In Defense of Fiduciary Media— A Comment; or, What's Wrong with "Clown" or Play Money?

William Barnett II and Walter Block

In an article published in the *Review of Austrian Economics*, George Selgin and Lawrence H. White (1996) defend their position that people should be free "to issue and use fiduciary media of exchange" against criticisms also published in the *RAE* by Hans-Herman Hoppe (1994), Jesús Huerta de Soto (1995), and Jörg Guido Hülsmann (1996). Selgin and White write off in short order, and rightly so, monetary systems consisting of fractional-reserve banking systems based either on governmental fiat money or, *à la* Hayek (1978), on fiat-type (i.e., irredeemable, non-commodity) monies. They distinguish fiduciary media bank notes and demand deposits redeemable for a commodity money (gold specie), on the one hand when they are backed less than 100 percent by reserves of gold specie, and on the other hand when they are backed by the full 100 percent. Thereafter Selgin and White commence their defense of monetary systems with fractional-reserve banking, provided they are based on gold specie money.[1] They argue that such systems are both ethically and economically defensible.[2]

William Barnett II is an associate professor of economics at Loyola University New Orleans. Walter Block is the Harold E. Wirth Eminent Scholar Endowed Chair and professor of economics at Loyola University New Orleans. The present authors wish to acknowledge an intellectual debt to Hans Hoppe and Guido Hülsmann. We are also very grateful to an anonymous referee.

[1]Hereinafter: (1) only systems using gold specie are considered, whether the banks are fractional-reserve or 100 percent reserve banks; and, (2) the term "fractional-reserve" refers only to *demand* deposits, or to bank notes redeemable in specie on demand, or to banks or banking systems that offer such notes or deposits.

[2]These are referred to by Selgin and White as legitimacy and practical-advantages arguments. Certainly they mean morality not legitimacy, as any monetary and banking system sanctioned by law is, by definition, legitimate; whether a particular such system is moral is another, and far more important, matter.

THE QUARTERLY JOURNAL OF AUSTRIAN ECONOMICS VOL. 8, NO. 2 (SUMMER 2005): 55-69

Regarding ethicality, against the charge of fraud, they argue that, provided that the bank does not deceive depositors as to the matter of reserves, voluntary deposit contracts involving fractional-reserve deposits are not fraudulent. The only real point of contention in the literature favoring this system appears to be whether or not depositors know full well that banks engage in fractional-reserve banking and thus whether or not banks have a duty to notify them and their assignees, and, if they do have such a duty, the particulars thereof. There is, of course, nothing exceptional about this.[3]

With respect to the economics of the matter, they address several issues. We consider them in the following order: instability; resource costs savings; feasibility; and, mismatching of maturities.[4] We conclude with a discussion of the possible conflation of time and demand deposits.

Fractional-Reserve Banks are Inherently Unstable

Perhaps our most important objection to their position arises with the issue of stability. For Selgin and White, free-banking is a system, based on gold or silver specie, in which anyone could open and operate a bank, subject only to the test of the market.[5]

They assume, undoubtedly correctly, that, provided it was legal, some banks in such a system would attempt to act not as bailees (100 percent reserve banks), but rather as depositories (fractional-reserve banks), their obligation being limited merely to redeeming on demand, and in specie, any demand notes or deposits they had previously issued to customers. The fact that, in such a system, some individual banks, and *a fortiori*, the "system" as a whole would not, at any time, have enough specie to redeem all its obligations does not present a problem to Selgin and White. In our view, however, this is a position requiring elucidation.

Thus, putting other possible problems aside, a key objection to fractional-reserve banking is that when there are bank runs, and history provides plenty of evidence thereof, banks will fail, the banking system will shrink, if not implode, and society's payments mechanism will be damaged, causing severe damage to the system of social cooperation we know as the market, with attendant reduced levels of human want satisfactions.

---

[3]For an analysis of fractional-reserve parking lots, airline overbooking, lotteries, etc., see Hoppe et al. (1998, pp. 47–48).

[4]Actually, they treat the issue of feasibility in the section on fraud; however, it seems to us that feasibility is an economic not an ethical issue.

[5]That is, there would be no central bank or other lender of last resort, nor governmental deposit insurance, nor legal tender laws, nor any other type of governmental intervention/regulation, save for the enforcement of property rights and contracts.

Selgin and White (1996, pp. 91–92) offer, essentially, three arguments against the problem of bank runs. First, "solvent banks are not inherently run-prone."[6] Second, the market would *immediately* eliminate banks thought to be insolvent.[7] And, third, banks could insert (temporary) "option clauses" in their contracts with their customers. Let us consider these in turn.

"Solvent" Fractional-Reserve Banks are Inherently Run-Prone

It cannot be denied that an interventionist fractional-reserve banking system has a number of means to deal with bank runs that are not available in a pure free-banking system. First, and most important, knowledgeable participants in the economy know full well that under Federal Deposit Insurance Corporation (FDIC) specifications, the savings of all depositors are, virtually 100 percent, guaranteed;[8] any bank which cannot meet its obligations, due to fractional-reserve shortcomings, is assured that the Fed stands ready and willing to print up enough new money and more, if need be, to make good on its obligations. Second, there are lenders of last resort mechanisms, or purchaser (at a premium over market value) of non- (or under-) performing assets.[9] Third

---

[6]It is important to be clear as to the meaning of *solvent* and *insolvent* banks. Certainly by solvent (insolvent) Selgin and White do *not* mean non-bankrupt (bankrupt); i.e., a situation in which a bank's assets exceed (are less than) its liabilities, for that would be to trivialize their argument. Rather, by solvent (insolvent) they must mean either a situation in which a bank can (can not) satisfy, by paying specie, current demands to redeem its notes and demand deposits *or* a situation in which a bank is (is not) *expected* to be able to satisfy, by paying specie, anticipated future demands to redeem its bank notes and demand deposits.

> 7 It is true that a particular bank's notes would be valued below par if market participants worried that they might not be able to redeem the notes ahead of a run on that bank. But such notes, on which the default was considered a non-negligible risk, would not continue circulating even at a discount. They would immediately be presented for redemption, and thus removed from circulation. The surviving brands of notes would be only those for which all redemption demands made in practice were expected to be met. (Selgin and White 1996, p. 90)

By inference, what is true for notes would also be true of deposits. Therefore, insolvent banks would be driven from the market immediately they were recognized as such and only the solvent banks would continue to operate.

> 8 On April 1, 1999, a new law raised the FDIC limits on joint accounts. Now, FDIC will cover up to $100,000 for each person listed on joint accounts at that bank. Because these limits are based on the type of ownership, not the number or type of accounts, FDIC calculates your joint-account limit by adding up your share of any accounts you own jointly at that bank (half the account total if there are two owners). . . . [T]he FDIC limits apply separately to each bank where you have accounts. Lankford (1999)

[9]These means of course cause other problems, but that is an issue beyond the scope of the present paper.

are "bank-libel" laws[10] prohibiting the calling in to question of the probity of a bank, and thus aiding, abetting, and fomenting runs on banks.

However, none of these measures would be available for fractional-reserve notes or demand deposits in a free market.[11] The type of risk involved in potential bank runs make it impossible to insure, privately, such notes and deposits against default.[12] Moreover, there would be no lender of last resort (because only the state or its agent has the power to so act) as neither an individual company, nor the industry as a whole has the necessary resources.[13] Again, only a government has the wherewithal and, more important, a motive to purchase non- (or under-) performing assets at a premium over market value. Finally, as there would be no bank-libel laws in a free market, the 100 percent reserve bank competitors of fractional-reserve banks would be able to instigate runs by advertising the essential insolvency of fractional-reserve banks, yea even to initiate runs by demanding specie for any net differential when claims were cleared with fractional-reserve banks.[14] Therefore, whereas bank runs on fractional-reserve banks are infrequent (though not non-existent) in the presence of governmental intervention to prevent runs or stop them if they do get started, bank runs would be ubiquitous in a free market.[15]

Against the argument that the type of risk involved in bank runs is uninsurable in a free insurance market, Selgin and White (1996, p. 91) argue that "*solvent* banks are not inherently run-prone."[16] The difficulty here is that, strictly speaking, *each and every* fractional-reserve bank is *immediately*

---

[10]See Swire (1992). For the argument against laws prohibiting libel, see Rothbard (1976, pp. 95-96) and Block (1991, pp. 50-53).

[11]This assumes, *arguendo*, that fractional-reserve banking and a free market are compatible, a claim we reject below.

[12]If the potential loss from an event would affect all members of the risk class, the event is uninsurable. For example, private flood insurance is unavailable because all members of the class—parcels of property in the flood plain—will suffer losses from the same event. Therefore, the risk cannot be spread from those members of the class unfortunate enough to experience the event and consequent loss to other members of the class who do not experience the event, and therefore, do not incur a loss. If, and when, the event occurs, all members of the class experience a loss.

[13]Private deposit insurance would, in any case, only shift the "uninsurable" risk to a different level, as would be true also were private deposit insurance to be the object of reinsurance. This is true no matter how wealthy the Lloyds "names" because with fractional-reserve banking, by definition, the claims, in the form of bank notes and/or deposits, to specie necessarily are in excess of the total specie in the banking system.

[14]And, that such net differences in claims would be in favor of 100 reserve banks is a virtual certainty because for any specific amount of reserves a fractional-reserve bank would have more liabilities in the form of bank notes and demand deposits than a 100 percent reserve bank.

[15]See footnote 9 above.

[16]Italics added.

"insolvent" as soon as it makes it first deposit-based loan.[17] This consideration, then, is moot. Or, to put this into other words, Selgin and White are here referring to a distinction without a difference. If *all* fractional-reserve banks are *always* and *ever* in a state of insolvency, then there can be no intelligible distinction among them on the basis of solvency. A "solvent fractional-reserve bank," then, is no less than an oxymoron. Therefore, it is infeasible to defend their position on the basis of an "immediate" elimination of insolvent banks.

Option Clauses Naught Availeth

Now consider Selgin and White's argument that banks could preclude themselves from bank runs by stipulating in their contracts with depositors some sort of grace period. They argue that such clauses would provide "essentially solvent" banks encountering a deficiency of specie the contractual right (based on informed consent) to suspend specie redemption for a limited period of time.[18] During this grace period the bank could liquidate sufficient obligations to meet the redemption demands for specie, thus defeating runs. Selgin and White argue that (temporary) "option clauses" providing banks the contractual right (based on informed consent) to suspend specie redemption for a limited period of time would enable banks to defeat runs. In their view, solvent banks could issue notes and deposits subject to such a clause, thus giving them breathing space to liquidate sufficient assets to meet the redemption demand within the specified period.

One problem with this "solution" is that all such "grace periods" and "option clauses" convert what would otherwise be a *demand* deposit (that is, money payable on *demand*) to a savings or time deposit, with just this sort of provision for a "cooling off" period. But opponents of fractional-reserve banking, such as the present authors, never denied that keeping only a fraction of outstanding balances on hand was improper for savings or time deposits, only for *demand* deposits. Thus Selgin and White's proviso avails them nothing in this debate.

Moreover, the exercise of such a clause would certainly interfere with the payments mechanism. To the extent that banks exercised such clauses, their depositors and the holders of their notes who were depending on these fiduciary media to consummate exchanges could not so do, with all the negative effects thereof; to wit: the situation in Argentina currently and in the recent

[17]Such a bank may initially and thereafter make loans of any gold-coins that are part of the bank's capital without becoming insolvent. It is only when, and as soon as, it makes loans of gold coins that have been deposited into demand-deposit accounts that it becomes insolvent.

[18]The exercise of such rights would involve a substantial interest penalty.

past, where the government has both reduced convertibility from fiduciary media into *fiat* money[19] and, for a while, suspended all such convertibility.[20]

We conclude this section by noting that runs would be an ubiquitous feature of a "free market economy" with a fractional-reserve banking system and that they would continuously destabilize the economy.

Resource Cost "Savings"

Selgin and White argue that there is a significant cost of 100 percent reserves. It consists of the cost of mining and storing that amount of gold needed for use as bank reserves in excess of the amount that fractional-reserve banks would have required (call this "excess gold").[21] That is, resources are not allocated optimally in a system where bank notes and demand deposits are completely backed up by gold; rather, either the resources used to mine the excess gold could have been used to produce other want-satisfying goods or, depending upon people's preferences as expressed in the market, the excess gold might have been mined anyway, but rather than being used as excess gold (undesired and unnecessary reserves), might be used to satisfy other wants (e.g., jewelry) or extant gold could be diverted from other uses to reserves. There is certainly no argument emanating from this quarter to the effect that 100 percent reserves are costless; resources do have alternative uses, to be sure.[22] However, Selgin and White ignore resource costs of fractional-reserve banking save that of holding reserves of gold in excess of those required to meet demands for redemption of bank notes and demand deposits. But resource costs are not the only costs involved in fractional-reserve banking; fractional-reserve banking has been, and will continue to be a cause of the business cycle, the name we apply to a process of systematic misallocation of

[19]If fractional-reserve banking can cause such problems in a system with governmental intervention and fiat money, there can be no doubt that the difficulties would be immeasurably greater in the system Selgin and White advocate: free banking, *cum* legal fractional reserves, with gold backed fiduciary media and no governmental intervention in the form of note and deposit insurance, lender-of-last-resort, purchaser of distressed securities at above market prices, and bank-libel laws.

[20]Granted, that there were no convertibility-suspension clauses in the Argentine situation; nevertheless, there is no reason to think that problems caused by the inability to access funds would have been any less had it been because of the exercise of such clauses rather than the result of government fiat.

[21]Of course, the excess gold could come from diverting extant gold from other uses rather than from mining new gold.

[22]The type of monetary system, whether gold or fiat money, in conjunction with the issue of fractional-reserve, or 100 percent reserve, backed bank notes and demand deposits is intimately related to the issue of the optimum quantity of money. On that subject see Barnett and Block (2004).

resources.[23] Although virtually impossible to quantify, this systematic misallocation of resources takes the form, during the false boom, of massive misallocations of scarce capital and human resources, and during the subsequent and consequent bust, the un- and under-employment of both capital and human resources. One can look to the current and recent situations in the U.S. 1990–2002, or Japan 1980–2002, to get some feel for the immense magnitude of the respective misallocations of goods and resources, and the costs thereof. Indubitably, these costs dwarf any resource costs resulting from mining and storing "excess gold reserves."

Moreover, the resource costs incurred by fractional-reserve banks, necessary to convince their clients to make and maintain demand deposits with them and to encourage the members of society-at-large to accept their deposits and/or notes in exchanges, would likely not be insignificant. In a truly just society, 100 percent reserve banks would be free to refuse to accept fractional-reserve notes and deposits or, if they did, to redeem them only for specie. That is, the existence of 100 percent reserve banks alongside fractional-reserve banks, wherein the former would demand specie for any net differential when claims were cleared with fractional-reserve banks, would force the latter to maintain very high ratios of reserves to notes and demand deposits. Therefore, resource costs savings by fractional-reserve banks from holding less than 100 percent reserves are very likely to be quite small. And, considering the massive misallocations of resources consequent on business cycles or bank runs, the overall resource costs of fractional-reserve banking would very likely be very much greater than that of 100 percent-reserve banking.

Fractional-Reserve Banks are Infeasible

The feasibility issue boils down to whether non-fraudulent fractional-reserve banks would have any creditors; i.e., would people knowingly accept bank notes or demand deposits from fractional-reserve banks.

Moreover, because every insolvent bank would be driven out of business immediately it became insolvent, by (Selgin and White's) definition every extant bank would necessarily be solvent. Solvent, that is, until the moment

[23]With fractional-reserve banking new money is lent into existence. This process does not create any new goods or resources. However, to the preexisting claims against the extant real goods and services, it adds additional claims in the form of the new fiduciary media. The spending of these new media cause the prices of the extant goods and resources to increase, but not all at the same times or by the same percentages. Therefore the structure of relative prices is distorted. Moreover, the increase in credit causes interest rates to decline, distorting the intertemporal structure of prices. Again, not all interest rates decline simultaneously or by the same degree. See on this any of the copious literature on the Austrian business cycle theory, a recent example being Garrison (2001).

it became insolvent and was immediately driven out of business. This begs the real question as to whether "solvent" banks would be run prone—by definition any bank experiencing a run would be insolvent and any bank not experiencing a run would be solvent.

Consider what Mises had to say about money substitutes and fiduciary media.

> Claims to a definite amount of money, payable and redeemable on demand, against a debtor about whose solvency and willingness to pay there does not prevail the slightest doubt, render to the individual all the services money can render, provided that all parties with whom he could possibly transact business are perfectly familiar with these essential qualities of the claims concerned: daily maturity as well as undoubted solvency and willingness to pay on the part of the debtor. We may call such claims *money-substitutes*, as they can fully replace money in an individual's or a firm's cash holding. . . . A money-substitute can be embodied either in a banknote or in a demand deposit with a bank subject to check ("checkbook money" or deposit currency), provided the bank is prepared to exchange the note or the deposit daily free of charge against money proper. . . . The main thing is that every owner of a money-substitute is perfectly certain that it can, at every instant and free of expense, be exchanged against money.
>
> If the debtor—the government or a bank—keeps against the whole amount of money-substitutes a 100% reserve of money proper, we call the money-substitute a *money-certificate*.
>
> If the money reserve kept by the debtor against the money-substitutes issued is less than the total amount of such substitutes, we call that amount of substitutes which exceeds the reserve *fiduciary media*. (Mises 1996, pp. 432–33)

Therefore, according to Mises, for demand deposits and bank notes to be money substitutes "there [must] not prevail the *slightest* doubt" about the debtor's solvency by "*all* parties with whom [the owner of the claim] could *possibly* transact business" (emphases added). Moreover, "The *main* thing is that *every* owner of a money substitute [e.g., demand deposits and bank notes] is *perfectly certain* that it can, at *every instant* and free of expense, be exchanged against money" (Mises 1996, p. 434).

Certainly, only in an interventionist banking system can fiduciary media satisfy those conditions. However, we are considering a free, not a hampered, market. In such a non-interventionist banking environment there is no way that fiduciary media can meet those stringent conditions; i.e., fiduciary media would not be, nor would they be accepted as, money substitutes. That is, they would be infeasible under these circumstances.

Furthermore, the argument of Selgin and White that non-fraudulent fractional-reserve banking is feasible may be correct if by feasible we mean that people might knowingly and willingly engage in such relationships with

banks at certain points in time or for relatively short periods of time.[24] However, if by feasible we mean that such relationships are logically possible, then the Selgin and White position is untenable.[25]

For example, assume there are one million bushels of wheat of a certain type and grade stored in a grain elevator with a capacity of 10 million bushels. There are, then, under present non-fraudulent circumstances, without doubt, also titles, in the form of warehouse receipts,[26] to these one million bushels. These titles are not to specific bushels of wheat, but to the specified amount of wheat of the type and grade that was put into storage.

Now, suppose the warehouse operator were to "print up" pieces of paper that purported to be titles to another nine million bushels of wheat of the same type and grade. But he did so under very peculiar circumstances. No (purposeful) con artist, he, he printed them up with the express willing consent of

[24]Consider the following scenario. In an unhampered economy a fractional reserve bank (FRB) is opened alongside 100 percent reserve banks. In order to attract customers, it advertises that: (1) it keeps a 99 percent reserve against demand deposits, and therefore, for all practical purposes, its deposits are as safe as those at 100 percent reserve banks; and, (2) its services are less expensive than those of the 100 percent reserve banks, because it lends out 1 percent of its deposits and uses the interest thereon to reduce the prices of its services. Assuming that the FRB's calculations are correct, it attracts customers and earns a profit. This success would attract imitators, either from among the extant 100 percent reserve banks or from new entrants into the industry. In any case, there would still be 100 percent reserve banks. Necessarily, when obligations are cleared among the banks, reserves will be drained from the FRBs to the latter. And, ironically, the more successful were the FRBs in attracting customers, the sooner would the clearing process drain their reserves. They would then be faced with either a continual reduction in their demand liabilities in order to maintain a constant reserve ratio of 99 percent as their reserves decreased, or with a reduction in the reserve ratio in order to maintain their demand liabilities in the face of the reduced reserves. In the former case, they would end up with no demand liabilities; i.e., they would no longer be FRBs; in the latter case, they would experience runs that would put them out of business.

[25]There are two issues involved here: the practical and the logical-legal. Purely on a pragmatic level, *à la* P.T. Barnum, there are always suckers out their waiting to be taken—at least in the short run. However, it would not take much experience with fractional-reserve banks alongside 100 percent reserve banks, before there would not be enough fools left to make the former system profitable. That is, were both systems allowed to function side by side, and there were no laws against libeling fractional-reserve banks as necessarily bankrupt (on this, see footnotes 7, 12, 18, above, and accompanying text), then there is no doubt that, purely as a practical matter, the fractional-reserve banking system would prove untenable.

In sharp contrast is the logical-legal perspective. Fractional-reserve banking is no more compatible with a private property based, anti-fraud system than is the proverbial square circle compatible with reality. No matter what the fractional-reserve bankers thought they were doing, or were trying to do, it would be praxeologically impossible for them to succeed in promoting their dubious schemes in the context of full free enterprise; at best, all they could achieve would be to create "clown" or play money.

[26]Such receipts might take the form of paper documents or of entries in a computer.

each and every member of society;[27] i.e., each had signed a piece of paper, stating that he was of sound mind, and consenting to the printing up of these extra titles.

What would the actual function of these extra titles to nine million bushels of (non-existent) wheat? Suppose the original titles to be marked with an "A" and the extra titles to be marked with a "0." Not one of the owners of the one million bushels of wheat would have signed these agreements, we may be absolutely sure, if it meant the expropriation of their wheat; i.e., if the zero titles could be redeemed for wheat. Therefore, there would be no actual transfer of wheat, attendant upon this printing of "fractional-reserve;" i.e., zero, titles to wheat. What, then, will be the actual function of these zero titles?

It is our contention that their function, their *only possible* function, will be to serve as a sort of a joke. That is, these extra nine million titles will serve much the same purpose as "Monopoly" money, or fake U.S. currency, which obviously is printed up not to be used as counterfeit money, but rather, in the former case, in a "Parker Brothers" game and, in the latter, as a joke.[28] For example, those "$1 million bills" that are very much bigger than U.S. dollars, with a picture of a donkey or an elephant instead of a person on them, etc. The point is, there cannot be (it is logically impossible for there to be) truly operational fractional-reserve bank notes or demand deposits through any sort of agreement process as outlined above that would not be readily interpreted as a joke or as mere play money by all fully informed people.

Furthermore, Block (1988, pp. 28–31) suggests that, because the holder of a note for which there is only a 20 percent reserve has only a 20 percent chance of redeeming it in the event of a run, such notes partake of the character of a lottery ticket and would be valued at a discount by a knowledgeable public. In sharp contrast, Selgin and White argue that if people feared they might not be able to redeem a particular bank's notes before an imminent run, the notes would be valued below par and such would not circulate, even at a discount, but rather would be presented for redemption immediately.[29] They (1996, p. 90) state: "The surviving brands of notes would be only those for which all redemption demands made in practice were expected to be met." That is, only "good" (our term) notes would circulate, and those at par.

We conclude this section by noting that fractional-reserve banks would be driven out of business by 100 percent reserve banks because fractional-reserve banks would not merely be run prone, but would actually experience runs in the normal course of events; i.e., runs on such banks would be ubiquitous.

---

[27]Spooner (1972), then, could have no objection to these goings on.

[28]This is the genesis of the concept "clown money" in the subtitle to this paper.

[29]The argument applies, *mutatis mutandis*, to demand deposits.

And, a few such experiences in the free market would preclude them from a regular existence as part of the banking system.[30]

The Risks of Mismatching Asset Maturities with Demand Liabilities is Not Worth Taking

Selgin and White make the case that for fractional-reserve banks demand liabilities are a form of maturity-mismatching, involving risks, and that if such risks are justified by sufficiently high (expected) returns, then the fractional-reserve banking is, in turn, warranted. If we are right, and Selgin and White wrong, about the feasibility of such banks; i.e., that they would prove infeasible, then these authors are also incorrect in this new contention because there would be no high, expected returns to offset the risk of bankruptcy consequent on chronic runs. That is, because such banks would go out of business in short order,[31] they would not cause systemic risks. Alternatively, if Selgin and White are right and we wrong, and such banks would be feasible, then merely because the risks of maturity-mismatching involved in fractional-reserve banking may *seem* worth taking *ex ante* does not mean that that they can't or won't prove *ex post* to have been a mistake. The very feasibility of such banks would be incontrovertible evidence that their customers were not fully cognizant of the risks they were bearing. Moreover, considering, again, the Selgin and White statement that, "solvent banks are not inherently run-prone," we note that it is the very mismatching of the maturities of assets and liabilities that makes fractional-reserve banks run prone. And, runs on fractional-reserve banks are a cause of macro-instability in a free-market economy, in turn causing massive misallocations of resources. Thus, though the risks of maturity mismatching may seem worth taking to the fractional reserve-bankers and, perhaps, to their customers–though the latter are necessarily unaware of the risks they run personally–certainly that group, and perhaps many of the former group, as well, would be unaware of the systemic risks involved. In fact, the larger society bears the vast majority of the risk. Given the virtual certainty that runs on such banks would be chronic, the risks of massive distortions of the would-be structure of production would be realized

[30]This is not to deny that occasionally fractional-reserve banks would pop up here and there, much as drop-the-pigeon and other con games make sporadic appearances until the bunko squad catches up with them or they flee town one step ahead of the law. And, similarly, such banks would last just until the runs, which would not be long in coming, began.

[31]That is, they would go out of business in short order on the real-world assumption that it takes time for market forces (e.g., bank runs) or the police power (e.g., bunko squad), to catch up with them. However, based on the assumption that all market participants are always law abiding, and that libertarian law prevails, they would *not* go out of business in "short order." Rather, they would never be started in the first place.

and would far outweigh any benefits to be had from such a system. That is taking into account the risks of massive misallocations of resources, it is obvious that the true risks of fractional-reserve banking do not outweigh any higher expected returns.

The Conflation of Time and Demand Deposits Also Availeth Naught

Suppose the following, if only as a mental experiment. A banker sets up not a demand deposit, but rather a time deposit with a *very* short term to maturity: The time dimension for this account is very short: one day. The bank would make these deposits available in either of two forms: bank notes or entries in the banks' computer(s). Furthermore, in either form, these deposits would be negotiable; in the former case by transfer of the note and in the latter by time draft. Suppose additionally there were two provisions attached to such deposits: (1) at maturity they would be automatically renewed unless the customer wished to redeem them;[32] and, (2) they would be subject to an option clause that would permit the bank to postpone, for a limited period of time and with a penalty,[33] redemption for specie. Further, these terms and conditions would be promulgated to the banks' customers, and the terms would be printed both on the banks' notes and on the draft forms, which guarantees, arguendo, full knowledge to everyone about these goings on, i.e., no fraud occurs. Banks would then lend out the specie deposited in these accounts. Moreover, the term to maturity of the loan would *not* have to match that of the deposit, as this would "merely" be a case of financial intermediation. Certainly, there would be no legal mandate under free enterprise for *time* deposit banks to match the due dates for borrowers and depositors.[34]

We are on record opposing fractional-reserve banking for demand deposits, not time deposits, as *per se* illegal. But what are we to make of these ultra short-term deposits? Although *de jure* they are time deposits and not demand deposits, *de facto* they would be appear to be excellent substitutes therefor. Certainly, some enterprises would attempt to circumvent the requirement that demand deposits be backed 100 percent by reserves of

[32]This is the usual way that banks currently handle certificates of deposit; of course, the interest rate paid on such deposits is subject to change upon renewal.

[33]Of course the conditions under which the bank could temporarily suspend convertibility, as well as the time period and penalty, would be spelled out in detail.

[34]Suppose there were a law on the books preventing mismatching of assets and liabilities such that the term to maturity of the liability(ies) underlying an asset could, at the time the asset was created, be no longer than that of the asset. Two points must be made about such a situation. First, under this assumption, we would no longer be in the realm of "free banking." Second, the bank could set up loans analogous to these deposits; i.e., one second loans that would be automatically renewed at term unless the bank demanded payment, and, so as to protect this debtor the same way the bank is protected vis-à-vis the depositor, there would be an option allowing the debtor to obtain a limited grace period (for a price of some sort; e.g., a penalty rate of interest).

specie by offering such short-term time deposits to the public. Unless we are to have the state determine, by law and arbitrarily, of course, the minimum period for which a deposit must be made in order to qualify as a time deposit, such deposits would have to be considered legal time deposits. This would appear to present a problem for those of us who maintain that in a free market: (1) demand deposits would have to be backed by 100 percent reserves of specie; and (2) time deposits would not have to backed by *any* reserves, much less 100 percent reserves.

However, this is not the end of the matter, for we also maintain that even such legal, *de facto*, demand deposits would be unworkable for the same reasons that we maintained in the section "Fractional-Reserve Banks are Infeasible," that *de jure* demand deposits would be infeasible. (Because they would be unworkable, they would amount to no more, in effect, than "clown" or play money.) We conclude then, that even based on the heroic assumption of ultra short term time deposits, the case for fractional-reserve banking still cannot be defended.

In any case, *all* time deposits, no matter how long the term to maturity at issuance, eventually reach maturity. Right before that point, they are still time deposits, but with exceedingly short time durations left until maturity. Thus, there is nothing really new in principle to this posited objection to our thesis.

Fiduciary Media and Unlimited Wealth

In a monetary, in contradistinction to a barter, exchange, one party, A, is required to transfer ownership of money to the other party, B. If A gives fiduciary media in the form of demand deposits[35] or bank notes to B, then A has fulfilled his obligation. Therefore, A has paid money to B, as that is what is required in a monetary exchange. That fiduciary media are money in the normal sense of the word is obvious: money is a generally accepted medium of exchange.

Moreover, Mises (1996) states:

> We may call such claims *money-substitutes*, as they can fully replace money in an individual's or a firm's cash holding. (p. 432) . . . . As a rule it is not possible to ascertain whether a concrete specimen of money-substitutes is a money-certificate or a fiduciary medium. . . . A bank which does not issue fiduciary media can only grant *commodity credit*, i.e., it can only lend its own funds and the amount of money which its customers have entrusted to it. The issue of fiduciary media enlarges the bank's funds available for lending beyond these limits. (p. 433)

[35]The form (e.g., bank notes) in which the transfer is effected is immaterial.

> The fiduciary media affect the market phenomena in the same way as money does. Changes in their quantity influence the determination of money's purchasing power and of prices and—temporarily—also of the rate of interest. (p. 434)
>
> [a]n increase or decrease in the quantity of fiduciary media affects the determination of money's purchasing power in the same way as do changes in the quantity of money. (p. 436)[36]

Therefore, money is an asset, and as such, a form of wealth. Because fiduciary media are money substitutes that "can fully replace money" and that "affect market phenomena in the same way as money," fiduciary media are a form of wealth. Thus if Selgin and White are correct that fiduciary media could exist in an otherwise free market, we would have truly reached the promised land. For fractional-reserve banks can then create *wealth* in the form of fiduciary media out of thin air, or, more precisely out of paper and ink in the case of bank notes and electromagnetic "blips" in a computer in the case of demand deposits. And, provided *all* banks expand their circulating credit,[37] with attendant fiduciary media, at the same rate, there is no limit to the expansion, because there would be no reason for anyone to cash in bank notes or deposits for specie, as everyone would have complete faith that the banks would honor every each and every demand for redemption in specie. Verily, a widow's curse (1 Kings 17: 8–16) of wealth in the form of money.

Ultimately, then, even when the partial backing is gold, and not a fiat money, fractional-reserve banking is still part and parcel of the old alchemists' dream of turning base metal (in this case, read paper or "blips" in a computer) into gold.

References

1 Kings 17: 8-16. 1976. *Good News Bible*. New York: American Bible Society.

Barnett, William, II, and Walter Block. 2004. "On the Optimum Quantity of Money." *Quarterly Journal of Economics* 7, no. 1 (Spring): 39–52.

Block, Walter. 1988. "Fractional-Reserve Banking: An Interdisciplinary Approach." See Block and Rockwell, Jr., eds. (1988).

Block, Walter. [1991] 1976). *Defending the Undefendable*. New York: Fox and Wilkes.

Block, Walter, and Llewellyn H. Rockwell, Jr., ed. 1988. *Man, Economy, and Liberty: Essays in Honor of Murray N. Rothbard*, Auburn, Ala.: Ludwig von Mises Institute.

Huerta de Soto, Jesús. 1995. "A Critical Analysis of Central Banks and Fractional Reserve Free Banking from the Austrian Perspective." *Review of Austrian Economics* 8 (2): 25-38.

---

[36]See also Mises (1912) and Rothbard (1976).

[37]Circulating credit is "credit granted out of the issue of fiduciary media" (Mises, 1966, p. 434).

Garrison, Roger W. 2001. *Time and Money: The Macroeconomics of Capital Structure*. New York: Routledge.

Hayek, Friedrich A. 1978. *The Denationalisation of Money*. 2nd ed. London: Institute of Economic Affairs.

Hoppe, Hans Hermann. 1994. "How is Fiat Money Possible?—or, The Devolution of Money and Credit." *Review of Austrian Economics* 7 (2): 49–74.

Hoppe, Hans-Hermann, Guido Hülsmann, and Walter Block. 1998. "Against Fiduciary Media." *Quarterly Journal of Austrian Economics* 1, no. 1 (Spring): 19–50.

Hülsmann, Jörg Guido. 1995. "Free Banking and the Free Bankers." *Review of Austrian Economics* 9 (1): 3–53.

Lankford, K. 1999. "How Does FDIC Insurance Work?" http://banking.yahoo.com/q0728.html

Mises, Ludwig von. [1911] 1971. *The Theory of Money and Credit*. New York: Foundation for Economic Education.

Mises, Ludwig von. 1996. *Human Action*. San Francisco: Fox and Wilkes.

Rothbard, Murray N. 1973. *For a New Liberty*. New York: Macmillan.

Rothbard, Murray N. 1976. "Austrian Theory of Money." In *The Foundations of Modern Austrian Economics*. E.G. Dolan, ed. Kansas City: Sheed and Ward. Reprinted in: *The Logic of Action One: Method, Money, and the Austrian School*. Cheltenham, U.K. Edward Elgar Publishing. Ltd. 1997.

Selgin, George, and Lawrence H. White. 1996. "In Defense of Fiduciary Media—or, We Are Not Devo(lutionists), We Are Misesians." *Review of Austrian Economics* 9 (2): 83–108.

Spooner, Lysander. [1870] 1972. *No Treason: The Constitution of No Authority and A Letter to Thomas F. Bayard*. Santa Ana, Calif.: Rampart College.

Swire, P.P. 1992. "Bank Insolvency Law Now That It Matters Again." *Duke Law Journal* 42 (December): 469.