

# CONSIDERATIONS ON FRACTIONAL RESERVE BANKING AND FREE-BANKING

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In this article, our goal is to examine a controversy very dear to Austrian economists: that of the legitimacy of the fractional reserve banking system, defined as a system in which the bankers keep in their vaults a quantity of money (narrowly defined) lower than the quantity of cash deposits granted to their clients.

In the Austrian vision, the monetary supply, broadly defined (Mises, 1971), consists of money properly said, plus monetary substitutes (bank notes, cash deposits), plus credit-money, this one corresponding to any future right to a monetary sum (time deposits, promissory notes, pre-fixed derivatives). In a narrow sense, money supply consists in money properly said (*fiat*-money or commodity money).

We must, however, clarify some aspects of the money supply.

Monetary substitutes have their origin in the monetary certificates. Monetary certificates, in their turn, are tools utilized to confer information about the medium of exchange. For instance, precious metal coins mintage confers information about the metal's purity and about the weight of the coin; bank notes and current account balances confer information about the amount, overseer and proprietor of the deposited money. So, money certificates can change the agents' valuations concerning the particular good in question, even being able of independent valuation. Monetary certificates can be physically connected to the medium of exchange or separated from it. In the case of physically connected monetary certificates, we have what we normally call monetary substitutes. Monetary substitutes can, due to their nature, work as property titles to the very medium of exchange. Contemporaneously, monetary substitutes usually can be identified with cash deposits

(current account balances) and paper checks, provided that the use of bank notes is increasingly rare.

Having made those clarifications concerning monetary substitutes, we will, following Mises (1971, p. 135), call fiduciary media the quantity of monetary substitutes that exceeds the quantity of money properly said.

However, before proceeding with our Investigation about the consequences of the legalization of the production of fake monetary substitutes (fiduciary media), we must explain what would be a fake monetary substitute and the nature of this counterfeiting. We must, therefore, start our argumentation establishing some differences about the nature of loan and deposit contracts [x].

Loan contracts can be classified in two ways. The first one is the *commodatum* contracts, in which one agent (creditor) temporarily concedes the availability of a certain good to another agent (debtor), who must return the good at the end of the pre-fixed period in appropriate conditions. The second one is the mutual (*mutuum*) contracts, a little bit more complex. In those, the creditor grants the debtor property over a sum of fungible goods [x] (*tantundem*, in Latin), in exchange for the future property over another sum of fungible goods.

Deposit contracts, in their turn, involve the transference of the custody over a certain good by one agent (depositor) to another (depository). That is, at any moment whatsoever, when a depositor firms a deposit contract, he is granting the depository availability (even less property) over the deposited *tantundem*. A particular kind of deposit is the irregular deposit contract. This contract relates to the deposit of fungible goods. Because of the nature of the goods deposited, they probably will get mixed up unless significant costs are incurred in their isolation. Therefore, the depository's duty is to grant immediate availability to the depositor to a *tantundem* correspondent to that initially deposited.

We are now in a position to explain the main differences about deposit and loan contracts.

In the deposit contract there aren't any property titles transferred. In a loan contract, the situation is completely different. The creditor

realizes an intertemporal exchange with the debtor. The creditor agrees with parting with the *tantudem*'s availability during the loan period. The debtor, in exchange, compromises to deliver a future good (in a quantity presumably greater) at the end of the accorded period. Yet, in a deposit contract, the depositor simply wishes that the depositary act as a protector of the *tantudem*. There aren't exchanges between present goods and future goods. The depositary can offer some services, such as withdrawing services at different places and under different forms, and be remunerated for those services. But in any form the depositor has parted with the control of the destiny of the monetary units trusted to the depositary's guard. Briefly, when an agent makes a deposit contract, what he has in mind is that his cash holdings are at a certain figure. In an intertemporal exchange, the agent is aware of alterations in his cash holdings.

Explicated the differences between a deposit and a loan contract, we must relate this concepts to the production of monetary substitutes and to the problem of their counterfeiting.

In a loan contract, the debtor receives from the creditor money properly said, whereas the creditor receives a payment promise, that, securitized, is capable of being negotiated at some secondary market as *credit-money*. Still, the depositary, when realizing a deposit, normally receives from the depositor a monetary certificate physically separated from the deposited amount, that is, a *monetary substitute*. What are the logical consequences of those facts? Credit-money can be issued without any legal limits whatsoever, since its emission presupposes the intertemporal exchange of property titles. The risks imminent to this operation, in a unhampered economy, are completely internalized by the agents. However, there is a legal limitation over the issuance of monetary substitutes: *these must always match the deposited amount*. Why?

The correspondence between issued monetary substitutes and the *tantudem* follows from the very nature of a deposit contract – the depositary must grant the depositor full and continuous availability over the *tantudem*. To support our reasoning, let's suppose that the depositary have issued a quantity of monetary substitutes greater than the deposited *tantudem* – that he has

issued fiduciary media. Clearly the depositary is incurring in a breach of contract with his depositors. If all owners of the monetary substitutes at any moment physically demand what's rightfully theirs, that is, the immediate availability of the deposited amount (as demonstrated by the redemption of the monetary substitutes), the depositor will not be able to accomplish *all* his contractual duties. A good metaphor for this situation would be that of comparing the depositary with a parking lot owner. A depositary that issues fiduciary media would act as a parking lot owner that takes the clients' cars for a ride without their consent.

It could be argued that only at the limit situation described, that is, only when physically the amount required by the monetary substitutes holders exceeds the depositary's reserves, the latter is incurring in fraud. Nonetheless, the deposit contract presupposes *full and continual* availability over the *tantundem* to the depositors. It is not sufficient to offer availability to the depositors only at the moment that these physically demand the redemption of their monetary substitute. The availability must be *continually* kept for *all* the depositors, because *all* depositors have a right to withdraw their *tantundem* at any moment they wish (concomitantly or not). The conclusion is that the depositary is already incurring in fraud *at the moment he issues fiduciary media* (fake monetary substitutes).

Then, as explained by Huerta de Soto (2006, p. 666), we can see that the problem of the fiduciary media is a classic *tragedy of the commons* problem, i.e., a situation in which there aren't correctly delimited property rights. All the holders of monetary substitutes subjectively believe that they have property rights over some monetary sum, and consider it at the moment they elaborate their plans of action. We can conclude that the legalization of fiduciary media represents a direct intervention over entrepreneurial activity, then being a factor of discoordination over the economic system.

Though, a new question deserves an answer. What would be the legal bank reserve level in an unhampered economy, that is, one without institutionalized aggression and coercion?

Suppose you have \$100 and decided to enter the financial intermediation industry. You decide to buy a vault, keep these

\$100 inside, and issue notes with the following writings: «It can be exchanged here at my vault *at any moment* for \$1». If you issue 100 similar notes and sell them with any surplus (because of the safeguarding services), there are no problems with that. But, if you issue and sell more than a hundred of them, you are cheating your customers. Why?

Suppose you have issued 150 similar notes, sold 100 notes for one person and 50 notes for another. You are saying one thing: I grant you, respectively, *full and continual availability* of \$100 and \$50; *and you are not performing your part of the deal* – if both appear together *at any moment* to redeem their notes, you will not be capable of keeping your promises.

Does all this mean that you cannot anyhow issue more than 100 notes? No.

You could issue notes with the following writings: «It can be exchanged here at my vault for \$1, at any money, *if possible*». Pay attention to the difference of the notes with and without the «*if possible*» clause. You could issue and sell how much of them you desired, because there is an explicit consent by the buyers that it is a risky contract, in which the full availability is not granted. It amounts to *credit-money* issuance, not fiduciary media.

Now, two additional difficulties. The first one is the fact that the banks have third parties deposits among their own capital. The bankers could never reduce their reserves to a figure lower than the amount possessed by their clients, because it would consist in misappropriation. So, in our example, the banks would necessarily have to deny the redemption of those risky notes as soon as the reserves reach the quantity correspondent to the deposits of the customers of the first kind of note. *This means that the banks can only issue fiduciary media against the reserves of third parties willing to suffer the abuses inherent to the fractional reserve system (never against those of non willing third parties) and only explicitly (besides being able to issue credit-money against their own reserves).*

Adepts of the full reserves system usually argue that the issuance of fiduciary media, even under the consented system described above, causes externalities, since it reduces the purchasing power of money and engenders business cycles, due to the artificial

lengthening of the capital structure. All of this, despite being theoretically true, at practice would not represent a real serious problem, neither would constitute legal basis to prohibit it under the conditions described above. Why?

The agents, as I wrote, would demand information about the origin of the assets utilized (bank note specifications or information about the bank account they become creditors and/or debtors). They would have to consent with the loss of purchasing power of their money. Medium of exchange whose supply does not rise overdue to the effects caused by the fiduciary media, *ceteris paribus* immune to a tendency of depreciation in its purchasing power, would find a lot more customers in an unhampered economy, compared to medium of exchange whose supply is more elastic. And, as the primordial function of money is being a medium of exchange, fiduciary media would tend to be eliminated from the market because of the competition with more stable medium of exchange, with greater demand and higher purchasing power.

The second difficulty, related to the first one, resides on the fact that the banks do not have the habit anymore of using banknotes. The cash deposits consist in numbers in a computer system. To avoid fraud, the clients would probably demand public availability of banks' solvency data. Probably another service would arise (in practice, another monetary certificate), that of bank account monitoring, to assure that the banks do not incur in fraudulent operations. The banks would have to arrange special «risky» accounts to practice fiduciary media issuance and be monitored. In fact, the theoretical classification of the diverse «financial products» present at recent economic history, as much as proves of their legitimacy (respecting property rights and freedom to contract) is something to be realized with care. As notes Huerta de Soto (2006, cap. 3), the fractional reserve banking system has been working «hidden» and protected by fiat interventionist legislation in markets such as insurance and derivatives markets.

Now, under the light of our analysis, we shall weave a brief comment about the doctrine of *free-banking*, to which some Austrians consider themselves adept.

*Free-banking* theorists does not think that fractional reserves necessarily create problems, such as business cycles. Furthermore, they consider it as being necessary to maintain the «monetary equilibrium» of the economic system. In brief, they reason, utilizing the tautological equation of exchange, that variations in the demand for money should be countered with variations in the money supply (via fractional reserve banking system, *without a Central Bank*), whilst variations in the «price level» should be let to operate. They pretend to stabilize «MV», leaving «PT» free of any control. Horwitz (2000, cap. 4), taking as a given the necessity of adjustment, argues that an adjustment via money supply is more efficient than an adjustment via prices due to the fact that prices tend to be sticky, provoking relative price distortions at the adjustment process. Nevertheless, as shows the very Austrian theory, additional expenditure caused by increases in the money supply also provoke relative price distortions – in this case it would be just a matter of preference of the *free-bankers* for a increase in the money supply over the price adjustment.

We know that the interest rate is determined by the agents' time preference, manifested in the *proportion* of expenditures on present and future goods. So, rises at the hoarding level can be representing changes in agents' time preferences. Only in a extremely improbable situation this hoarding would be consequence of a proportional cut in expenditures on present and future goods. An action by the fractional reserve banking system that provoked an increase in the money supply in response to a hoarding resultant from non proportional expenditure cuts between present and future goods would be obstructing alterations at the agents' time preferences, clearly being a discoordinating feature for the economic system.

Besides that, *free-banking* doctrine, based on the «monetary (dis)equilibrium» idea, simply denies the structural uncertainty character of the world in which the agents are immerse, a factor that gives rise to the agents' desire to demand cash holdings, even after having received their income. Even if the system is not attaining some technologically optimal capable of being obtained, this does not mean that the agents must be coerced to act in a way to attain it. In addition, the agents seek to maintain «hoarded»

a certain purchasing power, not some mere nominal balances. By raising the supply of money and press the prices upwards (*ceteris paribus*), the agents, if they desire the preservation of the purchasing power of their cash holdings, will hoard an additional nominal amount, or reducing their consumption and/or their investments, in a way according to their time preferences, just responding to the «ineffective» former cash holding demand.

Finally, we can conclude that the fractional reserve banking system is a practice scornful of property rights when legally institutionalized, and always economically hazardous. In an unhampered economy, it is expected to disappear.

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