

New Perspectives on Political Economy

Volume 4, Number 2, 2008, pp. 131 – 157

Monetary Reform and Deflation – A Critique of Mises, Rothbard, Huerta de Soto and Sennholzⁱ

Philipp Bagusⁱⁱ

JEL Classification: E50, P11, P21, P31

Abstract: In this paper I will analyze the reform plans proposed by Ludwig von Mises, Murray N. Rothbard, Jesús Huerta de Soto, and Hans Sennholz. Though their contributions to monetary reform are significant, their fear of deflation leads them to consider monetary reforms that are theoretically inconsistent and ethically problematic.

ⁱ I would like to thank Walter Block, William Barnett II, Guido Hülsmann, Mateusz Machaj, Mark Thornton and two anonymous referees for their helpful comments and the Ludwig von Mises Institute for financial help.

ⁱⁱ Associate Professor of Economics at the University Rey Juan Carlos in Madrid and Visiting Scholar at the University of Economics, Prague, philipp.bagus@urjc.es.

1 Introduction

Austrian economists generally agree that the actual monetary system is, to say the least, imperfect, leading to redistributive inflation and business cycles. Therefore, many Austrian economists, as does Huerta de Soto in his recent treatise *Money, Bank Credit, and Economic Cycles*, propose monetary reform plans to eliminate those characteristics of the monetary system. Many of them agree that the desirable aim of a monetary reform is a 100% gold standard, i.e., a system where all bank notes and demand deposits are completely covered by gold. Even though there are disagreements about how this reform should be reached, these proposals have one characteristic in common: an attempt to avoid deflation.^{1,2} In this paper I will analyze the reform plans proposed by Ludwig von Mises, Murray N. Rothbard, Jesús Huerta de Soto, and Hans Sennholz. Though their contributions to monetary reform are significant, their fear of deflation leads them to consider monetary reforms that are theoretically inconsistent and ethically problematic.

2 Ludwig von Mises

Mises' plan for monetary reform can be found in "Monetary Reconstruction" in the 1953 English edition of his theoretical monetary treatise *The Theory of Money and Credit*.³ Here Mises proposes the reestablishing of the classical gold standard, which he praises throughout his writings (Mises 1998, 468-473 or Mises 1980, 480-481). Notably, Mises advocates a return to the gold standard in which gold is actually used as money. Mises' primary reason for advocating the return to the classical gold stan-

¹ In this essay, deflation always means monetary deflation.

² Barnett and Block (2004) maintain that Mises and Rothbard opposed any change in the extant stock of money (inflation and deflation), apparently whether it is commodity money or not. Hence, Barnett's and Block's view supports the point made here.

³ Earlier versions and variations of his proposal are his 1919 essay "Der Wiedereintritt Deutschlands in das Deutsche Reich und die Währungsfrage" in *Schriften des Vereins für Sozialpolitik* 158. Leipzig: Duncker & Humblot and his 1923 essay "Die geldtheoretische Seite des Stabilisierungsproblems" in *Schriften des Vereins für Sozialpolitik*. 164: 2. Munich & Leipzig: Duncker & Humblot and his essay "Noninflationary Proposal for Postwar Monetary Reconstruction" written in 1944 and published in Ebeling (2000) (ed.) *Selected Writings of Ludwig von Mises: The Political Economy of International Reform and Reconstruction*, Vol. 3. Indianapolis: Liberty Fund. Pp. 71-118.

dard is that “it makes the determination of the monetary unit’s purchasing power independent of the measures of governments” (Mises 1980, 480).

But how should this return to the classical gold standard be accomplished? Mises proposes a three-step reform for the U.S.⁴ First, the issuing of any further fiduciary media, i.e., bank notes or bank deposits not backed completely by gold, will be forbidden. This implies a rigid 100 percent reserve for all *future* bank notes and deposits. Second, and at the same time, a free market for gold is to be established. People are free to buy, sell, hold, import, export, lend, or borrow gold, while the government must restrict itself from intervening in the gold market. Third, once the market has established a somewhat stable price for gold, this market rate will be declared the new legal parity. The unconditional convertibility of dollars into gold and vice versa will be secured by a state-run “Conversion Agency.”

Two main critiques against Mises’ proposal should be made here. First, even though Mises’ proposal implies the cancelation of interventions into the monetary realm, it involves other interventions and is centrally planned. Second, his plan tries to avoid deflation without any theoretically consistent justification. First, let us consider the critique that his reform is a managed reform, containing several interventions. In fact, Mises’ proposal contains new interventions besides the abolition of already existent interventions. Mises assumes without any demonstration that additional interventions would be necessary for the sake of liberalization. In fact, Mises’ centrally planned monetary reform seems to be in contradiction to his other writings where he points out the deficiencies of central planning.⁵ Even more surprising is that in *The Theory of Money and Credit*, only a few pages before he presents his reform plan, Mises criticizes central planning in regard to money:

Money is the commonly used medium of exchange. It is a market phenomenon. Its sphere is that of business transacted by individuals or groups of individuals within a society based on private property ownership of the means of production and the division of labor... The goal of their [governments and po-

⁴ See Mises (1980, 490-495). In his 1944 article Mises (2000, 104-106) has four steps. The additional step in this earlier plan, which precedes the three discussed here, consists in balancing the national budget without engaging in further inflation.

⁵ See for instance, Mises (1962) for his endorsement of classical liberalism and Mises (1996) for his critique of interventionism.

litical parties] policies is to substitute “planning” for the alleged planlessness of the market economy. The term *planning* as they use it means, of course, central planning by authorities, enforced by police power. It implies the nullification of each citizen’s right to plan his own life. (1980, 478)

After his criticism of economic central planning, is it not a contradiction on his part to propose a centrally planned and conducted reform? Can an economist propose the correct government interventions to achieve the ideal economic system? Considering his opposition to government intervention in the market, why does he not call for a simple but immediate retreat of the state from the monetary sphere?⁶ Did he think that this would result in chaos, even though he did not think the abolition of other government interventions would lead to chaos? Or did the usually uncompromising Mises just want to make his proposal more appealing? In light of these questions his monetary proposal is puzzling to those who are familiar with his work. There is a likely explanation for this inconsistency; however, for the moment, let us turn to the details of his plan.

Mises’ plan explains how the government should install a gold standard. Ironically, we find these details only a few pages following his critique of central planning. Here, Mises fails to see that even with the advice of such a brilliant economist of his own caliber, a central agency, while it can trigger a reform,⁷ lacks the information required to manage an unambiguous and perfectly orchestrated reform. More precisely, the central agency lacks the information that the individuals have about their specific circumstances and their valuations. This information would be necessary to find a monetary unit or a new parity consistent with valuations of market participants and, thus, to coordinate the transition toward the new monetary system.

Not surprisingly, Mises offers some rather arbitrary features and peculiar details in his plan. The first ambiguity of his plan consists in the time frame that runs from the installment of gold in a free market to the announcement of the new legal parity.

⁶ A note on semantics: I do not understand the abolition of interventions as an intervention, as one might suggest. This procedure is not another intervention but rather a cessation of further intervention.

⁷ For instance, Dulbecco and Renard (2003) show that by decentralization the Chinese government triggered the economic reforms of China. I would like to thank an anonymous referee to bring this paper to my attention.

As Mises states:

Once the market price has attained some stability, the time will have come to decree this market rate as the new legal parity of the dollar and to secure its unconditional convertibility at this parity. (1980, 492)

But what does “some stability” mean? This “stability” is of course arbitrary and not operational. Markets are never in equilibrium, if that is what Mises meant by “stability.” Moreover, it leaves room for discretionary decisions of the central agency, namely deciding when “some stability” is reached. In public choice terms we might expect decision makers to be biased in a certain direction. Therefore, it does not even seem to be correct to speak of a market price of gold. The material value of a paper dollar in terms of an ounce of gold is close to zero. The paper dollar only gains value because people are expecting a new legal parity that effectively converts the dollar in a gold substitute. This promulgation of the new legal parity is an intervention, and as such, it is vulnerable to the whims of the central agency. Market participants will try to anticipate this intervention, guessing what the new parity will be.⁸ As a result, a free market price of gold is simply not possible in Mises’ proposal.⁹

There are other ambiguities in Mises’ plan. For instance, in his earlier 1944 plan Mises states that,

[f]or the interval preceding the promulgation of the dollar’s new gold parity, the heights of the ad hoc gold deposit required for every additional dollar should be fixed in accordance with the market price (in terms of dollar’s) plus a margin of ten percent. (2000, 106)

Why should it be ten percent and not nine or eleven? Herein lies the problem. In planning an intervention thoroughly, one needs to plan the details.¹⁰ And in planning

⁸ Another problem is the stabilization of the exchange rate of gold and the US dollar that is implied in setting a new legal parity not backed by 100% reserves. Stabilization or fixation of exchange rates can incite speculative attacks. In an attack, in the worst case a speculator does not lose, but can win when the exchange rate depreciates. See on this Yeager (1976, 248-49). A spectacular example of such an attack was the 1992 attack of George Soros on the fixed exchange rate of the British pound.

⁹ In the final phase of Mises’ reform, of course, gold has become money and there are many free market prices of goods and services in terms of gold.

¹⁰ An exception might be interventions leading to a transition. For instance, the decentralization in the Chinese economic reform triggered a transition process. See Dulbecco and Renard (2003).

the details of interventions one is in ambiguous territory. This planning of details occurs again, when Mises goes on to advise the regulation of “the issue of additional fractional coins by the government” (Mises 2000, 106). There he claims it unnecessary to have those coins covered 100 percent by gold, thereby, allowing for a small inflation and a seignorage for the government.

Interestingly Mises calls for another intervention within one year after the gold standard is installed:

Moreover, the Treasury is bound to withdraw from circulation, against the new gold coins, and to destroy, within a period of one year after the promulgation of the new legal gold parity of the dollar, all notes of five, ten, and perhaps also twenty dollars. (1980, 494)

Of course, the one year period and the “perhaps” is arbitrary. However, the intention that Mises pursues with this intervention is farsighted and in the long tradition in the U.S. of opposing the banks’ issuing of small-denominated notes.¹¹ Mises intends this intervention to encourage the circulation of gold coins, thereby, making it more difficult for the government to nationalize gold and introduce fiat paper money. However, the use of government intervention to circulate gold coins seems counterproductive to the larger goal of installing a monetary system resistant to government intervention. This is so because what is essential with respect to a lasting and sound monetary system is that the public no longer believes that government intervention into monetary affairs is necessary. By using government force to install a gold standard, the illusion that the government needs to plan, possesses the capacity to plan, and has the right to impose this plan in order to improve monetary affairs is reinforced.

Moreover, as Herbener points out, the conversion agency that Mises proposes to unconditionally convert gold into dollars and vice versa is a government agency and thereby, provides a governmental foothold into the monetary system. The Federal Reserve System (Fed), which Mises leaves in its place, could also function as such a foothold to expand government power into the monetary system especially in times

¹¹ See, for instance, Rothbard on the Jacksonians being anxious to eliminate small-denominated notes (2002, 105).

of “crisis” (Herbener 2002a, 14).¹² The continuing existence of government intervention into the monetary system in the form of the banking regulations of the Federal Reserve System or the business of the Conversion Agency must also be problematic from Mises own point of view, as he claims that government interventions are not stable. They lead to consequences that the interventionists do not want. Therefore, interventionists are faced with two options: either abolish the intervention or intervene further in order to combat the unintended consequences.¹³

Mises likely regarded it as necessary to deviate from the path of straight liberalization to overcome resistance and opposition against a monetary reform. Therefore, he argues for a rather long-term transition process involving the government and a newly created Conversion Agency. However, he fails to answer the important question that economists dealing with transition can seek an answer for: “If the reform agents deviate from a clear-cut reform path in the short-run, what are the mechanisms that can keep them committed to the reform process in the long-term?”¹⁴

Now let us turn to the second main critique of Mises’ proposal and the question why Mises does not immediately call for monetary freedom but for a state managed reform. Jeffrey Herbener offers an answer, suggesting that Mises wants to avoid a deflation (2002b, 90 and 2002a, 14). Indeed, Mises is rather deflation phobic.¹⁵ Not only does he wish to avoid monetary deflation, but price deflation in certain cases as well, as inferred by a statement he makes while discussing the proposal of introducing an international paper money:

If all nations were to agree upon an international currency consisting of international paper money issued by a world bank or of national paper money unconditionally redeemable in deposits with a world bank, *it would be necessary to provide for future increases in the amount of this international paper money or of these deposits*. If such an expansion of the quantity of the circulating medium were to be prevented for all time, the increasing demand for money, arising from economic progress and the intensification of trade and commerce, would result

¹² See also Salerno (1982) who criticizes monetary reform plans which leave space for governmental institutions therefore serving as a foothold for the government in the monetary system.

¹³ See Mises (1996, 8-9).

¹⁴ I owe this point to a comment by an anonymous referee.

¹⁵ For a critique of Mises general view on deflation, see Bagus (2003, 24-26).

in a permanent tendency towards falling prices. The system would have a deflationary effect. (2000, 83, italics added)

Mises does criticize proposals for an international paper money because of the difficulty of distributing the “necessary ... future increases” of this money. His reasoning, however, does suggest that these increases are necessary to prevent prices from falling. His monetary reform plan also prevents prices from falling by freezing the amount of fiduciary media. This might be perceived as a strategy of reform sequencing. In the environment of price controls (minimum wage), resulting price deflation may result in unemployment etc. That may be then deliberately misinterpreted as a result of the “monetary freedom.” This in turn could damage any (if only marginal) gains of “monetary freedom.”

It is possible that similar considerations influenced Mises’ argumentation. However, the problem with Mises’ approach is that he does not explain that his plan is conditioned by strategic considerations. By not clarifying this, he gives the impression that falling prices are a danger for the economy. Yet, falling prices *per se* are not an economic problem for the economy as a whole.¹⁶ Entrepreneurs can make profits even when prices fall. What is important is not the general movement of the price level but the price differential between buying and selling prices. When selling prices fall and buying prices fall even faster, the price differential increases, allowing entrepreneurs to make even higher monetary profits. Of course, there might be entrepreneurs that commit errors and do not bid prices down sufficiently, buying at prices at which they run into losses. However, why would this kind of error (of bidding too much for factors of production) necessarily be higher in times of falling prices than in times of rising prices or in times of generally stable prices? In times of inflation, buying prices might actually rise faster than selling prices.

Moreover, the inefficient entrepreneur who continuously buys at prices that are too high will eventually be driven out of the market. His assets then would be taken over by entrepreneurs who abstained from buying, waiting for this opportunity to come. This procedure, of course, is the normal market process, independent of the question whether there exists a general tendency towards rising or falling prices.

¹⁶ On this point for instance, see Hülsmann (2003, 51-52) and Salerno (2003, 83-85).

In *Human Action*, Mises gives us another indication why he does not allow for deflation in his monetary reform stating that “[d]eflation and credit contraction no less than inflation and credit expansion are elements disarranging the smooth course of economic activities, and sources of disturbance” (1998, 564). However, Mises fails to see that with his freezing of existing fiduciary media, he might also actually trigger a recession “disarranging the smooth course of economic activities.” This is so because there might be a credit driven boom underway when Mises’ reform is introduced. In a credit expansion there is a relative reduction of the interest rate that is not caused by an increase in real savings.¹⁷ The reduction of the interest rate boosts the value of capital goods, making projects, particularly in the higher, more interest dependent stages of production, look more profitable than they would have been otherwise. When owners of the factors of production do not increase their savings sufficiently, but spend their income on consumption goods, this makes consumer goods prices rise relative to capital goods. It becomes obvious that the investments in the higher stages of production must be abandoned. Factors of production will be shifted back to the lower stages of production. However, the boom can go on if further credit is extended to entrepreneurs in the higher stages of production, who keep buying factors of production at rising prices. Thereby, the relative increase in prices of consumer goods is delayed. With Mises’ reform, credit expansion is suddenly stopped. There are no further injections of credit. Hence, consumer goods prices will increase relative to prices in higher stages of production. This implies a relative increase of accounting profits in stages of production close to consumption and a relative increase in the interest rate, finally leading to accounting losses in companies relatively more distant from consumption.¹⁸ Thus, with Mises’ reform, existing malinvestments will be purged. Yet, this will not happen as quickly as it would with a credit contraction.

Later on in his essay on monetary reconstruction, it becomes even clearer why Mises wants to prevent deflation. He points out that “the effects of a deflation ... would not heal the wounds inflicted by the inflation of the two last decades. They would merely open new sources” (1980, 498). He is right that the individuals who

¹⁷ This is not necessarily so, since entrepreneurs might have anticipated the effects of the credit expansion and bid them into the interest rate, as Hülsmann (1998) has pointed out.

¹⁸ For the microeconomic details of the boom and bust in the Austrian Business Cycle Theory, see Huerta de Soto (2006, 347-384).

lost in terms of relative wealth during the inflation are not necessarily the ones who would profit from a deflation. He is also correct that there will be a redistribution of wealth by the deflation. However, he fails to prove his point that this redistribution opens new wounds, or that this particular result of redistribution would be bad. Every liberalization from government intervention into the economy brings about a redistribution from those who are currently profiting from the intervention to those who are suffering from it. Of course, the liberalization of the monetary system also leads to a redistribution and restructuring of the production (possibly even a massive one). But it is hard to see that this redistribution and restructuring of the production according to free market choices of consumers would be something inherently bad that must be avoided. It is possible that Mises wanted to prevent the restructuring of the production according to choices of consumers, because he wanted to make his reform plan more appealing.

The passages Mises writes following the discussion of his reform plan indicate that his deflation phobia is not based on *a priori* reasoning but rather on his historical understanding of past deflations. He critiques the deflationary path the United Kingdom chose after the Napoleonic wars claiming that the British “stirred social unrest” (1980, 498). He is, of course, right. If a massive intervention into the market economy were to be eliminated, social uproar on the part of those who profited from the prior intervention would occur. For example, the abolition of slavery in an economy whose social and productive structures rest on the institution of slavery might lead to “social unrest” by slave owners. There might also be an outcry on the part of those who were suppressed by the intervention if they do not get any compensation.

Mises provides another historical example that explains his animosity toward deflation. He claims that the United Kingdom repeated the “error” of a deliberate deflation after World War I: “As the labor unions would not tolerate an adjustment of wage rates to the increased gold value and purchasing power of the pound, a crisis of British foreign trade resulted” (1980, 498). It is true that unions can settle for wage rates higher than the market rate if they are given the legal privilege to do that. However, when the unions have the power to lift wages over market clearing rates, they can do that irrespective of what the general tendency of prices is. They can do that when prices are generally stable, falling, or rising. They can do that when prices are

continuously falling at a slow rate or when there is just one big price drop. This is why the “stubborn” union argument against deflation fails. Mises goes on with his historical interpretation, stating that “[...] in the opinion of the masses, conditions gave an apparent justification to the Keynesian fallacies” (1980, 499). His interpretation might be true and explains his aversion to deflation. However, here Mises speaks as an economic historian about a unique historical case and not as an theoretical economist. He, thus, does not offer theoretical reasons why deflation would be harmful, but rather argues that in this specific historical case aided by the prevailing public opinion, deflation gave rise to a justification of Keynesian fallacies. Yet, he cannot and does not prove that deflation necessarily leads to the implementation of Keynesian fallacies. He fails, therefore, to make a case against deflation based on economic theory.

In summary, Mises develops an interventionist plan for monetary reform. While he favors the cancellation of some interventions, he supports the introduction of others. It seems that he resorts to the state to manage a monetary reform because he fears the opposition to straight liberalization and the effects of the deflation that can occur when the monetary sphere is completely liberalized.

3 Murray N. Rothbard

The role of deflation in Rothbard’s plans for monetary reform towards a 100 percent gold standard changes over the years. In 1962, he speaks of two possible ways to establish a 100 percent gold standard, one involving deflation:

[W]e have essentially two alternatives, polar routes toward 100 percent gold: either to force a deflation of the supply of dollars down to the currently valued gold stock, or to “raise the price of gold” (to lower the definition of the dollar’s weight) to make the total stock of gold dollars 100 percent equal to the total supply of dollars in the society. Or we can choose some combination of the two routes. (1991, 66)

Here Rothbard unnecessarily restricts the options that can lead to a 100 percent gold standard. For example, the government could force the supply of dollars down to a

level even lower than \$35 per ounce, for example to \$20 per ounce which was the earlier definition of the dollar in the U.S. Rothbard offers no particular reason that would speak against such a measure.¹⁹ Moreover, a reform involving a complete and immediate privatization of monetary affairs, i.e., the abstention of further intervention into the monetary system, might also evolve into a 100 percent gold standard.

Continuing on, Rothbard states that,

... we have built deflation into an absurd ogre, and have overlooked the healthy consequences of a deflationary purgation of the malinvestments of the boom, as well as the overdue aid that fixed income groups, hit by decades of inflationary erosion, would at last obtain from a considerable fall in prices. A sharp deflation would also help to break up the powerful aggregations of monopoly unionism, which are potentially so destructive of the market economy. At any rate, while the deflation would be nominally sharp, to the extent that people would wish to save much of their present cash holdings, they would increase voluntary savings by purchasing bank debentures in lieu of their deposits, thereby fostering “economic growth” and mitigating the rigors of the deflation. (1991, 67)

Rothbard makes four arguments in favor of deflation as a means of returning to a stable monetary standard: 1) purgation of malinvestments, 2) redistribution in favor of fixed income groups, 3) a possible break of union power, and 4) an increase in voluntary savings. Surprisingly, in spite of these arguments Rothbard does not commit himself to the deflationary course back to the legal parity of dollar with 1/35 ounce of gold. His reason is simply because there is “no particular reason to be devoted to the \$35 figure at present time” (Rothbard 1991, 67).

In 1983, in *The Mystery of Banking*, Rothbard dismisses the first way to establish a 100 percent gold standard involving deflation stating that “[t]he old definition of the dollar as 1/35 gold ounce is outdated and irrelevant to the current world” (1983, 263).²⁰ Now he endorses the second way and proposes the following plan: “In short,

¹⁹ One might argue that Rothbard thought deflation of a certain amount would become too disruptive. However, in this article he does not make that argument explicitly, but on the contrary names arguments in favor of price deflation without elaborating on the “rigors” of price deflation.

²⁰ Another place where his proposal to redefine the dollar to back all notes and deposits by gold can be found in “Aurophobia: or, Free Banking on What Standard?” in *The Review of Austrian Economics*, Vol. 6, No. 1 (1992), pp. 97-106. In *The Case Against the Fed* (1994), Rothbard basically upholds his

the new dollar price of gold (or the weight of the dollar), is to be defined so that there will be enough gold dollars to redeem every Federal Reserve note and demand deposit, one for one” (Rothbard 1983, 264). His plan is to hand over the gold that was nationalized in 1933 from the Fed to holders of Federal Reserve Notes and to the banks. With the new definition of the dollar all existing banks would have 100 percent gold reserves for the deposits. He seems to consider it as an advantage of his reform plan that “each bank will have 100 percent reserve of gold, so that a law holding fractional reserve banking as fraud and enforcing 100 percent reserves would not entail any deflation or contraction of the money supply” (Rothbard 1983, 265). He acknowledges the argument that banks receive part of the nationalized hoard as an undeserved gift, allowing them to back demand deposits. Furthermore, he agrees that banks should be held responsible for fraud, but only after the reform has taken place. He justifies this view by pointing out that with his plan “we have the advantage of starting from Point Zero, of letting bygones be bygones, and of insuring against a wracking deflation that would lead to a severe recession and numerous bankruptcies... [O]ne wonders whether a policy equally sound and free market oriented, which can avoid such a virtual if short-lived economic holocaust might not be a more sensible solution” (Rothbard 1983, 268).

Rothbard’s plan is surprising in the sense that it contradicts or omits the economic and ethical theories and insights which he himself developed. Let us first turn to the economic insights he neglects. As mentioned earlier, in 1962 Rothbard names four advantages of deflation. Moreover, in his 1963 *America’s Great Depression*, he clarifies in detail the advantages of deflation in the form of a bank credit contraction

1983 plan with the only difference being not to outlaw fractional reserve banking, calling it a “second best” solution. It should be noted that he would only support fractional reserve banking if the FED were outlawed, as well as governmental deposit insurance and lender-of-last-resort function and governmental bailouts. And then only because he judges that “any problem of inflationary credit or counterfeiting would be minimal ... it would suffice as an excellent solution for the time being, that is, until people are ready to press on to full 100 percent banking.” (1994, 150-151) In his 1995 *Take Money Back* (<http://www.mises.org/rothbard/moneyback.asp>) (parts of which were published in September and October 1995 issues of the *Freeman*), Rothbard, again, calls for redefining the dollar, *but he* acknowledges that his reform entails an “undeserved” gift for banks. Interestingly, he mentions the possibility of letting the banks collapse without explicitly endorsing this possibility. The question remains why Rothbard, throughout his lifetime, remained vague and indecisive in his plans for monetary reform although he held clear-cut positions on nearly every other issue.

in a recession.²¹ He gives several reasons why the bank credit contraction speeds up the readjustment and recovery in a recession. First, falling prices tend historically to encourage greater savings and

the accounting illusion of the boom is reversed: what seems like losses and capital consumption may actually mean profits for the firm, since assets now cost much less to be replaced. This overstatement of losses, however, restricts consumption and encourages saving; a man may merely think he is replacing capital, when he is actually making an added investment in the business. (Rothbard 2000, 17-18)

Since it is a lack of savings in relation to consumption that has led to the recession, the recovery is quickened. Continuing on, Rothbard names another beneficial effect of the credit contraction.²² The credit contraction leads to less money in the hands of entrepreneurs, mainly those who are located in the higher stages of production expanded during the artificial boom. Accordingly, the demand for factors of production falls, lowering the factor prices and income. Hence, the price differentials between buying and selling prices increase.

Also, it is hard to understand why Rothbard considers the likelihood of recession and “numerous bankruptcies” as a reason to avoid a reform plan that involves deflation. He himself makes it clear that if a company is forced into bankruptcy because there is a falling price level and its debt burden becomes too heavy, the bankruptcy only involves transfers of ownership between the legal claimants of companies. This is so because in case of bankruptcy there is a redistribution from equity holders to creditors.²³ Production must not necessarily be disturbed by this redistribution.

In addition to Rothbard’s own argument, it must be added that there are not necessarily more bankruptcies in times of a falling price level as compared to times of rising prices. Only entrepreneurs who do not anticipate the falling prices and buy at prices that are too high will incur losses.²⁴ When, in addition to this, they are

²¹ See Rothbard (2000, 14-19).

²² See Rothbard (2000, 18).

²³ See Rothbard (2000, 51).

²⁴ It should be noted that the underlying monetary policy and its effects on the credit markets make the anticipation of price movements more difficult. Entrepreneurs cannot only suffer losses because they do not anticipate a price deflation but also if they retreat from an overheated market too early.

in debt, their real debt increases and they face the risk of bankruptcy. These entrepreneurs commit errors in their anticipation of the future state of the market or rely on government intervention to bail them out (for example on the continuation of government interventions into the monetary system or, more specifically, on further credit expansion). Bankruptcies are normal for a market economy. And what does “numerous bankruptcies” mean? Would a certain number or percentage of bankruptcies be unacceptable, requiring the help of the government? Again, a high number of bankruptcies does not mean that production is necessarily hampered. Assets are taken over by the new owners, for example the creditors, who have an interest that production continues and is immediately adjusted towards consumer wants.

Let us now have a look at Rothbard’s ethical theory elaborated in his book *The Ethics of Liberty* (1982), written just before his 1983 proposal for monetary reform. Applying Rothbard’s theory of ethics to his proposal, we must conclude that his plan for monetary reform fails to match his ethical positions. He claims that fractional reserve banking is fraudulent because banks issue more money titles than they have received money proper and promise to redeem the money title into money proper on demand. As the promise cannot be fulfilled, this constitutes fraud and fraud is implicit theft.²⁵ And what is to be done in the case of theft? According to Rothbard, justice demands that the

criminal must pay *double* the extent of theft: once, for restitution of the amount stolen, and once again for the loss of that he had deprived another... [F]or proportionate punishment to be levied we would also have to add *more* than double so as to compensate the victim in some way for the uncertain and fearful aspects of his particular ordeal. (Rothbard 1998, 88-89)

Therefore, according to Rothbard’s reasoning, if banks and bank equity owners are not able to pay that amount, the bank assets and their personal assets would be turned over to the victims: the depositors. If this would not be sufficient, bank owners would have to work for the remainder of what they could not pay (86).²⁶

²⁵ See Rothbard (1991, 50-51).

²⁶ See Rothbard (1998, 86): “The ideal situation, then, puts the criminal frankly into a state of enslavement to his victim, the criminal continuing in that condition of just slavery until he has redressed the grievance of the man he has wronged.” Another cause for punishment of banks could be made by

Strangely enough, in outright contradiction to his theory, Rothbard does not recommend that. On the contrary, he calls for a transfer of the nationalized gold to the fractional reserve banks.²⁷ That gold was stolen from the bank depositors who are its just owners and should be handed back to them. Inconsistently, Rothbard claims the elimination of taxpayer bailouts as an advantage of his reform (Rothbard 1994, 150); however, from the point of view of his ethical theory, his proposal entails a last giant bailout of the criminal banks. Rothbard also claims that his plan would “have the advantage of starting from Point Zero, of letting bygones be bygones” (Rothbard 1983, 268). Rothbard’s “Point Zero” is, however, the result of a governmental intervention that prevents punishment of the banks. Would it not rather be a real “Point Zero” to let an unsound banking system collapse by abstaining from further interventions into the monetary system, instead of maintaining a status quo that results from privileges? Moreover, one wonders, why Rothbard upholds his plea for letting bygones be bygones, since in his ethical theory there is not anything like a statute of limitations. Justice is not a question of time.²⁸ Therefore, the amnesty for banks that Rothbard’s reform establishes is inconsistent with his writings on ethics.

With great insight, Rothbard analyzes the economic consequences of deflation, showing that it is not something inherently bad or that it must be prevented. Applying his ethical theory to fractional reserve banking would certainly wipe out the existing banking system and lead to a deflation entailing the consequences that Rothbard analyzed favorably. He fails to endorse a deflation that is in line with both his economic and ethical theories, but rather passes over his economic insights and contradicts his ethical theory calling for a managed reform. The question as why he does this is hard to answer and rather puzzling.

pointing to their relationship to the state, which is from Rothbard’s point of view “a coercive criminal organization” (172). Fractional reserve banks, by inflating the money supply and buying government bonds, help to finance the criminal activities of the state directly and indirectly. Hence, fractional reserve banks are guilty not only of defrauding customers but also of operating in symbiosis with a criminal organization. Also, a case could be made for punishing bank employers who – knowingly or not – collaborated within this criminal symbiosis. For the question of a “libertarian Nuremberg Trial,” see Block’s discussion of this in the Rothbardian tradition (2004 and 2006).

²⁷ While this transfer is in contradiction to Rothbard’s ethical theory, it is an interesting idea to overcome the threat of resistance against monetary reform posed by the major benefitters of the current system – the financial sector.

²⁸ Rothbard (1982, 42): “... the theory must hold true for all men, whatever their location in time or place.”

4 Jesús Huerta de Soto

In his recent treatise *Money, Bank Credit, and Economic Cycles*, Huerta de Soto elaborates a sophisticated plan of monetary reform in the Rothbardian tradition (Huerta de Soto 2006, 715-812). His ideal monetary system involves three components: complete freedom of choice in currency, complete banking freedom, and the fulfillment of traditional legal rules (a 100 % reserve requirement on demand deposit contracts). In order to achieve this ideal, he proposes a twofold strategy. On the one hand, he argues that it is important to educate the public about the benefits of the ideal monetary system. On the other hand, a short-term policy of a gradual progress towards that system must be adopted. Huerta de Soto divides his reform in five stages. In the first stage the central bank is still legally “dependent” on the government. It centrally plans the whole monetary sphere. In the second stage the central bank becomes legally “independent” and a monetary growth rule of approximately 4%-6% is installed.

In the following third stage, a 100 percent reserve requirement for banks is set with a monetary growth rule of 2 percent. This 100 percent rule is achieved in a curious way. First, bank assets above the bank’s equity are transformed into mutual funds. Then during a certain period of time, depositors get the option to change their deposits into shares of this mutual fund. “Each depositor to select this option would receive a number of shares strictly proportional to the sum of his deposits with respect to the total deposits at each bank” (Huerta de Soto 2006, 792). The 100 percent reserve requirement is then made by just printing the paper money necessary to back all remaining deposits and giving it to the banks.²⁹ No further issuing of fiduciary media will be permitted. But would that not involve a gift to the banks? Huerta de Soto acknowledges this argument by criticizing Rothbard:

In general we agree with the transition program formulated by Rothbard. However we object to the gift he plans for banks, a contribution which would

²⁹ At this point we are faced with a curious question: Would anyone stick with his deposits and not transform them into shares of the mutual fund? Before the reform, the deposits were “backed” or “supported” by the assets the banking system was holding (loans, etc.). These assets form now part of the mutual fund and are substituted by paper. Thus, it seems unlikely that many depositors would stick with their deposits.

allow them to keep the assets they have historically expropriated from society. In our opinion, it would be perfectly justifiable to use these assets toward the other ends we discuss in the text. (2006, 795-796, fn 100)

What are these ends? The ends are the replacement of outstanding treasury bonds and the partial or total liquidation of other state liabilities, like social security pension, etc. That means that the holders of treasury bonds and other state liabilities receive the mutual funds left over by the reform at the prevailing market rate. In other words, the shares of the mutual funds that do not correspond to the banks' equity and are not claimed by depositors, replace treasury bonds at the prevailing market price.³⁰ Any remaining shares would also replace other state liabilities. The banks' holdings of treasury bonds are simply canceled.³¹

At the fourth stage, the central bank is abolished and complete banking freedom subject to traditional legal principles prevails. The price of gold is redefined, similar to Rothbard's plan, in order to make all paper money redeemable in gold. A 100 percent gold standard is in place.

At the fifth stage, the gold standard would spread to the world. Here Huerta de Soto calls for an international agreement of a single gold standard. This requires the creation of fixed exchange rates between all currencies in prior stages. This would allow us to "uniformly assess the entire world supply of fiduciary media and to redistribute among the economic agents and private banks of the different countries the stocks of gold held by the world's central banks. This redistribution would be carried out in exact proportion to the sum of deposits and bills in each." (Huerta de Soto, 2006, 802). At the fifth stage the complete freedom in monetary affairs would also allow for the emergence of new monies.

While Huerta de Soto's reform is unmatched in details and strategically interesting, there are some problems with it. First of all, his reform is a managed reform which does not leave room for free market developments. For example, in arguing for his gold standard reform, Huerta de Soto writes that,

³⁰ Before this replacement depositors have the option to switch their deposits into shares of mutual funds.

³¹ Here, we face a problem. According to Huerta de Soto, treasury bonds should be included as part of the mutual funds because these bonds are assets as well. However, if the treasury bonds are canceled, former depositors, now mutual fund owners, lose a portion of their assets, that according to Huerta de Soto should belong to them.

[i]t is impossible to take a leap in the dark and establish an artificial monetary standard which has not emerged through an evolutionary process. Hence the new form of money should consist of the substance humanity has historically considered money par excellence: gold. (2006, 799)

It is true that gold was money for a long time. But in many countries silver was also the dominant currency in the retail economy. Moreover, other currencies existed prior to gold. One cannot know *a priori* which money would prevail in a free competition today. It might be gold, it might be gold and silver, or it might be another money. Why should it not be left to free decisions of individuals which monies are used from the beginning of the reform onward?

Of course, with an interventionist reform we are left with arbitrariness. For example, how long should these stages last, and how long should depositors have the option to switch to mutual fund shares, or why is it five stages? And why should money growth be 4 percent – 6 percent and later 2 percent; and why should this monetary growth be used to finance state activities or buy gold?

Here we come to some strategic problems. On first sight, one of the main advantages of Huerta de Soto's proposal for an ideal monetary reform is its moderateness. But this can also be a disadvantage. The long-term objectives can be forgotten. At every stage there is the danger that steps will be taken in the wrong direction. The reform is easily reversible, as the influence of the state in the monetary sphere is only very slowly displaced. As William Lloyd Garrison expresses this, "[g]radualism in theory is perpetuity in practice." Another example of gradualism is Huerta de Soto's comments about the Soviet Union. Why does he argue that due to its huge gold reserves, the Soviet Union could change its monetary system immediately to a pure gold standard, while other countries would have to wait?³² Why could other countries not go immediately to a pure gold standard? Huerta de Soto gives no convincing argument why other countries have to wait to get rid of recessions. It is possible that he thinks it is not possible to convince people of directly going to a pure gold standard, but how can we convince people to go there, if we advocate a fiat paper money system with 4-6 percent growth in the first place? Another related strategic problem with his plan is that the state's planning of the reform could foster the belief in the state's ability to improve monetary affairs.

³² See Huerta de Soto (2006, p. 805).

A point that could make the introduction of his reform very difficult is that Huerta de Soto argues for the introduction of a gold standard on a world wide scale in order to “prevent the transition from having any unnecessary, real effects”.³³ Yet, first mover countries would have an advantage of adopting a pure gold standard. They would receive the gold at still relatively low prices, while countries which adopt such a standard later would have to pay higher prices. These “real effects” are not something that must be prevented. Furthermore, countries probably would not agree to fixed exchange rates that Huerta de Soto’s plan suggests because this would imply a redistribution of gold. They would not agree upon the exact rate of exchange.

So where do all these detailed interventions stem from? As with Mises’ and Rothbard’s plan, the details and interventions Huerta de Soto’s plan seem to be based on a fear of deflation. Indeed, Huerta de Soto points out that his reform like Rothbard’s is not deflationary.³⁴ He seems to imply that deflation in a monetary reform should be prevented.³⁵ Unfortunately, Huerta de Soto does not see the advantages of deflation as a fast purge of malinvestments and unsound banks, as possibly increasing savings, and as increasing pressures to abolish regulations.

Another critique against Huerta de Soto’s reform is that it defends the status quo irrespectively of how this status quo was arrived at. He himself sees it as a weak point in Rothbard that banks receive a gift in the privatization of nationalized gold.³⁶ That implies Huerta de Soto employs, at least partially, an ethical point of view in his argumentation for a monetary reform. He also writes about the “aggregate wealth the banking system has expropriated”(Huerta de Soto, 2006, 794). So, why is he against a gift to the banks but in favor of an amnesty for their expropriation? Should depositors not be compensated and all bank assets turned over to depositors? Moreover, should not the nationalized gold be given back directly to the population? And why are financiers of the government (holders of treasury bonds) being rewarded with shares in the mutual fund?

³³ See Huerta de Soto (2006, p. 802).

³⁴ See Huerta de Soto (2006, 796 fn. 100).

³⁵ This seems also be implied in his view of the British deflations after the Napoleonic Wars and after WW I. See Huerta de Soto (2006, 447-448). There he speaks of “unnecessary pressure” for the economic system.

³⁶ See Huerta de Soto (2006, 797, fn. 100).

In sum, Huerta de Soto's proposal is a sophisticated elaboration on Rothbard's plan. Its strategic advantages must be recognized and his ideal monetary system might be a desirable goal. Yet, the way he proposes to get there is too time consuming, too interventionist, involves unjustified conservation of the status quo, and has arbitrary distributional effects. All these effects result from his attempt to avoid deflation and make the reform more appealing.³⁷

5 Hans Sennholz

Even though Hans Sennholz does not expose a detailed monetary reform, he certainly argued in his work for severe changes in the monetary system. Sennholz³⁸ in *Age of Inflation* (1979)³⁹ and later in *Money and Freedom* (1985) offers one of the most radical and most libertarian proposals for changes in the monetary system: "We seek no reform law, no restoration law, no conversion or parity, no government cooperation: merely freedom" (Sennholz, 1985, 77). What is to be done specifically to "remove government from all monetary affairs" (Sennholz 1979, 149)? Sennholz offers three specific points (1979, 149-50): First, all legal tender must be repealed. Second, the central bank must be abolished,⁴⁰ and third, the compulsory monopoly of the mint is to be eliminated.

Sennholz' laissez-faire approach is far more consistent than it is in the aforementioned reform plans offered by other Austrian economists. He does not want to impose any result of his reform but merely remove government interventions: "Government need not establish the gold standard by any conscious or deliberate act," because people may choose it again (1979, 158). Because Sennholz does not mention time at this point, it seems that he calls for an immediate removal of government from the monetary sphere. He rightly states that in today's ideological climate, the

³⁷ Confronted with my critique, Huerta de Soto acknowledged most of the points and made clear that his proposal was not intended to be the theoretical best reform.

³⁸ In his Phd thesis, *How can Europe survive* (1955, 296-99), written under Mises, he still embraced Mises' reform plan.

³⁹ Some of the relevant parts of *Age of Inflation* appeared before as "In Search of Monetary Stability" in *The Freeman*, February 1977, pp. 80-90.

⁴⁰ He does not touch the interesting question who should get the nationalized gold, now controlled by the central bank.

change he proposes is out of political reality. He does not explain how to make his proposal feasible. But that is for Sennholz – at least at this point of his discussion – not the important question. He is not willing to compromise economic principles and indicates that this might actually be an advantage in the effectiveness of the plan:

We need not here enter a discussion of who is more practical and effective: he who uncompromisingly seeks to draw his conclusions and reveal irrefutable truths, or he who permits his deliberations to be colored by that which is more popular. (1979, 150)

It is curious that Sennholz does not mention deflation in respect to his plan. This might actually be the reason why his initial proposal is more radical and free market than the aforementioned plans. However, the immediate removal of government from monetary affairs and especially the abolishment of the central bank will probably involve a deflation. When the prestige of the central bank and state regulations vanish, people may immediately make a run on their banks. In a fractional reserve banking system without a central bank, this in turn may purge the whole system involving the deflation of the fiduciary media. Even if there are no initial bank runs when the central bank is dissolved, confidence, which is essential for a fractional reserve banking system, is likely to be shaken during the next recession. This recession has probably already been induced by the abstention from further credit expansion. A bank run might occur at this time, and this purge would involve a substantial credit contraction, likely followed by declining prices.

Interestingly enough, only a few pages later, Sennholz takes a huge step back from an unconditional immediate liberalization of the monetary sphere and, somewhat, revises his plan. His “revised plan” entails four objectives (Sennholz, 1979, 166-67).⁴¹ The first and second objectives consist in the freedom to trade, hold, and use gold. The third object is the freedom to mint coins. However, the Federal Reserve System, stays in place (166), which is an outright contradiction to Sennholz’ very own statement that government intervention in the monetary sphere be ended. He predicts

⁴¹ This version of Sennholz’ plan is very similar to Henry Hazlitt’s plan which can be found in Hazlitt’s *The Inflation Crisis, And How To Resolve It* (1978), pp. 175-190 and in his (1975) essay “To Restore World Monetary Order.” Hazlitt, as Sennholz, seems to shy away from a complete abstention from government intervention into the monetary realm, because he dreads deflation (1978, 190 and 1975, 74). Like Sennholz, Hazlitt does not elaborate why deflation must be avoided.

that a “parallel standard” with both fiat paper and a gold standard would prevail.⁴² As gold outcompetes fiat money, Sennholz predicts that to save the dollar the U.S. government might decide to make its money convertible to gold as well.

Where in these few pages does Sennholz shift from total abstention from government intervention into the monetary sphere to a “parallel standard” stem from?⁴³ As with the other economists mentioned earlier, it might have been the fear of deflation. As Sennholz states: “Prices and wages would have to be drastically cut, which no modern society could withstand in an orderly fashion.” Why could a modern society not withstand this? Sennholz gives no explanation for that. He just assumes it as self-evident. But why can union power not be broken? This could be done at the same time governmental monetary interventions are ended. If the power of unions were not broken, there would be an immense pressure to break the rigidities that state interventions impose on the price system after the reform.

A severe problem of a “parallel standard” that Sennholz proposes is that it would not really be free competition between the government money and gold. Government could and very likely would subsidize its own currency via its taxation power. Sennholz himself states that the FDIC could stay in place.⁴⁴ Government subsidies could give the government money an advantage that might prevent its currency from being outcompeted by gold.

Moreover, as Joseph Salerno (1982, 12) vividly points out:

[...] there looms the distinct possibility that the political authority may use the occasional, but highly visible, financial crises and bank failures which follow the inflationary booms as a pretext for regulation of the banks “in the public interest.” Having thus regained its first crucial foothold, the government would be well on its way to reimposing its monopoly over money.

In sum, Sennholz proposes changes of the monetary system very close to a free market solution. Perhaps frightened by the possibility of an unpopular deflation, he dilutes his plan, neglecting the advantages a deflation could have.

⁴² For a brilliant critique of monetary reforms proposing a parallel private gold standard see Salerno (1982, 10-14).

⁴³ A “parallel standard” does not correspond to a free market but rather to a “mixed economy.”

⁴⁴ See Sennholz (1985, 81).

6 Conclusions

Mises, Rothbard, Huerta de Soto, and Sennholz offer plans of monetary reform that entail numerous state interventions into the economy, inconsistencies, arbitrariness, and tactical ambiguities. Their proposals contradict their own ethical and political principles, and seek to engineer an improved institution of money. All of these problems seem to stem from the authors' attempts to preserve the status quo and to avoid alleged chaos, their reliance on a problematic economic theory of deflation, or the attempt to gain acceptability by avoiding a deflation. Yet, a good reform must fulfill three complementary criteria. Monetary reform must be based on a sound economic theory. Monetary reform should be ethically just, and it should leave the maximum space possible for an entrepreneurial process to determine the exact results. A reform that fulfills these criteria, would probably also bring about deflation. However, deflation is not something inherently bad. Rather, it can be seen as a corrective process that is part of creating a stronger financial market. Because of this inherent importance of deflation in the return to a sound monetary system future research should be directed to more in-depth analysis of deflation.

Bibliography

- [1] Bagus, Philipp. 2003. "Deflation: When Austrians Become Interventionists." *Quarterly Journal of Austrian Economics* 6 (4): 19-35.
- [2] Barnett II, William and Block, Walter. 2004. "On the Optimum Quantity of Money." *Quarterly Journal of Austrian Economics* 7 (1): 39-52.
- [3] Dulbecco, Philippe and Renard, Marie-Francoise. 2003. "Permanency and Flexibility of Institutions : The Role of Decentralization in Chines Economic Reforms." *The Review of Austrian Economics* 16 (4): 327-346.
- [4] Hazlitt, Henry. 1975. "To Restore World Monetary Order." In Sennholz ed. *Gold is Money*. Westport, Co.: Greenwood Press: 61-76.
- [5] Hazlitt, Henry. 1978. *The Inflation Crisis, and How to Resolve it*. New Rochelle, N.Y.: Arlington House.

-
- [6] Herbener, Jeffrey M. 2002a. "After the Age of Inflation: Austrian Proposals for Monetary Reform." *Quarterly Journal of Austrian Economics* 5 (4): 5-19.
- [7] Herbener, Jeffrey M. 2002b. "Ludwig von Mises on the Gold Standard and Free Banking." *Quarterly Journal of Austrian Economics* 5 (1): 67-91.
- [8] Hoppe, Hans-Hermann. 1994. "How is Fiat Money Possible? -or, The Devolution of Money and Credit." *The Review of Austrian Economics* 7 (2): 49-74.
- [9] Hoppe, Hans-Hermann. 2001. *Democracy The God That Failed – The Economics and Politics of Monarchy, Democracy, and Natural Order*. New Brunswick, New Jersey: Transaction Publishers.
- [10] Hoppe, Hans-Hermann. 2006. *The Economics and Ethics of Private Property – Studies in Political Economy and Philosophy*. 2nd ed. Auburn, Ala.: Ludwig von Mises Institute.
- [11] Hülsmann, Jörg G. 1998. "Toward a General Theory of Error Cycles." *Quarterly Journal of Austrian* 1 (4): 1-23.
- [12] Hülsmann, Jörg G. 2003. "Optimal Monetary Policy." *Quarterly Journal of Austrian Economics* 6 (4): 37-60.
- [13] Huerta de Soto, Jesús. 2003. "The Theory of Dynamic Efficiency." in Backhaus, Jürgen, Hejmann, Wim, Nentjes, Andries, van Ophem, Johan (ed.) *Economic Policy In An Orderly Framework: Liber Amicorum For Gerrit Meijer*. Münster: Transaction Publishers.
- [14] Huerta de Soto, Jesus. 2004. "Historia Conjetural, Ciencia Economica, y Etica Social." In Huerta de Soto. *Estudios*. 2nd ed. Madrid: Union Editorial: 105-120.
- [15] Huerta de Soto, Jesus. 2006. *Money, Bank Credit, and Economic Cycles*. Auburn, Ala.: Ludwig von Mises Institute.
- [16] Mises, Ludwig von. 1919. "Der Wiedereintritt Deutsch-Österreichs in das Deutsche Reich und die Währungsfrage." In *Schriften des Vereins für Sozialpolitik* 158. Leipzig: Duncker & Humblot.

- [17] Mises, Ludwig von. 1923. "Die geldtheoretische Seite des Stabilisierungsproblems." In *Schriften des Vereins für Sozialpolitik*. 164: 2. Munich & Leipzig: Duncker & Humblot.
- [18] Mises, Ludwig von. [1944] 2000. "A Noninflationary Proposal for Postwar Monetary Reconstruction." In Ebeling (ed.) *Selected Writings of Ludwig von Mises: The Political Economy of International Reform and Reconstruction*, Vol. 3. Indianapolis: Liberty Fund. Pp. 71-118.
- [19] Mises, Ludwig von. [1949] 1998. *Human Action: A Treatise on Economics*. Scholar's Edition. Auburn, Ala.: Mises Institute.
- [20] Mises, Ludwig von. [1953] 1981. *The Theory of Money and Credit*. Indianapolis: Liberty Fund.
- [21] Mises, Ludwig von. 1962. *The Free and Prosperous Commonwealth: An Exposition of the Ideas of Classical Liberalism*, New Jersey, N.Y.: D. Van Nostrand.
- [22] Mises, Ludwig von. [1977] 1996. *Critique of Interventionism*. New York: Foundation for Economic Education.
- [23] Rothbard, Murray N. 1983. *The Mystery of Banking*. Richardson & Snyder.
- [24] Rothbard, Murray N. 1991. *The Case for a 100 Percent Gold Dollar*. Auburn, Ala.: Ludwig von Mises Institute.
- [25] Rothbard, Murray N. (1992). "Aurophobia: or, Free Banking on What Standard?" *The Review of Austrian Economics* 6 (1): 97-106.
- [26] Rothbard, Murray N. 1994. *The Case Against the Fed*. Auburn, Ala.: Ludwig von Mises Institute.
- [27] Rothbard, Murray N. 1995. *Taking Money Back*. Available at: <http://www.mises.org/rothbard/moneyback.asp>
- [28] Rothbard, Murray N. 1998. *The Ethics of Liberty*. 2nd ed. N.Y.: New York University Press.

-
- [29] Rothbard, Murray N. [1963] 2000. *America's Great Depression*. 5th ed. Auburn, Ala.: Ludwig von Mises Institute.
- [30] Rothbard, Murray N. 2002. *A History of Money and Banking in the United States: The Colonial Era to World War II*, Auburn, Ala.: Ludwig von Mises Institute.
- [31] Salerno, Joseph T. 1981. "The Gold Standard: An Analysis of Some Recent Proposals." *Cato Institute Policy Analysis* (September 9).
- [32] Salerno, Joseph T. 2003. "An Austrian Taxonomy of Deflation: With Applications to the U.S." *Quarterly Journal of Austrian Economics* 6 (4): 81-109.
- [33] Sennholz, Hans. 1955. *How can Europe Survive?* Toronto, New York, London: D. Van Nostrand.
- [34] Sennholz, Hans. 1979. *Age of Inflation*. Belmont, Ma.: Western Islands.
- [35] Sennholz, Hans. 1985. *Money and Freedom*. Spring Mills, Pa.: Libertarian Press.
- [36] Yeager, Leland B. 1976. *International monetary Relations: Theory, History, and Policy*. 2nd ed. New York: Harper & Row.

