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Democratizing Money

by

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ABSTRACT

In the Western interpretation of democracy, governments exist in order to manage relations of property, with absence of property ownership leading to exclusion from participation in governance and, in many cases, absence of equal treatment before the law. Democratizing money will therefore ensure equal opportunity to the ownership of property, and thus full participation in the democratic governance of society, as well as equal access to the banking system, which finances the creation of capital via the creation of money. If the divergence between capital and labor—between rich and poor—is explained by the monopoly access of capitalists to finance, then reducing this divergence is crucially dependent on the democratization of money. Though the role of money and finance in determining inequality between capital and labor transcends any particular understanding of the process by which the creation of money leads to inequity, specific proposals for the democratization of money will depend on the explanation of how money comes into existence and how it supports capital accumulation.

KEYWORDS: Money; Finance; Financial History; Clearing Systems; Unit of Account

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I. DEMOCRATIZATION?

Why is it important to democratize money? In the Western interpretation of democracy, governments, following Roman law, exist in order to manage relations of property. In Adam Smith's ([1776] 1937, 674) interpretation this implied that "civil government so far as it is instituted for the security of property, is in reality instituted for the defence of the rich against the poor, or of those who have some property against those who have none at all." Absence of property ownership meant exclusion from participation in governance and, in many cases, absence of equal treatment before the law. In Smith's time, property was primarily ownership of land, which was acquired through inheritance, royal gift, or forced transfer. A century later, Karl Marx noted that in industrial societies it was capital that was the property to be defended by government, and produced divergence between the capitalist and laboring classes. And access to money and finance was the key to capital appropriation via the exploitation of labor.

II. DEMOCRATIZING MONEY

The first step in the democratization of money is to ensure equal opportunity to the ownership of property, and thus full participation in the democratic governance of society. The second should then imply equal access to the banking system, which finances the creation of capital via the creation of money. If the divergence between capital and labor—between rich and poor—is explained by the monopoly access of capitalists to finance, then reducing this divergence is crucially dependent on the democratization of money.

The importance of the role of money and finance in determining inequality between capital and labor, between rich and poor, transcends any particular understanding of the process by which the creation of money leads to inequity. However, specific proposals for the democratization of money will depend on the explanation of how money comes into existence and how it supports capital accumulation.

III. THE TRADITIONAL “METALLIST” APPROACH

The dominant neoclassical representation (the story is well told by Friedrich Bendixen [1908], a sceptic, and William Stanley Jevons [1896], an early acolyte) starts from the observation that exchange takes place via the use of coins forged from precious metals; it thus became natural to consider the value of the coin being exchanged for commodities as being determined by the value of the precious metal embodied in the coin. It argued that since bilateral barter exchange is inefficient, a market economy will eventually evolve to the use of a single commodity to determine relative prices and effectuate exchange. The physical characteristics of the commodity that can best serve this role, which gold and silver happen to fit perfectly, determines what money is. On this observation, an explanation of the dominance of gold and silver as money was constructed.

But this explanation creates ambiguity when bank notes were introduced by banks, and raised the question of whether pieces of paper without intrinsic value could be considered money. The conundrum was resolved by positing that the pieces of paper were just signs representing, and convertible into, gold. This difficulty increased when bank deposits, which did not even have a paper value, appeared and could be more or less costlessly created. The possibility that creation of these “signs” or tokens could depart in magnitude from the gold money that they represented meant that their value might depart from the underlying value of gold. Thus was born the divergence between “nominal” and “real” values. An excessive expansion of signs would mean a “depreciation” in their value relative to gold—what came to be called price inflation. The goal of monetary policy thus became to limit the quantity of money signs to the quantity of commodities they represent—the so-called “quantity” theory of money—so that nominal values corresponded to real values. And this has been the scope of monetary theory from the 16th century to Milton Friedman’s (1969) resurrection of the theory in the 1970s.

In this approach, nominal money creation is based on fractional reserve deposit banking in which private banks (subject to government regulation) receive deposits from clients, but are able to expand their lending by a multiple of the deposits given by a legal or traditional requirement to keep a share of the money received in reserve for contingencies—a process known as the

“deposit multiplier.” Thus, banks are seen as intermediaries that take money on deposit from clients and lend out an even greater sum to borrowers to create capital. Therefore we could say that the depositors’ savings are financing the borrowers’ capital accumulation. In this version gold has disappeared, but its place has been taken by what is called “high-powered money,” which is the base of the multiplier process.

This is the system that produced the Great Depression of the 1930s and the Great Recession of 2008, but most importantly it has produced the accumulation of capital supporting the trend rise in income inequality of the last half century. To provide more democratic access to money for those who have seen their economic conditions decimated would thus seem to require a reform of that system by means of giving the government a greater role in the provision of finance. Indeed, there is a long tradition that recognizes the possibility of a direct public provision of money through the central bank, independently of private financial institutions.

This practice was first employed in Britain through the Bank of England’s direct financing of the 1914–18 war (see Anson et al. 2017) In the US, this possibility was first raised by Marriner Eccles, as head of the Federal Reserve during the Roosevelt Administration, and then by Wright Patman (see Kregel 2014) who argued that it was folly for the government to finance the Second World War by borrowing money from private banks when the Federal Reserve had created the dollars in the first place. It would be cheaper, he argued, to finance the war directly by money creation from the Federal Reserve.

On the basis of these early insights into the operation of financial system, it is easy to reach the conclusion that the best way to democratize finance would be for the government to take over the process of deposit-money creation directly, replacing private banks and acquiring the ability to determine the impact of finance on the entire population in a more democratic manner. The solution would be government, or possibly public-private partnership banks, providing for financing of investment through the same system of fractional reserve deposit creation.

IV. THE ALTERNATIVE EXPLANATION OF MONEY CREATION: THE “CHARTALIST” OR “CLEARING SYSTEM” APPROACH

The problem with this democratization proposal was that it is based on a theory of monetary creation that does not reflect the evolution of financial systems, and thus misinterprets their essential characteristics. The work of Mitchell Innes (1913) shows clearly that there is no historical support for bilateral barter exchange inefficiencies leading to the market process of the discovery of a more efficient substitution of a single means of payment. Even more challenging is the historical evidence of the existence of medieval financial systems in which there is no physical equivalent of money in the form of precious metals or coins. This is not only the realm of the anthropologists who identify money as seashells or boulders buried under the sea. Indeed, there is a long academic tradition that provides an alternative interpretation of money that is independent of the traditional interpretation of money as a single dominant physical commodity such as gold.

This alternative explanation emerged in the debate between what are known as metallists and chartalists. This representation is grounded in the existence of what Luigi Einaudi ([1936] 1953) called “imaginary” money, that is the existence of money that had no physical or precious metal expression as coin, but rather was a notional unit of account used to express prices, define obligations in time contracts, and keep books. It is reflected in the legal tradition of nominalism (the recognition of money in the law of contract as a notional accounting unit), used as the basis for the liquidation of contracts, and is independent of changes in the real value of the monetary unit in which the contract is stipulated.

The chartalist approach was formulated by critics of the metallist approach, undertaken by economists such as Sir James Steuart (1767) in the 18th century and Stephen Colwell (1859) in the 19th century, followed by German and Austrian economists such as Bendixen, L. Albert Friedrich Hahn, Georg Friedrich Knapp, and Joseph Schumpeter, as well John Maynard Keynes and Ralph Hawtrey in England in the beginning of the 20th century. It is this critical tradition that started with Henry McCleod’s studies of banking (e.g., McCleod 1894), but had been lost in the postwar discussions dominated by Friedman’s a-theoretic and a-historic resurrection of the

metallist approach. This section argues that the chartalist approach provides a better foundation for the democratization of money because it provides a better explanation of the evolution of money and the support of capital accumulation.

In his book *Das Wesen des Geldes*, the American-born Hamburg banker Friedrich Bendixen ([1908] 1926) provided a trenchant criticism of the now-traditional explanation of how gold came to dominate two-way barter exchange well before Innes debunked the historiography of the neoclassical explanation. Referring to the legal theory of money proposed by Knapp (1905), he notes that “the metallist theory, which has been dominant until today defines the unit of value (mark, franc, guilder, ruble) as a certain amount of metal, cannot explain every monetary system, and is therefore not general, and therefore, false. ... The unit of value is not defined metallically, but nominally, equivalently in countries on the gold standard and those with paper currency. ... The great importance of the new theory is the assertion that even in countries on the gold standard, the unit of value is nominal.” He indicates Austria as an example of a country with a functioning payments system that works without gold or other metallic commodity.

This is not a question of the value of paper currency or its proportion to gold, as in the more traditional banking versus currency school approaches, for it considers fiat and metallic coin as equivalent. What exactly did Bendixen mean by the unit of value being defined nominally?

Steuart’s *An Inquiry into the Principles of Political Oeconomy* ([1767] 1966, II: 408) had already provided the answer in the mid-18th century when he raised the importance of the distinction between metal coin and “money, which I call of account, is no more than an arbitrary scale of equal parts, invented for measuring the respective value of things vendible” for the operation of bank transfers. He compares the operation of two different types of banks distinguished by the two means of circulation: “those which only transfer the credit written down in their books from one person to another ... I call banks of deposit,” in contrast to banks of circulation, “which issue notes payable in coin to the bearer” (Stuart [1767] 1966, II: 476).

The importance of the unit of account in the development of market capitalism was first noted by Sir William Petty a century earlier in his *Dialogue of Diamonds* ([1899] 1963). He notes that the operation of market competition requires the ability to compare similar commodities from different producers. To do this you need a common unit. For different attributes of diamonds the karat is used; likewise different commodities have to have prices represented in similar units of measure. How can you compare prices if they are denominated in different metallic coins? It was necessary not only to have a common *notional* unit to classify commodities as being similar, a common unit was also necessary to compare the coins that would be used in exchange for them.

Keynes (1930, 3) takes a similar position in his *A Treatise on Money*: “A money-of-account comes into existence along with Debts, which are contracts for deferred payment, and Price-Lists, which are offers of contracts for sale or purchase. Such Debts and Price-Lists, whether they are recorded by word of mouth or by book entry on baked bricks or paper documents, can only be expressed in terms of a Money-of-Account.”

Einaudi ([1936] 1953, 252), in his account of “imaginary” money, also notes the importance of a nominal unit of account without physical properties as the basis of the determination of prices and thus as the basis of market exchange and financial practices in 17th and 18th century Europe:

There was, then, a monetary unit used only as a standard of deferred payments (promises to pay) or for the purpose of keeping accounts. This was the function of a money of account, an imaginary or ideal money. The public made contracts, kept books, established mortgages, or stipulated rents in pounds, shillings, and pence.... Although it was possible to make contracts or to keep accounts in imaginary money—that is, in pounds, shillings and pence—it was impossible to make actual payments in these monetary units, since they had not been coined for several centuries. Payment was made in real currency, that is, in gold coins, white money or silver coins, black money or low-grade silver, vellon or copper coins.

Einaudi goes on to point out that it was the right of the local sovereign to determine the rates of exchange of the various metallic coins and the unit of account, allowing the coins to be used to discharge a debt denominated in imaginary money. See Einaudi’s ([1936] 1953, 259) table 1 (reproduced below) for an example of the determination of rates of exchange between various coin and the unit of account.

TABLE 1
RATES OF THE GOLD AND SILVER COINS CURRENT IN MILAN (1762)

GOLD					
Number of Coins	Rate in Money of Account	Number of Coins	Rate in Money of Account	Number of Coins	Rate in Money of Account
	£ s. d.		£ s. d.		£ s. d.
1	110. 0. 0.	2	25.10. 0.	1	14.15. 0.
1	46. 2. 6.	1	25. 7. 6.	2	14.10. 0.
1	41. 0. 0.	2	25. 5. 0.	2	14. 7. 6.
1	37. 2. 6.	3	25. 0. 0.	1	14. 5. 0.
1	31. 0. 0.	1	24.12. 6.		
1	25.15. 0.	1	15. 0. 0.		

SILVER					
Number of Coins	Rate in Money of Account	Number of Coins	Rate in Money of Account	Number of Coins	Rate in Money of Account
	£ s. d.		£ s. d.		£ s. d.
1	10. 5. 0.	1	7.11. 0.	2	6. 0. 0.
1	8.12. 0.	1	7.10. 0.	1	5. 8. 9.
2	8. 9. 0.	1	7. 7. 6.	1	3. 8. 0.
1	8. 8. 0.	2	6.19. 0.	1	2. 5. 0.
2	8. 7. 6.	1	6.17. 6.	1	1.10. 0.
1	8. 5. 0.	1	6.16. 0.	1	0.15. 0.
1	8. 2. 6.	1	6.12. 6.	1	0. 7. 6.
1	7.16. 0.	1	6. 5. 0.		
1	7.12. 0.	1	6. 4. 0.		

Source: Cesare Beccaria, "Del disordine e de' rimedi delle monete nello Stato di Milano nell'anno 1762," in *Le opere*, Vol. I (Florence, 1854), pp. 470-71.

Source: Einaudi ([1936] 1953, 259)

There was thus no single metallic coin that served as “money,” and any one would do to discharge a debt denominated in a unit of account determined by the sovereign when converted at the official rate in unit of account.¹

It is this scenario that is described in Keynes’s *Treatise on Money* (1930, 3) affirming that “money itself, namely that by delivery of which debt-contracts and price-contracts are discharged, and in the shape of which a store of General Purchasing Power is held, derives its character from its relationship to the Money-of-Account, since the debts and prices must first have been expressed in terms of the latter. ... Perhaps we may elucidate the distinction between money and money-of-account by saying that the money-of-account is the description or title and the money is the thing which answers to the description.”

¹ Kemp (1956, 18) notes that “in England prior to 1700, the king possessed three powers with respect to money: (1) the power to coin money; (2) the power to charge a seignorage for that service; (3) the power to determine the relative rates at which various coins, both domestic and foreign, should be valued in domestic payments.”

In Einaudi's account, a multitude of different coins answer the description after translation via the conversion table given above. However, Keynes (1930, 4) notes:

by the mention of contracts and offers, we have introduced Law or Custom, by which they are enforceable; that is to say, we have introduced the State or the Community. Furthermore it is a peculiar characteristic of money contracts that it is the State or Community not only which enforces delivery, but also which decides what it is that must be delivered as a lawful or customary discharge of a contract which has been concluded in terms of the money-of-account. The State, therefore, comes in first of all as the authority of law which enforces the payment of the thing which corresponds to the name or description in the contract. But it comes in doubly when, in addition, it claims the right to determine and declare what thing corresponds to the name, and to vary its declaration from time to time—when, that is to say, it claims the right to re-edit the dictionary. This right is claimed by all modern States and has been so claimed for some four thousand years at least.

Thus, for Keynes, the government decides what physical thing or coin answers to the description of money. When this occurs, Keynes defines the system as one of “state money,” or chartalism, referring to the work of Knapp.² Note that this can occur with the designation of a single type of coin of particular weight and characteristics or through designation of a fiat or paper currency (although Keynes [1930] notes that “it is not essential to chartalism that the State should mint the standard”). In difference from the banking/currency debates, it is not a question of the proportions of money commodities and paper currency, it is the link between the unit of account and money designated to discharge a debt designated in unit of account. Indeed, Keynes defines three different types of state money: commodity, fiat, and managed.

He goes on to note that “acknowledgements of debt are themselves a serviceable substitute for money proper in the settlement of transactions” and when they “are used in this way, we may call them bank money ... an acknowledgement of a private debt, expressed in the money of account. ... We thus have side by side State money or money proper and bank money or acknowledgements of debt” (Keynes 1930: 2, 5).

² Note that Keynes here (and Einaudi below) adopts the legal principle of nominalism “that the State enjoys the right to define the unit of account and to organize the monetary system.” The state theory supports the essential feature of nominalism—“In other words, the State establishes a currency and its units of account represent their own independent value in terms of the domestic legal system, regardless of any external factors which may have an economic impact upon that currency.”

V. THE BASIC PRINCIPLES

First Principle to Understanding “Money”: Unit of Account

In the opening sentence of his *A Treatise on Money*, Keynes notes “Money-of-Account, namely that in which Debts and Prices and General Purchasing Power are expressed, is the primary concept of a Theory of Money.” The first principle of this alternative to the quantity theory is that monetary theory starts with an understanding of the crucial role of a purely notional unit of account in capitalist production and exchange.

It is the development of this approach that led Schumpeter ([1917] 1954, 717) to suggest that the study of money had started in the wrong place with its focus on what commodity would serve as money:

But logically, it is by no means clear that the most useful method is to start from the coin—even if, making a concession to realism, we add inconvertible government paper—in order to proceed to the credit transactions of reality. It may be more useful to start from them in the first place, to look upon capitalist finance as a clearing system that cancels claims and debt and carries forward the differences—so that “money” payments come in only as a special case without any particularly fundamental importance. In other words: practically and analytically, a credit theory of money is possibly preferable to a monetary theory of credit. (Schumpeter 1954, 717)

Second Principle to Understanding “Money”: Debts and Credits in Unit of Account in a Social Balance Sheet

Schumpeter highlights the second principle of the new approach: money as a unit of account in a balance sheet or in a clearing system. Schumpeter (2014, 134) had elaborated this approach in his *A Treatise on Money*, where he argued that money represented a “current account relation ... the idea that everyone’s economic act is recorded on a real or imaginary current account. ... Each service, whether it consists in money, money claims, or goods and services charged in money, is to be credited to each person’s current account, while every receipt of money, money claims, goods, services, is to be charged to it.”

Indeed, these economists were simply reflecting what they observed in banking operations from the beginning of the 19th century. For example David Ricardo (1816 [1951–55]), in his “Proposal for and Economical and Secure Currency,” notes the fact that instead of gold being used in exchange “money is merely written off one account and added to another” and payments “effected without the intervention of either bank notes or money.”

The necessity of money as a nominal unit of account is to permit the operation of an “account-settlement” system under the individual decisionmaking characteristic of capitalism (although Schumpeter notes that it would function just as well under a planned socialist economy).

Third Principle to Understanding “Money”: Money as Social Account Settlement Managed by Bankers

The third principle of this approach is to recognize the role of bankers as bookkeepers controlling entries in their clients’ balance sheets. For Colwell (1859, 188–89):

A class of men is formed, who make it their business to deal in... evidences of debt. If a banker or broker purchases the two notes given by the merchant and his customer, it is obvious that both receive the means from him to pay the notes of which he has become holder and owner. ... The process of payment between them will be very simple, if the banker merely give each of the two parties credit on his books for the proceeds of the notes purchased of them their respective checks on these credits pay off the whole indebtedness ...

Thus, “[b]anks become, in this way, substantially book-keepers for their customers” and “[t]he books of the banks furnish, thus, a mode of adjustment by which the customers are enabled to apply their credits to the payment of their debts” (Colwell 1859: 9–10). And predating Innes and most of modern state money theory, this is applied to the private credit system: “No currency can be more suited to pay a man *with than that which he has issued himself*” (Colwell 1859, 8; italics supplied)

The same approach is taken by Ludwig von Mises (1953 [1912], 286):

The modern organization of the payment system makes use of institutions for systematically arranging the settlement of claims by off-setting processes. In the clearing-house, the claims continuously arising between members are subtracted from one another and only the balances remain for settlement by the transfer of money or fiduciary media. The use of money is avoided because claims to money are transferred instead of actual money. This process is continued until claim and debt come together, until creditor and debtor are united in the same person. Then the claim to money is extinguished, since nobody can be his own creditor or his own debtor.

Innes (1914, 168) was one of the clearest exponents of this tradition: “A credit cancels a debt; this is the primitive law of commerce. ... By sale a credit is acquired, by purchase a debt is created. Purchases, therefore, are paid for by sales. The object of commerce is the acquisition of credits. A banker is one who centralizes the debts of mankind and cancels them against one another. Banks are the clearing house of commerce. ... The value of credit does not depend on the existence of gold behind it, but on the solvency of the debtor.”

Fourth Principle to Understanding “Money”: Bankers from Providers of Payment Services, as Agent/Broker Providing Clearing Systems

The historical evolution of the commercial banking system in this approach would be viewed as the process by which bankers’ provision of bookkeeping systems allows them to provide netting of client assets and liabilities, or what is more easily understood as provision of a “clearing house” for debts and credits. What the commercial banker provides is a financial service: matching debts and credits on their books via provision of a payments clearing system.

In such a system as Colwell and Innes noted, and Keynes (1980, 44–45) reprised in this his banking principle, there is a

necessary equality of debits and credits, of assets and liabilities. If no credits can be removed outside the banking system but only transferred within it, the Bank itself can never be in difficulties. It can with safety make what advances it wishes to any of its customers with the assurance that the proceeds can only be transferred to the bank account of another customer. Its problem is solely to see to that its customers behave themselves and the advances made to each of them are prudent and advisable from the point of view of its customers as a whole.

As noted by Innes (1914, 168): “The value of credit does not depend on the existence of gold behind it, but on the solvency of the debtor.” And Colwell (1859, 193): “The credit system does not, then really furnish a substitute for money, so much as a model of dispensing with it.” Indeed, from this point of view, the credit system is a financial innovation that creatively destructs the use of commodity or government “money proper” by economizing and replacing it as a means of payment in the commercial transactions of the economy: “in all stages of commerce, we find there has been a constant effort to dispense entirely with the use of precious metals” (Colwell 1859, 157). “Individuals might have trouble, owing to particular circumstance, in meeting payments; but a whole class or body of men could not, unless from other causes, because the fund for payment could never be short, and interest upon credits could never go to a high rate” (Colwell 1859).

Fifth Principle to Understanding “Money”: Profit Motive Drives Bankers to Provide Means of Payment and to Become Principal/Dealers

The inherent stability of the system was maintained as long as bankers remained bookkeepers, doing due diligence on their clients and providing payment services. However, bankers eventually realized that they could profit from providing alternative means of payment services by issuing their own liabilities in the form of banknotes, sight deposits, and all other types of financial innovations. By the beginning of the 20th century, Hawtrey (1919, 4) states simply: “A dealer in debts or credits is a Banker.” He describes how an economy could function without “money,” solely on the basis of “credit,” as already noted by Ricardo in the passage cited above, as well as by Jevons (1896, XXII).

Bankers over time thus evolved from being brokers to being dealers in debits and credits. The evolution of the commercial banking system may be viewed as the description of how bankers provide the bookkeeping systems that allows them to provide netting of client assets and liabilities, or what is more easily understood as provision of a “clearing house” for debits and credits.

What the commercial banker provides is a service—to make payments on behalf of clients via provision of a payments system—and eventually bankers started to issue their own liabilities (notes or sight deposits) that came to serve as means of payment and served as a substitute for money proper. When bankers cease being mere agents for their clients and become principals issuing their own liabilities, the provision of payment services converges with the creation of what Keynes called “bank money” and serves to replace the use of physical coins, or “money proper.” The conversion table is no longer necessary.

This evolution from broker/agent to principal/dealer can be seen as the evolution from Schumpeter’s (1912) circular flow to financial development based on creative destructive innovations. In the repetitive economic activity of the circular flow equilibrium, debts and credits always match and Schumpeter notes such a system can function without any physical money. However, when innovation takes place in the form of bank-issued notes or bank deposits, then banks have the unlimited ability to create purchasing power, which frees investment from the constraint of savings and allows the entrepreneur to engage in new innovation that disrupts the steady, predictable circular flow.

Through the introduction of these innovations, bankers were able to act as principals and the result was the creation of bank default risk and the imposition of government prudential regulations—usually in the form of physical commodity reserves, and then in state money—to limit their ability to issue their own liabilities.

Fifth Principle to Understanding “Money,” bis: Bankers as Dealers Means Loans create Deposits

This principle is still present in the modern financial system: bankers accept liabilities from the private sector in exchange for the issue of their own liabilities that not only serve as means of making payment, but are means of payment because they are backed by reserves of state money, and thus a substitute for state money. As Colwell (1859, 197–99) notes, this is a guarantee that cannot be kept with certainty because “under our present system,” ... bank liabilities are “required to be convertible at will into gold or silver. In point of fact they are not so convertible, and they cannot possibly be, as they amount at all times to a sum from ten to twenty times

greater than any possible amount of gold and silver which would be available for such purposes. ... neither the necessities of business, nor the demands of convenience, require to be convertible on demand... This requirement, as it operates, is one of the most mischievous blunders in modern times.”

British financial journalist Hartley Withers (1906, 46, 51) writes: “most of the money that is stored by the community in the banks consists of book-keeping credits lent to it by its bankers. It is usually supposed that bankers take money from one set of customers and then lend it to other customers; but in most cases the money taken by one bank has been lent by itself or another bank,” and that “the greater part of the banks’ deposits consist, not of cash paid in, but of credits borrowed. For every loan makes a deposit,” and Schumpeter (2014, 191) notes “... bank assets create bank liabilities, liabilities of a special kind, that for other people are cash.”

This approach identifies the increasing risk in the financial system given the shift to the issue of sight liability means of payment in the transition from agent/broker to principal/dealer. This transition raises the regulatory issue of how this “blunder” can be maintained without major disruptions to the payments system. The answer provided by Keynes, Hawtrey, and others is that the system works on the condition that bank liabilities are never in practice redeemed in state money and only offset in the clearing house or the interbank market. And while it remains true that debits must balance credits, this need not be true for any individual bank. In the historical record of clearing houses, this problem was resolved by the issue of clearing house credit certificates (the clearing houses provided the blueprint for Reserve Associations and then the Federal Reserve System in the US). It gave rise to the lender of last resort function carried out by central banks who issue their own liabilities, usually subject to a government guarantee or directly in state money.

Sixth Principle to Understanding “Money”: Financial Innovations and Financial Instability

Result from Transition of Bankers from Broker/Agents to Dealer/Principals

The result of the blunder is the increasing risk associated with the expanding issue of bankers' own liabilities to finance expenditure without a counterbalance in the form of private nonbank sector liabilities. Commercial banks only differ in this in that their liabilities serve as liquid means of making payment.

This evolution from broker/agent to principal/dealer can be seen in the development of many types of financial innovations. Indeed, commodity merchants started their transition from traders to financial institutions by offering to meet the commitments of other traders with the excess of their trade credits in different locations.

An exporter received a claim on the foreign importer denominated in foreign currency that could be provided to an importer client who had to make a payment to a foreign exporter in the same foreign currency. Bankers soon recognized that agricultural cycles in exports would create cycles in available credits and evolved from this broker service to principal by issuing foreign claims on themselves through the floating of “finance bills,” which could eventually be covered when the cycle turned.

The same process took place in the development of stock trading (cf. Kregel 1989, 1995) and can also be seen in the more recent creation of interest rate swaps in which banks initially acted to bring together fixed- and floating-rate borrowers, taking a piece of the spread, and then acting to warehouse exposure until a suitable counterparty could be found. The same principle applies to the subprime mortgage market in which banks eventually evolved from brokers to dealers and principal investors through securitization.

Thus the commercial bankers' clearing function evolves from the netting of the private sector's debts and credits to the netting of the individual banks' liabilities serving as means of payment via a clearing house covering local member banks.

More recently, Hyman Minsky (1986, 258) built his explanation of how money creates instability in the financial system with a similar explanation:

In our system, payments banks make for customers become deposits, usually at some other bank. If the payments for a customer were made because of a loan agreement, the customer now owes the bank money; he now has to operate in the economy or in financial markets so that he is able to fulfill his obligations to the bank at the due dates. Demand deposits have exchange value because a multitude of debtors to banks have outstanding debts that call for the payment of demand deposits to banks. These debtors will work and sell goods or financial instruments to get demand deposits. The exchange value of deposits is determined by the demands of debtors for deposits needed to fulfill their commitments. Bank loans, while ostensibly money-today for money-later contracts, are really an exchange of debits from a bank's books today for credits to a bank's books later. In simple terms, bank liabilities are held because businesses have debts denominated in those same liabilities and thus they extinguish those liabilities.

For Minsky, loans and deposits are just debits and credits in the bank's clearing system.

Minsky (1995) notes that even today, despite financial innovation in the mechanisms providing clearing of credits and debts, “[a]s the twenty-first century approaches, the only reason why banks are special is that they operate the ‘ultimate’ payment system within economies (the proximate payment mechanism is now often a credit card). There are now alternatives to banks for all but the provision of the ultimate payment mechanism function. Because banks operate the ultimate payments mechanism, those liabilities of banks which serve as the ‘medium of exchange’ also serve as the standard in which domestic public and private debts are denominated.”

Seventh Principle to Understanding “Money”: State Money Systems Mirror Private Bank Money Systems

Schumpeter's credit money system or Keynes's bank money system both recognized the existence of an official state money along the lines proposed by Knapp. As noted by Innes (1913, 37):

I have already explained how such acknowledgements [of indebtedness] acquire value in the case of private persons. We are all engaged in buying and selling. We manufacture commodities for sale ... and the only way in which we can be paid for the services we thus render is by receiving back from our purchasers the tallies which we ourselves have given in payment of like services which we have received from others. But a government produces nothing for sale, and owns little or no property; of what value then, are these tallies to the creditors of the government? They acquire their value in this way. The government by law obliges certain selected persons to become its debtors. ... This procedure is called levying a tax, and the persons thus forced into the position of debtors to the government must in theory seek out the holders of the tallies or other instrument acknowledging a debt due to the government, and acquire from them the tallies by selling to them some commodity or in doing them some service, in exchange for which they may be induced to part with their tallies.

It is interesting that Knapp ([1905] 1924, 135–36) makes the same argument of similarity but with reverse causation: “Something similar makes its appearance when bank-notes are used for payment to the bank. ... Here the question ‘What sort of money is for the time being valuta?’ is irrelevant. For the bank is under an obligation to receive these notes as so many units of what happens to be valuta money at the time”: “bank-notes have a remarkable but little noticed property, completely analogous to money of the State.”

Keynes (1930, I: 5) also deals with the relation between bank money and state money, noting the probable priority of the former:

We have seen that the introduction of a money of account gives rise to two derived categories—offers of contracts, contracts and acknowledgements of debt, which are in terms of it, and money proper, answering to it, delivery of which will discharge the contract or the debt. The first of these prepares the way for the next development, namely the discovery that for many purposes the acknowledgements of debt are themselves a serviceable substitute for money proper in the settlement of transactions. When acknowledgements of debt are used in this way, we may call them bank money—not forgetting, however, that they are not money proper. Bank money is simply an acknowledgement of a private debt, expressed in the money of account, which is used by passing from one hand to another, alternatively with money proper, to settle a transaction. We thus have side by side State money or money proper and bank money or acknowledgment of debt.

But Keynes (1930: 6) goes on to note that: “Historically a good many examples of representative State money are descended from some kind of bank money, which by being adopted by the State has subsequently passed over from one category to the other.” He continues, “for chartalism begins when the State *designates* the objective standard which shall correspond to the money of

account. Representative money begins when money is no longer composed of its objective standard. Fiat money only appears when the State goes one step further and abandons the objective standard” (Keynes 1930: 10).

“Nevertheless, whilst representative money is a relatively modern device, it was, as we have seen, adapted and taken over by the State from a far more ancient contrivance of private finance—namely bank money” (Keynes 1930: 13).

Eighth Principle to Understanding “Money”: He Who Controls the Network Determines What Is Money

Schumpeter clearly recognized the difference between his approach to money and Knapp’s, yet he believed that this lack of agreement did “not apply to the basic idea, or to the author of the theory or to the best representative of similar ideas, Bendixen. ... I hope to show that the ‘dominant’ doctrine should, and can, make its peace with the State theory and absorb its achievements, even though some of it may have to be discarded” (Schumpeter [1917] 1956, 149).

The agreement was clearly in the importance of starting from credit and balance sheets as an independent payment system divorced from the use of a commodity as money. This Bendixen had already established. It was also clear that both Knapp’s state money and Schumpeter’s balance sheets were debt-credit matching systems. The question was what determined the ability of each to dominate commodity money. It was not a question of “faith and trust” in support of “fiat” or paper money or of its ability to be converted into commodity money at some rate of exchange.

The difference between the two systems was the creation of liability. For Schumpeter’s system, the liability was created by the banker and credits were held because they could be used in the clearing system to extinguish debts. This system worked, as Keynes reminded in his definition of the “banking principle,” only if everyone belonged to the same clearing system. An external asset was only needed for the payment of debts to creditors in other clearing systems.

For Knapp's system, credits were held because they were created outside the economic system in the form of the imposition of a legal liability denominated in the unit of account to make a payment to the government with the liability issued by the government, state money. State money was both the unit of account and that which the state determines as equivalent. Whether this was a fiat currency or a gold coin made little difference, as Bendixen stressed. Just as the private banking system could create purchasing power without limit, so too the government could create purchasing power without limit.

As noted by Einaudi, the state also preserved the right to determine what would be used to extinguish a debt in terms of unit of account in a private credit system. It could be either the conversion table or the state-issued liability, whether paper or commodity. And it could, and often did, specify its own liability as the unit of account of the private system.

The linkage between the two systems occurs when that which the state determines as discharging a debt is used for payments imbalances across payments systems, or for the failure of debts to be validated within a payments system—in the form of bank reserves and access to the lender of last resort function of the discount window.

It is this relation that leads to the monetarist idea that reserves are exogenous and that deposits create loans, as well as the need to limit loans to voluntary savings in the form of 100 percent reserve banking and to the alternative that the government should take over the provision of deposits as liabilities of the government or the central bank. There is a certain logic to this proposal. In US banking history, the National Banking Act sought to replace the issue of private banks' notes with the issue of national bank notes by private "national" banks that held 100 percent government securities as backing. Indeed, the prior issue of greenbacks had provided an even more direct means of providing money as direct issue of government debt. When state banks responded by issuing checkable deposits, it would have been coherent for the Congress to amend the National Bank Act to create national bank deposits as equivalent to national bank notes. But this did not happen, and beginning at the turn of the century private banks controlled the issue of deposits denominated in state money, which Patman was to criticize as illogical

(Kregel 2014). The current proposals for joining public-private emission of deposits follows this line.

VI. AN ALTERNATIVE ROUTE TO DEMOCRATIZING FINANCE

It would thus appear that there are two routes to democratizing finance. The first would be to accept the existing system in which financial institutions act as principal in credit creation and introduce either full or partial government control over the composition of the assets that receive funding. This could be achieved by simple nationalization of the banking system, or some sort of mechanism to control the quantity and quality of the assets of the financial system. The former solution would correspond to the French financial system after the Second World War and the latter to the system of qualitative directed lending that was proposed for the US (cf. Dunkman 1933; Whitney 1934).

The alternative approach would be to return to the role of banks as agents by recreating a national clearing house system operated by the government or the central bank. All members of the system would have a unique account that would be credited and debited through entry of economic transactions. The accounts would be denominated in a unit of account: for the US the dollar would remain the unit of account. Access to the system could be through bank branches, as in the traditional system, or through electronic or mobile payments systems. Most of these already exist in the form of ATMs and smartphone applications. Current technological advances in electronic transfer systems via distributed ledgers make such a solution even more plausible today.

In difference from the traditional system, where liquidity is created by banks' creation of their private demand liabilities, in the clearing system it is sufficient for the government or central bank to provide a credit to a prospective borrower for the financing of consumption or investment in excess of its credit balance. Within the clearing system, this would be balanced by a debit entry that would be the equivalent of government debt. Financing of government expenditures would take place in the same way, with a credit entry to the provider of services

and a debit entry representing government debt. For accounts with a credit balance, the counterpart would be the debt entries of the government, representing the equivalent of the purchase of government debt. Since the transactions must balance it would be perfectly safe. Any excess balances held by the clearing system would be countered with government debit entries, thus providing a perfectly secure store of value that would be a close equivalent to the 100 percent banking proposals. But, note that in such a system there would be no government borrowing or payment of interest, while the creation of private credits would be charged an interest rate that would serve the role of the monetary policy variable. Finally, the access to finance would be managed and financed via the clearing system—the net creation of government clearing balances would replace government borrowing in private capital markets and its validation would come from the returns from the investment. In this way, the government could return to the idea of “directed lending”—which had been dominant in the early years of the Federal Reserve in the form of the list of eligible assets for discount by the central bank—or to European systems of government management of lending such as those practiced in the reconstruction of Europe.

Why would such an approach be more democratic? First, there would be no private bankers to bail out, and all risks of default on the means of exchange would be borne by the government, while the distribution of financial resources would be the result of democratic decisions on the direction of the financing. Alternatively, local government clearing houses could provide local financing, under the direction of local governments, with each local clearing system participating in the national clearing system, much as the original design of the German Girozentrale system (see Kregel 1997).

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