

Mises on Monetary Reform: the Private Alternative

Jörg Guido Hülsmann

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Abstract This paper discusses Ludwig von Mises's proposals for monetary reform. We will largely focus on technical aspects—the concrete practical steps he recommended—without detailing how these relate to his general conceptions of money and of a sound monetary order. We will highlight two characteristic features of Mises's proposals. One, he stressed the role of the competitive market process and of private initiative in establishing a monetary order based on gold, effective gold coin circulation, and 100% reserve banking. Two, he presented an original scheme for privatizing the control of the money supply.

Keywords Monetary reform · Ludwig von Mises · Denationalization of money

This paper discusses Ludwig von Mises's proposals for monetary reform. We will largely focus on technical aspects—the concrete practical steps he recommended—without detailing how these relate to his general conceptions of money and of a sound monetary order.¹ We will highlight two characteristic features of Mises's proposals. One, he stressed the role of the competitive market process and of private initiative in establishing a monetary order based on gold, effective gold coin circulation, and 100% reserve banking. Two, he presented an original scheme for the complete dismantling of fiat money and fractional-reserve banking.

¹Mises presents his monetary theory in *Theory of Money and Credit* (1980) and in *Human Action* (1949), especially chapters 17 and 20. He discusses the principles of a sound monetary order (and thus the goals to be pursued by monetary reform) in his *Theory of Money and Credit*, chap. 20 (first published in 1924) and chap. 21 (first published in 1953). See Pallas (2005) and Hülsmann (2007) for a general discussion of Mises's contributions to monetary economics. For an analysis of the evolution of his monetary thought see Gertchev (2004).

J. G. Hülsmann (✉)
University of Angers, Angers, France
e-mail: guido.huelsmann@univ-angers.fr

Mises presented his proposals for monetary reform most notably on three separate occasions: (1) in 1919, in the context of the disintegration of public finance in his native Austria; (2) in 1923 at the height of the German hyperinflation; and (3) in the early years of the Bretton-Woods System (1953).² Let us deal with them in turn.

Plans for a Mark-Exchange Standard

In 1919, public finance in the burgeoning Republic of Austria was in complete disarray, the government using large-scale inflation to cover its expenditures. With the country being on the verge of hyperinflation and disaster, Mises worked out two plans for monetary reform—an official one proposing action for “normal” times, and a secret contingency plan in case of a sudden emergency.

The plan for currency reform that virtually monopolized the attention of the Austrian government and public in the first few months of the republic was a proposed currency union with the German Reich. Prevailing wisdom had it that Austria was incapable of solving her problems on her own and that political and monetary union with the Reich was vital for the country. Mises was charged with defining the Austrian position for the upcoming negotiations with the Germans, and was invited to contribute an expert report on the question to a special *Verein für Sozialpolitik* volume that analyzed the Austrian economy. This report is still relevant in today and can be read as a blueprint for the unification of paper monies, as exemplified in the case of the European Monetary Union (1999). Mises pointed out that all problems of Austria's proposed monetary unions with the German Reich arose from the fact that both countries presently used paper monies.

A currency community of two states on the basis of a paper currency is hardly feasible if there is not from the very outset the intention to abstain from any further inflation, and if this intention is not strictly put into practice. As soon as inflationary measures are resorted to, to add to the state treasury, there must arise differences of opinion about the distribution of the new quantities of money that are to enter circulation. (1919a, p. 156)

The only example of such a currency community based on paper money was the Austro–Hungarian dual monarchy, which had been established in 1867 and featured two states using the same currency, namely the currency of their common predecessor, the Kaisertum Österreich. Yet this currency community could be successful because it was based on the principle that the total quantity of banknotes in circulation could not be increased. Thus distributive conflicts were avoided from the outset. But if the proposed currency union involved any inflationary measures,

² He also discussed monetary reform in papers written during the 1930s and World War II, mainly restating ideas he had already presented in 1919 and 1923.

the only way to avoid such distributive conflicts was to establish a common financial administration, he thought.

It is therefore clear from the outset that German–Austria's adoption of the German Reich's currency can begin only once the political unification has been [if not achieved, then] at least unchangeably decided. (1919a, p. 156)³

As for the ratio for the conversion of kronen into marks, Mises argued that it should be based on the prevailing market exchange rate between the two currencies. The ratio would also have to account for the future redemption rate of marks into gold. He recommended that this rate be based on the prevailing mark-price of gold. Attempts to reestablish the prewar rate would hurt exports, which would be devastating under the present circumstances, especially for the Austrians.

The transition from the present state of two independent paper monies to the desired currency union could most suitably be achieved through the intermediate creation of a mark-exchange standard. In this scheme, the Austrian central bank would start redeeming its notes for marks, thus making kronen *de facto* money substitutes for marks. “By this very fact, German–Austria's adoption of the German currency is put into practice. The krone is nothing but a name for a part of the mark” (1919a, p. 164). The final step would be the replacement of krone notes by mark notes.⁴

Private Emergency Plan

Mises's plan for a mark-exchange standard was never put into practice because the western powers prevented a political and monetary union between the German Reich and the new Austrian republic. The latter therefore willy-nilly had to solve its monetary problems on its own. Because Mises very much doubted the Austrian government's capacity to do this, he developed a revolutionary private-enterprise strategy for the establishment of sound money.

The fundamental paradigm shift at the heart of this secret plan was simply to ignore the government, and to make the reform of the monetary system an affair of the country's principal bankers, merchants, and industrialists. In the fall of 1919, Mises distributed a confidential memorandum. He argued that there was an imminent danger that the inflation and the plummeting krone exchange rate would

³ It was Mises's (1919a, pp. 156ff.) position that Austria should be granted a special subsidy during the first years of the unification because Austrians had made greater contributions to the war effort, and had suffered more from defeat. Also, the financial agreement between the two states had to allow Austrian entrepreneurs to redeem discounted war bonds at the central bank. This was absolutely essential because they had invested much more of their capital in war bonds than had the German entrepreneurs. Mises insisted on these two points, mentioning each of them twice in his 25-page report.

⁴ This scheme corresponds more or less exactly to the way the euro has been introduced based on prevailing market exchange rates. In a first step (1999 to 2002), the different national currencies were kept in circulation, but they had changed their economic natures. They were no longer independent monies, but legal substitutes for the new money that had not yet any visible embodiment (however, electronic counterparts—the so-called central-bank “liquidities” already existed as from 1999). With Mises we could say that in those three years the mark, the franc, the schilling, etc., were but names for a part of the euro. In a second step, then, the old national paper notes were replaced by euro notes and coins.

incite people to give up on using krone banknotes altogether, and that it was necessary to prepare for this day.

One can hardly expect the government to make such preparations. It cannot be assumed that the financial administration that for five years has not only followed, but also repeatedly sought to defend the disastrous inflation policy, and which in complete ignorance of the sole source of the decreasing value of money has accelerated the decline of the krone, would suddenly change its mind. Leaders responsible for its policies who correctly saw the economic connections have up to now been unable to overcome prevailing in-house traditions. Citizens must seek to achieve through their own powers that which the government fails to bring about. All one can hope for on the part of the government is that it not hamper the initiative of the private sector. It is the duty of the banks—and with the banks, that of big corporations in industry and trade—to make ready the measures that appear necessary to overcome the catastrophic consequences of the collapse of currency. This is in their own interest and also a service to society as a whole. (1919b, p. 7)

Mises then gave the details of his plan. He proposed to take measures to replace the krone with a foreign currency. If the inflationary process was sufficiently slow, he argued, no further measures would be necessary. The krone would then be replaced in a continuous process without threatening a disruption of business operations. The danger lay exclusively in the scenario of a sudden collapse that would leave the citizens without money. In this case, disruption could ensue and lead to misery and violence. It was in anticipation of this possibility that he urged the Austrian entrepreneurs to seek a credit of 30 million Swiss francs that could be used for the payment of 1 month's worth of wages and for retail payments. Moreover, it was of utmost importance that this sum be available in very small denominations lest it be useless for the man on the street.

Austrian law did not allow this, but in the emergency scenario underlying the Mises Plan such legal considerations would be secondary. And he urged his readers not to despair about the possibility of such an emergency, but to see it instead as an opportunity for political progress. The collapse of the currency could have “the liberating effect of destroying the system that brings it about.” In Mises's words:

Political ideas that have dominated the public mind for decades cannot be refuted through rational arguments. They must run their course in life and cannot collapse otherwise than in great catastrophes.... One has to accept the catastrophic devaluation of our currency as foregone. Imperialist and militarist policy necessarily goes in hand with inflationism. A consequent policy of socializations necessarily leads to a complete collapse of the monetary order. The proof is delivered not only through the history of the French revolution, but also through the present events in Bolshevist Russia and a couple of other states that more or less imitate the Russian example, even though they do not display the atrocious brutality of the Jacobins and Bolsheviks, but prefer less bloody methods instead. As unbecoming as the collapse of the currency is in its consequences, it has the liberating effect of destroying the system that brings it about. The collapse of the assignats was the kiss of death for the Jacobin policy and marked the beginning of a new policy. In our country too a decisive change

of economic policy will take its impetus from the collapse of the currency. (1919b, pp. 2–3)⁵

This radical plan was never applied in practice even though the country barely escaped a hyperinflationary collapse in 1922. Starting in the fall of 1919, the Republic of Austria received foreign credits that eventually helped the government to finance its expenditure largely without the printing press.

Stabilization by the Market

In 1923, the *Verein für Sozialpolitik* had put the problem of monetary stabilization on the agenda for its annual meeting. Mises had been invited to write one of the expert reports to serve as the basis for the discussions and submitted his manuscript at the end of February 1923 (1923b, p. 6). The paper was eventually published under the title “Die geldtheoretische Seite des Stabilisierungsproblems” [The Problem of Stabilization Considered from the Point of View of Monetary Theory] (1923a).

Mises's essay combines a sophisticated analysis of what today would be called the dynamics of currency competition with the first concise statement of Mises's ideas on how to prepare for the transition from an inflationary currency to the gold standard. The essay was one of Mises's most influential works in the sense that it had an immediate and noticeable impact on the economic policy of the German Reich.

Mises discussed two scenarios of the displacement of the inflationary currency. Either this process can occur in a panic such that the bad money is abandoned in a few days or even in a few hours. Or the currency substitution takes place relatively slowly, thus assuring a smoother transition. Mises had first-hand experience of the slower process, which involved in essence a stabilization through the market process. The description given in his essay fits observations he made during the high postwar inflation in Vienna:

[The] practice of making and settling domestic transactions in foreign money or in gold, which has already reached substantial proportions in many branches of business, is being increasingly adopted. As a result, to the extent that individuals shift more and more of their cash holdings from German marks to foreign money, still more foreign exchange enters the country. As a result of the growing demand for foreign money, various kinds of foreign exchange, equivalent to a part of the value of the goods shipped abroad, are imported instead of commodities. Gradually, there is accumulated within the country a supply of foreign monies. This substantially softens the effects of the final breakdown of the domestic paper standard. Then, if foreign exchange is demanded even in small transactions, if, as a result, even wages must be paid in foreign exchange, at first in part and then in full, if finally even the government recognizes that it must do the same when levying taxes and paying its officials, the sums of foreign money needed for these purposes are, for the most part,

⁵ Without knowing it, Mises had spelled out here an idea that, many years before him, Carl Menger had stated in a private note, saying that ideas must run their course. F.A. Hayek discovered this note at the beginning of the 1930s, when he worked on a new edition of Menger's works. Mises (1969, pp. 3–6) later referred to this note in his *The Historical Setting of the Austrian School of Economics*.

already available within the country. The situation, which emerges from the collapse of the government's currency, does not necessitate barter, the cumbersome direct exchange of commodities against commodities. Foreign money from various sources then performs the service of money, even if somewhat unsatisfactorily. (1923a, p. 10; 1978, p. 13)

And indeed, in the early fall of 1923, several institutions sprang up spontaneously that would lead Germany on the path to replacing the mark. In October, the Hamburger Bank started issuing notes covered by foreign exchange and a similar bank was set up in Kiel. Meanwhile preparations were made in the Rhineland to establish a bank on a gold standard. The disintegration of the German economy into several currency areas was imminent (Stucken 1964, p. 49).

Stabilization by Politics

History took a different course. The inflation did not stay moderate enough to allow for a smooth currency reform through the market process. Mises had anticipated the outbreak of a panic and the implied disruptions of economic activity:

Things will necessarily be much worse if the breakdown of the paper money does not take place step-by-step, but comes, as now seems likely, all of a sudden in panic. The supplies within the country of gold and silver money and of foreign notes are insignificant. The practice, pursued so eagerly during the war, of concentrating domestic stocks of gold in the central banks and the restrictions, for many years placed on trade in foreign moneys, have operated so that the total supplies of hoarded good money have long been insufficient to permit a smooth development of monetary circulation during the early days and weeks after the collapse of the paper note standard. Some time must elapse before the amount of foreign money needed in domestic trade is obtained by the sale of stocks and commodities, by raising credit, and by withdrawing balances from abroad. In the meantime, people will have to make out with various kinds of emergency money tokens. (1923a, p. 12; 1978, p. 15)

He provided a political stabilization plan to cope with this emergency situation. As he had emphasized in his report to the *Verein für Sozialpolitik*, the “first precondition of any monetary reform is to halt the printing press” (1923a, p. 13). He also believed it was necessary to bring about a return to gold. He explained:

The reason for using commodity money is precisely to prevent political influence from affecting the value of the monetary unit. Gold is not the standard money [merely] on account of its brilliance or other physical and chemical characteristics, but because the increase or decrease of its quantity is independent of any orders issued by political powers. The crucial function of the gold standard is that it makes changes in the quantity of money subject to the laws determining the profitability of gold production. (1923a, p. 16; my translation)

His prewar studies had already alerted him to the likelihood that fractional-reserve banknotes would be issued on a growing scale and that there was no natural limit to

this type of inflation if it proceeded slowly in a step-by-step manner. His 1923 proposal therefore advocated the main provisions of Peel's Act, the British currency reform of 1844, which mandated 100% reserves for all *additional* note issues. Mises's plan took the present existence of fractional-reserve notes as irreversible and focused instead on the prevention of any further issuance of such notes. All additional issues must be completely covered by gold deposited with the issuing bank.

The foundation and cornerstone of the provisional new monetary system will be the absolute prohibition of the issue of any notes not completely covered by gold. The amount of Reichsbank banknotes, of banknotes of the Darlehenskassen, of emergency currency of any kind, and of token money will be legislated to be—after deduction of the stocks of gold and of foreign exchange held by the Reichsbank and by the private banks of issue—the maximum amount of German notes in circulation. Any extension of this maximum must be avoided under any circumstances, except for the facilitation of end-of-quarter payments that we have already mentioned. Any note issue beyond this limit must be fully covered by a deposit of gold or of foreign exchange with the Reichsbank. This is obviously the adoption of the main provision of Peel's Bank Act with all its deficiencies. But for the moment these deficiencies hardly have any practical significance. Our present goal is merely to abolish inflation by stopping the printing press. This objective, which alone we presently strive for, is best served through a prohibition of note issues without metallic backing. (1923a, p. 33; my translation)⁶

To determine the most suitable redemption ratio between gold and the currency, Mises recommended that the monetary authority should proceed by (1) stopping the printing press and then (2) letting the exchange rate between its currency and gold stabilize on the market.⁷ In short, stop inflating and then let the market determine the gold value of the mark. He maintained the same views on the technical aspects of monetary reform for the rest of his career.

The Question of an Effective Gold Circulation

Mises's 1923 stabilization plan did not call for a return to a full-blown gold standard, which involved the circulation of gold coins:

[A] return to the gold standard would not necessarily mean a return to the actual use of gold money for small- and medium-sized payments within the country. For even the gold exchange standard developed by Ricardo in his work,

⁶ The deficiencies he alludes to concern the absence of legal limitations on checking accounts and other money substitutes.

⁷ The reform enacted by the German government in 1923 differed from the Mises plan in respect to the second point. It stopped the printing press, but then introduced a new paper money without any backing in gold. This worked because the government had successfully created new confidence among the population that the decline of the currency had reached its limit. It established a new note-issuing *Rentenbank* endowed with a claim to 3,200 million marks which were said to be “backed up” by all commercial assets in Germany. On the day when this new bank started issuing its Rentenmarks, the printing of the old marks was halted, thus breaking the vicious circle of inflation.

Proposals for an Economical and Secure Currency (1816), is a true and sound gold standard. The monetary history of the recent decades has clearly shown this. (1923a, p. 17; my translation)

This was in line with his argument in the 1912 first edition of his *Theory of Money and Credit*, in which he belittled the importance of precious metals in coin circulation. Following Ricardo even further, he even suggested legislating that the Reichsbank only be obliged to redeem gold ingots, rather than gold coins. This would act as an effective deterrent against redemption demands that the Bank might not be able to comply with in its first years of operation under the gold standard. At some later point, it might however be useful to counteract the note-using habits of the population, and thus to replace the note circulation by an effective gold circulation, in order to prevent future overissuance of banknotes (1923a, pp. 34ff.).

It turned out that Mises's apprehensions about the remaining inflation dangers in a gold exchange standard were justified. Writing 26 years later in *Human Action*, he regretted the moderate stance he had taken in his earlier writings because it left too much power in the hands of the government, which through its monetary authority still issued the gold exchange currency. He denounced the root error behind the gold exchange standard, which was in seeing “the costs involved in the preservation of a metallic currency as a waste.” This had been the mistake of both Adam Smith and David Ricardo and thus enjoyed immense credibility and prestige. Yet Mises had come to consider it as “one of the most serious shortcomings of the classical economists.”

In dealing with the problems of the gold exchange standard all economists—including the author of this book—failed to realize that it places in the hands of governments the power to manipulate their nations' currency easily. Economists blithely assumed that no government of a civilized nation would use the gold exchange standard intentionally as an instrument of inflationary policy. (1949, p. 780)

When a new edition of *The Theory of Money and Credit* appeared in 1953, Mises used the opportunity to add a new fourth part on “monetary reconstruction” which argued for reintroducing the gold standard. Here he restated ideas he had expressed in previous works, but greater intellectual maturity had made the exposition simpler and more vigorous. He insisted in particular on the necessity of an effective circulation of gold coins.

Gold must be in the cash holdings of everybody. Everybody must see gold coins changing hands, must be used to having gold coins in his pockets, to receiving gold coins when he cashes his paycheck, and to spending gold coins when he buys in a store. (1980, p. 493)⁸

These lines represent a departure from his thinking in the early 1920s, and even more so from his views of 1912, when he first published the book and ridiculed the

⁸ Similarly, he wrote in private correspondence: “There is only one effective method of avoiding inflation: All government expenditure must be covered by taxes and by borrowing from the public, not by borrowing from the commercial banks” (1951).

“metallistic” preoccupation with the use of coins made out of precious metals. He had not become a gold bug. He had no fetish about the yellow metal or any other metal. The point was that only a commodity currency made the citizens sovereign in monetary matters. As long as they had real money in hand, they were truly in charge of it and they would immediately notice any departure from sound policies. Any bank or government refusal to redeem checks would immediately be recognized as fraud.

What is needed is to alarm the masses in time. The workingman in cashing his paycheck should learn that some foul trick has been played upon him. The President, Congress, and the Supreme Court have clearly proved their inability or unwillingness to protect the common man, the voter, from being victimized by inflationary machinations. The function of securing a sound currency must pass into new hands, into those of the whole nation. (1980, p. 494)

At the end, Mises noticed, there were no arguments against the gold standard; there was only the cynical claim that reintroducing it was a utopian undertaking. He replied very much along the same lines by which he had concluded his critique of socialism:

Yet we have only the choice between two utopias: the utopia of a market economy, not paralyzed by government sabotage on the one hand, and the utopia of totalitarian all-round planning on the other hand. The choice of the first alternative implies the decision in favor of the gold standard. (1980, p. 500)⁹

Denationalizing Money

The question then is how to establish such an effective gold circulation in practice and to make sure “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 full—that is, 100 percent—covered by deposits paid in by the public” (1980, p. 481).

Mises presented his mature views on currency reform in chapter 23 (“The Return to Sound Money”) of his *Theory of Money and Credit*. More precisely, he proposed two plans, one for countries without significant government gold holdings (“Currency Reform in Ruritania”) and one for countries with large gold holdings in the public treasury (“The United States’ Return to a Sound Currency”).

For the imaginary country of Ruritania, he recommended the introduction of a dollar-exchange standard, respectively of a gold-exchange standard, in three major steps: (1) Stop producing any more local money. (2) Wait for the exchange rate to stabilize. (3) As soon as the exchange rate is just about to increase as compared to the dollar (Mises assumes that the dollar supply keeps growing), new local money should be produced and exchanged against dollars or gold at the going exchange rate, which would then become the official rate of the new exchange standard. All

⁹ He had little doubt that these warnings would go unheeded (1952).

new issues of the local currency would thus automatically have a 100% coverage in gold or foreign exchange, as in Peel's Act.

One noteworthy novelty in this plan was Mises's insistence that the reform be entrusted to a completely new agency—*not* to the local central bank or to the public treasury—whose exclusive mission would be to deal with the public, exchanging local currency against foreign currencies or gold. (Today such agencies would be called currency boards.) This new element also played a central role in Mises's plan for a return of the U.S. to an effective gold circulation. He insisted that

it is imperative that the American government and all institutions dependent upon it, including the Federal Reserve System, keep entirely out of the gold market. A free gold market could not come into existence if the administration were to try to manipulate the price by underselling. The new monetary regime must be protected against malicious acts by officials of the Treasury and the Federal Reserve System. There cannot be any doubt that officialdom will be eager to sabotage a reform whose main purpose is to curb the power of the bureaucracy in monetary matters. (1980, pp. 491–92)¹⁰

His plan for a currency reform in the U.S. aimed at replacing the old dollar notes by a *new type* of dollar-notes, which would (a) have 100% gold coverage and (b) no longer be available in denominations of five, ten, and 20 dollars, in order to encourage the use of gold coins. His plan featured six major steps:

- (1) Stop producing dollar notes and mandatory 100% coverage of all new dollar substitutes such as checking deposits.
- (2) Liberalization of the gold market: freedom for citizens and foreigners to hold and trade gold.
- (3) Wait for the gold price to stabilize, then “decree this market rate as the new legal parity of the dollar and to secure its unconditional convertibility at this parity” (1980, p. 492).
- (4) Set up a new “Conversion Agency”—a currency board in today's terminology—with the mission to buy and sell gold at the new parity. When *buying* gold from the public, this agency would issue a new type of dollar notes available in denominations of one dollar and of 50 dollars and upward, all of which would therefore be covered 100% by gold. When *selling* gold to the public, the Agency would buy back old-type dollar notes, token coins, and checks drawn on solvent member banks. Thus the quantity of the old types of (non 100% covered) currency would be reduced, and this reduction should not be sterilized.

¹⁰ Mises repeated this warning about the Fed:

It is essential for the reform suggested that the Federal Reserve System should be kept out of its way. Whatever one may think about the merits or demerits of the Federal Reserve legislation of 1913, the fact remains that the system has been abused by the most reckless inflationary policy. No institution and no man connected in any way with the blunders and sins of the past decades must be permitted to influence future monetary conditions. (1980, p. 493)

- (5) Oblige the Treasury 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, p. 494).
- (6) Withdrawal and destruction of old dollar notes through the Treasury and the Federal Reserve.

Conclusion

In his writings on monetary reform, Ludwig von Mises has not only stressed the importance of the ultimate goal of driving government intervention out of the production of money and of banking services. He has also provided a sophisticated analysis of the role that market forces might play, and should play, to attain this goal, stressing that private initiative rather than government agencies could bring about needed reforms. Finally, he proposed a radical plan for dismantling the current system of fiat money and fractional-reserve banking, establishing a new system based on effective gold-coin circulation and 100% reserve banking.

References

- Gertchev, Nikolay. 2004. “Dehomogenizing Mises's Monetary Theory.” *Journal of Libertarian Studies* 18 (3).
- Hülsmann, Jörg Guido. 2007. *Mises: The Last Knight of Liberalism*. Auburn, Ala.: Ludwig von Mises Institute.
- Mises, Ludwig von. 1919a. “Der Wiedereintritt Deutsch-Österreichs in das Deutsche Reich und die Währungsfrage.” In *Wirtschaftliche Verhältnisse Deutsch-Österreichs*. Ed. Michael Hainisch. *Schriften des Vereins für Sozialpolitik* 158. Leipzig: Duncker & Humblot.
- Mises, Ludwig von. 1919b. “Über die im Hinblick auf das Fortschreiten der Geldentwertung zu ergreifenden Massnahmen” [On the measures to be taken on behalf of the decreasing value of money]. Memorandum. Mises Archive 109.
- Mises, Ludwig von. 1923a. “Die geldtheoretische Seite des Stabilisierungsproblems.” *Schriften des Vereins für Sozialpolitik* 164(2) Munich: Duncker & Humblot. Mises Archive 109. Trans. “Stabilization of the Monetary Unit—From the Viewpoint of Theory.” In *On the Manipulation of Money and Credit*. Trans. Percy L. Greaves. New York: Free Market Books, 1978. Reprinted in *The Causes of the Economic Crises*. Auburn, Ala.: Ludwig von Mises Institute, 2006.
- Mises, Ludwig von. 1923b. Duncker & Humblot (*Verein's* publisher) letter to Mises. February 26; Mises Archive 78.
- Mises, Ludwig von. 1949. *Human Action: A Treatise on Economics*. New Haven, Conn.: Yale University Press.
- Mises, Ludwig von. 1951. Mises letter to Howard Pew. November 6; Grove City Archive: Pew files.
- Mises, Ludwig von. 1952. Mises letter to Rougier. January 3; Grove City Archive: Rougier files.
- Mises, Ludwig von. 1969. *The Historical Setting of the Austrian School of Economics*. Auburn, Ala.: Ludwig von Mises Institute, 1984.
- Mises, Ludwig von. 1980. *Theory of Money and Credit*. Indianapolis, Ind.: Liberty Classics.
- Pallas, Carsten. 2005. *Ludwig von Mises als Pionier der modernen Geld und Konjunkturtheorie*. Marburg: Metropolis.
- Stucken, Rudolph. 1964. *Deutsche Geld- und Kreditpolitik, 1914–1963*. 3rd ed. Tübingen: Mohr.