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# The Monetary Writings of Carl Menger

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**A** founder of a scientific system cannot be expected to develop his system in all details. His strength and lifetime may be insufficient to develop all implications and conclusions. He may prepare the blueprint and erect a few pillars that will support the structure. He may even give a great deal of care to a few details. But even the greatest mind must be content with a system that contains many cursory thoughts and unproven parts. He must rely on scholars who follow him to expand and complete the task.

Carl Menger was such a founder who in many respects resembled that great builder of classical economic thought, Adam Smith. In more or less modified form both systems of thought continue to exercise influence on contemporary economic thinking. Both were rejected by some thinkers, modified and criticized by others. Some used parts of the system as foundations on which they built magnificent superstructures; others have used them as points of departure to build theories of their own.

Carl Menger's *Grundsätze der Volkswirtschaftslehre* (Principles of Economics, 1871) is one of the greatest tracts in economic literature.<sup>1</sup> Few books have had a comparable influence, not because it was widely read and loudly acclaimed, but because a few capable students and followers recognized its value and adopted its thought. In it Menger laid a solid foundation for the theory of subjective value and a theory of the origin of money. He did not formulate many distinct theories in the book, but his brilliant observations there served as the cornerstones for many theories to come.

A few years later Menger published his second great work, which in its field was as significant as the *Grundsätze*. He aroused the interest of the academic world and the anger of the German Historical School with his *Untersuchungen über die Methode der Sozialwissenschaften und der politischen Oekonomie insbesondere* (Inquiries into the Method of the Social Sciences and Particularly Political Economy, 1883). This essay started the "battle of the century," commonly called the *Methodenstreit* (controversy on method).

Both works are landmarks in the history of economic thought. Both were translated in a number of other languages and are available to students of economics everywhere. But little is known about Menger's later monetary writings, which helped to bring currency reform and sounder money to Austria. Between 1889 and 1893 Menger published seven essays on monetary theory and currency reform that rank among the outstanding works on the subject matter. They are available only in the German language, which has seriously limited their influence on contemporary economic thought.

In the order of their publication Menger's monetary writings include the following:

"Die Kaufkraft des Guldens österreichischer Währung" (The Purchasing Power of the Austrian Guilder), 1889

"Geld" (Money), 1892, 2nd revised edition 1909

"Beiträge zur Währungsfrage" (Contributions to the Currency Issue), 1892

"Der Uebergang zur Goldwährung" (Transition to a Gold Currency), 1892

"Aussagen in der Valutaenquete" (Testimony before the Currency Commission), 1892

"Von unserer Valuta" (On Our Currency), 1892

"Das Goldagio und der heutige Stand der Valutareform" (The Gold Premium and the Present Currency Reform), 1893

## **On the Origin of Money**

In this *Principles* Carl Menger had already sketched an irrefutable theory of the origin of money. He had dealt with it as a great thinker would deal with an important thought that deserves further scrutiny. In just a few pages he had presented an explanation of the origin of money, had enumerated "the kinds of money appropriate to particular peoples and to particular historical periods," had refuted the notion of money as a "measure of price," and described the development of coinage systems. But in *Principles* he did not proceed to the central problem of money, which is its exchange value, commonly called its purchasing power. He did announce "the theory of money," which is the very title of his chapter on money, but he actually developed only a brilliant theory of the *origin* of money.

Carl Menger refuted the doctrines so popular throughout the ages that indirect exchange and money are the products of authoritarian decree or social covenant. Plato had defined money as "an agreed-upon token for barter," and Aristotle had found that money was a product of agreement and law. Menger demonstrated, instead, that it is the unintended result of individual efforts of members of society. Every single individual is interested in exchanging less marketable goods for those of greater marketability, durability, and divisibility. Man's search for more marketable goods in time leads him to the most marketable good, which may also be the most durable, divisible, and transportable good known to him. Without any agreement, without legislative compulsion, in fact, even without any consideration of public interest and the public good, individuals are persuaded to exchange their goods and services for more marketable goods, even if they are not needed for immediate use. The economic good that emerges as the most marketable good of all is called "money."

In his great essay on money,<sup>2</sup> which he completed more than twenty years later, Menger embarked upon a more systematic investigation into the nature of money. Once again his analysis led him toward a theory of the origin of money that openly contradicted the statist and socialist doctrines of his day. They credited the state with the "invention" of money and assigned its regulation and control to government. According to Menger, however, it is an irrefutable fact that individuals are eager to acquire money not by orders of their government, but in order to exchange it later for other economic goods. It is this conduct of individuals that is making certain goods the media of exchange.

In Menger's time many writers were eager to add secondary functions to that of medium of exchange. They spoke of money facilitating credit transactions or transmitting value through time and space. Or they dwelt on money as a general medium of payment. But Menger showed convincingly that all secondary functions can be deduced from the function of money as common medium of exchange. A credit transaction, after all, is merely an exchange of a present good for a future good. To be a transmitter of value through time and space depends on special suitability of a good for hoarding and shipping, which adds marketability and therefore enhances a good's qualification as medium of exchange.

## **On the Demand for Money**

Carl Menger did not formulate a complete theory of the value of money, but the germs of almost all later doctrines and theories are more or less recognizable in his essay on money. His primary task was to explode

many errors and fallacies that were leaving their mark not only on monetary thought but also on government policies. Above all, he sought to counter the growing trend toward holistic and collectivistic considerations by tracing all phenomena back to the actions of individuals. In all his investigations he sought to apply his subjective value theory and emphasize its importance for the elucidation of economic phenomena.

Throughout the history of economic thought many writers argued for the largest possible quantity of money. Others sought to enumerate objective factors that allegedly determine the demand for money. They suggested that the demand for money was determined by the quantity of exchangeable goods available in an economy, or by the volume of payments that need to be made. Others yet continue to speak of the velocity of circulation as a significant factor that influences the demand for money. All such explanations, according to Menger, are missing the mark. A realistic theory of the demand for money must be based on the monetary demand of individuals or groups of individuals who comprise a national economy. Their demand is the ultimate gauge of the national demand. In Menger's own words:

The monetary demand of a national economy is the sum of the moneys needed by individuals and groups of individuals participating in the division of labor. It is a quantity the significance of which is visible not only in the aggregate, but also in the distribution among individuals. But the national demand is not a mere summation of the cash demand of individuals. We must consider also the services of financial institutions that substitute their instruments for cash or at least economize the use of cash.<sup>3</sup>

There is a demand for money because people want to hold some cash. They demand money in order to exchange it ultimately for other economic goods; they appraise it in the same way as they appraise all other economic goods. Their demand is reduced somewhat by institutions for the settlement of claims and counterclaims by mutual cancellation, such as clearinghouses. But such factors influence the demand for money only indirectly through their influence on people's desire for cash holdings.

Menger traced all monetary phenomena back to the choices and actions of individuals. He always took his stand against holistic concepts and notions. To him, it was a grievous error to calculate and make use of holistic concepts, such as total volume of trade, total quantity of money, general price levels, and velocity of national circulation. There are no objective factors creating a national demand; any and all factors affect individuals only as motivation.

## The Purchasing Power of Money

It is an erroneous belief that money enters the market endowed with a given purchasing power independent of the valuations of individuals. Actually it receives its exchange value from the subjective valuations of all the persons exchanging goods and services in the market. But this exchange value appears to individuals as an accomplished fact, a given purchasing power, that must be accepted unconditionally. It is a given quantity of other economic goods that are offered for its acquisition. As the price of other goods and services is expressed in terms of money, so is the "price" of money—its purchasing power—expressed in the quantity of other goods that are offered for its acquisition. Several times Carl Menger announced a theory of the purchasing power of money. Several times he laid a solid foundation for such a theory but then failed to develop it in detail.

In his *Principles of Economics* Menger seemed to suggest that the value of money ultimately depends on the value of the material of which it is made. He offered a theory that explains the value of gold and silver coins from their potential use for industrial purposes. If for any reason the coins would lose their industrial usefulness they would also lose their purchasing power. Menger wrote:

I refer to the observation that the character of money as an industrial metal often completely disappears from the consciousness of economizing men because of the smoothness of operation of our trading mechanism, and that men therefore only notice its character as a means of exchange. The force of custom is so strong that the ability of a metal used as money to continue in this role is assured even when men are not directly aware of its character as an industrial metal. This observation is entirely correct. But it is also quite evident that the ability of a material to serve as money, as well as the custom on which this ability is founded, would disappear immediately, if the character of money as a material applicable to industrial purposes were destroyed by some accident. I am ready to admit that, under highly developed conditions of trade, money is regarded by many economizing men only as a token. But it is quite certain that this illustration would immediately be dispelled if the character of coins as quantities of industrial raw materials were lost.<sup>4</sup>

His 1889 essay "The Purchasing Power of the Austrian Guilder" affirmed the same value theory, but under certain conditions also professed a kind of supply and demand theory that embodied elements of a quantity theory. He was greatly alarmed by the fact that the guilder's purchasing power exceeded the metal value of the silver guilder, which to him was an "economic anomaly" harboring "the greatest dangers to the Austrian economy."

Since 1879 the guilder had traded considerably above the value of the silver contained in the guilder. Menger explained this discrepancy as "rarity value" which came into existence when the government closed the mint. The market price of silver bullion had been falling throughout the 1870s, which in time would have caused the purchasing power of the guilder to fall to its bullion value. To take advantage of the lower silver cost, the people would have taken more silver to the mint to convert bullion to coins. But government intervened by closing the mint. "Free silver coinage would have prevented the discrepancy between the value of bullion and coinage," Menger explained. It would have kept the guilder's purchasing power at par with its silver value. But "under the present, artificially created conditions, the purchasing power of the Austrian guilder is determined by the relationship between the circulating media and the public demand for such media."<sup>5</sup>

Menger viewed the "rarity value" of money with great alarm. "There cannot be any doubt," he warned his readers, "that since 1879 the guilder's purchasing power has been subjected to continuous fluctuations." It is affected by every change in economic activity, in fact, inversely affected as money with fictitious value will neither enter nor leave the country and therefore escape the "regulatory influence of unlimited coinage."

In his 1892 "Contributions to the Currency Issue" Menger added four more "evils" and "dangers." First, the peculiarities of the Austrian monetary order cause the exchange rates between guilders and foreign currencies to fluctuate continually, which prevents reliable calculation for foreign trade and commerce. They turn all foreign trade into currency speculation and make all sales a "double business." Second, an artificial monetary system always faces the danger of a sudden resumption of coinage, which, in this case, would lower the guilder's objective exchange value and seriously disrupt financial markets. As the suspension of coinage was ordered without benefit of law or even regulation, it may be resumed at any moment. Third, an artificial currency is rather vulnerable to all kinds of crisis, which may cause it to fall to new discounts not only toward gold but even toward silver. And fourth, it is probably the greatest danger that silver prices can be expected to fall further and thus cause the discrepancy between the purchasing power of the silver guilder and its precious metal value to widen even further. It would render the Austrian currency system ever more precarious.<sup>6</sup>

Menger's concern about the "anomaly" of the Austrian currency undoubtedly reflected his great anxiety about the total dependence of the Austrian national bank and its currency issues on the state. Again and again the Austrian government had used the bank to finance budgetary deficits and market its treasury obligations. Even after it had closed the

mint in 1879, it had continued to manufacture silver guilders for its own account. In short, its repeated interventions had caused a separation of the guilder's purchasing power from its metallic base. In Menger's own words, purchasing power was "floating in mid-air" and, "in the true sense of the word, was reflecting an original rarity value brought forth by genuine and relatively severe rationing of our currency."<sup>7</sup>

Professor Menger, of course, was describing the fiat standard that causes the purchasing power of money to "float in mid-air." That is, the objective exchange value of money is determined by demand and supply—in the same way as the exchange ratios between other marketable goods are determined. In this sense his "float theory" becomes a "quantity theory" that points the way toward a modern theory of money. He placed the theory of money on a new foundation, the subjective value theory. But he did not have the opportunity or inclination to analyze the various determinants of the objective exchange value of money. He offered no explanation of the process of value determination at any given time and place.

Menger left this task to Friedrich von Wieser and Ludwig von Mises. The former elaborated the problem in a brilliant essay on the value of money and developed some determinants, especially the historical elements.<sup>8</sup> The latter presented a complete subjective theory of the value of money in his 1912 treatise *Theorie des Geldes und der Umlaufsmittel* (The Theory of Money and Credit).<sup>9</sup>

## The Gold Standard

For Menger the pending currency reform made extreme demands on his time and strength. It made the year 1892 probably the most productive year in terms of literary effort and output. In January and February he published a series of articles "On Our Currency" in the *Allegemeine Juristen Zeitung* (General Journal for Jurists). On March 15 and 17 he testified before the Currency Commission that was meeting in Vienna.<sup>10</sup> In June his "Contributions to the Currency Issue," which had first appeared in the *Jahrbücher für Nationalökonomie und Statistik*,<sup>11</sup> were republished as a separate booklet of fifty-nine pages by an eminent publisher, Gustav Fischer, in Jena. In the same month Menger released a thirty-six-page essay on the problems of "Transition to a Gold Currency" with Wilhelm Braumüller in Vienna and Leipzig. All these efforts sought to guide Austrian policymakers in their stated objective to reform the currency system and adopt the gold standard.

To Menger the gold standard was the ideal standard for civilized nations. In his "Contributions to the Currency Issue" he waxed eloquently on the evils of the "limping silver standard" and the great merits of a gold standard:

It is no coincidence that the civilized nations are striving universally and urgently to introduce a gold currency. Gold is the money of advanced nations in the modern age. No other money can provide the convenience of a gold currency in our age of rapid and massive commodity exchanges. Silver has become a troublesome tool of trade. Even paper money must yield to gold when it comes to monetary convenience in everyday life. A ten- or five-guilder gold coin would be more convenient than our ten- or five-guilder note. Moreover, under present conditions only a gold currency constitutes hard money. Neither a bank note and treasury note nor a silver certificate can take the place of gold, especially in moments of crisis.

The historic trend toward the formation of large states and markets has given additional impetus to gold as medium of exchange. In larger countries silver cannot even mediate satisfactorily domestic trade. International trade, which must not be restricted artificially, is growing in significance and dependence on gold. It also forces small countries to join larger trade areas and adopt gold as a medium of exchange. The international balance of payments of modern countries can only be settled in gold. Gold is the money of the world in our age; silver is the money of second-class countries only. Especially since the most important trading countries are using gold, no progressive society can cling to silver without becoming isolated—like an economic island in international commerce. We are accustomed to view economic problems from every conceivable angle except that given by their very nature and substance. Therefore, it is all the more important to emphasize that gold is the right medium of exchange for our age, not because it serves the interests of certain groups, but because it renders the services of money in a most useful, secure, and expedient manner.<sup>12</sup>

Menger did not overlook the technical and economic advantages of a gold currency, such as inexpensive minting, difficult counterfeiting, little wear and tear, greatest convenience, and easy transport. Above all, gold was the money of Austria's neighbors and trade partners, and the gold standard the only standard that offered full parity of the Austrian currency with other currencies.

Menger exerted a powerful influence on Austrian economic affairs. After all, he was the most celebrated Austrian economist, who a few years earlier had engaged the German economists in the heated *Methodenstreit* (dispute on method) from which he had emerged with great honor and acclaim. Moreover, he had been the tutor to the eighteen-year-old crown prince of Austria, the ill-fated Archduke Rudolf. In 1892, the year of the currency reform, Menger's voice was heard throughout the land, expounding and illustrating the merits of the gold standard. But he did not hesitate to point to two important problems which the currency commission had simply ignored: the general worldwide tendency of gold

to appreciate in exchange value and the further rise of this exchange value as a result of the Austrian currency reform.

Menger rejected the old argument of the opponents of the gold standard that the quantity of newly mined gold in time will be insufficient to meet the growing needs of business, that the gold standard lacks the needed flexibility in the supply of money and, therefore, will cause serious shortages of money. In reality, as Menger pointed out, a growing relative scarcity of gold will raise the exchange value of gold and the purchasing power of every gold coin. "Surely, even if all the fears of declining gold production should come to pass, gold coins will not lose their function as media of exchange, but rather serve it ever more conveniently as their purchasing power continues to rise."<sup>13</sup>

To dispel the popular fear that the world will run out of gold and that its purchasing power is bound to soar, which would cause goods prices to fall, Menger cited the estimates of the U.S. director of the mint, a Mr. Leech, according to whom the low point of world gold production of less than 5 million ounces annually was reached in the years 1881 to 1885. Thereafter production began to rise again and exceeded 5.6 million ounces in 1890. Menger also called attention to the rising gold production in South Africa, where 65,000 ounces were mined in 1885, 220,000 ounces in 1888, 400,000 ounces in 1889, 500,000 ounces in 1890, and more than 750,000 ounces in 1891.<sup>14</sup> Of course, he could not foresee that South Africa was about to become the most important gold-producing country, which in time would "inflate" the world with gold at a production rate of more than 30 million ounces per year. Gold mining in other countries would add another 15–17 million ounces annually.

Menger was greatly concerned about the possible rise of the purchasing power of gold as a result of the Austrian currency reform. "No reasonable and knowledgeable observer of the situation can guarantee that the Austrian currency reform, even with most careful execution, will not bring about a considerable rise in the value of gold," he wrote.<sup>15</sup> It may cause goods prices to decline throughout the gold standard countries, cause wage rates to fall, and above all, change all creditor–debtor relationships to the benefit of creditors and the detriment of debtors. There could be evil consequences that must be avoided through careful planning and orderly transition to a gold currency.

To avoid a sudden rise in gold value as a result of new Austrian gold demand, Menger recommended a number of policy measures that, at least during a lengthy period of transition, would reduce the individual demand for gold. He favored the issue of subsidiary silver coins or notes fully backed by silver but also redeemable in gold, issue of smaller denomination bank notes, permission of note-issuing banks to hold part of their reserves in silver, no minting of small denomination gold coins,

establishment of an international clearinghouse, further development of savings banks and savings associations, of the deposit system transferring deposits by checks, and other credit and clearing organizations. Such measures would allow the major nations gradually to enjoy the benefits of the gold standard without aggravating the danger of rising gold value. Having given due care and consideration of the interests of other countries on the gold standard, Menger claimed the right to acquire gold and proceed with the currency reform. After all, "it seems to be an impermissible and hopeless undertaking to assign to some civilized countries the role of second-class countries in monetary affairs," he observed.<sup>16</sup>

### **Testifying before the Currency Commission**

In the spring of 1892, the secretary of the Austro-Hungarian treasury, Dr. Steinbach, invited Menger and other experts to testify before his committee and especially comment on the following questions:

1. What should be the standard of the currency system?
2. If it should be gold, should a quantity of silver coins be permitted, and what quantity?
3. Should it be permissible to issue a quantity of fully redeemable, non-interest-bearing treasury notes, and under what conditions?
4. What should be the ratio of conversion of the silver guilder to gold?
5. What should be the currency unit?<sup>17</sup>

In his lengthy testimony Menger again pointed at the great evils of the then current system, the speculative nature of all foreign trade, the isolation of Austrian financial affairs from the world market, the permanent pressure on Austrian prices, and permanently higher interest rates. But the worst evil and "central issue to the currency problem", according to Menger, was the great discrepancy between the guilder and its silver content, which he estimated at 20 percent. "The government of Austria-Hungary is in the position, by mere executive order, to reduce the real value of all obligations by one-fifth and give instant relief to all debtors. . . . In fact, every secretary of the treasury can reduce the wealth of a great many citizens by 20 percent."<sup>18</sup> Moreover, the purchasing power of the guilder may fall even further on account of the "irrational circulation of 312 to 412 million guilders of treasury notes," which may lead to a silver premium and note discount; altogether, many citizens of Austria-Hungary were facing the real danger of losing nearly 50 percent of their real wealth.<sup>19</sup> Therefore, in answer to the first question, Menger

recommended adoption of the gold standard. But he urged the government to proceed most carefully and deliberately lest it disrupt the international gold market and cause the purchasing power of gold to rise. Currency redemption should commence only after years of thorough preparation when government should acquire the needed quantity of gold without disrupting or disturbing the precious metals markets.

To the second question, on the desirability of a quantity of silver coins under a gold standard, Menger had a ready answer: "A good silver currency presents no danger, for it replaces gold coins from which it receives its value."<sup>20</sup> Great dangers to the gold standard only arise from excessive issues of silver coins. The situation is explained by two basic economic principles pertaining to money: Gresham's law, according to which bad money crowds out a corresponding quantity of good money if both must be exchanged at faulty exchange rates, and the principle of monetary substitution, according to which good money serving as the common medium of exchange confers value on bad money that is fully redeemable in the former. Gold determines the value of silver money circulating beside it as long as the latter is present only in strictly limited quantities.

Menger sounded like a politician speaking to fellow politicians on the Currency Commission. Three distinct thoughts seem to permeate his testimony: the desirability of the gold standard for his country, his deep concern about potential disruptions of the international gold market as a result of Austria-Hungary's adoption of the gold standard, and his effort to make the transition as palatable and simple as possible. Seeking to convince his countrymen that the gold standard was within their reach, he pointed out that the standard prevalent was "gold-plated." But although the European currencies were gold-plated, Menger said,

We must not scorn them. Money is no luxury. A gold-plated item at first renders the same services as genuine items as long as the plating is solid. If a gold currency is plated so solidly that it can survive the corrosive acid of a commercial crisis or even the ordeal of a war, then nothing can be said against it. In its center is a nucleus of solid paper, covered by a layer of subsidiary coins, covered by yet another thin layer of silver coins, and finally, over it all, a solid layer of gold. If we keep it that way we have a very useful gold currency. There are no pure gold currencies in Europe, only gold-plated currencies, even in England. Let us not be too demanding.<sup>21</sup>

Menger answered the third question in a similar manner: There is no basic objection to the emission of government obligations and their use as money as long as the quantity remains relatively small. But government obligations encounter great distrust, which cannot be surprising in

the light of their sad history in Austria-Hungary. Therefore its quantity must be strictly limited to no more than 90 to 100 million guilders, which would amount to some 10 percent of government revenues. The notes must be redeemable at any time, but not be granted the quality of legal tender. In Menger's own words,

The prompt redeemability of treasury notes in cash at the central treasury and, if possible, at all other public treasuries, may not only strengthen the fickle confidence of the people, but also serve effectively to limit their emission to the needed quantity. No objection can be raised from a technical financial point of view to regular emissions of some 90 to 100 million guilders that are fully redeemable on demand.<sup>22</sup>

For the same reason Menger even defended the issue of small denomination treasury notes: "As far as their acceptability and usage are concerned, I can see no danger in the emission of small, always redeemable notes, that is, five-guilder notes or even a certain quantity of one-guilder notes."

The fourth question, concerning the conversion ratio, was, according to Menger, a question of justice. We must create a *just* guilder that does not shift individual wealth, inflicting losses on some people and granting profits to others. In a currency reform the owner of present money must receive such quantities of gold money as he would be able to buy on his own in the moment of currency reform. All exchanges, therefore, should pursue the principle of "present rate," which is the only fair rate.

The same principle must apply also to the conversion of debt stated in old currency to debt denominated in new currency. The "present rate" is the only just conversion ratio. Menger rejected expressly the proposal that any debt conversion should be mindful of the exchange rate that existed at the time the debt was incurred. Future changes of exchange rates may be considered, but past changes in the purchasing power of money must not be taken into account in the conversion. He testified:

The debtor who on January 1, 1862, incurred a debt of 1,000 guilders owes his creditor 1,000 guilders of present value. I do not deny that money, like all other goods, is subject to value changes. Its purchasing power is changing. Thirty years ago a guilder had more or less purchasing power. But this fact is ignored in legislation as well as in every-day life. He who owes 1,000 guilders and can only repay 999 guilders can be thrown into bankruptcy. But he who pays his creditor 1,000 guilders that in the meantime have lost one-third of their purchasing power, discharges his obligation. I should like to add that we all are accustomed to ignore such changes in the purchasing power of money. Even such excellent bankers as you, gentlemen, prepare your annual balance sheets

without considering whether your capital has gained in purchasing power or whether it has lost. . . . Therefore, while we may consider future changes in purchasing power, we may ignore past changes in a conversion of old currency debt to new gold-currency debt.<sup>23</sup>

The last question, on the future currency unit, occasioned only a few comments by Menger. He opposed the thought of Austria-Hungary joining a German mark system or a French franc system. Such a union would generate extreme confusion and necessitate complicated exchange rate calculations. He favored the preservation of the old guilder as currency unit but recommended that a new half-guilder coin be added to the given coinage. He warned against two possible mint mistakes, to make coins either too large or too small for ready acceptance and use by the public. For him the present guilder was just right, an ideal unit for a gold currency.<sup>24</sup>

## Errors of Reform

On August 2, 1892, a few months after Menger testified before the Currency Commission, the Austro-Hungarian government conducted the currency reform. It enacted an exchange rate of one guilder or two new crowns to 2.10027 French francs and announced gold redemption for January 1, 1896 or 1897, or possibly earlier. In an essay published in the *Bohemia* in June 1893, under the title "The Gold Premium and the Present Currency Reform," Professor Menger analyzed the reform and criticized the official blunders. Except for a minor essay on "Money and Coinage since 1857," in the *Oestereichische Staatswörterbuch*, in 1897, and except for the 1900 and 1909 editions of his famous essay on money, this work on the gold premium was to be his last on the subject matter of money. Thereafter, the genius reformer of classical economics and fearless knight of the *Methodenstreit* fell into silence as if he despaired about his country and the world.

Menger applauded the early successes of the reform. The currency act establishing the gold crown had hardly been passed when gold was entering the country. The conditions were most favorable as South African gold production was accelerating, lowering the exchange value of gold. But above all, the government of the United States was conducting inflationary policies that led to massive shipments of gold to Austria. More than half of the gold imports consisted of American eagles.<sup>25</sup>

But amid all the exuberance of success, a most disturbing factor began to make its appearance: Gold and foreign exchange rose to a 3 percent premium. All further gold acquisition had to be suspended and

the reform interrupted because the guilder fell to a serious discount. The ultimate goal of reform, the beginning of redemption in gold, disappeared on the distant horizon.

The reason for this embarrassing development, according to Menger, had to be sought in a number of official blunders. The government had rushed to convert its funds into gold, which had greatly lifted the price of its obligations and substantially lowered their yield. In fact, silver obligations that are about to be converted to gold obligations tend to rise in price and their yields tend to fall, especially if silver is falling in value and gold is rising. In Austria-Hungary the public enthusiasm about the new gold currency caused interest rates to plummet, which soon surpassed all expectations and connections with Austrian reality. A reaction in the form of rising interest rates, rising gold prices, and falling guilder value became unavoidable.

The readjustment was all the more painful as Austrian obligations owned and held abroad experienced the same boom and bust. By 1893 many foreigners were selling their guilder holdings in Austrian markets, or were withdrawing their deposits, which depressed the guilder and lifted gold even further.

As soon as the gold premium made its appearance, Professor Menger insisted, the gold purchases should have been suspended. But the authorities did the very opposite. The purchases were continued with great haste. "In fact one could get the impression," Menger observed, "that the great and complicated reform work lacked consistent leadership, that everyone proceeded on his own account, the governments of both Austria and Hungary, the central bank, and the gold-purchase syndicate, that each one sought to excel the other in 'success stories.' Thereby all precautions were thrown to the wind."<sup>26</sup>

The purchases were conducted in great haste by various government authorities. But above all, the Austro-Hungarian Bank, which was the note-issuing central bank, bought most of the gold in the domestic market, thereby draining and depleting this market of gold and foreign exchange until it brought forth a gold premium and guilder discount. The bank bought gold for some 40 million guilders, thus releasing new bank credits through what later was to be called "open market purchases," thereby spreading fears of depreciation throughout the exchange markets. Therefore, it can hardly be surprising that the guilder fell to a discount.

To commence redemption of all notes in gold and thus return to sound money, Menger considered it an inescapable requirement to eradicate the gold premium and note discount. In his own words,

For the present state of our currency it does not matter much whether we must calculate in guilders or half-guilders, in pennies or half-pennies,

whether we use convenient one-guilder notes or inconvenient undervalued silver guilders or silver crowns, whether we make change in silver or copper coins, or in nickel or bronze subsidiary coins, whether the gold is kept in this bank or shipped to that bank. But a serious and purposeful currency reform is not possible as long as domestic and foreign markets deny us the exchange rates on which we legally have embarked.<sup>27</sup>

Menger was always skeptical about the knowledge and wisdom of the political authorities that were conducting the reform. But he had an abiding faith in the principles and laws of the market that spring from the subjective choices and actions of men. If only the authorities would abstain from inflicting new harm on society, economic conditions would soon improve through adjustment and readjustment. In his words: "For a healing of the evil we must now wait for favorable conditions, for the gradual healing powers of natural forces that are effective also in economic life, but above all, for a careful treatment of domestic currency markets. That is to say, we must avoid those blunders that caused the evil."<sup>28</sup>

It would be a mistake to suppose that in his monetary writings Carl Menger developed a consistent theory of money and credit. That was not his intention; his primary concern was economic justice and social division of labor, which are basic to economic productivity and individual well-being. He was greatly concerned about the preservation of that polyglot state of the Hapsburgs, Austria-Hungary, which was uniting many peoples speaking different languages and leading them to live together harmoniously in one state. But to most of his countrymen the union was unwanted. They preferred national favors and privileges over peaceful cooperation, government authority over individual freedom, inflation and credit expansion over gold, and sound money. Their hopes and aspirations were to come to pass with the dissolution of the empire just twenty-five years later.

Carl Menger did not complete the splendid work he had begun in his youth. His great mind, which had found its own road and carried its own lamp, clearly recognized the destiny of mankind. He saw the inflations that were to ravish income and wealth, and the twentieth century wars in which human folly and tragedy were to reach their climax. Soon after the publication of his essays on money Carl Menger fell silent, perhaps despairing about the future of his beloved country and the fate of mankind.

## Notes

1. Material from Carl Menger, *Principles of Economics*, reprinted by permission of New York University Press. Copyright © 1976 by Institute for Humane Studies.

2. Carl Menger, *The Collected Works of Carl Menger* (London: London School of Economics and Political Science, 1936), vol. 4, pp. 1-116.
3. *Ibid.*, p. 114.
4. *Principles of Economics*, p. 320.
5. "The Purchasing Power of the Austrian Guilder," 1889, in *Collected Works*, vol. 4, p. 121.
6. "Contributions to the Currency Issue," in *Collected Works*, pp. 138-41.
7. *Ibid.*, p. 138.
8. F. von Wieser, "Der Geldwert und seine geschichtliche Veränderungen," in *Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung* 13 (1904).
9. Ludwig von Mises, *The Theory of Money and Credit* (New Haven, Conn.: Yale University Press, 1953), pp. 97-123.
10. "Testimony before the Currency Commission," Imperial Court and State Printing Office, 1892, pp. 197-223, 269-71, reprinted in *Collected Works*, vol. 4, pp. 225-86.
11. 3rd series, vol. 3.
12. *Collected Works*, vol. 4, pp. 154, 155.
13. *Ibid.*, p. 156, n. 1.
14. "Contributions to the Currency Issue," in *Collected Works*, p. 157.
15. *Ibid.*, p. 167.
16. *Ibid.*, p. 168.
17. "Testimony before the Currency Commission," *Collected Works*, vol. 4, p. 225 et seq.
18. *Ibid.*, p. 228.
19. *Ibid.*, p. 229.
20. *Ibid.*, p. 246.
21. *Ibid.*, p. 247.
22. *Ibid.*, p. 244.
23. *Ibid.*, pp. 256, 257.
24. *Ibid.*, p. 269.
25. *Ibid.*, p. 310. On July 14, 1890, the Sherman Act, passing both houses of the U.S. Congress, provided that the U.S. Treasury purchase 4.5 million ounces of silver monthly, against which legal tender notes, redeemable in gold or silver coins at the discretion of the Treasury, would be issued.
26. *Ibid.*, p. 320.
27. *Ibid.*, p. 323.
28. *Ibid.*, p. 324.