AGAINST FIDUCIARY MEDIA

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WITH JÖRG GUIDO HÜLSMANN AND WALTER BLOCK

Almost all contemporary Austrian economists are united in their opposition to central banking and their advocacy of a system of free competitive banking. However, a vigorous debate has arisen over the precise meaning of "free competitive banking." Does "free banking" require 100 percent reserve deposit banking, or does it allow or even require fractional reserve banking? In a recent article that appeared in the *Review of Austrian Economics,* George A. Selgin and Lawrence White (1996), the two most prominent contemporary Austrian proponents of "free banking" as fractional reserve banking, have undertaken a systematic attempt to answer their numerous Austrian critics and defenders of 100 percent reserve deposit banking.[1]

Against the charges made by their critics, Selgin and White try to establish two theses. First, they claim to show that the practice of fractional reserve banking, that is, the issue of fiduciary media, does not constitute fraud but is justified by the principle of freedom of contract, and in particular they contend that fractional reserve banking is in accordance with the title-transfer theory of contract as developed by Murray N. Rothbard (such that Rothbard, who holds that fractional reserve banking *is* fraudulent, must have failed to grasp his own theory). Second, they attempt to show that the creation of fiduciary media does not of necessity lead to economic inefficiencies and discoordination but may actually help prevent an otherwise unavoidable

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[1] Selgin and White (1996, pp. 83–107). All page numbers in the text reference this article.

Curiously, in the reply to their various critics, Selgin and White selected as their central target an article by Hoppe (1994) that deals only cursorily with their position. Other Austrian critics of fractional reserve banking explicitly dealt with in Selgin and White's article including Block (1988) and de Soto (1995). Murray N. Rothbard, the most prominent critic of fractional reserve banking, is targeted only indirectly; and although several of his works are mentioned in their bibliography, Rothbard's later writings on the subject (1988; 1992; 1995) are not mentioned. Likewise ignored entirely are the criticisms by Salerno (1991a; 1991b; 1993). Selgin and White also do not address, and in this case could not have done so, the most recent and most extensive criticism of their work by Hülsmann (1996).

crisis and thus improve economic performance. In the following, we will demonstrate that neither the central normative claim nor the secondary positive claim is established.[2]

THE ISSUE OF FRAUD I: MONEY, MONEY SUBSTITUTES, FIDUCIARY MEDIA, AND THE TITLE-TRANSFER THEORY OF CONTRACT

In order to resolve the question of whether or not fractional reserve banking constitutes fraud, from the outset a few factual assumptions and terminological issues will have to be clarified. Fortunately, almost complete agreement on these matters exists on both sides of the debate, and thus we can be extremely brief. Money cannot but originate as a commodity, such as gold. Gold, then, as money, is defined as "the generally acceptable medium of exchange," and as such is uniquely characterized by its "supreme salability in comparison with all other assets" (such that its "possession puts one in the position of being able to make any potential purchase with minimum inconvenience") (White 1989, p. 247). Money substitutes, in turn, are defined as claims or titles to specified amounts of money (gold). If money substitutes (paper notes) are fully covered by reserves of money (gold), Mises denotes them "money certificates," and we will refer to them here simply as money substitutes. If money substitutes (paper notes) are uncovered by money (gold), they will be referred to as fiduciary media instead.[3]

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[2]As a doctrinal matter, Selgin and White also suggest that their view of fractional reserve banking coincides with Ludwig von Mises's view; hence, they call themselves Misesians (and claim it is the defenders of 100 percent reserve banking who are deviationists). This claim can be rejected. In fact, Selgin (1998, pp. 60–63) has frankly acknowledged that Mises's and his own views concerning fiduciary media are contradictory, and White's attempt to claim Mises as a proponent of fractional reserve free banking has been addressed by Salerno (1993). Here it suffices to provide a quotation from Mises (1978, pp. 438, 448):

> The main thing is that the government should no longer be in a position to increase the quantity of money in circulation and the amount of checkbook money not fully—that is, 100 percent—covered by deposits paid in by the public. . . . No bank must be permitted to expand the total amount of its deposits subject to check or the balance of such deposits of any individual customer . . . otherwise than by receiving cash deposits . . . or by receiving a check payable by another domestic bank subject to the same limitations. This means a rigid 100 percent reserve for all future deposits; that is, all deposits not already in existence on the first day of the reform.

See also notes 7, 14, 22, 27, 28 below.

[3]See Salerno (1994, p. 76). Selgin and White highlight the fact that Hoppe referred to them as proponents of "partial fiat money," but then are ultimately compelled to admit that he did in fact not misrepresent their position as advocates of fractional reserve banking based on an underlying gold standard. Their complaint amounts to no more than a dispute over semantics. We will treat it as such here, too, and will concentrate instead exclusively on substantive disagreements.

There is actually more to the charge of Selgin and White being fiat money advocates in the article under scrutiny. For, in "the mature free-banking system," according to Selgin and White (but in contrast to the analysis of the operation of such a system given by Mises), a situation is supposed to emerge in which

> at the limit, if inter-clearinghouse settlements were made entirely with other assets (perhaps claims on a super-clearinghouse which itself holds negligible commodity money),

Based on these assumptions and definitions, we can now turn to the question of whether or not the issue of fiduciary media constitutes fraud. Fortunately, the discussion of this issue is facilitated by the fact that Selgin and White explicitly accept the Rothbardian title-transfer theory of contract. That the issue of fiduciary media is inherently fraudulent, as Rothbard and Hoppe claim, Selgin and White find

> impossible to reconcile with Rothbard's . . . title-transfer theory of contract, which we accept, and which Rothbard otherwise uses to defend the freedom of mutually consenting individuals to engage in capitalist acts with their (justly owned) property. Rothbard . . . defines fraud as "failure to fulfill a voluntarily-agreed-upon transfer of property." Fractional-reserve arrangements cannot then be *inherently* or *inescapably* fraudulent. Whether a particular bank is committing fraud by holding fractional reserves must depend on the terms of the title-transfer agreement between the bank and its customers. (pp. 86–87)

> Whether it is fraudulent to hold fractional reserves against a bank liability does not depend *per se* on whether it is a demand or time liability, but only on whether the bank has misrepresented itself as holding 100 percent reserves. The demandability of a particular claim issued by a bank, that is, the holder's contractual option to redeem it at any time, is not per se a representation that the bank is holding 100 percent reserves against the total of its demandable claims. Rothbard . . . argues otherwise, based on the view that a bank's demand deposits are necessarily "warehouse receipts" and not debts. We do not see why bank and customer cannot contractually agree to make them debts and not warehouse receipts, and we believe that historically they have so agreed. (p. 87, n. 8)

While this may sound plausible at first glance, it does not withstand serious scrutiny. In fact, the quoted passage reveals that the most basic lesson concerning property and contract has been overlooked. As Hoppe (1994, p. 67) formulated it, "two individuals cannot be the exclusive owner of one and the same thing at the same time."[4] This is an immutable principle; it is a law of action and nature that no contract can change or invalidate. Rather, any contractual agreement that involves presenting two different individuals as simultaneous owners of the same thing (or alternatively, the same thing as simultaneously owned by more than one person) is

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> and if the public were completely weaned from holding commodity money, the active demand for the old-fashioned money commodity would be wholly nonmonetary. (White 1989, p. 235)

Thus, notes Salerno (1994, p. 76, n. 7) regarding Selgin and White's ultimate objective, "the public would presumably finally be freed from its shackles of gold to enjoy the virtues of an invisible-hand-generated private fiat money." Moreover, as far as semantic innovations and deviations from orthodox Misesian terminology, and hence potential sources of confusion are concerned, we have to consider Selgin and White's own writings. For in referring to money and money substitutes as "outside" and "inside" money respectively, in talking of "base money," "basic money," "bank money," "high-powered" and "low-powered" money, and, yes, the gold dollar "as a substitute for bank deposits," they display an unusual degree of semantic creativity. Moreover, in suggesting, by their selection of terms, that all of these things are somehow equally "money," their writings actually have become a source of obfuscation. See on this Hülsmann (1996, p. 5ff).

[4]It is also "impossible that some time depositor and borrower are entitled to exclusive control over the same resources" (Hoppe 1994, p. 67).

objectively false and thus fraudulent.[5] Yet this, precisely, is what a fractional-reserve agreement between bank and customer involves.

In issuing and accepting a fiduciary note (at a necessarily discounted price), both bank and customer have *in fact*, regardless of whatever they may believe or think about the transaction, agreed to represent themselves—fraudulently—as the owner of one and the same object at the same time. They have in fact contracted to create additional titles and claims to the same existing quantity of property. In issuing fiduciary notes, they do not—and cannot—bring more property into existence. Indeed, no contract whatsoever can possibly increase the existing quantity of property, but can only transfer (redistribute) existing property from one person to another. The quantity of existing property can only be increased through additional appropriation and production (and a thus enlarged quantity of property can in turn lead to a correspondingly increased number of titles to property). But fractional reserve banking and the issue of fiduciary media, while it does not and cannot increase the amount of property in existence, also does not involve (as all other contracts *do*) a transfer of existing property or titles to existing property from one hand to another. Neither does the issue and acceptance of a fiduciary note signify a transfer of property from bank to client or *vice versa*. To be sure, as the result of a fiduciary issue, the distribution of assets and liabilities in the accounts of bank and client is altered. But no existing quantity of property is actually transferred from bank to client, or vice versa, and the total quantity of property in existence has remained unchanged. Rather, fiduciary media represent new and additional titles to or claims on an existing and unchanged stock of property. They are not the result and documented outcome of an additional supply of property on the part of the bank or its client. Instead, they represent an additional supply of property *titles*, while the supply of *property* has remained constant. It is precisely in this sense that it can be said of fiduciary media that they are created out of thin air. They are property-less titles in search of property. This, in and of itself, constitutes fraud, whether according to Rothbard's definition of the term as "a failure to fulfill a voluntarily-agreed-upon transfer of property" or according to Selgin and White's own definition of it as "a *willful* or *deliberate* deception for purposes of gain." Each issuer and buyer of a fiduciary note (a title to money uncovered by money), regardless of what he may believe, is in fact—objectively—engaged in a misrepresentation for the purpose of personal gain. The bank and its client have consented to misrepresent themselves as the owners of a quantity of property that they do not own and that plainly does not exist; and whenever they buy an existing quantity of property in exchange for titles to a non-existing quantity of property, they have become invariably and inescapably guilty of an act of fraudulent appropriation.[6]

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[5]Even partners cannot simultaneously own the *same* thing. A and B can each own half of a household, or half the shares in it, but they each own a *different* 50 percent. It is as logically impossible for them to own the same half as for two people to occupy the same space. Yes, A and B can both be in New York City at the same time, but only in different parts of it.

[6]De Soto (1995, p. 33) correctly likens the effect of fractional reserve banking to that of the so-called tragedy of the commons. Selgin and White (pp. 92–93, n. 12) object to de Soto's analogy on the ground that the tragedy of the commons refers "to a particular sort of technological externality,"

Selgin and White's failure to recognize this, and their belief in the ethical innocence of fractional reserve banking, is due to two confusions. On the one hand, as has already been indicated, they do not recognize that no object—and no quantity of money (gold)—can be owned by more than one party at a time and that no contract can possibly increase the quantity of property in existence, and thus that any pretension to the contrary is inherently fraudulent. On the other hand, and intimately related, Selgin and White do not recognize the fundamental praxeological difference between property and property titles. Rather, in subsuming money (gold) and money substitutes (banknotes) under the same heading of "money," they continually obfuscate this very distinction. For if money (gold) and titles to money (banknotes) are both defined as "money," then it indeed seems to follow that it does not make any difference whether the supply of money or that of banknotes increases. Both are "money" and hence, by definition, in both cases the same event—an increase in the supply of money—has taken place. But this does not alter the facts; it only defines them out of existence.

Of course, as Selgin and White correctly note, everyone is free to adopt any definition and make any distinction that he wishes. Yet definitions do not create real distinctions; they can, though, make them disappear. They can only either reflect such distinctions or else ignore and confuse them; and clearly, to refer to both money and money substitutes indiscriminately as money is to obscure the difference between two categorically—praxeologically—distinct phenomena and states of affairs. A title to money and an increase of titles is not the same thing as money and an increase of money. Rather, unlike an increase in the quantity of money (gold) or an increase of titles backed by a corresponding increase of money, any increase in the quantity of titles to money unaccompanied by an increased quantity of money necessarily implies that one and the same quantity of money is owned by more than one person at the same time; and since such a thing is physically impossible —the quantity of money is unchanged and all existing money must be presently owned by someone—every redemption of a fiduciary title, then, be it into money or any other form of real property, involves an act of illicit appropriation.

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according to Selgin and White, involves "a physical or otherwise direct interference with someone's consumption or production" and represents "interaction outside the market." In contrast, write Selgin and White, the "externality from fiduciary media" is a harmless pecuniary "effect on someone's wealth transmitted via the price system," that is, through changes in the system of relative prices, and represents "an interdependence through the market." Selgin and White err: an object and a title to an object are not the same thing.

In lumping money and money substitutes together under the joint title of "money," as if they were somehow the same thing, Selgin and White fail to grasp that the issue of fiduciary media —an increase of property titles—is not the same thing as a larger supply of property and that relative price changes effected through the issue of fiduciary media are an entirely different "externality" matter than price changes effected through an increase in the supply of property. With this the fundamental distinction between property and a property title in mind, de Soto's analogy between fractional reserve banking and the tragedy of the commons makes perfect sense. As under the scenario of a tragedy of the commons, every issue of fiduciary media—to titles in search of property—sets in motion a rush, always starting with the bank and its client, to fill these empty tickets with existing property; and in the course of this rush, invariably the firstcomers will physically enrich themselves (through the appropriation of existing quantities of property) at the expense of a corresponding impoverishment of latercomers, whose quantity of existing property is physically diminished while they have been left with a larger number of property tickets.

Assume there exists both property itself and property titles (notes). Besides property in consumer goods, producer goods, and money, titles to consumer goods, titles to producer goods, and titles to money are assumed to exist. The origin of property titles in addition to the existence of property itself promotes legal certainty and reduces and facilitates legal disputes, and hence undoubtedly represents a beneficial (natural) development. Moreover, it allows for two innovations. On the one hand, it becomes possible to separate the act of transferring ownership in property from the act of transferring its possession. That is, it becomes possible to surrender or acquire ownership in objects without simultaneously surrendering or acquiring possession, disposition, and control of the very same objects. Applied to money it becomes possible that, all the while the ownership of existing quantities of money (gold) can change constantly from one person to another, the entire quantity of money may remain—unchangingly—in the hands of one and the same bank (as the manager of money owned by others). On the other hand, with the development of property titles, intertemporal exchanges will be systematically facilitated. Existing (present) property or titles thereto may be transferred in exchange against titles to future property (debt claims); and hence it will be also assumed that next to titles to existing property (consumer goods, producer goods, and money), titles (debt claims) to future consumer goods, future producer goods, and future money exist and are traded as well.

In light of these developments, the following transactions (contracts) between any two parties A (bank client) and B (bank) are possible. A may transfer his money (gold) into B's disposition and thereby either (1) *not* give up his ownership in it, or (2) *give* up his ownership. There is no third *possibility*. If (1), then A keeps the title to the sum of money transferred to B; B does not have title to it, but acts as a money warehouser (a bailee) for A (as a money bailor). *There is no third possiblity.* If (2), then B acquires the title to the quantity of money put into its disposition by A; A receives from B in exchange either (a) a present—existing—quantity of consumer and/or producer goods previously possessed and owned by B; or (b) a title to a present—existing—quantity of consumer and/or producer goods in B's possession (but owned now by A) (an equity claim); or (c) a title to a quantity of *future* consumer and/or producer goods and/or money (a debt claim). *Again, there is no third possibility.* That is, A cannot both retain ownership of this property *and* transfer it to B.

Among all possible transactions, not one would result in the issue of a fiduciary note. Fiduciary media, according to Selgin and White's own definition, are "that portion of redeemable money substitutes backed by assets other than base money" (p. 85). There are money (gold) and money substitutes (titles to money) in existence, and there are titles to non-money goods (equity titles), and titles to not-yet-existing future goods (debt claims). Apparently, however, no such thing as "money substitutes backed by assets other than base money" would arise out of any of these transactions. Selgin and White *assume* the existence of fiduciary media (and they simply *assume* that the absence of fiduciary media must be the result of legal restrictions), but they do not provide a praxeological explanation and reconstruction of the origin of such a peculiar entity and state of affairs. Rather, they only ask, why not? "We do not see why bank and customer cannot contractually agree to make them [that is, demand deposits and banknotes] debts and not warehouse

receipts." *Why* is it that there can—and should—be no money substitutes backed by assets other than money? For the same reason that there can and should be no car or house titles backed by assets other than cars or houses, that there can and should be no equity titles backed by assets other than equity, and that there can and should be no assets—money, equity, or debt—owned (backed) by more than one person at a time. Titles to money are—and should be—backed by money in the same way and for the same reason as titles to cars are and should be backed by cars. This is what defines them as property titles. It is in accordance with and a reflection of the nature of property and property titles. In distinct contrast, a title to money backed by assets other than money is a contradiction in terms, and its issue and use involves the same sort of objective misrepresentation as the issue of a title to a car backed by assets other than a car (parts of planes and bikes, for instance).[7]

The answer to why fractional reserve agreements are ethically impermissible, and why there can be no contracts to make warehouse receipts debt, is that such agreements and contracts contradict (deny) the nature of things. Any such contract is from the outset—a priori—invalid. Selgin and White try to get around this inescapable conclusion by adopting, wittingly or not, an ultra-subjectivist view of contracts and agreements. According to this view, the very fact that a voluntary agreement is

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[7]Similar logic-semantic confusions are at work when Selgin and White try to reduce the difference between demand and time liabilities to one of degree rather than kind (p. 90). Explains Selgin (1988, p. 62): "Holders of demand liabilities are granters of credit just as are holders of time liabilities. The only difference is that in the former case the duration of individual loans is unspecified; they are 'call loans' that may mature at any time"; and "Mises," who holds the opposite view, "confuses a difference of degree with one of substance." In fact, it is Selgin who is confused.

To be sure, one might say that it is only a matter of degree whether a loan (of a car or of money) matures in an hour, a day, a week, or a month. Just as surely, however, this does not change the categorical distinction between present—existing—goods and not (yet) existing future goods. At any point in time, a car or a sum of money (gold) either exists or it does not exist. Nor does it alter the praxeological datum that no one, at any time, can act with anything except present goods. Future goods are the goal of actions, but in order to attain them, every actor must first invariably employ present means (goods). Nor does Selgin's observation concerning degrees of time affect in the slightest the fundamental human condition of scarcity. The supply of present goods is at all times limited, and the limited quantity of present goods limits in turn the quantity of possible future goods.

Whereas Mises recognizes the distinction between present goods and future goods as a universal praxeological category, Selgin's attempt to conflate demand and time deposits (thus distinguish himself fundamentally from Mises) implies a denial that there is no such fundamental difference between present (existing) goods and future (not-existing) goods (or that their existence differs only in degrees). Contrary to Selgin, it is not a matter of degree but rather one of substance whether a car or a sum of money presently exists or not, and whether one person or someone else owns them. Either they exist or they don't exist, and either A owns them or someone else does. Accordingly, if a property title (demand deposit note) then states that one person is the owner of a present car or present money and no car or money exists, or the car or money is presently owned by someone else, this does not represent a degree of truth but a falsehood. Explains Mises (1978, p. 268):

> A depositor of a sum of money who acquires in exchange for it a claim convertible into money at any time which will perform exactly the same service for him as the sum it refers to has exchanged no present good for a future good. The claim that he has acquired by his deposit is also a present good for him. The depositing of money in no way means that he has renounced immediate disposal over the utility it commands.

See also the two following notes.

reached and/or a contract is concluded demonstrates that it must be a valid—true or permissible—agreement and contract. Yet this view is not only false it is also incompatible with Rothbard's title-transfer theory of contract that these authors claim to have accepted. Agreements and contracts per se do not imply anything regarding their validity for the fundamental reason that agreements and contracts do not create reality, but rather presuppose it. More specifically, contracts do not bring property into existence, but rather recognize and transfer existing property. Hence, as in Rothbard's ethical system, the theory of property must precede the treatment of contracts. Contracts and contract theory presuppose and are constrained by property and property theory. That is, the range of possible (valid) contracts is limited and restricted by the existing quantity (stock) of property and the nature of things, rather than the other way around. Thus, agreements regarding flying elephants, centaurs, squared circles, of perpetui mobile, for instance, are invalid contracts. They cannot—by virtue of biological, physical, or mathematical law—be fulfilled, and are from the outset false and fraudulent.

While Selgin and White may acknowledge this, they fail to recognize that a fractional reserve banking agreement implies no lesser an impossibility and fraud than that involved in the trade of flying elephants or squared circles. In fact, the impossibility involved in fractional reserve banking is even greater. For, whereas the impossibility of contracts regarding flying elephants, for instance, is merely a contingent and empirical one (it is not inconceivable that in another possible world, somewhere and sometime, flying elephants may actually exist, thus making such contracts possible), the impossibility of fractional reserve banking contracts is a necessary and categorical one. That is, it is inconceivable—praxeologically impossible—that a bank and a customer can agree to make money substitutes (banknotes, demand deposit accounts) debts instead of warehouse receipts. They may say or certify otherwise, of course, just as one may say that triangles are squares. But what they say would be objectively false. As triangles would remain triangles and be different from squares, so money substitutes would still be money substitutes (titles to present money) and be distinct from debt claims (titles to not yet existing future goods) and equity claims (titles to existing property other than money). To say otherwise does not change reality but objectively misrepresents it.

In doing what Selgin and White believe clients and banks to have done—to agree to make warehouse receipts debt—the money depositor A receives from the bank B a claim to present *money*, rather than a debt or equity title. That is, A does *not* in fact give up ownership of the deposited money (as would have been the case if he had received a debt or equity claim from B). While A retains title to the money deposit, however, B does not treat A's deposit as a bailment, but rather as a loan, and enters it as an asset onto its own (B's) balance sheet (offset by an equal sum of outstanding demand liabilities). While this may appear initially to be merely a harmless accounting practice, it involves from the outset a misrepresentation of the real state of affairs.[8] Since both, B as well as A, count the same quantity of

[8]See on this point Rothbard (1983b). "How," asks Rothbard,

do these warehouse receipt transactions relate to the T-account balance sheets of the deposit banks? In simple justice, not at all. When I store a piece of furniture worth $5,000 in

money simultaneously among their own assets, they have in effect conspired to represent themselves in their financial accounts as owning a larger quantity of property than they actually own: that is, they have become financial impostors.[9] Though fraudulent, this would not matter so much if everything were left at this. However, as soon as B acts as if things were the way he represents them on his balance sheet to be—as if the bank owned the deposited money and only had the obligation to redeem outstanding warehouse receipts on demand—mere misrepresentation is turned into misappropriation. If B, in accordance with this misrepresentation, lends out money, or more likely, issues additional warehouse receipts for money and lends these out to some third party C, in the expectation of eventually being repaid principal and interest, the bank becomes engaged in undue appropriation, because what it lends out to C—whether money or titles to money—is in fact not its (B's) own property but that of someone else (A). It is this fact—that the title transferred from B to C concerns property B does not own—that makes fractional reserve banking from the outset fraudulent.

It is not the case, as is claimed, that fraud (breach of contract) is committed only if B, the fractional reserve bank, is actually unable to fulfill all requests for redemption as they arise. Rather, fraud is also committed each time B does fulfill its redemption obligations. Because whenever B redeems a fractionally covered banknote into money (gold) (whenever a note holder takes possession of his property), it does so with someone else's money: if B redeems C's note, it does so with money owned by A, and if A wants his money too, B pays him with money owned by D, and so on. *Qua* defenders of fiduciary media and fractional reserve banking, Selgin and White would have to maintain that there is no breach of contract as long as B is able to fulfill its contractual obligations with *someone else's* property (money).

> warehouse, in law and in justice the furniture does not show up as an asset of the warehouse during the time that I kept it there. The warehouse does not add $5,000 to both its assets and liabilities because it in no sense owns the furniture; neither can we say that I have loaned the warehouse the furniture for some indefinite time period. The furniture is mine and remains mine; I am only keeping it there for safekeeping and therefore I am legally and morally entitled to redeem it any time I please. I am not therefore the bank's creditor; it doesn't owe me money which I may some day collect. Hence, there is no debt to show up on the Equity + Liability side of the ledger. Legally, the entire transaction is not a loan but a bailment. (pp. 88–89; also pp. 94–95)

Interestingly, while Selgin and White manifest a strong positivistic tendency (fractional reserve banking is recognized by the courts, so it must be all right; on this tendency see "The Issue of Fraud III" below), they do not come to terms with legal reality. For if money deposits are debt, why, then, don't the courts apply the same reasoning to all other fungible commodities such as wheat? Why are wheat warehouse receipts not considered a debt (but a bailment) by the courts? Why is this treatment peculiar to money and the banking business? Moreover, why is it that the courts, even if they falsely consider money deposits as debts, still insist that they are more than an ordinary debt, and the depositor's relation to the bank is not identical with that of an ordinary creditor? See Rothbard (1983, p. 275).

[9]See also Jevons (1905, pp. 206–12, 221), who lamented the existence of general deposits since it has "become possible to create a fictitious supply of a commodity, that is, to make people believe that a supply exists which does not exist." On the other hand, special deposits, such as "bills of lading, pawn-tickets, dock-warrants, or certificates which establish ownership to a definite object," are superior because "they cannot possibly be issued in excess of the good actually deposited, unless by distinct fraud." And Jevons concluded that "it used to be held as a general rule of law, that a present grant or assignment of goods not in existence is without operation."

Yet this is patently wrong, and it stands in clear contradiction to Rothbard's title-transfer theory of contract that Selgin and White claim to have accepted. In accordance with Rothbard's contract theory, individuals are only entitled to make contracts regarding the transfer of *their own property.* In contrast, fractional reserve banking, by its very nature (even if it is practiced successfully), involves contracts concerning the transfer of *other people's property.* Hence, this practice—the issue of fiduciary media—is in principle (inherently) incompatible with the title-transfer theory of contract—and it turns out, not surprisingly, that it is Rothbard, and not his two interpreters, who ultimately demonstrates a better grasp of his own contract theory.

THE ISSUE OF FRAUD II: FRACTIONAL RESERVE BANKING AND FREEDOM OF CONTRACT

Murray Rothbard's classification of fractional reserve banking as fraud was the result of long and intensive study of ethics and property-rights theory in particular. Selgin and White rightly regard economics as intellectually independent and separate from ethics. It may be studied without any prior knowledge of property and property-rights theory. Yet they do not hesitate to make sweeping ethical pronouncements. In their moral defense of fractional reserve banking Selgin and White rarely mention property, let alone outline a theory of property. This results in a series of fundamental errors and problems: confusion regarding the distinction between property and property titles; confusion as to the (im-)possibility of something (property) being owned simultaneously by more than one owner; confusion concerning the logical priority of property and property theory vis-à-vis contract and contract theory; and confusion concerning the necessity of fulfilling one's contractual obligations with one's own property (not just anyone's).

These difficulties enter into the authors' discussion of the issue of "freedom of contract." Their argument is straightforward.

> If a bank does not represent or expressly oblige itself to hold 100 percent reserves, then fractional reserves do not violate the contractual agreement between the bank and its customer. . . . Outlawing voluntary contractual arrangements that permit fractional reserve-holding is thus an intervention into the market, a restriction on the freedom of contract which is an essential aspect of private property rights. (p. 87)

This passage reveals again Selgin and White's already noted ultra-subjectivism. According to this view, it is voluntary agreements that make for—constitute and define—a valid contract. However, valid contracts are agreements regarding the transfer of real property; hence, the range of valid contracts is in fact first and foremost constrained by the nature of things and property (and only then by agreement). It was thus that Hoppe (1994, p. 70) explained that

> freedom of contract does not imply that *every* mutually advantageous contract should be permitted. . . . Freedom of contract means instead that A and B should be allowed to make any contract whatsoever *regarding their own properties,* yet fractional reserve banking involves the making of contracts regarding the property of third parties.

Selgin and White refer to this charge somewhat misleadingly as "third-party effects" (p. 92) and counter it by charging Hoppe in turn with elementary confusion as regards the nature of property and property rights. They state first, that

> spill-overs from others' actions to the *value* of C's property . . . are an inescapable free-market phenomenon, and are not a violation of C's private-property rights, [whereas] *physical invasions* of C's property . . . are of course inconsistent with the protection of C's property rights. It should be obvious that if A and B are barred from any transaction that merely affects the *market value* of C's possessions, without any physical aggression or threat against C or C's rightful property, then the principles of private property, freedom of contract, and free-market competition are completely obliterated. Is B to be barred from offering to sell compact disc recordings to A, merely because doing so reduces the market value of C's inventory of vinyl records? (pp. 92–93)

Second, they state that the reduction of the purchasing power of money, which they admit must result from every issue of fiduciary media, is as such a harmless value-effect and thus "provides no justification for legally barring the bank's action." Hence they conclude that Hoppe's argument is "invalid" (and incompatible with Rothbard's theory of property).

Selgin and White's counterargument contains two errors. First, while the major premise is correct, it is false that Hoppe is mistaken about it. Hoppe has written extensively on the theory of property rights, and is not only aware of the distinction mentioned by Selgin and White but even provides a praxeological defense of it; hence, in this regard no difference of judgment whatsoever between Rothbard and Hoppe exists.[10]

Second, the minor premise is demonstrably false (and hence, so is the conclusion). Selgin and White claim that the fall in the purchasing power of money resulting from the issue of fiduciary media is the same sort of harmless event as a fall in the price of anything else (caused by changes in supply and/or demand). That money owners lose purchasing power as a result of fractional reserve banking, they claim, is not different from the situation in which the owners of potatoes or cars suffer a value-loss due to a larger supply of or a reduced demand for potatoes and cars.

Here again, Selgin and White conflate money (gold)—that is, property—and money substitutes (banknotes)—that is, property titles. To be sure, the issue of fiduciary media does not lead to physical damage to real property. After all, a bank note is just a piece of paper, and paper does not exert any relevant physical effect on the external world. But the same can be said also about the issue of fiduciary titles to potatoes or cars (titles backed by assets other than potatoes or cars). They, too, are merely pieces of paper, and as such have no impact on the real world. Yet there exists an important difference between changes in a potato or car owner's wealth position due to changes in the supply or demand for potatoes or cars on the one hand, and changes brought about by changes in the supply or demand for titles to non-existing (unchanged) quantities of potatoes or cars on the other hand. Surely, the owners of potatoes or cars are affected differently in both cases. In the first case, if the price of potatoes or cars falls due to a larger potato or car supply, all current potato or car owners remain (unchangingly) in possession of the same quantity of property (potatoes or cars). No one's physical property is diminished. Likewise, if the price falls because potato or car buyers are willing to offer only lesser quantities of other

[10]See, for instance, Hoppe (1988, pp. 69ff); and White's (1990) review of Hoppe.

goods in exchange for potatoes or cars, this by itself has no effect on any current potato or car owner's physical quantity of potatoes or cars. In distinct contrast in the second case, the issue and sale of an additional title to an unchanged quantity of potatoes or cars *does* lead to a quantitative diminution of some current potato or car owner's physical property. It does not merely have a value-effect: the purchasing power of potato or car titles will fall. It does have a physical effect: the issuer and seller of fiduciary potato or car titles misappropriates other people's potatoes or cars. He appropriates other people's property without relinquishing any property of his own (in exchange for an empty property title).[11]

THE ISSUE OF FRAUD III: THE "PROOF FROM EXISTENCE" FRACTIONAL RESERVE BANKING AND STATE FORMATION

Neither the title-transfer theory of contract nor the principle of freedom of contract supports the claim that the issue of fiduciary media and fractional reserve banking is ethically justified. To the contrary, only one other argument remains in support of the claim that fractional reserve banking represents a legitimate form of business.

The argument boils down to a proof from existence: X, Y, or Z exists; it would not exist if it were not beneficial; hence, it should exist (and outlawing it would be detrimental and morally wrong).

Thus, write Selgin and White (p. 95):

> the group [of people] whose freedom of contract we are concerned with here is not a small eccentric bunch, but is the great mass of people who have demonstrated that they do prefer banks that operate on fractional reserves. . . . Depositors continue to patronize these banks, demonstrating their preference, for them. . . . By the principle of demonstrated preference depositors must be presumed to benefit from the package they have agreed to accept, risk and all. (p. 93)

> [Consequently,] if any person knowingly prefers to put money into an (interest-bearing) fractional reserve account, rather than into a (storage-fee-charging) 100 percent reserve account, then a blanket prohibition on fractional reserve banking by force of law is a binding legal restriction on freedom of contract in the market for banking services. (p. 88)

> [Moreover,] . . . benefits accrue to bank depositors and noteholders, who receive interest and services paid for by the extra bank revenue generated from lending out a portion of its liabilities. Benefits accrue to bank borrowers who enjoy a more ample supply of intermediated credit, and to everyone who works with the economy's consequently larger stock of capital equipment. And the benefits must accrue to bank shareholders, who could choose to have the bank not issue demand liabilities if they found the risks not worth taking. (p. 94)

Selgin and White have here put the cart before the horse. The existence of a practice, however widespread, has no bearing on the question of whether it is justifiable

[11] Also see note 4 above. We will also show that these authors' meaning of demand for (and supply of) money is misconceived. An increased demand for money (or potatoes or cars) is not just a wish to have more money (or potatoes), but greater *effective* demand.

or not. Consider first, for illustrative purposes, the following analogy concerning the ethical permissibility of a state, that is, of a territorial monopolist of law and order (or of justice and protection).[12]

In the words of Selgin and White (applied here in a different context and paraphrased), the group of people whose freedom of contract we are concerned with is not a small eccentric bunch, but is the great mass of people who have demonstrated that they do prefer states (judges and protectors) that operate on a monopolistic basis. Territorial inhabitants continue to patronize these states, demonstrating their preference for them. By the principle of demonstrated preference, territorial inhabitants must be presumed to benefit from the package they have agreed to accept, risk and all. Consequently, if any person knowingly prefers to put money into a tax-bearing state account, rather than into a protection-fee-charging account in non-taxing justice and protection agencies, then a blanket prohibition on state-formation by force of law is a binding legal restriction on freedom of contract in the market for justice and protection services. Moreover, benefits accrue to state depositors and noteholders, who receive interest and services paid for by the extra state revenue generated from employing parts of the deposits for extra tax collections. Benefits accrue to state borrowers who enjoy a more ample supply of intermediated credit, and to everyone who works with the economy's consequently larger stock of capital equipment. And benefits must accrue to state shareholders, who could choose to have the state not engage in taxation if they found the risks not worth taking.

Given their own libertarian credentials, Selgin and White would presumably reject this analogy as false and inappropriate. But if so, why? What is it that invalidates the second *proof*, but not the first? What, if anything, makes a blanket prohibition (or permission) of fractional reserve banking categorically different from a blanket prohibition (or permission) of state formation and operation?

The answer—that no such difference exists and that both proofs are equally invalid—is to be found in the Rothbardian principle of demonstrated preference. While Selgin and White invoke this principle in support of their conclusion regarding the ethical permissibility of fractional reserve banking, they miss its implication. The principle of demonstrated preference, as explained by Rothbard in his celebrated "Toward a Reconstruction of Utility and Welfare Economics," *presupposes* property rights. Not all demonstrated preferences are ethically permissible or socially beneficial. Instead, the only such preferences that are permissible and welfare enhancing are these that are expressed by means of one's own property and nothing but one's own property. Every preference demonstration by means of property other than one's own—with other people's property—is impermissible and non-beneficial.

As for the demonstrated preference for states, it runs afoul of Rothbard's principle. In Rothbard's analysis, which is presumably accepted by the participants on

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[12]To avoid any misunderstanding, the term monopoly is employed here in its Rothbardian definition as an exclusive privilege (or the absence of free entry). A monopoly of law and order means that one may turn for justice and protection only to one party—the state—and that it is exclusively this party that determines the content of justice and protection.

both sides of the current debate, the violation can be quickly pinpointed. Private property, as the result of acts of (original) appropriation and/or production, implies the owner's right to exclusive jurisdiction regarding his property, including the right to employ this property in defense against possible invasions and invaders. Indeed, there can be no property without an owner's right to physical defense, and it is the very purpose of private property to establish separate domains of exclusive jurisdiction. No private-property owner can possibly surrender his right to ultimate jurisdiction over and defense of his property to someone else—unless he sells or otherwise transfers his property (in which case someone else would have exclusive jurisdiction over it). That is, so long as something (a good) has not been abandoned, its owner must be presumed as retaining these rights; and as far as his relations to others are concerned, every property owner may then only partake in the advantages of the division of labor and seek better and improved protection of his unalterable property rights through cooperation with other owners of property. Every property owner can buy from, sell to, or otherwise contract with everyone else concerning supplemental property protection and security services. Yet each owner also may at any time unilaterally discontinue any such cooperation with others. In distinct contrast, a territorial monopoly of protection and jurisdiction—a state—implies that every property owner is prohibited from discontinuing his cooperation with his protector, and that no one (except the monopolist) may exercise ultimate jurisdiction over his own property. Rather, everyone except the monopolist has lost his right to defense and is thus rendered defenseless vis-à-vis his own protector. Obviously, such an institution stands in contradiction to every owner's demonstrated preference of not giving up his property. Contrary to their demonstrated preference, the monopolist prohibits the people from using their property in physical defense against possible invasions by himself and his agents. A monopoly of protection and jurisdiction rests thus from the outset on an impermissible act of expropriation (taxation) and provides the monopolist and his agents with a license to further expropriation and taxation. Every owner's range of permissible actions regarding his own property, and hence the value of his property, is diminished, whereas the monopolist's range of action and control is correspondingly enlarged and his exclusive privilege is reflected in an increase in the value of his property (capitalization of monopoly profit).

Presently, states exist everywhere, and almost everyone resides under state *protection*. Regardless of this preference demonstration, however, there is nothing wrong, ethically or economically, with blanket protection against state formation. No one may form a state, for the same reason that no one may expropriate or rob anyone else. In a court of law, it would be sufficient that a single property owner objected to the monopoly's existence, and the monopolist would have to cease in his current operation as a tax-yielding protection agency and be repaired to the legal status of a non-taxing but fee-charging law-and-security agency (a normal specialized firm). A tax-yielding protection agency is a contradiction in terms—an invasive protector—and must be forbidden, irrespective of any benefits occuring to state depositors, state borrowers, and state owners. To do so is not a legal restriction on freedom of contract in the market for justice and protection services, but the very presupposition of freedom of contract and justice. Everyone putting money or any other resources into a tax-yielding protection account is engaged in unlawful action and subject to punishment.

Just as states exist everywhere, so do fractional reserve banks, and nowadays practically everyone is banking with fractional reserve banks. What, if anything, is the difference between the status of a state and that of a fractional reserve bank? Why should fractional reserve banks not be outlaw banks just as states outlaw protection agencies? To be sure, just as there can be no doubt concerning a demand for protection services, there can also be no doubt as to a demand for banking services. Yet the demand for protection services that private-property owners may properly demonstrate does not include a demand for tax-yielding protection services, as we have seen. It exclusively permits a demand for fee-charging protection agencies. Why should an analogous distinction not be true also for banking services? Why should a demand for interest-yielding demand deposit accounts not be just as impermissible as the demand for tax-yielding protection accounts, on the ground that both interest-yielding deposit accounts and tax-yielding property protection are contradictions in terms? Why should the functions of a money warehouser and clearing institution (100 percent reserve deposit banking) and as an intermediary of credit (savings-and-loan banking) not be the only just forms of banking (just as fee-charging protection agencies are the only legitimate form of protection)?

The answer depends on whether or not the demonstrated preference for fractional reserve banking services, that is, the issue and acceptance of fiduciary media, involves solely and exclusively the property of the two contracting parties. At any given point in time, the quantity of property (appropriated goods)—whether consumer goods, producer goods, or money—is given. Fractional reserve banking does not increase the quantity of existing property (money or otherwise), nor does it transfer existing property from one party to another. Rather, it involves the production and sale of an increased quantity of titles to an unchanged stock of money property (gold); that is, the supply of and the demand for counterfeit money and illegitimate appropriation. As in every other case of counterfeiting (forgery)—of stock and commodity certificates, banknotes, land titles, original art, etc.,—the issue and sale of money copies (banknotes) uncovered by originals (gold) will physically diminish or despoil the original money—stock, commodity, land, or art—owners' property. But a counterfeiter of money is particularly dangerous and invasive because of money's defining characteristic as the most easily saleable and widely acceptable of all goods; that is, because *money*-counterfeits open to their seller the widest possible range of objects for undue appropriation (from money to almost every other form of real property).

Thus, it is no wonder that of all forms of forgery, the counterfeiting of money has always held the greatest attraction. So long as money exists there will also exist a persistent demand for counterfeit money. Regardless of this attraction and demand, however, there is nothing wrong with a blanket prohibition against fractional reserve banking. No one may operate a fractional reserve bank for the same reason that no one, in any other line of business, may engage in counterfeiting, that is, the production and sale of titles or copies to non-existing property or originals. In a court of law, it would be sufficient that a single money or other property owner brought suit against a fractional reserve bank as a manufacturer of counterfeit money, and the bank immediately would have to cease its current operation and be reduced to its two original functions: deposits and loans. An interest-yielding (rather than fee-charging) deposit bank is a contradiction in terms: it is a counterfeiting money warehouser,

and must be outlawed, irrespective of any benefits accruing to bank depositors, borrowers, and owners. To do so is not a restriction on freedom of contract in the market for banking services, but the requirement of lawful money and banking. Everyone putting money or other resources into interest-yielding deposit accounts is engaged in undue and unlawful appropriation.[13]

The relationship between states and fractional reserve banks is even more intimate, and in any case quite different from that suggested by Selgin and White. They claim that it would be an illegitimate interference with the operation of free markets if the state were to prohibit fractional reserve banking. In fact, fractional reserve banking is the result of an illegitimate state interference with the market, and prohibiting it would only repair this earlier intervention. Selgin and White recognize that in the evolution of a free banking system, 100 percent reserve deposit banking and, functionally separated, loan banking, must (praxeologically) precede fractional reserve banking. In their view, fractional reserve banking is the natural outgrowth of an earlier 100 percent reserve system. However, they do not offer an explanation for this transition as a natural solution to a problem that cannot be solved under the prior system of 100 percent banking (in the way that Austrians conceive of money as the natural solution to the problem of lacking coincidences of wants under a preceding barter system). They merely affirm that the transition actually occurred.

While one can easily see why and how a banker might want to take advantage of the possibilities of counterfeiting, it is just as clear that any such attempt would not go by without quickly and continually being challenged. Surely the current writers and thousands of earlier legal and economic theorists would have accused fractional reserve banks of counterfeiting and would have brought suit against them. The further course of banking evolution would then depend on a court decision. If the court decided that the issue of fiduciary media *qua* titles to money uncovered by money constitutes counterfeiting, fractional reserve banks would not come into existence; and only if it decided otherwise would they ever actually appear. Nothing in this evolution is natural; everything appears rather deliberate. Nor would the outcome of such trials naturally be to Selgin and White's liking. To the contrary, if one were to assume that fractional reserve bankers would be tried on counterfeiting charges before a jury of their own peers (of other businessmen), we dare say that, empirically, the overwhelming number of such cases would end in conviction (the testimony of Selgin and White notwithstanding). Why, then, the almost complete dominance of fractional reserve banking?

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[13]Explains Rothbard (1995, p. 77):

> The champions of free competition in counterfeiting retort that this is simply the market at work, that the market registers a "demand" for more expanded credit, and that the private bankers, those Kirznerian entrepreneurs, are simply "alert" to such market demands. Well, of course, there is always a "demand" for fraud, and embezzlement, on the market, and there will always be plenty of "alert" swindlers who are eager and willing to furnish a supply of these items. But if we define the "market" not simply as a supply of desired goods and services, but as a supply of such goods *within* a framework of inviolate property rights, then we see a very different picture.

The answer is that the courts deciding these matters everywhere are *state* courts. Only if a single court possesses a territorial monopoly of jurisdiction is it possible that the dispute at hand could be settled once and for all. And that it has been uniformly settled in the way it was, that is, by permitting rather than prohibiting fractional reserve banking, follows from the interest of every court and judge *qua* state court and state judge. The owners and agents of the state recognize fully as much as bankers the potentials of money counterfeiting as a source of income. In permitting bankers to issue fiduciary media (rather than prohibiting the practice as counterfeiting), banks are made existentially dependent on the state. They can only operate because the state, due to its territorial monopoly of jurisdiction, shields them from counterfeiting suits; and the state does so only under the provision that banks will share with it in the extra revenue and credit derived from legalized counterfeiting. Hence, by permitting fractional reserve free banking the state actually creates the first and preliminary form of a joint-bank-state-counterfeiting cartel under its own ultimate control.

Once fractional reserve banking receives blanket protection from the state, it follows naturally that fractional reserve banks will outcompete 100 percent reserve banks. Not, as Selgin and White assert (pp. 97–98), because they are better or more efficient banks, but for the reason that, once money counterfeiting is permitted, banks that engage in it tend to outcompete banks that do not. That is, for the same reason that, once industrial air pollution is permitted a polluting steel producer will tend to outcompete a steel producer who does not pollute, and for the same reason that a protection agency with taxing powers, a state, will tend to outcompete protectors without taxing power. Put differently, it is not always the case that good drives out bad. This is the case only so long as private property-rights are inviolate. If they are not, and there exist privileged agents or agencies, who are exempt from the universal rules regarding the appropriation, production and transfer of property, then these will tend to outcompete other normal agents. In this case, bad drives out good. Thus, it is completely mistaken to interpret the empirical success of fractional reserve banking as proof of its greater economic efficiency. The success of fractional over 100 percent deposit banking is no more a market phenomenon than is the success of tax-yielding protectors, states, over competitive and non-taxing security producers. It is false to suggest, as Selgin and White do, that fractional reserve banking has stood the market test and represents the outcome of voluntary consumer choices. After all, 100 percent reserve deposit banking is not outlawed and consumers are free to bank with them instead of fractional banks if they so prefer. Or would they likewise argue that the polluting steel producer had stood the test of the market because, after all, consumers are free to buy their steel from non-polluting steel producers, or that states have proven themselves in the market because, after all, consumers are free to buy their security also from agencies without any tax and jurisdictional powers?[14]

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[14]A similar confusion characterizes Selgin and White's view on the relationship between money proper (gold) and banknotes. They criticize Hoppe for claiming that, in a genuine free-market order, most people would use money proper rather than banknotes (without mentioning Hoppe's theoretical reason). "The facts," they claim, "are otherwise" (p. 99). Yet these facts—the historical success of the banknote over genuine money—are the *result of an earlier state interference* with private-property rights (the legalization of fractional reserve banking). As Mises (1966, pp. 438, 442, 447) noted,

Moreover, whereas 100 percent reserve banking is crisis-proof, fractional reserve banking, as even Selgin and White admit, is not. In fact, as we can only briefly indicate here, a system of free fractional reserve banking will, in accordance with Mises's theory of interventionism, lead to further state interventions and the successive devolution of money. Free fractional reserve banking *qua* state-protected competition in counterfeiting will lead to a steady contest among banks of testing the viability of increasingly lower reserve ratios. This is bound to lead to banking crises, and these will be used by governments for the introduction of central banking. Central banking leads to still more counterfeiting, and to the abolition of commodity money and adoption of national fiat currencies. Lastly, international—inter-central bank—competition in fiat money counterfeiting will lead to state bankruptcies, and their financial default will be used by the most powerful among the surviving states for the establishment of a one-world government, central bank, and fiat currency.

Hence, the solution proposed by Selgin and White to the current monetary disorder, that is, a gold-based free—fractional reserve—banking system, is in fact the initial interventionist cause of virtually all contemporary monetary problems.[15]

> the truth is that, except for small groups of businessmen who were able to distinguish between good and bad banks, banknotes were always looked upon with distrust. It was the special charters which governments granted to privileged banks that slowly made these suspicions disappear.
>
> In [governments'] eyes the foremost task of the banks was to lend money to the treasury. The money-substitutes were favorably considered as pace-makers for government-issued paper money. The convertible banknote was merely a first step on the way to the nonredeemable banknote. With the progress of statolatry and the policy of interventionism these ideas have become general and are no longer questioned by anybody.
>
> Governments did not foster the use of banknotes in order to avoid inconvenience to ladies shopping. Their idea was to lower the rate of interest and to open a source of cheap credit to their treasuries. In their eyes the increase in the quantity of fiduciary media was a means of promoting welfare. Banknotes are not indispensable. All the economic achievements of capitalism would have been accomplished if they had never existed.

Accordingly, Mises's view regarding sound money is completely different from Selgin and White's. Whereas the latter believe that gold would—and should—ultimately disappear from circulation altogether (see note 3 above), Mises (1978, pp. 450–51) considered it a requirement of a sound monetary system that "gold must be in the cash holdings of everybody. Everybody must see gold coins changing hand, must be used to having gold coins in his pockets, to receiving gold coins when he cashes his pay check, and to spending gold coins when he buys in a store."

[15]On the relationship between state, money and banking, and political centralization see Hoppe (1990) and Hülsmann (1997). Selgin and White argue:

> We also reject the notion . . . that *competitive* banks issuing redeemable liabilities can create credit "out of thin air." By the nature of the balance sheet, all bank loans must be funded by liabilities or equity. Neither source of funds can be conjured out of thin air. No one is forced to hold a bank's redeemable liabilities or to buy its shares; anyone can hold claims on other banks instead, or on no bank. A competitive bank must therefore *expend real resources to attract a clientele* by the provision of interest and services. The notion that a bank can extend credit gratuitously is valid only with respect to the inframarginal credits of a monopoly bank, or to the issuer of a forced tender; it does not apply to a bank in a competitive system. (p. 94, n. 13)
>
> Thus competition will beat down the returns to capital invested in fractional reserve banking until the marginal bank is earning only the normal rate of return. (p. 97)

THE POSITIVE ECONOMICS OF FIDUCIARY MEDIA: MONEY BALANCE, PRICE ADJUSTMENT, SAVING, AND INVESTMENT

From the nature of fiduciary media—as titles to non-existing quantities of money property (gold), titles to money covered by things other than money, or plain counterfeit money—it would seem to follow that fractional reserve banking cannot possibly effect anything but a continual wealth and income redistribution. As the uncovered money substitutes ripple from the issuing bank and its borrower clientele outward through the economy, and thereby successively raise the price of increasingly more goods, real wealth (property) is transferred and redistributed in favor of the issuing bank and the initial and early recipients and sellers of this money, and at the expense of its late or never receivers and sellers. Explains Rothbard (1993, p. 851),

> the first receivers of the new money gain the most, the next gain slightly less, etc., until the midpoint is reached, and then each receiver loses more and more as he waits for the new money. For the first individuals' selling prices soar while buying prices remain almost the same; but later, buying prices have risen while selling prices remain unchanged.

However, according to Selgin and White, fiduciary media can accomplish far more. Rather than only redistributing existing property, the issue of fiduciary media can, under certain conditions, lead to an increase in real wealth (property). We have already quoted them stating that "benefits accrue to bank borrowers who enjoy a more ample supply of intermediate credit, and to everyone who works with the economy's consequently larger stock of capital equipment." They refrain from putting it this bluntly, yet what they claim is that, under specific circumstances, an

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While we have no difficulty accepting the distinction drawn here between competitive and monopolistic banking, none of this has any bearing on the issue at hand, that is, the validity of the analogy between states and fractional reserve banks as outlaw organizations. For one, states to compete for clients (residents). Indeed, competition between states (or banks) for clients only comes to a complete halt with the establishment of a single world state (or central bank). And the intra-state competition between fractional reserve banks is, as explained, competition within a state-privileged industry, that is, monopolistic competition (just as inter-state competition is an example of monopolistic competition). Second and more importantly, the difference between competitive and monopolistic banks (or states), interesting as it may otherwise be, does not affect in the slightest their common characteristic as fractional reserve banks (or states). Counterfeiting and taxation do not change their nature because they are undertaken competitively.

The error can be revealed by analogy. Selgin and White are paraphrased here: We also reject the notion that competitive states issuing tax liabilities can create taxes out of thin air. By the nature of state budgets, all expenditures must be funded by conquest, robbery, or theft. Neither source of funds can be conjured out of thin air. No one is forced to hold any particular state's tax liabilities or buy its shares; anyone can move and pay taxes to another state, or to no state. A competitive state must therefore *expend real resources to* attract a clientele by the provision of protection and services. The notion that a state can increase taxes gratuitously is valid only with respect to the inframarginal taxes of a monopoly state; it does not apply to a state in a competitive system. Thus, competition will beat down the returns to capital invested in states until the marginal state is earning only the normal rate of return.

According to Selgin and White, it would seem to follow that taxation (like money counterfeiting) is not to be considered a problem until the arrival of a single world monopoly bank. Up until then, under competitive conditions, taxes represent nothing but a normal market income.

increase of titles to an unchanged fund of goods will somehow make this fund grow or prevent it from shrinking.

When and how can such a miracle be accomplished? According to Selgin and White, (unanticipated) changes in the demand for money lead to "temporary" or "short-run monetary disequilibrium" involving "serious misallocations of resources"—that is, *unless* such changes are accommodated by fractional reserve banking practices (p. 101). They write:

> In the long run, nominal prices will adjust to equate supply and demand for money balances, whatever the nominal quantity of money. It does not follow, however, that each and every change in the supply of or demand for money will lead at once to a new long-run equilibrium, because the required price adjustments take time. They take time because not all agents are instantly and perfectly aware of changes in the money stock or money demand, and because some prices are costly to adjust and therefore "sticky." It follows that, in the short-run (empirically, think "for a number of months"), less than fully anticipated changes to the supply of or demand for money can give rise to monetary disequilibrium.... It is therefore an attractive feature of free banking with fractional reserves that the nominal quantity of bank-issued money tends to adjust so as to offset changes in the velocity of money. (pp. 100–1)

> If the banking system fails to increase the quantity of bank-issued money and the price level does not promptly drop, an excess demand for money arises (assuming also that the quantity of base money does not immediately increase). A corresponding excess supply of goods arises: unsold consumer goods pile up on sellers' shelves (this is of course what proximately puts downward pressure on prices, until at last goods prices have fallen sufficiently). Business is depressed until the purchasing power of money gets back to equilibrium. (p. 105)[16]

From the outset, one must wonder about the very existence of the problem of monetary disequilibrium (not to speak yet about the solution). In the just-given quote, one can substitute any other good for money: televisions, steel, beer, or pretzels. The quantities of goods such as these are also rigidly fixed (as is the quantity of gold), and yet (unanticipated) changes in the demand for televisions, steel, beer, or pretzels do not lead to temporary disequilibria involving serious misallocations of resources. Or, in any case, they do not cause problems that would require the invention of a special new device (such as fractional television or beer production).

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[16] As Roger Garrison, another fractional reserve free banker, has put it, "in terms of the equation of exchange [MV=PQ], we can say that free banking adjusts so as to offset changes in V; but M allows changes in Q to be accomodated by changes in P." Garrison (1996, pp. 117–18) describes the short-run "monetary disequilibrium" in almost identical form:

> An increase in the demand for money puts downward pressure on product and factor prices in general. If there were no money-supply response, a general decline in economic activity would follow, since prices and wages could not fully and instantaneously adjust themselves to the new market conditions. Goods in general would go unsold; production would be cut; workers would be laid off.... With a less-than-perfectly flexible price system, general deflationary pressures can push the economy below its potential during the period in which prices are adjusting to the higher monetary demand. And the fact that some prices and some wages are more flexible than others means that the adjustment period will involve changes in relative prices that reflect no changes in relative scarcities. These are precisely the kinds of problems... avoided by free banking's responsiveness to increases in money demand.

Nor is it clear why we are supposed to believe that "it is important to distinguish between short-run and long-run implications of changes in the demand schedule for money or in the stock of money" (p. 100), or, in any case, why this distinction should be of different importance or significance in the case of money from that of everything else. To be sure, it takes time before an unexpected increase in the demand for televisions and beer, for instance, will have exhausted all of its effects on the system of relative prices and a new adjusted production structure will have been established. But this does not mean that price adjustments take any time (meanwhile causing short-run problems). To the contrary, price adjustments occur immediately and without any delay. Every change in the supply of or demand for anything affects prices instantly. This fact is overlooked because of an un-Austrian concern for macroeconomic artifacts such as the general price level, long-run equilibrium, and the velocity of money. However, viewed from the proper individualist perspective, there can be no doubt about the immediacy of price adjustments and the praxeological integration of the short and the long run.

In individualistic terms, an increased demand for money is the result of the purposeful actions of individuals, that is people intent upon increasing their individual cash balances. To do so, a person must restrict his purchases and/or increase his sales. In either case, the outcome is an immediate fall of some prices. As the result of restricting one's purchases of x, y, or z, the money price of x, y, or z will be lowered immediately (as compared with what it would have been otherwise), and likewise, by increasing one's sales of a, b, or c their prices will fall instantly. No one is concerned about the general price level or the generalized purchasing power of money. Instead, everyone is always concerned about specific prices and the purchasing power of money regarding specific items (and everyone is interested in his very own and different specific array of prices and purchasing power). In restricting his specific purchases and/or increasing his specific sales, each actor accomplishes exactly and immediately what he wants: certain prices that he deems too high are lowered, the purchasing power of a unit of money increases, the real value of his cash balance rises, and his demand for and supply of money is immediately brought back into equilibrium (and he wishes to hold neither more nor less money than he actually does).[17]

The adjustment of the praxeologically meaningless general price level necessitated by an increased demand for money is nothing but the summation of a series of countless immediate and purposeful individual cash-balance adjustments. If the increased demand for money is accommodated by the issue of fiduciary media, as Selgin and White

[17]Thus writes Mises (1990, p. 61):

> Buyers and sellers on the market never concern themselves with the elements in the equation of exchange, of which two—velocity of circulation and the price level—do not even exist before market parties act and the other two—the quantity of money (in the whole economy) and the sum of transactions—could not possibly be known to the parties in the market. Only the importance which the various actors in the market attach, on the one hand, to the maintenance of a cash balance of a certain magnitude and, on the other hand, to the ownership of the various goods in question determines the formation of the exchange relationship between money and goods.

advocate, this adjustment process will not be facilitated but delayed.[18] The speed of the adjustment of prices depends on the market-participants' expectations concerning the given quantity of money. If it is reasonable to assume that fractional reserve banks will increase their fiduciary issues in response to an unanticipated increase in the demand for money, then the adjustment will take *more* time. Production would adjust and begin *earlier* without the additional influence of inflation.[19]

Moreover, the proposed solution to the alleged problem of short-run monetary disequilibrium displays a fundamental confusion regarding the concept of demand (and supply), and the relationship between the demand for money, saving, and investment in particular. First, an increased demand for money (as for televisions, beer, or pretzels) is not just a wish to have more money (or televisions, beer, etc.), but *effective* demand. That is, an increased demand for money (as for anything else) can be satisfied only if the demander is willing to increase his market-supply of and/or reduce his demand for something else. Likewise, the supplier (seller) of money can only increase his supply of money if he reduces simultaneously the supply of (or his reservation demand for) something else. The authors have overlooked Say's law: all goods (property) are bought with other goods, no one can demand anything without supplying something else, and no one can demand or supply more of anything unless he demands or supplies less of something else. But this is here *not* the case whenever a fiduciary note is supplied and demanded. The increased demand for money is satisfied without the demander demanding, and without the supplier supplying, less of anything else. Through the issue and sale of fiduciary media, wishes are accommodated, not effective demand. Property is appropriated (effectively demanded) without supplying other property in exchange. Hence, this is not a market exchange—which is governed by Say's law—but an act of undue appropriation. Or would it be an efficient solution to the problem of unanticipated short-run television, beer, or pretzel-shortages if television, beer, and pretzel producers were to accommodate such increased demand

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[18]Moreover, from an individualist perspective, the increased demand for money occurs with specific actors at specific times and places. It is not sufficient for banks to accommodate some abstract higher money demand by more money; rather, but the accomodation would have to occur precisely with the correct people and locations. If this is not the case, one can hardly speak of an accomodation but of an additional distortion. This difficulty was recognized by the early Hayek (1935, p. 124):

> in order to eliminate all monetary influences on the formation of prices, and the structure of production, it would not be sufficient merely quantitatively to adapt the supply of money to these changes in demand, it would be necessary also to see that it came into the hands of those who actually require it, that is, to that part of the system where that change in business organization or the habits of payment had taken place.

With the later Hayek, one wonders how banks could possibly have the requisite knowledge of performing this task.

[19]As regards the stickiness of prices, and the redistributive consequences of an increased demand for money vis-à-vis an array of prices of varying degrees of stickiness, which Selgin and White as well as Garrison raise as matters of concern, it is of utmost importance to recognize that prices are the outcome of purposive action—and so is their stickiness. That is, the flexibility or inflexibility of various product and service prices is not accidental to, but a deliberate part of, these products and services. Contrary to Garrison's claim, the stickiness of prices does affect and is related to, real relative scarcities. If more sticky prices suffer more, so to speak, so be it; that will teach them to be less sticky in the future—if the owners of the property in question act in a manner compatible with this end.

"temporarily" by issuing and selling additional titles to televisions, beer, and pretzels but not these goods themselves?

Second,[20] Selgin and White further misconstrue the nature of money and the demand for money hold extraordinary claim: that the issue of fiduciary media *"matched by an increased demand to hold fiduciary media"* is not only not disequilibrating (p. 102), but will actually afford the economy a "larger stock of capital equipment," because

> the act of holding fractional-reserve *bank-issued* money not only (like holding base money) defers consumption for a longer or shorter period, but also *temporarily lends funds* to the bank of issue in doing so. The period of the loan is unspecified . . . but if the bank can estimate with a fair degree of accuracy the lengths of time for which its demand claims will remain in circulation . . . , it can safely make investments of corresponding length. (p. 103)

Following the lead of Rothbard, Hoppe had criticized this essentially Keynesian view concerning the relationship between the demand for money and savings (loanable funds)[21] by pointing out that

> not-spending money is to purchase *neither* consumer goods *nor* investment goods. . . . Individuals may employ their monetary assets in one of three ways: they can spend them on consumer goods; they can spend them on investment; or they can keep them in the form of cash. There are no other alternatives. . . . The consumption and investment proportion, that is, the decision of how much to spend on consumption and how much on investment, is determined by a person's time preference, that is, the degree to which he prefers present consumption over future consumption. On the other hand, the source of his demand for

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[20]The error of confusing property and titles lies also at the bottom of Selgin and White's attempts to separate analytically the demand for outside money from the demand for inside money, as if these were somehow two different kinds of money with two different and independent demands.

[21]Selgin (1988, p. 55) stated the same thesis thus:

> Whenever a bank expands its liabilities in the process of making new loans and investments, it is the holders of the liabilities who are the ultimate lenders of credit, and what they lend are the real resources they could acquire if, instead of holding money, they spent it. When the expansion or contraction of bank liabilities proceeds in such a way as to be at all times in agreement with changing demands for inside money, the quantity of real capital funds supplied to borrowers by the banks is equal to the quantity voluntarily offered to the banks by the public. Under these conditions, banks are simply intermediaries of loanable funds.

As for John Maynard Keynes (1936, p. 82) he had written in the *General Theory* that "the notion that the creation of credit by banking system allows investment to take place to which 'no genuine saving' corresponds" that is, "the idea that saving and investment . . . can differ from one another, is to be explained, I think, by an optional illusion" (ibid, p. 81). "The savings that result from this decision are just as genuine as any other savings. No one can be compelled to own the additional money corresponding to the new bank-credit, unless he deliberately prefers to hold more more money rather than some other form of wealth" (ibid, p. 83). Indeed, Selgin (1988, p. 59) acknowledges that "many Keynesians might accept the prescription for monetary equilibrium offered [by him]. Those who do not regard the liquidity trap as important factual possibility would probably accept it as entirely adequate."

Henry Hazlitt (1983, p. 227) remarked on this Keynesian idea that "on the same reasoning we can create any amount of new 'savings' we wish overnight, simply by printing that amount of new paper money, because *somebody* will necessarily hold that new paper money."

cash is the utility attached to money, that is, the personal satisfaction derived from money in allowing him immediate purchases of directly or indirectly serviceable consumer or producer goods at uncertain future dates.

Accordingly, if the demand for money increases while the social stock of money is given, this additional demand can only be satisfied by bidding down the money prices of non-money goods. The purchasing power of money will increase, the *real* value of individual cash balances will be raised, and at a higher purchasing power per unit money, the demand for and the supply of money will once again be equilibrated. The relative price of money versus non-money will have changed. But *unless* time preference is assumed to have changed at the same time, *real* consumption and *real* investment will remain the same as before: the additional money demand is satisfied by reducing nominal consumption *and* investment spending in accordance with the same pre-existing consumption and investment proportion, driving the money prices of both consumer as well as producer goods down, and leaving real consumption and investment at precisely their old levels. (Hoppe 1994, pp. 72–73)

Accordingly, Hoppe concluded, it is *never* warranted to accommodate an increased demand for money by issuing fiduciary credit.[22] In fact, to do so will either —insofar as the accommodating increase of fiduciary media is unanticipated and the market rate of interest falls temporarily below the natural rate of interest—lead to a boom-bust cycle; or else—insofar as the monetary change arising from the banking system is anticipated and the market rate of interest is bid up (in the expectation of higher selling prices) in accordance with the height of the natural rate—it will accomplish no more than a plain wealth and income redistribution among various members of society. It is praxeologically impossible, however, that the issue of fiduciary media can lead to an "enlarged stock of capital equipment."

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[22]See also Hoppe (1993, pp. 119–20, 137–38); and Rothbard's (1993, pp. 167ff, 667ff; 1983a, pp. 39ff) original argument in *Man, Economy, and State.*

As for Selgin and White's claim of being Misesians, it is worthwhile to quote Mises on

the role cash holding plays in the process of saving and capital accumulation. . . . If an individual employs a sum of money not for consumption but for the purchase of factors of production, saving is directly turned into capital accumulation. If the individual saver employs his additional savings for increasing his cash holding because this is in his eyes the most advantageous mode of using them, he brings about a tendency toward a fall in commodity prices and a rise in the monetary unit's purchasing power. If we assume that the supply of money in the market system does not change, this conduct on the part of the saver will not directly influence the accumulation of capital and its employment for an expansion of production. The effect of our saver's saving, that is, the surplus of goods produced over goods consumed, does not disappear on account of his hoarding. The prices of capital goods do not rise to the height they would have attained in the absence of such hoarding. But the fact that more capital goods are available is not affected by the striving of a number of people to increase their cash holdings. If nobody employs the goods—the nonconsumption of which brought about the additional saving—for an expansion of his consumptive spending, they remain as an increment in the amount of capital goods available, whatever their prices may be. The two processes—increased cash holding of some people and increased capital accumulation—take place side by side. A drop in commodity prices, other things being equal, causes a drop in the money equivalent of the various individuals' capital. But this is not tantamount to a reduction in the supply of capital goods and does not require an adjustment of production activities to an alleged impoverishment. It merely alters the money items to be applied in monetary calculation. (Mises 1966, pp. 521–22)

In their attempt to rebut this argument, Selgin and White first concede the central theoretical point: "We agree that time preference and money demand are distinct, and that a change in one does not imply a change in the other" (p. 102). Likewise:

> that holding money is one form of saving does not imply that an increase in the demand for money is identically an increase in total saving. An increased demand for money may accompany a reduced demand for holding other assets, and not a reduction in consumption; hence it may be part of a change in the manner of saving with no change in total savings. (p. 103)

However, if an increased demand for money is *not* identically an increase in total savings, then it is impossible to maintain that it provides for a larger pool of loanable funds and increased capital formation (a lengthening of the structure of production). Hence, to rescue their economic-growth thesis, immediately following this concession Selgin and White try to take it back again by arguing that:

> Nonetheless [the non-identity of time preference and money demand notwithstanding], to hold money is to hold it for later spending, even though how much later is not signalled (and typically has not yet been decided by the money holder). Holding money for later spending, rather than spending it on consumption now, does defer consumption to the future. As Hoppe . . . himself points out, the demand for cash stems from the convenience it allows one in purchasing "consumer or producer goods at uncertain *future* dates." . . . So perhaps our disagreement here is merely over words. (p. 102)

Unfortunately, this suggestion is unfounded. Rather than a verbal quibble, the disagreement is a substantive one concerning the nature of money.

It is difficult not to interpret the two previous pronouncements as contradictory. Selgin and White try to escape from this conclusion by an *ad hoc* semantic shift, that is, in characterizing money as a *future* good. Essentially, their argument is that while increased money demand does not imply increased savings, it provides nonetheless for a larger loan fund, because money is held only to be spent "at uncertain *future* dates" (their emphasis), such that an increased demand for money is always and at the same time an increase in the demand for future goods.[23] Yet money is demonstrably *not* a future good. In fact, when the money is spent—in the future—it loses all its utility for the present owner. It has utility only while and insofar as it is *not* spent, and its character as a present good stems from the omnipresent human condition of *uncertainty*.[24]

The error in classifying money as a future good can be revealed in a twofold manner. On the one hand, negatively, it can be shown that this assumption still leads to contradiction. In support of their thesis, Selgin and White claim that "holding

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[23]Selgin and White's view here is quite similar to that of Keynes (1936, pp. 293–94), when he emphasized that "the importance of money essentially flows from its being a link between the present and the future," and characterized money as "above all, a subtle device for linking the present and the future."

[24]Put differently: rather than, as Selgin and White say, that "the demand for money stems from the convenience it allows one in purchasing goods at uncertain *future* dates," the demand for money stems from the convenience it allows one in purchasing goods at *uncertain* future dates.

money for later spending, rather than spending it on consumption *now*, does defer consumption to the future," implying that the holding of money involves the exchange of a future good (satisfaction) for a present one. In the next sentence they admit that money held is spent *neither* on consumer goods *nor* on producer goods. Yet they fail to notice that this implies also, as a further consequence, that holding money for later spending, rather than spending it on production *now*, does defer *production* (and hence *future* consumption) to the future. If the holding of money defers consumption *and* production, however, then it becomes impossible to maintain that the holder of money has thereby invested in a *future* good, because *there are no future goods*—whether consumer *or* producer goods—which result from the act of holding money and to which its holder could thus be entitled. Yet as claims to no future goods whatsoever, money would be worthless. By implication, if money is not worthless (and no one would hold money if it had no value), then its value must be that of a *present* good.

On the other hand, positively, the nature of money as a paradigmatically present good can be established by praxeological proof. As Mises and Rothbard have explained, in general equilibrium or, more appropriately, within the imaginary construction of an evenly rotating economy, no money exists. With all uncertainties by assumption removed, everyone would know precisely the terms, times, and locations of all future exchanges, and all exchanges could be prearranged accordingly and take the form of direct rather than indirect exchanges.

> In a system without change in which there is no uncertainty whatever about the future, nobody needs to hold cash. Every individual knows precisely what amount of money he will need at any future date. He is therefore in a position to lend all the funds he receives in such a way that the loans fall due on the date he will need them. (Mises 1966, p. 249)

While there is no place for money in the construction of an evenly rotating economy, however, there exists within its framework a present and a future, now and later, the beginning of an action and its later completion, immediately serviceable consumer goods (present goods) and indirectly serviceable producer goods (future goods), a structure of production, and savings and investment, that is, exchange of present against future goods governed by time preference. If anything, this proves again that money and the demand for money are systematically unrelated to consumption, production, and time preference, and that the source of the utility of money must be a categorically different one from that of consumer goods and producer goods. The source of the utility of a consumer good is its direct and present serviceability, and the source of the utility of a producer good is its indirect future serviceability. Money, by contrast, is neither consumed nor employed in production. It is neither directly serviceable (as consumer goods are) nor indirectly useful as a way station to future consumer goods (as producer goods are). Rather, the utility of money must be that of an *indirectly yet presently* serviceable good.

Outside the imaginary construction of an evenly rotating economy, under the inescapable human condition of uncertainty, when the terms, times, and locations of all future exchanges cannot be predicted with certitude, and when action is by nature speculative and subject to error, man can conceivably demand goods no longer exclusively on account of their use-value (present or future), but also because of their value as *media of exchange* (for resale purposes). Faced with situations

where, due to the absence of double coincidences of wants, a direct exchange is impossible, man can evaluate goods also on account of their degree of marketability, and can consider trading whenever a good to be acquired is more marketable than that to be surrendered, such that its possession would facilitate the acquisition of directly or indirectly serviceable goods and services. Moreover, because it is the sole function of a medium of exchange to facilitate purchases of directly or indirectly serviceable goods, man will naturally prefer the acquisition of a more marketable and, at the limit, universally marketable medium of exchange to that of a less or non-universally marketable one, such that

> there would be an inevitable tendency for the less marketable of a series of goods used as media of exchange to be one by one rejected until at last only a single commodity remained, which was universally employed as a medium of exchange; in a word, money. (Mises 1978, pp. 32–33)

Selgin and White are familiar with this Mengerian–Misesian reconstruction of monetary evolution, of course. They apparently fail to recognize, however, that this feature of money as the most easily and widely saleable commodity, far from rendering it a future good, qualifies money at the same time as the good best suited to alleviate presently felt uncertainty and, as such, the most universally present good of all.[25] Although only indirectly useful—in this regard like producer goods, and unlike any consumer good—money is precisely on account of its supreme saleability a uniquely present good—in this regard like consumer goods, and unlike any producer good. Because money can be employed for the instant removal of the widest range of possible needs (or the satisfaction of the widest range of possible desires), it provides its owner with the best humanly possible protection (insurance) against uncertainty, that is, against his uneasiness of *not* being able to predict—of *not* being certain about—all of his future needs and desires. In holding money, its owner gains in the satisfaction of being able instantly to meet, as they arise unpredictably, the widest possible range of future contingencies.[26] "The maintenance of cash holding

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[25]In fact, one can only wonder how Selgin and White could have possibly overlooked money's character as a uniquely present good. After all, the interest rate as the most visible manifestation of the phenomenon of time preference is expressed in terms of *money*.

[26]The term uncertainty is employed here in its technical meaning as defined by Knight (1971, esp. chap. 7) and Mises (1966, esp. chap. 6), that is, as categorically distinct from risk (instances of class probability); also Hoppe (1997). Insofar as man faces a risky future, he does not need to hold cash. In order to satisfy his desire to be protected against risks, he can instead buy (or produce) insurance. A buyer of insurance demonstrates by his purchase that he is in fact *certain* about some future events. Hence, in paying a premium, he sacrifices a present good in exchange for a future one (payment in the event of actual risk-damage) and so contributes to and invests in a physical structure of production. Specifically, his premium becomes embodied in the production structure maintained by his insurance agency. In distinct contrast: insofar as man faces uncertainty he is, quite literally, *not certain* concerning his future, that is, as to what will happen to him and when. Hence, in order to be protected against uncertainty, he cannot possibly invests in any future good. Only present goods can insure against instantly arising—unpredictable—events. Nor can he invest in (present) consumer goods (for this would mean that he actually felt certain as to the specific nature of his future contingencies). Only a medium of exchange, on account of its supreme saleability, can insure him against contingencies of an uncertain nature. Hence, just as insurance is the price that must be paid for protection against risks, so cash holdings are the price that must be paid for protection against uncertainty. See also the following final note below.

requires sacrifices. To the extent that a man keeps money in his pocket or in his balance with a bank, he foresakes the instantaneous acquisition of goods he could consume or employ for production" (Mises 1966, p. 430). Accordingly, to the extent that he feels certain regarding his future, a man will want to invest in consumer and producer goods. Only to the extent that he feels uncertain about his future will he want to make the sacrifice referred to by Mises, that is, will he possibly want to invest in relief from any uneasiness felt concerning the uncertainty of his future consumption–production (income–expenditure) pattern. Hence, rather than indicating his increased willingness to sacrifice present satisfaction in exchange for future satisfaction, an increased demand for money demonstrates a man's more intensely felt uncertainty regarding his future; and rather than being an investment in the future, an addition to his cash balance represents an investment in present certainty (protection) vis-à-vis a future perceived as less certain.[27]

In light of this praxeological reconstruction of money as a singularly present good, Selgin and White's entire positive case for fractional reserve banking is revealed as mistaken. If banks indeed accommodate an (unanticipated) increased demand for money through the temporary issue of additional fiduciary media (credit), as Selgin and White propose, this can have only disruptive and disequilibrating effects. If and insofar as the accommodating response on the part of the banks is unanticipated, the interest rate will be reduced temporarily below its natural height, investment will increase, and the structure of production will be lengthened. Yet this result is fundamentally at odds with the public's demonstrated preference. The public perceives the future as more (increasingly) uncertain and, accordingly, in striving to increase the size of its cash holdings and thereby bidding the prices of non-money goods down and correspondingly increasing the purchasing power per unit money, is intent upon providing for more (increased) present protection against uncertainty. To commit additional resources to the future is the expression of *less* public uncertainty (rather than more), and thus stands at cross-purpose to the public's actual wishes and implies a systematic misallocation of resources (to be revealed in a boom-bust cycle). And in any case, even if the banks' accommodating money supply increase could be fully anticipated and the structure of production were not unduly lengthened, any such accommodation would still be disruptive, because—even apart from its inescapable redistributionist consequences—it can only *delay* the arrival of

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[27] Selgin and White never raise the question of *why* changes in the demand for money occur, and thus never penetrate to their ultimate—microeconomic—sources, that is, changes in individuals' subjective evaluations of presently perceived personal uncertainty. In contrast, whereas they portray changes in the demand for money as seemingly unmotivated and inexplicable events, Mises is explicit and emphatic about their rational character:

> The advantages and disadvantages derived from cash holding are not objective factors which could directly influence the size of cash holdings. They are put on the scales by each individual and weighed against one another. The result is a subjective judgment of value, colored by the individual's personality. Different people and the same people at different times value the same objective facts in a different way. Just as knowledge of a man's wealth and his physical condition does not tell us how much he would be prepared to spend for food of a certain nutritive power, so knowledge about data concerning a man's material situation does not enable us to make definite assertions with regard to the size of his cash holding. (Mises 1966, p. 430)

the desired goal. In order to be better protected against perceived uncertainty, prices must fall and the purchasing power of money must rise. With an additional influx of money, it cannot but take *longer* before this goal is accomplished.[28]

A FINAL NOTE: SOME MISTAKEN ANALOGIES

In light of the fundamental distinction between property (money) and property titles (money substitutes) explained in earlier sections of this article and the foregoing elucidation of money as a uniquely present good, several analogies popularly employed in the attempted justification of fractional reserve banking can be finally disposed of as mistaken. Even if they correctly distinguish between property titles (tickets) and property, all proposed analogies—between fractional reserve banking on the one hand and airline overbooking, fractional reserve parking lots, lotteries, and insurance on the other hand—fail to recognize properly the fundamental distinction between present and future goods.

The owner of a title to money owns a present good (money property)—an indirectly yet immediately serviceable good. The fractional reserve banker is found guilty of fraud; he issued and sold additional titles to an unchanged quantity of money property. In distinct contrast; the owner of an airline ticket owns a future good. Hence, in overbooking now (today) a flight at a future date (tomorrow), an airline cannot possibly have committed fraud already *now* (today). Fraud cannot occur until tomorrow, when the tickets must be actually redeemed, and only if the airline is then unable to satisfy each and every ticket holder's claim. In fact, airlines typically fulfill their contractual obligation: each ticket holder is assured a seat on the scheduled flight, because the airline is prepared to pay every excess ticket holder off, that is, to repurchase his ticket at a price (by exchange of another good) that the holder considers more valuable than his present airline seat. And certainly, no airline typically oversells spot-tickets (titles to seats right now, that is, present

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[28]Mises summarizes:

> The services money renders are conditioned by the height of its purchasing power. Nobody wants to have in his cash holding a definite number of pieces of money or a definite weight of money; he wants to keep a cash holding of a definite amount of purchasing power. As the operation of the market tends to determine the final state of money's purchasing power at a height at which the supply of and the demand for money coincide, there can never be an excess or a deficiency of money. Each individual and all individuals together always enjoy fully the advantages which they can desire from indirect exchange and the use of money, no matter whether the total quantity of money is great or small. Changes in money's purchasing power generate changes in the disposition of wealth among the various members of society. From the point of view of people eager to be enriched by such changes, the supply of money may be called insufficient or excessive, and the appetite for such gains may result in policies designed to bring about cash-induced alterations in purchasing power. However, the services which money renders can be neither improved nor repaired by changing the supply of money. There may appear an excess or a deficiency of money in an individual's cash holding. But such a condition can be remedied by increasing or decreasing consumption or investment. (Of course, one must not fall prey to the popular confusion between the demand for money for cash holding and the appetite for more wealth.) The quantity of money available in the whole economy is always sufficient to secure for everybody all that money does and can do. (Mises 1966, p. 421)

goods) and assigns two people to occupy the same seat, which is essentially what fractional reserve banking amounts to.

Similarly, the owner of a fractionally covered parking permit (with more permit holders than parking spaces) does not own a present good. He owns the right to participate for a specified period of time in repeated search for parking space. The owner of the parking facility cannot possibly commit any fraud in selling his permits, unless he then refused entry to a valid permit holder when there was empty space available, or if he changed the contractually agreed upon rules of the game; that is, if he had agreed to print up to a maximum of 200 permits, for instance, but actually printed 300. It is only the owner of a spot parking ticket, or the owner of a reserved parking space, who are owners of a present good; and there is, of course, characteristically no overselling of spot spaces or of reserved parking.

The same reasoning applies to the case of lotteries. The holder of a lottery ticket does not own any present good. He owns the right to participate in the drawing of specified prizes, whereby it is self-understood among buyer and seller—as inherent in the nature of a lottery—that there are—and must be—more tickets than prizes. The lottery operator cannot possibly have committed any crime, unless he failed to redeem the winning tickets into the promised prizes or surreptitiously changed the preannounced rules of the game. If this is rarely the case, it is practically unheard of that a lottery would print more than one winning ticket for one and the same prize (present good), which would be likewise fraudulent, of course, and which is essentially what fractional reserve bankers do.

Finally, the proposed analogy between fractional reserve banking and insurance has already been refuted implicitly in note 26 above, concerning the relationship between risk and insurance on the one hand and uncertainty and money on the other. Unlike the owner of money, the owner of an insurance policy does not own a present but a future good. An insurance company may be unable to meet its contractually assumed obligations at some future point in time, and one may then come to the conclusion that it had engaged in an overselling of tickets. However, it is impossible to say that a crime has been already committed now, at the moment when the insurance policy is sold, because the good sold by the insurance agency is a future one. In distinct contrast, the owner of a money ticket is the owner of a present good, and every overissue of tickets to present goods is from the very outset—instantly and immediately—fraudulent, and accordingly is contrary to market ethics.

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