the primary and secondary economies increase through technological innovation, the value of the land on which these two economies sit automatically increases in value. Small pieces of gold formed into coin or bullion are a piece of land that everyone can own and from which everyone can collect rent in harmony with their individual endeavor and nature's resources.

Were gold or silver the sole source of our money supply, everyone would share in its ever-rising value.¹⁷ What could be more equitable — and what legacy more worth leaving?

Notes

1. Jean Calvin. 16th Century. *Institution de la religion chrétienne*. The first Latin version was published in 1536. The final Latin and French versions were published in 1559 and 1560, respectively. [online documents (French)] <https://www.unige.ch/theologie/cite/calvin/institution>. Ludwig von Mises. 1912. *Theorie des Geldes und der Umlaufsmittel*. 2nd Edition (1924). Leipzig: Verlag von Duncker und Humboldt.
2. Irving Fisher. “100% Reserves — An Old System Adapted to Modern Needs.” Prepublication manuscript. Letter sent to Franklin D. Roosevelt, 32nd President of the United States, on February 10, 1937.
3. Roddy A. Stegemann. “A Call for the Restoration of Monetary Order (I): Monetary Grand Theft.” First presented at Session 81 of the 99th Annual Conference of the Western Economics Association International (WEAI) in Seattle, Washington. https://cambitas.spiritof2021.online/documents/monetary_grand_theft.pdf
4. Roy Sebag. *The Natural Order of Money*. United Kingdom: Goldmoney Publishing, 2022; Canada: Chelsea Green Publishing, 2023.
5. Op. cit. Ludwig von Mises, 1912.
6. This quantity can be represented by electrons or paper, but the representation must be one-to-one, and only one (the commodity) or the other (its digital or paper representation) can be used as money-in-exchange or money-in-use, which is a form of money-in-exchange. This eliminates all forms of fractional reserve banking. In other words, you cannot exchange or lend that for which you do not hold title. This prohibition follows the fundamental principle of common-law contracting known as consideration. See the first paper in this series, “A Call for the Restoration of Monetary Order (I): Monetary Grand Theft,” for a fuller explanation.
7. Roddy A. Stegemann. *Mount Cambitas — The Story of Real Money*. [online] <https://cambitas.spiritof2021.online/>
8. As this model deals with money stocks (real balances) and not with money flows, the interpretation of velocity is different. In the Fisher model velocity measures the frequency with which money exchanges hands; in this model it measures the size of the proportional units and the relative proportion of these units of what is held in total — namely, what is available for exchange. Accordingly, the issue of technology is included in the supply function of money rather than its demand, as is revealed in the subsequent discussion.
9. See the first paper in this series, “A Call for the Restoration of Monetary Order (I): Monetary Grand Theft,” https://cambitas.spiritof2021.online/documents/monetary_grand_theft.pdf, for an explanation of the concept of consideration in common law contract theory. In effect, you cannot sell an empty promise and have it be binding in a court of law.
10. We all spend a large portion of our lives as children — a completely dependent relationship on our parents. Younger siblings are typically dependent on older siblings, and this relationship tends to endure throughout the lifetime of the siblings. Employees are dependent on their employers for both workplace guidance and income, while they are employed. And, in any merit-based institution those less advanced are dependent on those more advanced for their training, knowledge, and professional advancement. In effect, human society is one of built-in, asymmetric interdependence in which some are more inclined toward dependence than others who are more inclined toward sustaining the dependence of others. Many of us may seek independence, but it is rarely ever achieved. In the end we are social creatures, and the best that most of the independent among us can achieve is a balance between dependence and sustaining the dependence of others.
11. Irving Fisher. 1911. *The Purchasing Power of Money*. 2nd Edition. Macmillan Co., New York.

By 1937 even Fisher had already argued for several years for an end to fractional reserve banking. Unfortunately, it was not a system based on real money founded in the primary economy. See Irving Fisher. “100% Reserves, An Old System Adapted to Modern Needs.” *Commercial and Financial Digest*, June 1937.

12. Op. cit. Roy Sebag, 2022.

13. In 1933 Franklin Delano Roosevelt (32nd US President) confiscated the gold of American citizens and took the US off the American domestic gold-exchange standard. In 1971 Richard Milhous Nixon (37th US President) withdrew the US from the Bretton Woods Accord agreed in 1944. This effectively destroyed the world’s gold-exchange standard and introduced the Petro-Dollar. Central Banking Digital Currency (CBDC).

14. This proposal is developed in full in the third paper of the present trilogy. See Roddy A. Stegemann, “A Call for the Restoration of Monetary Order (III): The Real Money Amendment.”

15. Op. cit. “A Call for the Restoration of Monetary Order (I): Monetary Grand Theft.”

16. Pierre-Joseph Proudhon. *Qu’est-ce que la propriété? Ou, recherches sur le principe du droit et du gouvernement*. Premier Mémoire. Paris, 1840.

17. Although gold, among the precious metals, is the demonstrably superior energy embodiment, silver may be, politically speaking, a better alternative to gold. It is a matter for another paper. Important is that we do not fall into the trap of bimetallism.

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